CONNECTICUT ENVIRONMENTAL POLICY ACT (CEPA)

Comparative Evaluation for Extension of North Hillside Road

University of Connecticut North Campus Master Plan

Mansfield, Connecticut

January 2007

FUSS & O'NEILL

Disciplines to Deliver

Comparative Evaluation
UConn North Campus Master Plan
Mansfield, CT

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1.0 INTRODUCTION

This document is comparative evaluation for the proposed 3,400-foot extension of North Hillside Road on the UConn Storrs campus. The proposed extension of North Hillside Road is from its current terminus northward to U.S. Route 44 in the town of Mansfield, Connecticut. The proposed project will construct a road to provide an alternate entrance to the University and to relieve traffic on U.S. Route 44, Route 195, and Hunting Lodge Road. The new road is also intended to facilitate the development of UConn-related academic and research buildings, student housing, and recreational facilities on parcels of land adjacent to the Storrs campus, also known as the "North Campus."

The potential environmental effects of the proposed extension of North Hillside Road and the associated development of the North Campus area were previously evaluated in CEPA Environmental Impact Evaluations (EIEs) prepared in 1994 (Environmental Impact Evaluation for State Actions Associated with a Research and Technology Park, Frederic R. Harris, Inc.) and 2001 (Environmental Impact Statement, North Campus Master Plan, Frederic R. Harris, Inc.). The Connecticut Office of Policy and Management (OPM) had determined that the project would not require additional CEPA review provided that the road alignment is generally the same as the alignment approved in the 2001 North Campus Master Plan EIE.

However, OPM has since raised concerns regarding potential differences in background traffic growth anticipated by the previous EIEs and current traffic projections. Consistent with CEPA regulations OPM has determined that a new CEPA EIE will not be required for the project but has requested the enclosed comparative evaluation in order to compare the traffic impacts of the proposed project against those originally identified in the 2001 EIE.

The projected 2010 No-Build and Build traffic conditions were analyzed based on new counts performed in 2006. The results of this analysis were compared with the previously conducted 2010 Base conditions analysis in the 2001 EIE, in order to determine if significant impacts to traffic operations are anticipated as a result of the development of the North Campus area.

2.0 EXISTING CONDITIONS

2.1 Site of Development

The Storrs Campus of the University of Connecticut is located in the town of Mansfield, Connecticut. The campus is bounded roughly by Route 44 (Middle Turnpike) to the north, Route 195 (Storrs Road) to the East, Route 275 (South Eagleville Road) to the south, and Hunting Lodge Road to the west. The proposed development includes the extension of North Hillside Road north to Route 44 and subsequent future development of the North Campus as described in the 2001 EIE.

2.2 Adjacent Roadway Network

The adjacent roadway network includes the following roads:

- Route 195 (Storrs Road)

- Hillside Road/North Hillside Road
- Route 44 (Middle Turnpike)
- Route 275 (South Eagleville Road)
- Route 430 (North Eagleville Road)
- Moulton Road
- Gurleyville Road
- Dog Lane
- Mansfield Road
- Stadium Road
- Separatist Road
- Hunting Lodge Road

State Route 195 (Storrs Road) has a posted speed limit of 30 miles per hour and is classified by the Connecticut Department of Transportation (ConnDOT) as a minor arterial roadway. This roadway begins at Route 6 to the south of the site and continues north along the northeastern portion of the University of Connecticut campus to its intersection with Route 44, where it becomes the Tolland Turnpike. State Route 195 provides one travel lane in each direction with sidewalks on both sides of the roadway.

Hillside Road/North Hillside Road is a campus roadway with a posted speed limit of 25 miles per hour. This roadway begins north of South Eagleville Road at Hillside circle and continues north to a point approximately half a mile north of North Eagleville Road. There are plans to continue North Hillside Road north to Route 44. Due to heavy pedestrian traffic, sidewalks are provided on both sides of the roadway with multiple crosswalks along its length.

Route 44 (Middle Turnpike) is classified by ConnDOT as a principal arterial and has a posted speed limit of 40 miles per hour in the vicinity of the campus. This roadway provides a single travel lane in each direction in the vicinity of the campus. Route 44 begins in Abington in the east and continues west to the state of New York. Route 44 provides access to the town of Ashford to the east and Coventry to the west.

Route 275 (South Eagleville Road) has a posted speed limit of 40 miles per hour and is classified by ConnDOT as a collector roadway. South Eagleville Road begins at Route 32 and continues northeast to Route 195. Land use along the road is primarily residential, including several apartment complexes.

Route 430 (North Eagleville Road) has a single travel lane in each direction and a posted speed limit of 25 miles per hour. This roadway is classified by ConnDOT as an urban minor arterial. North Eagleville Road begins at Route 32 and continues northeast to Route 195, where it terminates. The road serves as a main access roadway for the UConn campus, with multiple internal campus roadways and parking lot driveways intersecting it along its length.

Moulton Road is classified by ConnDOT as a local road. It has a single travel lane in each direction and has a north-south orientation, beginning at Route 195 and continuing northeast to Route 44. The majority of the land along Moulton Road is undeveloped.

Gurleyville Road is classified by ConnDOT as a local road, providing a single travel lane in each direction. Gurleyville Road begins at Route 195 and continues approximately 3 miles east, where it terminates at Woodland Road. Land use along Gurleyville Road is primarily residential.

Dog Lane is classified by ConnDOT as a local road and has a posted speed limit of 25 miles per hour. Land use along Dog Lane is commercial in the immediate vicinity of 195. Further east, land use along the road is residential. Dog Lane terminates in a dead end approximately one mile east of Route 195, just east of Bundy Lane.

Mansfield Road has a posted speed limit of 25 miles per hour and is classified by ConnDOT as a state institution road as it is located on the University of Connecticut campus. Mansfield Road provides access to the internal campus roadways and parking lots.

Stadium Road begins at Separatist Road on the western side of campus and continues east to Hillside Road in the center of campus, where it terminates. It has a posted speed limit of 25 miles per hour and is classified by ConnDOT as a state institution road.

Separatist Road is classified by ConnDOT as a collector and has a posted speed limit of 30 miles per hour. It has a single travel lane in each direction and serves as a connection between North Eagleville Road and South Eagleville Road. Land use along Separatist Road is residential.

Hunting Lodge Road is classified by ConnDOT as a local road and has a posted speed limit of 30 miles per hour. This roadway provides a single lane in each direction and serves as a connection from Separatist Road in the south to Birch Road in the north. Land use along Hunting Lodge Road is residential, including several apartment complexes.

2.3 Study Area Intersections

The adjacent roadway network includes the following intersections:

- Route 44 at Bank/Professional Park Drive (proposed North Hillside Road intersection)
- Route 44 at Route 195
- Route 195 at Moulton Road/Tower Loop Road
- Route 195 at North Eagleville Road
- Route 195 at Gurleyville Road
- Route 195 at Mansfield Road
- Route 195 at Dog Lane/Bolton Road
- Route 195 at South Eagleville Road
- North Eagleville Road at Hillside Road/North Hillside Road
- North Eagleville Road at Hunting Lodge Road
- Hillside Road at Stadium Road
- South Eagleville Road at Separatist Road/Sycamore Drive

North Hillside Road will be extended from its current terminus north of North Eagleville Road to Route 44. A new four-way intersection will be constructed at the intersection of North Hillside Road at Route 44, at the current location of the bank driveway intersection, opposite the Professional Park driveway. As part of the mitigation proposed in the 2001 EIE, this intersection will be signalized and will provide two lanes on the northbound approach. Route 44 will be widened in order to provide exclusive left and right turn storage lanes in the westbound and eastbound directions, respectively.

At the signalized intersection of Route 195 at Route 44, the northbound and southbound Route 195 approaches each have an exclusive left turn lane, a through lane, and a through/right turn lane. An exclusive left turn lane and a shared through/right turn lane are provided at the eastbound and westbound Route 44 approaches. Protected left turn phasing is provided on the Route 195 approaches, while protected plus permitted left turn phasing is provided on the Route 44 approaches. An exclusive pedestrian phase is also provided.

Route 195 at Moulton Road/Tower Loop Road is a signalized intersection and provides a single approach lane from each direction. The eastbound Tower Loop Road approach is one-way, providing egress from UConn parking lot "W." Just north of this intersection is a one-way entry drive that provides access to Tower Loop Road from Storrs Road.

The signalized intersections of Route 195 at Gurleyville Road and Route 195 at North Eagleville Road both form "T" intersections, and operate on a single controller due to their proximity to each other. There is approximately 250 feet of vehicle storage between the two intersections. The eastbound North Eagleville Road approach and the westbound Gurleyville Road approach each provide a left turn lane and a right turn lane. Exclusive left turn lanes are provided on Route 195 at each of the intersections. The northbound left turn lane at North Eagleville Road extends beyond the intersection with Gurleyville Road, where it is marked as a through lane. A southbound right turn lane is also provided on Route 195 at North Eagleville Road. This intersection has an exclusive pedestrian phase due to heavy pedestrian traffic from the University.

At the signalized intersection of Route 195 (Storrs Road) at Mansfield Road, the eastbound and westbound approaches at Mansfield Road and Bishop Circle each provide a single lane. The northbound and southbound Storrs Road approaches each provide one through lane and an exclusive left turn lane. An exclusive pedestrian phase is provided at this location due to the high volume of pedestrian traffic crossing Route 195.

The intersections of Route 195 (Storrs Road) with Dog Lane and Bolton Road are each "T" intersections, and are controlled by a single signal controller, as they are located less than 100 feet apart. Approximately 30 feet of storage is provided on Route 195 between the two intersections. Left turn lanes are provided on the Route 195 approaches to both intersections. The Dog Lane approach provides a single lane, while the Bolton Road approach provides both a left and right turn lane. The signal provides separate phases for the Bolton Road and Dog Lane approaches, including clearance phases on Route 195, enabling vehicles to safely clear the intersection. The signal also provides an exclusive pedestrian phase.

The signalized intersection of Route 195 at South Eagleville Road has four approaches. The southbound approach at Storrs Road has a left turn lane, a through lane, and a shared through/right turn lane. On the northbound approach at Storrs Road, one left turn lane and one through/right turn lane are provided. A left turn lane and a through/right turn lane are provided at the Eastbound South Eagleville Road approach, and the Post Office Drive has a single approach lane. Signal phasing at this intersection includes dual left overlap phasing on Storrs Road, a South Eagleville/Post Office phase and an exclusive pedestrian phase.

The intersection of North Eagleville Road at Hillside Road is signalized. The southbound North Hillside Road approach and the northbound Hillside Road approach each provide an exclusive left turn lane and a shared through/right turn lane. A left turn lane, a through lane and a right turn lane are provided at the eastbound North Eagleville Road approach, while the westbound approach has an exclusive left turn lane and a shared through/right turn lane. Left turn advance phases are provided on all approaches with the exception of the eastbound approach. An exclusive pedestrian phase is also provided.

Hunting Lodge Road at Route 430 (North Eagleville Road) is an unsignalized intersection with stop control at all four approaches. The northbound and southbound Hunting Lodge Road approaches and the eastbound North Eagleville Road approach have a single approach lane, while the westbound North Eagleville Road approach has a right turn lane and a shared through/left turn lane. The eastbound North Eagleville Road approach at this location is wide enough to accommodate a second lane.

The all-way stop-controlled intersection of Hillside Road at Stadium Road provides a single lane on each of the four approaches. Hillside Road forms the northbound and southbound approaches, Stadium Road forms the eastbound approach, and a UConn parking lot driveway forms the westbound approach.

The intersection of South Eagleville Road at Separatist Road and Sycamore Drive provides two-way stop control. The northbound Sycamore Drive and southbound Separatist Road approaches are controlled by stop signs, and each provide a single approach lane to South Eagleville Road. South Eagleville Road provides a single travel lane in each direction at this location.

2.4 Traffic Volumes, Speeds and Counts

In order to compare 2010 traffic conditions to those projected in the 2001 EIE, representatives of Fuss & O'Neill, Inc. conducted AM and PM peak period manual turning movement counts in November and December, 2006, at the thirteen intersections in the study area. The traffic count data collected indicates that the AM peak hour of traffic is 8:00 to 9:00 AM, while the PM peak hour is 4:30 to 5:30 PM. These peak hours were subsequently analyzed for comparison purposes. The existing traffic volumes for these peak hours are shown in Figures 1 and 2 of Appendix B.

Automatic traffic recorders were also placed on each of the major roadways within the study area network in order to determine 24 hour traffic volumes. Copies of the ATR traffic data have been included in Appendix E of this report.

3.0 NO BUILD TRAFFIC CONDITIONS

3.1 Background Growth

The 2006 existing traffic volumes were projected to 2010 No Build volumes by the Connecticut Department of Transportation. The State Traffic Commission (STC) as well as the planning departments from the Towns of Mansfield and Tolland were contacted in order to identify any pending developments in the region which could impact traffic volumes within the study area. Three developments were identified.

The Mansfield Downtown Partnership plans to develop Storrs Center into a mixed use, pedestrian friendly development that will include retail, office, and residential land uses. The development will be located on the west side of Route 195, between South Eagleville Road and Dog Lane. A new apartment complex on Hunting Lodge Road as well as an addition to the existing Celeron Square apartments, also on Hunting Lodge Road, are currently under design. No applications have been submitted to either the Town of Mansfield or the STC for these developments

This information was entered into the Department's Regional Traffic Model, to project 2010 volumes within the study area. The model also took into account the new North Hillside Road extension, which will be constructed as part of the North Campus development. This new connection will result in some redistributed trips to and from campus, which are accounted for in the no build volumes. These volumes were provided to Fuss & O'Neill by the ConnDOT Bureau of Planning. The projected 2010 No Build traffic volumes are shown in Figures 3 and 4 of Appendix B.

4.0 PROPOSED CONDITIONS

4.1 North Campus Developments

The University of Connecticut plan to develop the North Campus is detailed in the 2001 EIE. Several projects identified in the document have been completed, including the Charter Oak apartments and the tennis courts, and are therefore accounted for in the existing traffic volumes. At full build-out, the remaining development will consist primarily of technology research and development buildings, with approximately 855,000 square feet of office and laboratory space, as described in the 2001 North Campus Master Plan. A 2,700 space parking lot will also be constructed for remote campus overflow parking.

4.2 Site Access

Access to the site will be provided via an extension of the existing North Hillside Road. The road currently begins at North Eagleville Road at a signalized intersection, and opposes Hillside Road to the south. The road terminates at the Charter Oak apartments on the north side of campus. North Hillside Road will be extended north to Route 44, where a new signalized intersection will be provided. The new research and development facilities will be constructed along the roadway, with driveways and parking as necessary.

4.3 Trip Generation

Trip generation calculations were provided by ConnDOT for the proposed technology park and parking lot. Trips for the technology park were generated using the Institute of Transportation Engineers (ITE) publication *Trip Generation*, 7th edition, 2003. This publication is an industry-accepted resource for determining trip generation. Trips for the parking lot were generated at a rate of 0.35 trips per parking space. This rate is conservative, as it is expected that most of the trips to and from this parking lot will redistributed trips from other parking lots on campus, rather than newly generated trips.

For the purposes of this analysis, the new trips were distributed through the network using a fixed distribution from the ConnDOT regional model. This method applies the maximum number of trips to the intersections within the model. Under actual conditions, not all of these trips may be realized as a significant number of trips are absorbed by internal roadway connections. A sub-regional model developed for the 2001 EIE included these internal connections, and as a result projected lower volumes than the ConnDOT model at some of the key intersections.

5.0 ANALYSES

5.1 Intersection Capacity Analyses

Capacity analyses for both signalized and unsignalized intersections were conducted using Synchro Professional Software, version 7.0.

In discussing intersection capacity analyses results, two terms are used to describe the operating condition of the road or intersection. These two terms are volume to capacity ratio (v/c) and level of service (LOS).

The v/c ratio is a ratio of the volume of traffic using an intersection to the total capacity of the intersection (the maximum number of vehicles that can utilize the intersection during an hour). The v/c ratio can be used to describe the percentage of capacity utilized by a single intersection movement, a combination of movements, an entire intersection approach, or the intersection as a whole.

LOS is a measure of the delay experienced by stopped vehicles at an intersection. LOS is rated on a scale from A to F, with A describing a condition of very low delay (less than 10 seconds per vehicle), and F describing a condition where delays will exceed 50 seconds per vehicle for unsignalized intersections and 80 seconds per vehicle for signalized intersections. Delay is described as a measure of driver discomfort, frustration, fuel consumption, and lost travel time. Therefore, intersections with longer delay times are less acceptable to most drivers.

LOS is generally used to describe the operation (based on delay time) of both signalized and unsignalized intersections, while v/c ratio is applied to signalized intersections only. These definitions for v/c ratio and LOS, as well as the methodology for conducting signalized and unsignalized intersection capacity analyses, are taken from the 2000 Highway Capacity Manual published by the Transportation Research Board.

In discussing two-way stop controlled intersection capacity analyses, the term "level of service" (LOS) is used to provide a description of the delay and operational characteristics of the turns from the minor street (stop sign controlled) to the major street, and turns from the major street to the minor street. Through vehicles are not delayed by the minor street and do not experience delay, therefore they are not rated with a level of service. For all-way stop controlled intersections, LOS describes the average delay experienced by all vehicles entering the intersection.

Using the above referenced methodologies, AM and PM peak hour capacity analyses were conducted at the following signalized intersections:

- Route 44 proposed North Hillside Road intersection
- Route 44 at Route 195
- Route 195 at Moulton Road/Tower Loop Road
- Route 195 at North Eagleville Road
- Route 195 at Gurleyville Road
- Route 195 at Mansfield Road
- Route 195 at Dog Lane/Bolton Road
- Route 195 at South Eagleville Road
- North Eagleville Road at Hillside Road/North Hillside Road

AM and PM peak hour capacity analyses were also conducted at the following unsignalized intersections:

- Route 44 at Bank/Professional Park Drives
- North Eagleville Road at Hunting Lodge Road
- Hillside Road at Stadium Road
- South Eagleville Road at Separatist Road/Sycamore Drive

Tables 1 through 3 of Appendix A, present a summary of the levels of service at the unsignalized and signalized intersections for both 2006 Existing and 2010 No Build traffic conditions. The tables also provide the previously projected 2010 Base levels of service from the 2001 EIE. Copies of the analysis worksheets can be found in Appendices C and D, for the AM and PM peak hours respectively.

As previously projected in the 2001 EIE, each of the signalized intersections is projected to operate at LOS D or better under the No-Build condition with adjustments to signal timing splits the intersections of Route 195 at Bolton Road, Route 195 at Dog Lane, and North Eagleville Road at Hillside Road. Under the 2010 Build Condition, each of the signalized intersections will continue to operate at LOS D or better with adjustments to the timing splits, with the exception of the Route 195 at Route 44 and North Eagleville Road at Hillside Road.

The intersection of Route 195 at Route 44 is expected to operate at LOS F during both peak hours under the 2010 Build Condition. Revisions to the timing splits would allow the intersection to operate at LOS E during the AM peak hour. LOS E may be provided during the PM peak hour by revising the northbound and southbound left turn phasing in order to

provide protected plus permitted operation. The intersection may not realize the full delay projected in this analysis, due to the limitations of the regional model, as a number of the new trips may be absorbed by internal connections.

In order to restore LOS D or better operations during both peak hours, geometric improvements to the roadways will be required. Route 195 will need to be widened for an exclusive right turn lane on the southbound approach, with a channelized right turn movement at the intersection. Route 44 would also require widening on the eastbound approach, in order to provide a second left turn lane. This will also require a revision to the signal phasing to provide protected left turn only phasing on the eastbound and westbound approaches.

The extent of the future development of this region is still uncertain. Changes in zoning or construction of public sewers and other utilities may drive a need for additional capacity at the intersection. The public may be best served by a comprehensive improvement in the area as part of a larger State financed project.

The intersection of North Eagleville Road at Hillside Road is expected to operate at LOS F during both peak hours under the Build Condition. Modifications to the timing splits will allow the intersection to operate at LOS E during the AM peak hour and LOS C during the PM peak hour. In order to restore LOS D operations during the AM peak hour, North Eagleville Road will require widening in order to provide a westbound exclusive right turn lane. Additionally, the signal phasing should be modified in order to provide a westbound right turn phase overlapping the southbound left turn phase.

The two-way stop controlled intersection of South Eagleville Road with Separatist Road and Sycamore Drive is expected to operate at LOS F for vehicles on the Separatist Road approach during the PM peak hour. The 2001 EIE indicated that LOS D operations could be provided with widening on the Separatist Road approach to provide two lanes. With this improvement, it is expected that the approach will continue to operate at LOS F in the 2010 Build condition. A traffic signal is not recommended at this location, as it does not meet any of the MUTCD traffic signal warrants.

The all-way stop controlled intersection of North Eagleville Road at Hunting Lodge Road is expected to operate at LOS F during the AM peak hour and LOS E during the PM peak hour under the 2010 Build Condition, compared to a previously projected LOS C and LOS D, respectively. The intersection meets the MUTCD peak hour warrant for a traffic signal during the PM peak hour. The intersection does not meet any of the other signal warrants however. ConnDOT does not typically approve new signal installations where warrants are met only during the peak hours.

6.0 CONCLUSIONS & RECOMMENDATIONS

This comparative evaluation was conducted at the request of the Connecticut Office of Policy and Management, in accordance with the Connecticut Environmental Policy Act (CEPA). The purpose of the evaluation is to compare the traffic impacts of the proposed North Campus Development to those that were identified in the 2001 EIE.

The results of the analysis indicate that the extension of North Hillside Road will not have a significant impact to traffic operations and level of service. The 2010 No Build levels of service (LOS) did not significantly differ from what was originally projected in the 2001 EIE with an allowance for signal timing optimizations at the signalized intersections of North Eagleville Road at Hillside Road, Route 195 at Bolton Road, and Route 195 at Dog Lane. No additional mitigation is necessary for the 2010 completion of North Hillside Road.

The 2001 EIE projects full development of the North Campus to be completed by 2010. Given the absence of a completed North Hillside extension prior to 2010, the full build out of the North Campus will not completed at that time but will instead be realized in future years. For comparison purposes, the traffic generation of a completed North Campus was added to the 2010 No Build projections and compared to the 2010 Full Build condition in the 2001 EIE.

Under the full build condition, optimizing the signal timing at each intersection within the network will allow most of the signalized intersections to continue to operate acceptably during both peak hours. The following geometric improvements are recommended prior to the completion of the full North Campus development in order to maintain acceptable levels of service at all of the signalized intersections within the network:

- Widen Route 195 southbound approach to Route 44 in order to provide exclusive right turn lane with channelized movement.
- Widen Route 44 eastbound approach to Route 195 in order to provide second exclusive left turn lane.
- Revise phasing at Route 195 and Route 44 to provide protected only left turns on the eastbound and westbound approaches.
- Widen North Eagleville Road westbound at Hillside Road to provide an exclusive right turn lane. Revise signal phasing to include a right turn overlap phase with the southbound left turn phase.

The extent of the future development of this region is still uncertain. Changes in zoning or construction of public sewers and other utilities along the Route 44 corridor may drive a need for additional capacity within the study area network. It is recommended that mitigation be performed on a schedule to coincide with the demands of the development as each phase is implemented. Ultimately these improvements may be part of a larger State initiative in this region. The public may be best served by such a comprehensive approach.

The unsignalized intersections of South Eagleville Road at Separatist Road and North Eagleville Road at Hunting Lodge Road are both expected to operate poorly at LOS F under the 2010 Build Condition. Geometric improvements will not result in improved operations at these intersections, and signals are not warranted by the traffic volumes. Based on observation of field conditions, examination of the projected land use trip generation and ADT volume data, we have concluded that the delay for South Eagleville Road at Separatist Road will be limited to the minor Separatist Road approach only, and will not impact traffic on South Eagleville Road. Furthermore, this delay will be limited to the PM peak hour only, and the intersection will operate more efficiently during the rest of the day. The delay at the intersection of North Eagleville Road at Hunting Lodge Road is limited to the southbound and eastbound approaches during the AM peak hour only.

With the recommendations and exceptions outlined above, it is expected that the roadway network and study area intersections will operate satisfactorily in a manner similar to the projections of the 2001

Table No. 1
SIGNALIZED INTERSECTION LEVEL OF SERVICE SUMMARY
UConn North Hillside Road
Mansfield, Connecticut

SIGNALIZED INTERSECTIONS	Weekday Morning Peak Hour					Weekday Afternoon Peak Hour				
	Year 2006 Existing	Year 2010 No Build	2001 EIE 2010 Base	Year 2010 Build	2001 EIE 2010 Build	Year 2006 Existing	Year 2010 No Build	2001 EIE 2010 Base	Year 2010 Build	2001 EIE 2010 Build
Route 44 at North Hillside Road	-	A	A	B	A	-	B	B	D	B
Route 44 at Route 195	C	D	D	F(E)*	D	C	D	D	F	D
With Geometric Improvements				C					D	
Route 195 at Moulton Road	A	A	-	A	-	B	A	-	A	-
Route 195 at North Eagleville Road	B	B	D	D	D	F	D	D	E(C)	D
Route 195 at Gurleyville Road	A	A	C	D	C	B	C	D	C	D
Route 195 at Mansfield Road	A	A	B	A	B	B	B	E	C	E
Route 195 at Dog Lane	B	B	D	C	D	D	E	D	F(D)	D
Route 195 at Bolton Road	D	D		F(D)		C	C		C	
Route 195 at South Eagleville Road	B	B	D	C	D	C	C	D	C	D
North Eagleville Road at Hillside Road	E	F	E	F(E)	C	C	D	E	F(C)	C
With Geometric Improvements				D					C	

NOTE: Both the 2010 No build and 2001 EIE-2010 Base conditions include the proposed North Hillside Road extension to Route 44.
* LOS (LOS) indicates level of service without timing optimization (with timing optimization)

Table No. 2
TWO-WAY STOP CONTROLLED INTERSECTION LEVEL OF SERVICE SUMMARY
UConn North Hillside Road
Mansfield, Connecticut

TWO-WAY STOP CONTROLLED INTERSECTIONS	Weekday Morning Peak Hour					Weekday Afternoon Peak Hour				
	Year 2006 Existing	Year 2010 No Build	2001 EIE 2010 Base	Year 2010 Build	2001 EIE 2010 Build	Year 2006 Existing	Year 2010 No Build	Old EIE 2010 Base	Year 2010 Build	2001 EIE 2010 Build
Route 44 at North Hillside Road										
Bank Drives Northbound	B	-	-	-	-	B	-	-	-	-
Professional Park Drive Southbound	B	-	-	-	-	C	-	-	-	-
Route 44 Eastbound Left Turn	A	-	-	-	-	A	-	-	-	-
Route 44 Westbound Left Turn	A	-	-	-	-	A	-	-	-	-
South Eagleville Road at Separatist Road										
Sycamore Drive Northbound	B	B	-	B	-	C	C	-	C	-
Separatist Road Southbound	C	C	B	C	B	F	F	F	F	F
With Geometric Improvements				C	B				F	D
South Eagleville Road Eastbound Left Turn	A	A	-	A	-	A	A	-	A	-
South Eagleville Road Westbound Left Turn	A	A	-	A	-	A	A	-	A	-

NOTE: Both the 2010 No build and 2001 EIE-2010 Base conditions include the proposed North Hillside Road extension to Route 44.

Table No. 3
ALL-WAY STOP CONTROLLED INTERSECTION LEVEL OF SERVICE SUMMARY
UConn North Hillside Road
Mansfield, Connecticut

ALL-WAY STOP CONTROLLED INTERSECTIONS	Weekday Morning Peak Hour					Weekday Afternoon Peak Hour				
	Year 2006 Existing	Year 2010 No Build	2001 EIE 2010 Base	Year 2010 Build	2001 EIE 2010 Build	Year 2006 Existing	Year 2010 No Build	Old EIE 2010 Base	Year 2010 Build	2001 EIE 2010 Build
North Eagleville Road at Hunting Lodge	**C**	**C**	**C**	**F**	**C**	**C**	**C**	**D**	**D**	**D**
North Eagleville Road Eastbound	C	C		F		B	B		B	
North Eagleville Road Westbound	A	A		B		C	B		D	
Hunting Lodge Road Northbound	A	B		B		B	B		B	
Hunting Lodge Road Southbound	D	D		F		C	C		C	
Hillside Road at Stadium Road	**A**	**A**	**C**	**A**	**C**	**B**	**B**	**D**	**B**	**F**
Stadium Road Eastbound	A	A		A		B	B		B	
Stadium Road Westbound	A	A		A		A	A		A	
Parking Lot Drive Northbound	A	A		A		B	C		C	
Stadium Road Southbound	A	B		B		B	B		B	

NOTE: Both the 2010 No build and 2001 EIE-2010 Base conditions include the proposed North Hillside Road extension to Route 44.

				PROJ. MANAGER:	
				CHIEF DESIGNER:	
				REVIEWED BY:	DATE
1.					
No.	DATE	DESCRIPTION	BY		
REVISIONS					

SCALE:
HORZ.: NTS
VERT.:
DATUM:
HORZ.:
VERT.:

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UNIVERSITY OF CONNECTICUT
2006 EXISTING CONDITIONS
AM PEAK HOUR
NORTH CAMPUS COMPARATIVE EVALUATION
MANSFIELD CONNECTICUT

PROJ. No.: 2005.147.A20
DATE: JANUARY 2007

FIG. 1

CTB: LMAN: MS VIEW: UCS:

				PROJ. MANAGER:	
				CHIEF DESIGNER:	
				REVIEWED BY:	DATE
1.					
No.	DATE	DESCRIPTION	BY		
REVISIONS					

SCALE:
HORZ.: NTS
VERT.:
DATUM:
HORZ.:
VERT.:

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UNIVERSITY OF CONNECTICUT
2006 EXISTING CONDITIONS
PM PEAK HOUR
NORTH CAMPUS COMPARATIVE EVALUATION
MANSFIELD CONNECTICUT

PROJ. No.: 2005.147.A20
DATE: JANUARY 2007

FIG. 2

				PROJ. MANAGER:	
				CHIEF DESIGNER:	
				REVIEWED BY:	DATE
1.					
No.	DATE	DESCRIPTION	BY		
REVISIONS					

SCALE:
HORZ.: NTS
VERT.:
DATUM:
HORZ.:
VERT.:

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2010 NO BUILD
AM PEAK HOUR
NORTH CAMPUS COMPARATIVE EVALUATION
MANSFIELD CONNECTICUT

PROJ. No.: 2005.147.A20
DATE: JANUARY 2007

FIG. 3

CTB: LMAN: MS VIEW: UCS:

				PROJ. MANAGER:	
				CHIEF DESIGNER:	
				REVIEWED BY:	DATE
1.					
No.	DATE	DESCRIPTION	BY		
REVISIONS					

SCALE:
HORZ.: NTS
VERT.:
DATUM:
HORZ.:
VERT.:

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MANSFIELD CONNECTICUT

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FIG. 4

CTB: LMAN: MS VIEW: UCS:

				PROJ. MANAGER:	
				CHIEF DESIGNER:	
				REVIEWED BY:	DATE
1.					
No.	DATE	DESCRIPTION	BY		
REVISIONS					

SCALE:
HORZ.: NTS
VERT.:
DATUM:
HORZ.:
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TRIP GENERATION
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NORTH CAMPUS COMPARATIVE EVALUATION
MANSFIELD CONNECTICUT

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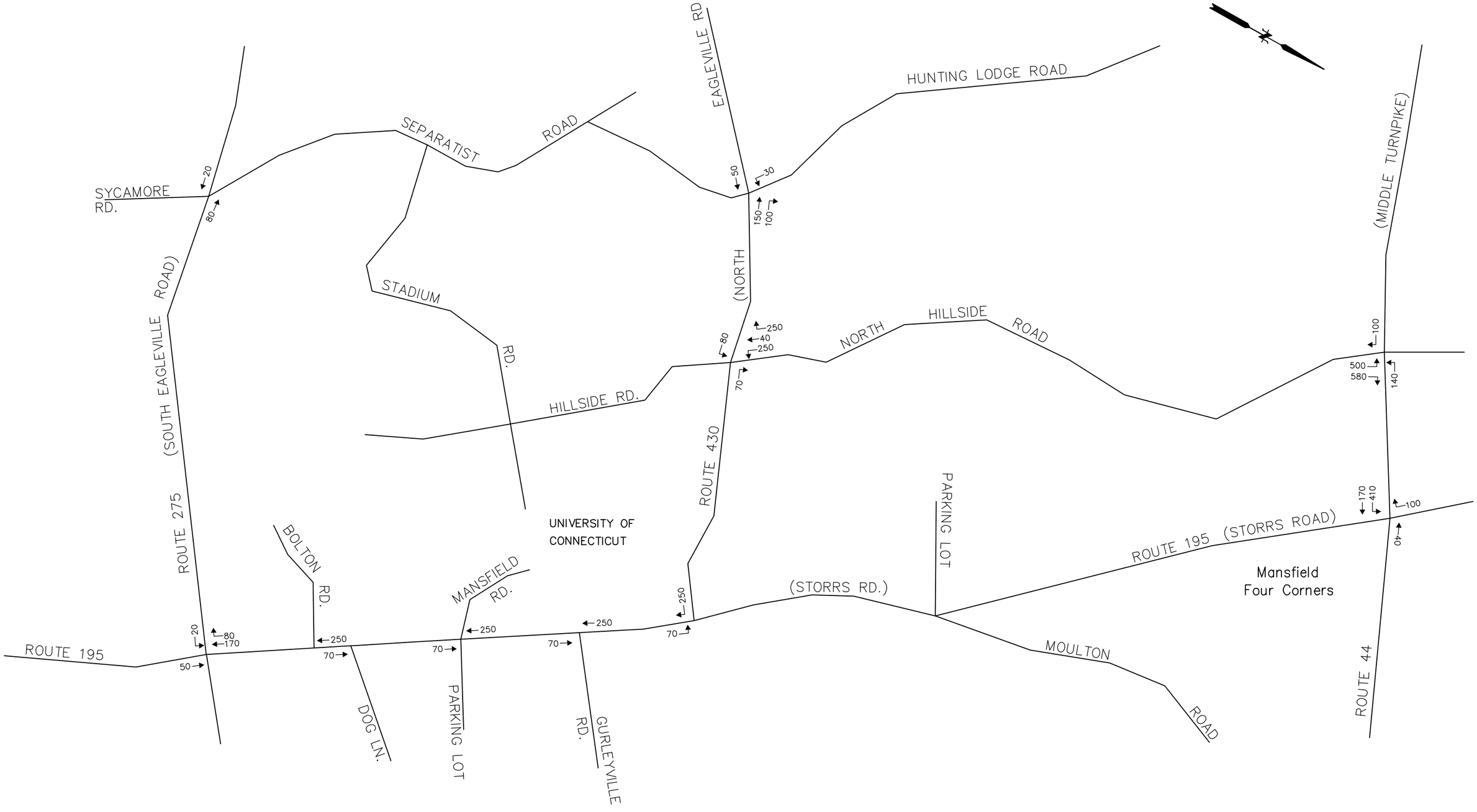
DATE: JANUARY 2007

FIG 5



				PROJ. MANAGER:	
				CHIEF DESIGNER:	
				REVIEWED BY:	DATE
1.					
No.	DATE	DESCRIPTION	BY		
REVISIONS					

SCALE:
HORZ.: NTS
VERT.:
DATUM:
HORZ.:
VERT.:

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NORTH CAMPUS COMPARATIVE EVALUATION
MANSFIELD CONNECTICUT

PROJ. No.: 2005.147.A20
DATE: JANUARY 2007

FIG 6

CTB: LMAN: MS VIEW: UCS:

				PROJ. MANAGER:	
				CHIEF DESIGNER:	
				REVIEWED BY:	DATE
1.					
No.	DATE	DESCRIPTION	BY		
REVISIONS					

SCALE:
HORZ.: NTS
VERT.:
DATUM:
HORZ.:
VERT.:

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AM PEAK HOUR
NORTH CAMPUS COMPARATIVE EVALUATION
MANSFIELD CONNECTICUT

PROJ. No.: 2005.147.A20
DATE: JANUARY 2007

FIG 7

CTB: LMAN: MS VIEW: UCS:

				PROJ. MANAGER:	
				CHIEF DESIGNER:	
				REVIEWED BY:	DATE
1.					
No.	DATE	DESCRIPTION	BY		
REVISIONS					

SCALE:
HORZ.: NTS
VERT.:
DATUM:
HORZ.:
VERT.:

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MANSFIELD CONNECTICUT

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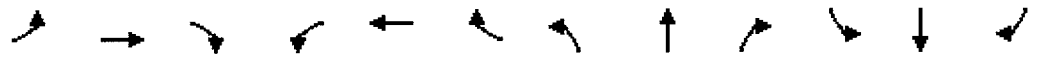
DATE: JANUARY 2007

FIG 8

2010 NO BUILD TRAFFIC VOLUMES

AM PEAK HOUR

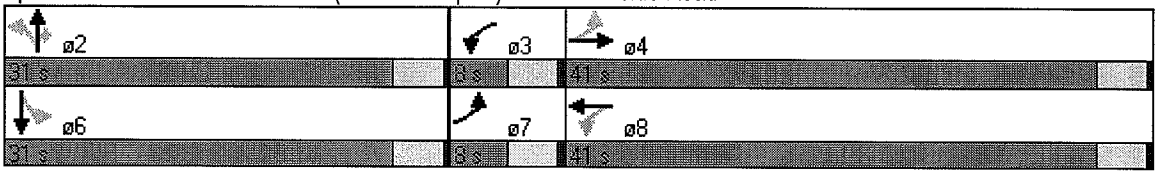


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	20	240	120	230	300	40	10	0	40	10	0	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	200		0	0		150	0		0
Storage Lanes	1		0	1		0	0		1	0		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.950			0.982				0.850		0.932	
Flt Protected	0.950			0.950				0.950			0.976	
Satd. Flow (prot)	1805	1752	0	1805	1818	0	0	1805	1615	0	1728	0
Flt Permitted	0.538			0.410								
Satd. Flow (perm)	1022	1752	0	779	1818	0	0	1900	1615	0	1771	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		42			11				44		11	
Link Speed (mph)		30			45			30			30	
Link Distance (ft)		1971			1708			712			486	
Travel Time (s)		44.8			25.9			16.2			11.0	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	2%	5%	0%	3%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	22	267	133	256	333	44	11	0	44	11	0	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	22	400	0	256	377	0	0	11	44	0	22	0
Turn Type	pm+pt			pm+pt			Perm		Perm	Perm		
Protected Phases	7	4		3	8			2			6	
Permitted Phases	4			8			2		2	6		
Detector Phase	7	4		3	8		2	2	2	6	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Minimum Split (s)	8.0	20.0		8.0	20.0		20.0	20.0	20.0	20.0	20.0	
Total Split (s)	8.0	41.0	0.0	8.0	41.0	0.0	31.0	31.0	31.0	31.0	31.0	0.0
Total Split (%)	10.0%	51.3%	0.0%	10.0%	51.3%	0.0%	38.8%	38.8%	38.8%	38.8%	38.8%	0.0%
Maximum Green (s)	4.0	37.0		4.0	37.0		27.0	27.0	27.0	27.0	27.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5	0.5	0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	Min		None	Min		None	None	None	None	None	
Walk Time (s)		5.0			5.0		5.0	5.0	5.0	5.0	5.0	
Flash Dont Walk (s)		11.0			11.0		11.0	11.0	11.0	11.0	11.0	
Pedestrian Calls (#/hr)		0			0		0	0	0	0	0	
v/c Ratio	0.04	0.47		0.36	0.26			0.03	0.14		0.07	
Control Delay	4.0	8.4		4.3	4.5			13.5	7.1		10.8	
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Delay	4.0	8.4		4.3	4.5			13.5	7.1		10.8	
Queue Length 50th (ft)	1	19		0	0			1	0		1	
Queue Length 95th (ft)	6	110		39	107			11	18		15	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		1891			1628			632			406	
Turn Bay Length (ft)	100			200					150			
Base Capacity (vph)	594	1241		710	1579			897	786		843	
Starvation Cap Reductn	0	0		0	0			0	0		0	
Spillback Cap Reductn	0	0		0	0			0	0		0	
Storage Cap Reductn	0	0		0	0			0	0		0	
Reduced v/c Ratio	0.04	0.32		0.36	0.24			0.01	0.06		0.03	

Intersection Summary	
Area Type:	Other
Cycle Length: 80	
Actuated Cycle Length: 30.6	
Natural Cycle: 50	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 1: Route 44 (Middle Turnpike) & North Hillside Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	20	240	120	230	300	40	10	0	40	10	0	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0	4.0		4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00			1.00	1.00		1.00	
Frt	1.00	0.95		1.00	0.98			1.00	0.85		0.93	
Flt Protected	0.95	1.00		0.95	1.00			0.95	1.00		0.98	
Satd. Flow (prot)	1805	1753		1805	1819			1805	1615		1729	
Flt Permitted	0.54	1.00		0.41	1.00			1.00	1.00		1.00	
Satd. Flow (perm)	1022	1753		779	1819			1900	1615		1772	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	22	267	133	256	333	44	11	0	44	11	0	11
RTOR Reduction (vph)	0	21	0	0	4	0	0	0	41	0	10	0
Lane Group Flow (vph)	22	379	0	256	373	0	0	11	3	0	12	0
Heavy Vehicles (%)	0%	2%	5%	0%	3%	0%	0%	0%	0%	0%	0%	0%
Turn Type	pm+pt			pm+pt			Perm		Perm	Perm		
Protected Phases	7	4		3	8			2			6	
Permitted Phases	4			8			2		2	6		
Actuated Green, G (s)	18.8	18.2		26.0	21.8			2.1	2.1		2.1	
Effective Green, g (s)	18.8	18.2		26.0	21.8			2.1	2.1		2.1	
Actuated g/C Ratio	0.52	0.50		0.71	0.60			0.06	0.06		0.06	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0	4.0		4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0	3.0		3.0	
Lane Grp Cap (vph)	539	874		673	1086			109	93		102	
v/s Ratio Prot	0.00	c0.22		c0.04	0.20							
v/s Ratio Perm	0.02			0.23				0.01	0.00		c0.01	
v/c Ratio	0.04	0.43		0.38	0.34			0.10	0.03		0.11	
Uniform Delay, d1	4.3	5.9		2.2	3.7			16.3	16.2		16.3	
Progression Factor	1.00	1.00		1.00	1.00			1.00	1.00		1.00	
Incremental Delay, d2	0.0	0.3		0.4	0.2			0.4	0.1		0.5	
Delay (s)	4.4	6.2		2.5	3.9			16.7	16.4		16.8	
Level of Service	A	A		A	A			B	B		B	
Approach Delay (s)		6.1			3.4			16.4			16.8	
Approach LOS		A			A			B			B	

Intersection Summary				
HCM Average Control Delay	5.3	HCM Level of Service	A	
HCM Volume to Capacity ratio	0.48			
Actuated Cycle Length (s)	36.5	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	50.5%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

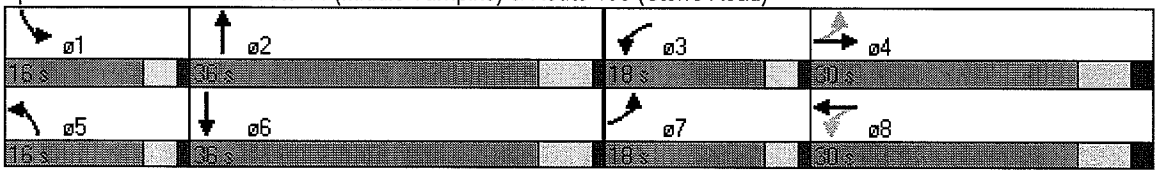
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	80	90	120	210	230	110	60	170	10	40	760	250
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	11	10	12	10	12	12	12	12	12
Storage Length (ft)	250		0	290		0	210		0	250		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	100		25	50		25	50		25	50		25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.914			0.951			0.992			0.963	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1678	1623	0	1745	1600	0	1652	3389	0	1641	3400	0
Flt Permitted	0.371			0.410			0.950			0.950		
Satd. Flow (perm)	655	1623	0	753	1600	0	1652	3389	0	1641	3400	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		63			22			6			46	
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		1708			2086			382			1110	
Travel Time (s)		25.9			31.6			8.7			25.2	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	4%	4%	3%	0%	7%	2%	2%	6%	0%	10%	1%	6%
Adj. Flow (vph)	91	102	136	239	261	125	68	193	11	45	864	284
Shared Lane Traffic (%)												
Lane Group Flow (vph)	91	238	0	239	386	0	68	204	0	45	1148	0
Turn Type	pm+pt			pm+pt			Prot			Prot		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8								
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	4.0	15.0		4.0	15.0		4.0	15.0		4.0	15.0	
Minimum Split (s)	8.0	21.7		8.0	21.7		8.0	20.7		8.0	20.7	
Total Split (s)	18.0	30.0	0.0	18.0	30.0	0.0	16.0	36.0	0.0	16.0	36.0	0.0
Total Split (%)	18.0%	30.0%	0.0%	18.0%	30.0%	0.0%	16.0%	36.0%	0.0%	16.0%	36.0%	0.0%
Maximum Green (s)	14.0	23.3		14.0	23.3		12.0	30.3		12.0	30.3	
Yellow Time (s)	3.0	4.7		3.0	4.7		3.0	4.7		3.0	4.7	
All-Red Time (s)	1.0	2.0		1.0	2.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	6.7	4.0	4.0	6.7	4.0	4.0	5.7	4.0	4.0	5.7	4.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.0	3.0		1.0	3.0		1.0	4.0		1.0	4.0	
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
v/c Ratio	0.32	0.58		0.56	0.81		0.54	0.14		0.43	0.84	
Control Delay	20.8	30.7		24.9	45.8		59.6	20.2		56.9	36.0	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	20.8	30.7		24.9	45.8		59.6	20.2		56.9	36.0	
Queue Length 50th (ft)	34	95		96	212		43	44		28	358	
Queue Length 95th (ft)	63	171		149	#363		82	72		61	#525	
Internal Link Dist (ft)		1628			2006			302			1030	
Turn Bay Length (ft)	250			290			210			250		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)	398	439		448	479		198	1437		197	1364	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.23	0.54		0.53	0.81		0.34	0.14		0.23	0.84	

Intersection Summary

Area Type: Other
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 80
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: Route 44 (Middle Turnpike) & Route 195 (Storrs Road)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	80	90	120	210	230	110	60	170	10	40	760	250
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	12	11	10	12	10	12	12	12	12	12
Total Lost time (s)	4.0	6.7		4.0	6.7		4.0	5.7		4.0	5.7	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	0.91		1.00	0.95		1.00	0.99		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1678	1624		1745	1601		1652	3388		1641	3400	
Flt Permitted	0.37	1.00		0.41	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	654	1624		752	1601		1652	3388		1641	3400	
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	91	102	136	239	261	125	68	193	11	45	864	284
RTOR Reduction (vph)	0	48	0	0	16	0	0	4	0	0	29	0
Lane Group Flow (vph)	91	190	0	239	370	0	68	200	0	45	1119	0
Heavy Vehicles (%)	4%	4%	3%	0%	7%	2%	2%	6%	0%	10%	1%	6%
Turn Type	pm+pt			pm+pt			Prot			Prot		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8								
Actuated Green, G (s)	29.5	23.3		39.1	28.9		6.8	39.9		4.6	37.7	
Effective Green, g (s)	29.5	23.3		39.1	28.9		6.8	39.9		4.6	37.7	
Actuated g/C Ratio	0.30	0.23		0.39	0.29		0.07	0.40		0.05	0.38	
Clearance Time (s)	4.0	6.7		4.0	6.7		4.0	5.7		4.0	5.7	
Vehicle Extension (s)	1.0	3.0		1.0	3.0		1.0	4.0		1.0	4.0	
Lane Grp Cap (vph)	256	378		411	463		112	1352		75	1282	
v/s Ratio Prot	0.02	0.12		c0.07	c0.23		c0.04	0.06		0.03	c0.33	
v/s Ratio Perm	0.08			0.16								
v/c Ratio	0.36	0.50		0.58	0.80		0.61	0.15		0.60	0.87	
Uniform Delay, d1	26.6	33.3		22.0	32.9		45.3	19.2		46.8	28.9	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	1.1		1.4	9.4		6.2	0.2		8.9	8.4	
Delay (s)	26.9	34.4		23.4	42.3		51.5	19.4		55.7	37.3	
Level of Service	C	C		C	D		D	B		E	D	
Approach Delay (s)		32.3			35.0			27.5			38.0	
Approach LOS		C			D			C			D	

Intersection Summary			
HCM Average Control Delay	35.3	HCM Level of Service	D
HCM Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	13.7
Intersection Capacity Utilization	73.5%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

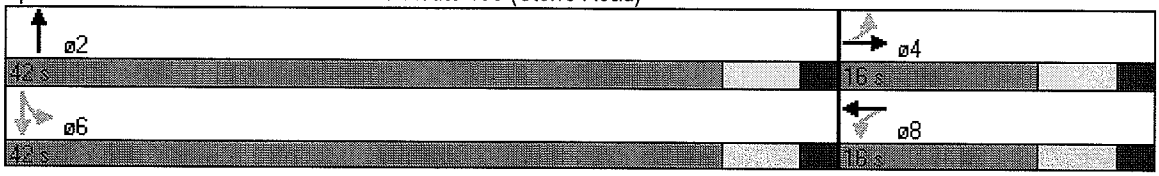
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL		NBR	SBL		SBR
Lane Configurations												
Volume (vph)	10	0	10	20	0	0	0		30	0		0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900		1900	1900		1900
Lane Width (ft)	12	16	12	12	16	12	12		12	12		12
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00
Frt		0.932										
Flt Protected		0.976			0.950							
Satd. Flow (prot)	0	1567	0	0	1948	0	0		0	0		0
Flt Permitted												
Satd. Flow (perm)	0	1606	0	0	2051	0	0		0	0		0
Right Turn on Red			Yes			Yes			Yes			No
Satd. Flow (RTOR)		12										
Link Speed (mph)		30			30							
Link Distance (ft)		333			142							
Travel Time (s)		7.6			3.2							
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86		0.86	0.86		0.86
Heavy Vehicles (%)	0%	0%	50%	5%	0%	50%	0%		21%	0%		0%
Adj. Flow (vph)	12	0	12	23	0	0	0		35	0		0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	24	0	0	23	0	0		0	0		0
Turn Type	Perm			Perm						custom		
Protected Phases		4			8			2				
Permitted Phases	4			8						6	6	
Detector Phase	4	4		8	8			2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0			15.0		15.0	15.0	
Minimum Split (s)	11.0	11.0		11.0	11.0			21.0		21.0	21.0	
Total Split (s)	16.0	16.0	0.0	16.0	16.0	0.0	0.0	42.0	0.0	42.0	42.0	0.0
Total Split (%)	27.6%	27.6%	0.0%	27.6%	27.6%	0.0%	0.0%	72.4%	0.0%	72.4%	72.4%	0.0%
Maximum Green (s)	10.0	10.0		10.0	10.0			36.0		36.0	36.0	
Yellow Time (s)	4.0	4.0		4.0	4.0			4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0			2.0		2.0	2.0	
Lost Time Adjust (s)	-1.0	-1.0	1.0	-1.0	-1.0	1.0	1.0	-1.0	1.0	-1.0	-1.0	1.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0		1.0	1.0			5.0		5.0	5.0	
Recall Mode	None	None		None	None			Min		Min	Min	
v/c Ratio		0.17			0.14			0.19			0.52	
Control Delay		15.8			19.8			1.3			3.2	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		15.8			19.8			1.3			3.2	
Queue Length 50th (ft)		4			9			0			0	
Queue Length 95th (ft)		19			22			47			221	
Internal Link Dist (ft)		253			62			22			346	
Turn Bay Length (ft)												
Base Capacity (vph)		224			273			1617			1745	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	

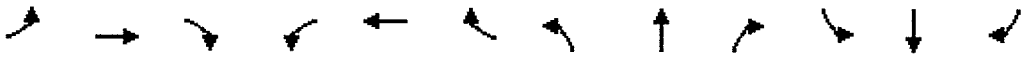
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBR
Storage Cap Reductn		0			0		0		0	
Reduced v/c Ratio		0.11			0.08		0.19		0.52	

Intersection Summary

Area Type: Other
Cycle Length: 58
Actuated Cycle Length: 80.9
Natural Cycle: 50
Control Type: Actuated-Uncoordinated

Splits and Phases: 3: Moulton Road & Route 195 (Storrs Road)





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↑			↰	
Volume (vph)	10	0	10	20	0	0	0	240	30	0	780	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	16	12	12	16	12	12	13	12	12	12	12
Total Lost time (s)		5.0			5.0			5.0			5.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frt		0.93			1.00			0.98			1.00	
Flt Protected		0.98			0.95			1.00			1.00	
Satd. Flow (prot)		1567			1948			1725			1863	
Flt Permitted		1.00			1.00			1.00			1.00	
Satd. Flow (perm)		1606			2051			1725			1863	
Peak-hour factor, PHF	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Adj. Flow (vph)	12	0	12	23	0	0	0	279	35	0	907	0
RTOR Reduction (vph)	0	12	0	0	0	0	0	3	0	0	0	0
Lane Group Flow (vph)	0	12	0	0	23	0	0	311	0	0	907	0
Heavy Vehicles (%)	0%	0%	50%	5%	0%	50%	0%	11%	21%	0%	2%	0%
Turn Type	Perm			Perm						custom		
Protected Phases		4			8			2				
Permitted Phases	4			8						6	6	
Actuated Green, G (s)		1.8			1.8			70.3			70.3	
Effective Green, g (s)		2.8			2.8			71.3			71.3	
Actuated g/C Ratio		0.03			0.03			0.85			0.85	
Clearance Time (s)		6.0			6.0			6.0			6.0	
Vehicle Extension (s)		1.0			1.0			5.0			5.0	
Lane Grp Cap (vph)		53			68			1462			1579	
v/s Ratio Prot								0.18				
v/s Ratio Perm		0.01			c0.01						c0.49	
v/c Ratio		0.23			0.34			0.21			0.57	
Uniform Delay, d1		39.6			39.7			1.2			1.9	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		0.8			1.1			0.2			0.8	
Delay (s)		40.4			40.8			1.3			2.7	
Level of Service		D			D			A			A	
Approach Delay (s)		40.4			40.8			1.3			2.7	
Approach LOS		D			D			A			A	

Intersection Summary			
HCM Average Control Delay	3.8	HCM Level of Service	A
HCM Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	84.1	Sum of lost time (s)	10.0
Intersection Capacity Utilization	53.6%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBR	NBL				ø2
Lane Configurations							
Volume (vph)	100	120	230				
Ideal Flow (vphpl)	1900	1900	1900				
Lane Width (ft)	12	13	10				
Storage Length (ft)	0	100	0				
Storage Lanes	1	1	1				
Taper Length (ft)	25	100	25				
Lane Util. Factor	1.00	1.00	1.00				
Frt		0.850					
Flt Protected	0.950		0.950				
Satd. Flow (prot)	1703	1545	1620				
Flt Permitted	0.950		0.344				
Satd. Flow (perm)	1703	1545	587				
Right Turn on Red		Yes					
Satd. Flow (RTOR)		136					
Link Speed (mph)	30						
Link Distance (ft)	1186						
Travel Time (s)	27.0						
Peak Hour Factor	0.88	0.88	0.88				
Heavy Vehicles (%)	6%	8%	4%				
Adj. Flow (vph)	114	136	261				
Shared Lane Traffic (%)							
Lane Group Flow (vph)	114	136	261				
Turn Type		Perm	custom			Perm	
Protected Phases	7		11	2 11	6		2
Permitted Phases		7	2			6	
Detector Phase	7	7	11	2 11	6	6	
Switch Phase							
Minimum Initial (s)	4.0	4.0	6.0		20.0	20.0	20.0
Minimum Split (s)	10.0	10.0	10.0		25.8	25.8	25.8
Total Split (s)	31.0	31.0	34.0	89.8	55.8	55.8	55.8
Total Split (%)	25.7%	25.7%	28.1%	74.3%	46.2%	46.2%	46%
Maximum Green (s)	25.0	25.0	30.0		50.0	50.0	50.0
Yellow Time (s)	3.0	3.0	3.0		3.9	3.9	3.9
All-Red Time (s)	3.0	3.0	1.0		1.9	1.9	1.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0	4.0	5.8	5.8	5.8	
Lead/Lag							
Lead-Lag Optimize?							
Vehicle Extension (s)	1.0	1.0	1.5		3.0	3.0	3.0
Recall Mode	None	None	None		C-Min	C-Min	C-Min
v/c Ratio	0.57	0.45	0.49	0.22	0.53	0.36	
Control Delay	61.7	12.7	6.9	2.1	13.2	5.5	
Queue Delay	0.0	0.0	0.0	0.3	0.0	0.0	
Total Delay	61.7	12.7	6.9	2.5	13.2	5.5	
Queue Length 50th (ft)	88	0	16	21	212	48	
Queue Length 95th (ft)	140	54	48	28	380	118	
Internal Link Dist (ft)	1106			261	2624		
Turn Bay Length (ft)		100				130	

Lane Group	EBL	EBR	NBL			ø2
Base Capacity (vph)	352	428	726	1328	1175	1084
Starvation Cap Reductn	0	0	0	572	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.32	0.32	0.36	0.39	0.53	0.36

Intersection Summary

Area Type: Other

Cycle Length: 120.8

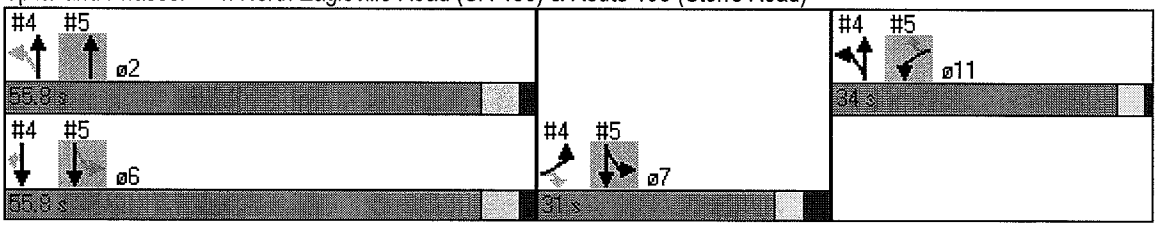
Actuated Cycle Length: 120.8

Offset: 14.2 (12%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow

Natural Cycle: 60

Control Type: Actuated-Coordinated

Splits and Phases: 4: North Eagleville Road (SR 430) & Route 195 (Storrs Road)



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	100	120	230	260	550	340
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	12	13	10	13	11	11
Total Lost time (s)	6.0	6.0	4.0	5.8	5.8	5.8
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	1703	1545	1620	1693	1766	1531
Flt Permitted	0.95	1.00	0.34	1.00	1.00	1.00
Satd. Flow (perm)	1703	1545	586	1693	1766	1531
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	114	136	261	295	625	386
RTOR Reduction (vph)	0	120	0	0	0	65
Lane Group Flow (vph)	114	16	261	295	625	321
Heavy Vehicles (%)	6%	8%	4%	16%	4%	2%
Turn Type		Perm	custom			Perm
Protected Phases	7		11	2 11	6	
Permitted Phases		7	2			6
Actuated Green, G (s)	14.3	14.3	90.7	94.7	80.3	80.3
Effective Green, g (s)	14.3	14.3	90.7	90.7	80.3	80.3
Actuated g/C Ratio	0.12	0.12	0.75	0.75	0.66	0.66
Clearance Time (s)	6.0	6.0	4.0		5.8	5.8
Vehicle Extension (s)	1.0	1.0	1.5		3.0	3.0
Lane Grp Cap (vph)	202	183	529	1271	1174	1018
v/s Ratio Prot	c0.07		c0.04	0.17	c0.35	
v/s Ratio Perm		0.01	0.33			0.21
v/c Ratio	0.56	0.09	0.49	0.23	0.53	0.31
Uniform Delay, d1	50.3	47.4	6.1	4.5	10.5	8.6
Progression Factor	1.00	1.00	1.23	0.49	1.00	1.00
Incremental Delay, d2	2.1	0.1	0.3	0.0	1.7	0.8
Delay (s)	52.5	47.5	7.7	2.3	12.2	9.4
Level of Service	D	D	A	A	B	A
Approach Delay (s)	49.8			4.8	11.2	
Approach LOS	D			A	B	

Intersection Summary			
HCM Average Control Delay	14.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	120.8	Sum of lost time (s)	15.8
Intersection Capacity Utilization	60.4%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

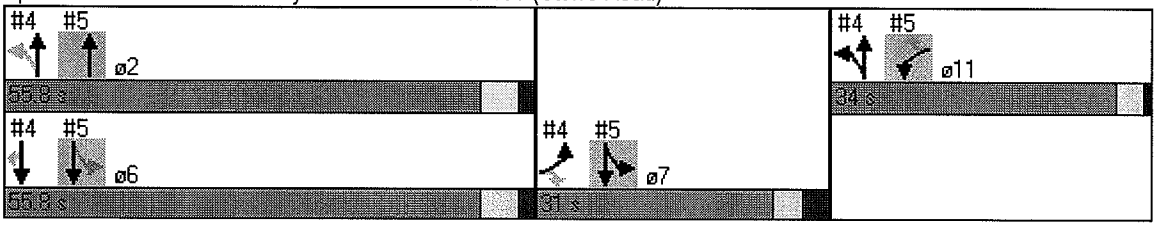
Lane Group	WBL	WBR		NBR			ø6
Lane Configurations							
Volume (vph)	20	60		30			
Ideal Flow (vphpl)	1900	1900		1900			
Lane Width (ft)	10	12		12			
Storage Length (ft)	100	0		0			
Storage Lanes	1	1		0			
Taper Length (ft)	25	25		25			
Lane Util. Factor	1.00	1.00		0.95			
Frt		0.850					
Flt Protected	0.950						
Satd. Flow (prot)	1478	1583		0			
Flt Permitted	0.950						
Satd. Flow (perm)	1478	1583		0			
Right Turn on Red		Yes		Yes			
Satd. Flow (RTOR)		62					
Link Speed (mph)	30						
Link Distance (ft)	1395						
Travel Time (s)	31.7						
Peak Hour Factor	0.96	0.96		0.96			
Heavy Vehicles (%)	14%	2%		20%			
Adj. Flow (vph)	21	62		31			
Shared Lane Traffic (%)							
Lane Group Flow (vph)	21	62		0			
Turn Type		Perm			custom		
Protected Phases	11		2		7	6 7	6
Permitted Phases		11			6		
Detector Phase	11	11	2		7	6 7	
Switch Phase							
Minimum Initial (s)	6.0	6.0	20.0		4.0		20.0
Minimum Split (s)	10.0	10.0	25.8		10.0		25.8
Total Split (s)	34.0	34.0	55.8	0.0	31.0	86.8	55.8
Total Split (%)	28.1%	28.1%	46.2%	0.0%	25.7%	71.9%	46%
Maximum Green (s)	30.0	30.0	50.0		25.0		50.0
Yellow Time (s)	3.0	3.0	3.9		3.0		3.9
All-Red Time (s)	1.0	1.0	1.9		3.0		1.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0	5.8	4.0	6.0	5.8	
Lead/Lag							
Lead-Lag Optimize?							
Vehicle Extension (s)	1.5	1.5	3.0		1.0		3.0
Recall Mode	None	None	C-Min		None		C-Min
v/c Ratio	0.17	0.32	0.40		0.22	0.41	
Control Delay	52.8	16.8	11.0		1.4	1.1	
Queue Delay	0.0	0.0	0.0		0.0	0.1	
Total Delay	52.8	16.8	11.0		1.4	1.2	
Queue Length 50th (ft)	16	0	142		2	11	
Queue Length 95th (ft)	41	42	268		3	14	
Internal Link Dist (ft)	1315		137			261	
Turn Bay Length (ft)	100				75		

Lane Group	WBL	WBR		NBR		ø6
Base Capacity (vph)	367	440	1193	610	1601	
Starvation Cap Reductn	0	0	0	0	262	
Spillback Cap Reductn	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	
Reduced v/c Ratio	0.06	0.14	0.40	0.17	0.44	

Intersection Summary

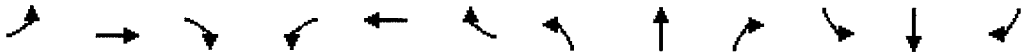
Area Type: Other
Cycle Length: 120.8
Actuated Cycle Length: 120.8
Offset: 14.2 (12%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow
Natural Cycle: 60
Control Type: Actuated-Coordinated

Splits and Phases: 5: Gurleyville Road & Route 195 (Storrs Road)



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	20	60	430	30	100	570
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	10	12	12	12	10	13
Total Lost time (s)	4.0	4.0	5.8		6.0	5.8
Lane Util. Factor	1.00	1.00	*0.50		1.00	1.00
Frt	1.00	0.85	0.99		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1478	1583	1791		1518	1737
Flt Permitted	0.95	1.00	1.00		0.28	1.00
Satd. Flow (perm)	1478	1583	1791		445	1737
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	21	62	448	31	104	594
RTOR Reduction (vph)	0	57	1	0	0	0
Lane Group Flow (vph)	21	5	478	0	104	594
Heavy Vehicles (%)	14%	2%	4%	20%	11%	13%
Turn Type		Perm			custom	
Protected Phases	11		2		7	6 7
Permitted Phases		11			6	
Actuated Green, G (s)	10.4	10.4	80.3		94.6	100.4
Effective Green, g (s)	10.4	10.4	80.3		94.6	100.4
Actuated g/C Ratio	0.09	0.09	0.66		0.78	0.83
Clearance Time (s)	4.0	4.0	5.8		6.0	
Vehicle Extension (s)	1.5	1.5	3.0		1.0	
Lane Grp Cap (vph)	127	136	1191		476	1444
v/s Ratio Prot	c0.01		0.27		0.03	c0.34
v/s Ratio Perm		0.00			0.15	
v/c Ratio	0.17	0.04	0.40		0.22	0.41
Uniform Delay, d1	51.2	50.6	9.3		6.4	2.6
Progression Factor	1.00	1.00	1.00		0.16	0.11
Incremental Delay, d2	0.2	0.0	1.0		0.1	0.1
Delay (s)	51.4	50.7	10.3		1.1	0.3
Level of Service	D	D	B		A	A
Approach Delay (s)	50.8		10.3			0.5
Approach LOS	D		B			A

Intersection Summary			
HCM Average Control Delay	7.5	HCM Level of Service	A
HCM Volume to Capacity ratio	0.39		
Actuated Cycle Length (s)	120.8	Sum of lost time (s)	9.8
Intersection Capacity Utilization	43.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



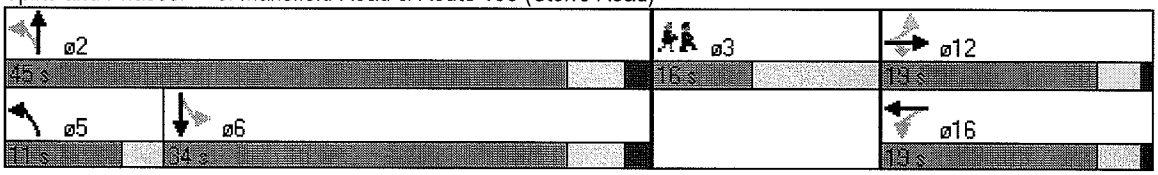
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL		NBR			SBR
Lane Configurations												
Volume (vph)	50	10	30	0	10	10	120		10			190
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900		1900			1900
Lane Width (ft)	12	10	10	12	16	12	11		12			12
Storage Length (ft)	0		20	0		0	170		0			0
Storage Lanes	0		1	0		0	1		0			0
Taper Length (ft)	25		50	25		25	50		25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00			1.00
Frt			0.850		0.932							
Flt Protected		0.960					0.950					
Satd. Flow (prot)	0	1479	1322	0	1487	0	1694		0			0
Flt Permitted		0.745					0.366					
Satd. Flow (perm)	0	1148	1322	0	1487	0	653		0			0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			34		11							
Link Speed (mph)		30			30							
Link Distance (ft)		843			640							
Travel Time (s)		19.2			14.5							
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88		0.88			0.88
Heavy Vehicles (%)	18%	0%	14%	0%	57%	13%	3%		0%			3%
Adj. Flow (vph)	57	11	34	0	11	11	136		11			216
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	68	34	0	22	0	136		0			0
Turn Type	Perm		Perm	Perm			pm+pt			Perm		
Protected Phases		12			16		5	2			6	
Permitted Phases	12		12	16			2			6		
Detector Phase	12	12	12	16	16		5	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		3.0	28.0		28.0	28.0	
Minimum Split (s)	9.0	9.0	9.0	9.0	9.0		6.0	34.0		34.0	34.0	
Total Split (s)	19.0	19.0	19.0	19.0	19.0	0.0	11.0	45.0	0.0	34.0	34.0	0.0
Total Split (%)	23.8%	23.8%	23.8%	23.8%	23.8%	0.0%	13.8%	56.3%	0.0%	42.5%	42.5%	0.0%
Maximum Green (s)	15.0	15.0	15.0	15.0	15.0		8.0	39.0		28.0	28.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0		3.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		0.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.0	1.0	-1.0	-1.0	1.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	3.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag							Lead			Lag	Lag	
Lead-Lag Optimize?							Yes			Yes	Yes	
Vehicle Extension (s)	1.0	1.0	1.0	1.0	1.0		2.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None		Min	C-Min		C-Min	C-Min	
v/c Ratio		0.56	0.20		0.13		0.22	0.32		0.08	0.50	
Control Delay		50.0	13.9		22.7		2.8	3.4		6.4	8.6	
Queue Delay		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Delay		50.0	13.9		22.7		2.8	3.4		6.4	8.6	
Queue Length 50th (ft)		33	0		5		10	52		7	113	
Queue Length 95th (ft)		67	23		24		27	112		23	235	
Internal Link Dist (ft)		763			560			466			1874	
Turn Bay Length (ft)			20				170			170		

Lane Group	ø3
Lane Configurations	
Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	3
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	7.0
Minimum Split (s)	16.0
Total Split (s)	16.0
Total Split (%)	20%
Maximum Green (s)	7.0
Yellow Time (s)	9.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL		NBR		SBR
Base Capacity (vph)		215	276		288		645	1558		587	1166
Starvation Cap Reductn		0	0		0		0	0		0	0
Spillback Cap Reductn		0	0		0		0	0		0	0
Storage Cap Reductn		0	0		0		0	0		0	0
Reduced v/c Ratio		0.32	0.12		0.08		0.21	0.32		0.08	0.50

Intersection Summary
Area Type: Other
Cycle Length: 80
Actuated Cycle Length: 80
Offset: 29 (36%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
Natural Cycle: 65
Control Type: Actuated-Coordinated

Splits and Phases: 6: Mansfield Road & Route 195 (Storrs Road)



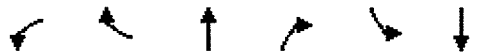
Lane Group	ø3
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	50	10	30	0	10	10	120	430	10	40	320	190
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	10	10	12	16	12	11	14	12	10	11	12
Total Lost time (s)		4.0	4.0		4.0		3.0	5.0		5.0	5.0	
Lane Util. Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Frt		1.00	0.85		0.93		1.00	1.00		1.00	0.94	
Flt Protected		0.96	1.00		1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1479	1322		1487		1694	1908		1685	1673	
Flt Permitted		0.75	1.00		1.00		0.37	1.00		0.48	1.00	
Satd. Flow (perm)		1148	1322		1487		652	1908		851	1673	
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	57	11	34	0	11	11	136	489	11	45	364	216
RTOR Reduction (vph)	0	0	31	0	10	0	0	0	0	0	13	0
Lane Group Flow (vph)	0	68	3	0	12	0	136	500	0	45	567	0
Heavy Vehicles (%)	18%	0%	14%	0%	57%	13%	3%	6%	0%	0%	4%	3%
Turn Type	Perm		Perm	Perm			pm+pt			Perm		
Protected Phases		12			16		5	2			6	
Permitted Phases	12		12	16			2			6		
Actuated Green, G (s)		7.5	7.5		7.5		62.5	62.5		53.4	53.4	
Effective Green, g (s)		7.5	7.5		7.5		62.5	63.5		54.4	54.4	
Actuated g/C Ratio		0.09	0.09		0.09		0.78	0.79		0.68	0.68	
Clearance Time (s)		4.0	4.0		4.0		3.0	6.0		6.0	6.0	
Vehicle Extension (s)		1.0	1.0		1.0		2.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		108	124		139		589	1514		579	1138	
v/s Ratio Prot					0.01		0.02	c0.26			c0.34	
v/s Ratio Perm		c0.06	0.00				0.16			0.05		
v/c Ratio		0.63	0.03		0.09		0.23	0.33		0.08	0.50	
Uniform Delay, d1		34.9	32.9		33.1		2.9	2.3		4.3	6.2	
Progression Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		8.0	0.0		0.1		0.1	0.6		0.3	1.6	
Delay (s)		42.9	33.0		33.2		2.9	2.9		4.6	7.7	
Level of Service		D	C		C		A	A		A	A	
Approach Delay (s)		39.6			33.2			2.9			7.5	
Approach LOS		D			C			A			A	

Intersection Summary			
HCM Average Control Delay	8.2	HCM Level of Service	A
HCM Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	68.3%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	WBL	WBR		NBR			ø2	ø3	ø10
Lane Configurations									
Volume (vph)	60	40		100					
Ideal Flow (vphpl)	1900	1900		1900					
Lane Width (ft)	14	12		12					
Storage Length (ft)	0	0		0					
Storage Lanes	1	0		0					
Taper Length (ft)	25	25		25					
Lane Util. Factor	1.00	1.00		1.00					
Frt	0.945								
Flt Protected	0.971								
Satd. Flow (prot)	1823	0		0					
Flt Permitted	0.971								
Satd. Flow (perm)	1823	0		0					
Right Turn on Red		Yes		Yes					
Satd. Flow (RTOR)	37								
Link Speed (mph)	30								
Link Distance (ft)	1395								
Travel Time (s)	31.7								
Peak Hour Factor	0.96	0.96		0.96					
Adj. Flow (vph)	62	42		104					
Shared Lane Traffic (%)									
Lane Group Flow (vph)	104	0		0					
Turn Type					Perm				
Protected Phases	11		2 10			6	2	3	10
Permitted Phases					6				
Detector Phase	11		2 10		6	6			
Switch Phase									
Minimum Initial (s)	5.0				15.0	15.0	15.0	7.0	5.0
Minimum Split (s)	9.0				21.0	21.0	21.0	17.0	9.0
Total Split (s)	15.0	0.0	45.0	0.0	30.0	30.0	30.0	17.0	15.0
Total Split (%)	19.5%	0.0%	58.4%	0.0%	39.0%	39.0%	39%	22%	19%
Maximum Green (s)	11.0				24.0	24.0	24.0	7.0	11.0
Yellow Time (s)	3.0				4.0	4.0	4.0	10.0	3.0
All-Red Time (s)	1.0				2.0	2.0	2.0	0.0	1.0
Lost Time Adjust (s)	0.0	0.0	-1.0	1.0	-1.0	-1.0			
Total Lost Time (s)	4.0	4.0	5.0	5.0	5.0	5.0			
Lead/Lag									
Lead-Lag Optimize?									
Vehicle Extension (s)	2.0				3.0	3.0	3.0	3.0	3.0
Recall Mode	None				C-Max	C-Max	C-Max	Max	None
v/c Ratio	0.37		0.71		0.55	0.51			
Control Delay	24.5		5.7		48.4	24.4			
Queue Delay	0.0		19.9		0.0	0.0			
Total Delay	24.5		25.6		48.4	24.4			
Queue Length 50th (ft)	29		0		20	120			
Queue Length 95th (ft)	73		m0		#75	195			
Internal Link Dist (ft)	1315		33			466			
Turn Bay Length (ft)					170				
Base Capacity (vph)	292		904		94	617			



Lane Group	WBL	WBR	NBR		ø2	ø3	ø10
Starvation Cap Reductn	0	263	0	0			
Spillback Cap Reductn	0	0	0	0			
Storage Cap Reductn	0	0	0	0			
Reduced v/c Ratio	0.36	1.01	0.55	0.51			

Intersection Summary

Area Type: Other

Cycle Length: 77

Actuated Cycle Length: 77

Offset: 1 (1%), Referenced to phase 2:NBT and 6:SBTL, Start of Yellow

Natural Cycle: 65

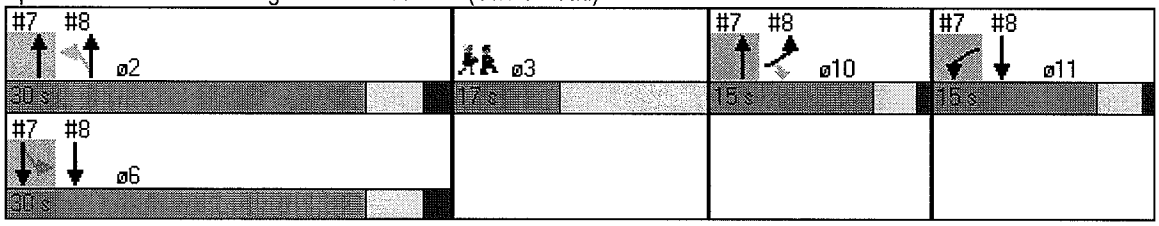
Control Type: Actuated-Coordinated

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 7: Dog Lane & Route 195 (Storrs Road)



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	60	40	520	100	50	300
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	14	12	14	12	11	12
Total Lost time (s)	4.0		5.0		5.0	5.0
Lane Util. Factor	1.00		1.00		1.00	1.00
Frt	0.95		0.98		1.00	1.00
Flt Protected	0.97		1.00		0.95	1.00
Satd. Flow (prot)	1824		1944		1711	1863
Flt Permitted	0.97		1.00		0.16	1.00
Satd. Flow (perm)	1824		1944		282	1863
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	62	42	542	104	52	312
RTOR Reduction (vph)	32	0	8	0	0	0
Lane Group Flow (vph)	72	0	638	0	52	312
Turn Type					Perm	
Protected Phases	11		2 10			6
Permitted Phases					6	
Actuated Green, G (s)	10.5		35.5		24.5	24.5
Effective Green, g (s)	10.5		37.5		25.5	25.5
Actuated g/C Ratio	0.14		0.49		0.33	0.33
Clearance Time (s)	4.0				6.0	6.0
Vehicle Extension (s)	2.0				3.0	3.0
Lane Grp Cap (vph)	249		947		93	617
v/s Ratio Prot	c0.04		c0.33			0.17
v/s Ratio Perm					0.18	
v/c Ratio	0.29		0.67		0.56	0.51
Uniform Delay, d1	29.9		15.1		21.1	20.7
Progression Factor	1.00		0.51		1.00	1.00
Incremental Delay, d2	0.2		0.2		22.1	2.9
Delay (s)	30.1		7.9		43.2	23.6
Level of Service	C		A		D	C
Approach Delay (s)	30.1		7.9			26.4
Approach LOS	C		A			C

Intersection Summary			
HCM Average Control Delay	16.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	77.0	Sum of lost time (s)	31.0
Intersection Capacity Utilization	54.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

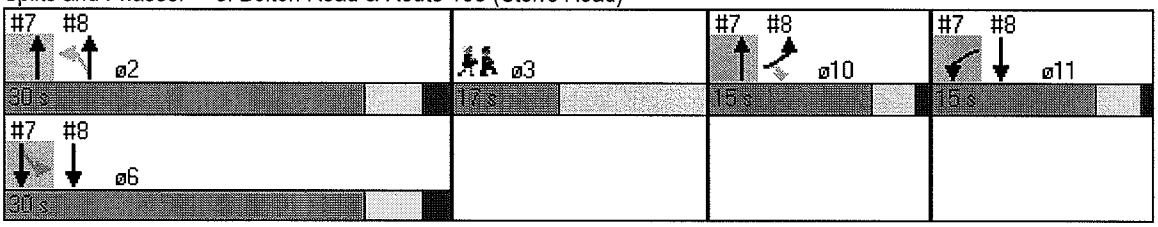
Lane Group	EBL	EBR				SBR	ø3	ø6	ø11
Lane Configurations									
Volume (vph)	20	50				80			
Ideal Flow (vphpl)	1900	1900				1900			
Lane Width (ft)	10	11				12			
Storage Length (ft)	0	290				0			
Storage Lanes	1	1				0			
Taper Length (ft)	25	50				25			
Lane Util. Factor	1.00	1.00				1.00			
Frt		0.850							
Flt Protected	0.950								
Satd. Flow (prot)	1348	1323				0			
Flt Permitted	0.950								
Satd. Flow (perm)	1348	1323				0			
Right Turn on Red		Yes				Yes			
Satd. Flow (RTOR)		52							
Link Speed (mph)	30								
Link Distance (ft)	908								
Travel Time (s)	20.6								
Peak Hour Factor	0.96	0.96				0.96			
Heavy Vehicles (%)	25%	18%				6%			
Adj. Flow (vph)	21	52				83			
Shared Lane Traffic (%)									
Lane Group Flow (vph)	21	52				0			
Turn Type		Perm	Perm						
Protected Phases	10			2	6 11		3	6	11
Permitted Phases		10	2						
Detector Phase	10	10	2	2	6 11				
Switch Phase									
Minimum Initial (s)	5.0	5.0	15.0	15.0			7.0	15.0	5.0
Minimum Split (s)	9.0	9.0	21.0	21.0			17.0	21.0	9.0
Total Split (s)	15.0	15.0	30.0	30.0	45.0	0.0	17.0	30.0	15.0
Total Split (%)	19.5%	19.5%	39.0%	39.0%	58.4%	0.0%	22%	39%	19%
Maximum Green (s)	11.0	11.0	24.0	24.0			7.0	24.0	11.0
Yellow Time (s)	3.0	3.0	4.0	4.0			10.0	4.0	3.0
All-Red Time (s)	1.0	1.0	2.0	2.0			0.0	2.0	1.0
Lost Time Adjust (s)	0.0	0.0	-1.0	-1.0	-1.0	1.0			
Total Lost Time (s)	4.0	4.0	5.0	5.0	5.0	5.0			
Lead/Lag									
Lead-Lag Optimize?									
Vehicle Extension (s)	3.0	3.0	3.0	3.0			3.0	3.0	2.0
Recall Mode	None	None	C-Max	C-Max			Max	C-Max	None
v/c Ratio	0.11	0.22	0.66	1.08	0.40				
Control Delay	30.4	11.9	38.9	89.0	2.3				
Queue Delay	0.0	0.0	0.0	54.0	0.6				
Total Delay	30.4	11.9	38.9	143.0	2.9				
Queue Length 50th (ft)	9	0	64	~346	3				
Queue Length 95th (ft)	29	30	#153	#539	1				
Internal Link Dist (ft)	828			733	33				
Turn Bay Length (ft)		290	90						

Lane Group	EBL	EBR				SBR	ø3	ø6	ø11
Base Capacity (vph)	193	234	235	579	931				
Starvation Cap Reductn	0	0	0	0	264				
Spillback Cap Reductn	0	0	0	62	0				
Storage Cap Reductn	0	0	0	0	0				
Reduced v/c Ratio	0.11	0.22	0.66	1.21	0.56				

Intersection Summary

Area Type: Other
Cycle Length: 77
Actuated Cycle Length: 77
Offset: 1 (1%), Referenced to phase 2:NBT and 6:SBTL, Start of Yellow
Natural Cycle: 65
Control Type: Actuated-Coordinated
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 8: Bolton Road & Route 195 (Storrs Road)



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	20	50	150	600	280	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	10	11	11	11	14	12
Total Lost time (s)	4.0	4.0	5.0	5.0	5.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.85	1.00	1.00	0.97	
Flt Protected	0.95	1.00	0.95	1.00	1.00	
Satd. Flow (prot)	1348	1323	1601	1749	1789	
Flt Permitted	0.95	1.00	0.42	1.00	1.00	
Satd. Flow (perm)	1348	1323	711	1749	1789	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	21	52	156	625	292	83
RTOR Reduction (vph)	0	45	0	0	15	0
Lane Group Flow (vph)	21	7	156	625	360	0
Heavy Vehicles (%)	25%	18%	9%	5%	11%	6%
Turn Type		Perm	Perm			
Protected Phases	10			2	6 11	
Permitted Phases		10	2			
Actuated Green, G (s)	11.0	11.0	24.5	24.5	39.0	
Effective Green, g (s)	11.0	11.0	25.5	25.5	37.0	
Actuated g/C Ratio	0.14	0.14	0.33	0.33	0.48	
Clearance Time (s)	4.0	4.0	6.0	6.0		
Vehicle Extension (s)	3.0	3.0	3.0	3.0		
Lane Grp Cap (vph)	193	189	235	579	860	
v/s Ratio Prot	c0.02			c0.36	c0.20	
v/s Ratio Perm		0.01	0.22			
v/c Ratio	0.11	0.04	0.66	1.08	0.42	
Uniform Delay, d1	28.7	28.4	22.1	25.7	13.0	
Progression Factor	1.00	1.00	1.00	1.00	0.11	
Incremental Delay, d2	0.3	0.1	13.9	60.7	0.1	
Delay (s)	29.0	28.5	35.9	86.4	1.5	
Level of Service	C	C	D	F	A	
Approach Delay (s)	28.7			76.3	1.5	
Approach LOS	C			E	A	

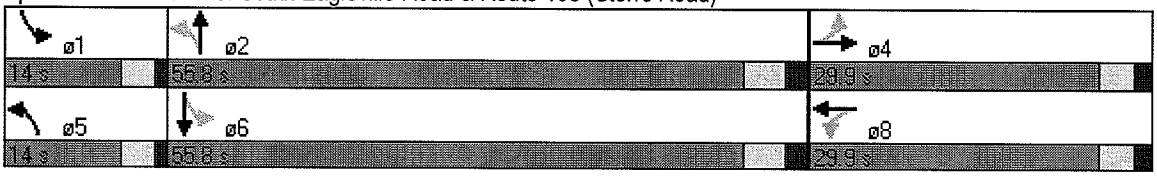
Intersection Summary			
HCM Average Control Delay	50.7	HCM Level of Service	D
HCM Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	77.0	Sum of lost time (s)	31.0
Intersection Capacity Utilization	47.9%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	170	10	90	10	10	30	190	490	10	20	190	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	12	13	12	12	12	12	12	12	12
Storage Length (ft)	250		0	0		0	370		0	130		0
Storage Lanes	1		0	0		0	1		0	1		0
Taper Length (ft)	105		25	25		25	50		25	60		25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Frt		0.865			0.919			0.997			0.952	
Flt Protected	0.950				0.990		0.950			0.950		
Satd. Flow (prot)	1662	1520	0	0	1734	0	1770	1801	0	1641	3125	0
Flt Permitted	0.721				0.941		0.481			0.444		
Satd. Flow (perm)	1261	1520	0	0	1648	0	896	1801	0	767	3125	0
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)		98						2			98	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2484			547			502			588	
Travel Time (s)		56.5			12.4			11.4			13.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	0%	5%	0%	0%	5%	2%	5%	13%	10%	9%	12%
Adj. Flow (vph)	185	11	98	11	11	33	207	533	11	22	207	98
Shared Lane Traffic (%)												
Lane Group Flow (vph)	185	109	0	0	55	0	207	544	0	22	305	0
Turn Type	Perm			Perm			pm+pt			pm+pt		
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		3.0	15.0		3.0	15.0	
Minimum Split (s)	10.9	10.9		10.9	10.9		7.0	20.8		7.0	20.8	
Total Split (s)	29.9	29.9	0.0	29.9	29.9	0.0	14.0	55.8	0.0	14.0	55.8	0.0
Total Split (%)	30.0%	30.0%	0.0%	30.0%	30.0%	0.0%	14.0%	56.0%	0.0%	14.0%	56.0%	0.0%
Maximum Green (s)	25.0	25.0		25.0	25.0		10.0	50.0		10.0	50.0	
Yellow Time (s)	3.2	3.2		3.2	3.2		3.0	3.6		3.0	3.6	
All-Red Time (s)	1.7	1.7		1.7	1.7		1.0	2.2		1.0	2.2	
Lost Time Adjust (s)	-0.9	-0.9	0.0	-0.9	-0.9	0.0	0.0	-1.8	0.0	0.0	-1.8	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.5	1.5		1.5	1.5		1.5	2.5		1.5	2.5	
Recall Mode	None	None		None	None		None	Min		None	Min	
v/c Ratio	0.62	0.25			0.14		0.30	0.54		0.06	0.24	
Control Delay	30.1	7.6			19.2		6.8	12.6		6.9	9.0	
Queue Delay	0.0	0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay	30.1	7.6			19.2		6.8	12.6		6.9	9.0	
Queue Length 50th (ft)	48	2			12		22	74		2	21	
Queue Length 95th (ft)	139	39			47		71	288		12	56	
Internal Link Dist (ft)		2404			467			422			508	
Turn Bay Length (ft)	250						370			130		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)	488	648			637		686	1229		499	1937	
Starvation Cap Reductn	0	0			0		0	0		0	0	
Spillback Cap Reductn	0	0			0		0	0		0	0	
Storage Cap Reductn	0	0			0		0	0		0	0	
Reduced v/c Ratio	0.38	0.17			0.09		0.30	0.44		0.04	0.16	

Intersection Summary	
Area Type:	Other
Cycle Length: 99.7	
Actuated Cycle Length: 55.7	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 9: South Eagleville Road & Route 195 (Storrs Road)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	170	10	90	10	10	30	190	490	10	20	190	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	12	12	13	12	12	12	12	12	12	12
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00			1.00		1.00	1.00		1.00	0.95	
Frt	1.00	0.87			0.92		1.00	1.00		1.00	0.95	
Flt Protected	0.95	1.00			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1662	1521			1734		1770	1801		1641	3125	
Flt Permitted	0.72	1.00			0.94		0.48	1.00		0.44	1.00	
Satd. Flow (perm)	1261	1521			1648		895	1801		768	3125	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	185	11	98	11	11	33	207	533	11	22	207	98
RTOR Reduction (vph)	0	76	0	0	0	0	0	1	0	0	57	0
Lane Group Flow (vph)	185	33	0	0	55	0	207	543	0	22	248	0
Heavy Vehicles (%)	5%	0%	5%	0%	0%	5%	2%	5%	13%	10%	9%	12%
Turn Type	Perm			Perm			pm+pt			pm+pt		
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	12.3	12.3			12.3		34.9	29.3		24.1	22.5	
Effective Green, g (s)	13.2	13.2			13.2		34.9	31.1		24.1	24.3	
Actuated g/C Ratio	0.23	0.23			0.23		0.60	0.54		0.42	0.42	
Clearance Time (s)	4.9	4.9			4.9		4.0	5.8		4.0	5.8	
Vehicle Extension (s)	1.5	1.5			1.5		1.5	2.5		1.5	2.5	
Lane Grp Cap (vph)	287	347			376		666	967		344	1312	
v/s Ratio Prot		0.02					c0.05	c0.30		0.00	0.08	
v/s Ratio Perm	c0.15				0.03		0.14			0.02		
v/c Ratio	0.64	0.10			0.15		0.31	0.56		0.06	0.19	
Uniform Delay, d1	20.2	17.6			17.8		5.3	8.9		10.0	10.6	
Progression Factor	1.00	1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	3.7	0.0			0.1		0.1	0.6		0.0	0.1	
Delay (s)	23.9	17.7			17.9		5.4	9.5		10.0	10.6	
Level of Service	C	B			B		A	A		B	B	
Approach Delay (s)		21.6			17.9			8.4			10.6	
Approach LOS		C			B			A			B	

Intersection Summary			
HCM Average Control Delay	12.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	57.9	Sum of lost time (s)	12.0
Intersection Capacity Utilization	55.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group		EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)		50	60	50	40	20	300	100	70	30	250	240
Ideal Flow (vphpl)		1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)		10	13	11	15	12	11	14	12	12	15	12
Storage Length (ft)			115	170		0	170		0	170		0
Storage Lanes			1	1		0	1		0	1		0
Taper Length (ft)			100	100		25	50		25	50		25
Lane Util. Factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.950			0.938			0.927	
Flt Protected				0.950			0.950			0.950		
Satd. Flow (prot)		1773	1503	1442	1953	0	1711	1802	0	1671	1890	0
Flt Permitted				0.666			0.267			0.640		
Satd. Flow (perm)		1773	1503	1011	1953	0	481	1802	0	1126	1890	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			66		22			39			53	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		629			413			498			489	
Travel Time (s)		14.3			9.4			11.3			11.1	
Peak Hour Factor		0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)		0%	11%	21%	0%	5%	2%	3%	9%	8%	3%	2%
Adj. Flow (vph)		55	66	55	44	22	330	110	77	33	275	264
Shared Lane Traffic (%)												
Lane Group Flow (vph)		55	66	55	66	0	330	187	0	33	539	0
Turn Type	Perm		Perm	pm+pt			pm+pt			pm+pt		
Protected Phases		4		3	8		5	2		1	6	
Permitted Phases	4		4	8			2			6		
Detector Phase	4	4	4	3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	15.0	15.0	15.0	5.0	15.0		5.0	6.0		5.0	6.0	
Minimum Split (s)	21.0	21.0	21.0	8.1	20.0		8.1	11.0		8.1	11.0	
Total Split (s)	40.0	40.0	40.0	11.0	51.0	0.0	9.1	15.0	0.0	9.1	15.0	0.0
Total Split (%)	53.3%	53.3%	53.3%	14.6%	67.9%	0.0%	12.1%	20.0%	0.0%	12.1%	20.0%	0.0%
Maximum Green (s)	34.0	34.0	34.0	7.9	46.0		6.0	10.0		6.0	10.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	3.0	3.0	3.0	0.1	2.0		0.1	2.0		0.1	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	3.1	5.0	4.0	3.1	5.0	4.0	3.1	5.0	4.0
Lead/Lag	Lag	Lag	Lag	Lead			Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	2.0	3.0		2.0	3.0		2.0	3.0	
Recall Mode	C-Max	C-Max	C-Max	None	C-Max		None	None		None	None	
v/c Ratio	0.12	0.06	0.08	0.08	0.05		1.47	0.47		0.11	1.81	
Control Delay	11.4	10.6	3.6	5.5	4.4		257.6	27.5		21.0	400.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	11.4	10.6	3.6	5.5	4.4		257.6	27.5		21.0	400.0	
Queue Length 50th (ft)	19	13	0	8	7		~161	56		11	~368	
Queue Length 95th (ft)	44	32	19	20	21		#340	#153		31	#555	
Internal Link Dist (ft)		549			333			418			409	
Turn Bay Length (ft)	50		115	170			170			170		

Lane Group		EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)	626	931	821	690	1205		225	402		312	298	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.12	0.06	0.08	0.08	0.05		1.47	0.47		0.11	1.81	

Intersection Summary

Area Type: Other

Cycle Length: 75.1

Actuated Cycle Length: 75.1

Offset: 37 (49%), Referenced to phase 4:EBTL and 8:WBTL, Start of Yellow

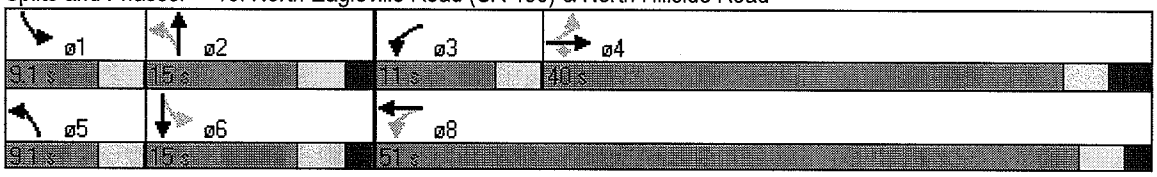
Natural Cycle: 70

Control Type: Actuated-Coordinated

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

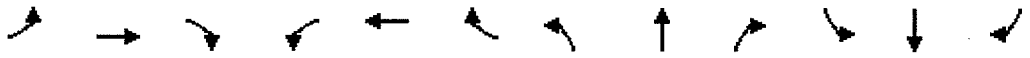
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 10: North Eagleville Road (SR 430) & North Hillside Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	70	50	60	50	40	20	300	100	70	30	250	240
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	10	13	11	15	12	11	14	12	12	15	12
Total Lost time (s)	6.0	6.0	6.0	3.1	5.0		3.1	5.0		3.1	5.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.95		1.00	0.94		1.00	0.93	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1586	1773	1503	1442	1953		1711	1803		1671	1889	
Flt Permitted	0.71	1.00	1.00	0.67	1.00		0.27	1.00		0.64	1.00	
Satd. Flow (perm)	1192	1773	1503	1011	1953		480	1803		1125	1889	
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	77	55	66	55	44	22	330	110	77	33	275	264
RTOR Reduction (vph)	0	0	34	0	9	0	0	31	0	0	45	0
Lane Group Flow (vph)	77	55	32	55	57	0	330	156	0	33	494	0
Heavy Vehicles (%)	10%	0%	11%	21%	0%	5%	2%	3%	9%	8%	3%	2%
Turn Type	Perm		Perm	pm+pt			pm+pt			pm+pt		
Protected Phases		4		3	8		5	2		1	6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)	36.3	36.3	36.3	44.1	44.1		21.0	15.5		14.3	11.9	
Effective Green, g (s)	36.3	36.3	36.3	44.1	44.1		21.0	15.5		14.3	11.9	
Actuated g/C Ratio	0.48	0.48	0.48	0.59	0.59		0.28	0.21		0.19	0.16	
Clearance Time (s)	6.0	6.0	6.0	3.1	5.0		3.1	5.0		3.1	5.0	
Vehicle Extension (s)	3.0	3.0	3.0	2.0	3.0		2.0	3.0		2.0	3.0	
Lane Grp Cap (vph)	576	857	726	615	1147		233	372		232	299	
v/s Ratio Prot		0.03		c0.00	0.03		c0.11	0.09		0.00	0.26	
v/s Ratio Perm	c0.06		0.02	0.05			c0.28			0.02		
v/c Ratio	0.13	0.06	0.04	0.09	0.05		1.42	0.42		0.14	1.65	
Uniform Delay, d1	10.7	10.3	10.2	6.7	6.6		36.8	25.9		25.1	31.6	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.5	0.1	0.1	0.0	0.1		210.7	0.8		0.1	308.6	
Delay (s)	11.2	10.5	10.4	6.7	6.7		247.5	26.7		25.2	340.2	
Level of Service	B	B	B	A	A		F	C		C	F	
Approach Delay (s)		10.7			6.7			167.6			322.0	
Approach LOS		B			A			F			F	

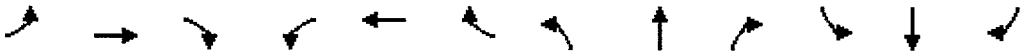
Intersection Summary				
HCM Average Control Delay	194.5	HCM Level of Service	F	
HCM Volume to Capacity ratio	0.55			
Actuated Cycle Length (s)	75.1	Sum of lost time (s)	12.2	
Intersection Capacity Utilization	69.5%	ICU Level of Service	C	
Analysis Period (min)	15			
c Critical Lane Group				



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	10	230	0	20	20	60	0	30	40	260	90	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	12	12	12	12	11	12	12	16	12
Storage Length (ft)	0		100	0		210	0		0	0		0
Storage Lanes	0		1	0		1	0		0	0		0
Taper Length (ft)	25		100	25		100	25		25	25		25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850		0.923			0.996	
Flt Protected		0.998			0.976						0.965	
Satd. Flow (prot)	0	1835	1837	0	1520	1429	0	1639	0	0	2011	0
Flt Permitted		0.998			0.976						0.965	
Satd. Flow (perm)	0	1835	1837	0	1520	1429	0	1639	0	0	2011	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		892			1090			461			1200	
Travel Time (s)		20.3			24.8			10.5			27.3	
Peak Hour Factor	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74
Heavy Vehicles (%)	11%	3%	0%	8%	36%	13%	100%	4%	3%	1%	3%	50%
Adj. Flow (vph)	14	311	0	27	27	81	0	41	54	351	122	14
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	325	0	0	54	81	0	95	0	0	487	0
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other

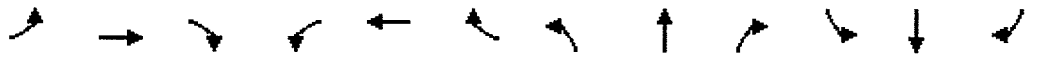
Control Type: Unsignalized



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	10	230	0	20	20	60	0	30	40	260	90	10
Peak Hour Factor	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74
Hourly flow rate (vph)	14	311	0	27	27	81	0	41	54	351	122	14

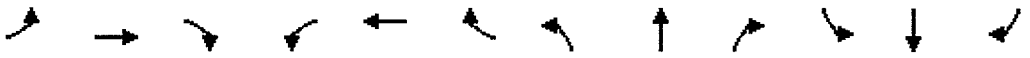
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1
Volume Total (vph)	324	0	54	81	95	486
Volume Left (vph)	14	0	27	0	0	351
Volume Right (vph)	0	0	0	81	54	14
Hadj (s)	0.08	0.00	0.62	-0.48	-0.28	0.18
Departure Headway (s)	6.7	6.6	7.6	6.5	6.2	5.8
Degree Utilization, x	0.60	0.00	0.11	0.15	0.16	0.78
Capacity (veh/h)	514	530	430	476	518	486
Control Delay (s)	18.0	8.4	10.4	9.4	10.4	26.5
Approach Delay (s)	18.0		9.8		10.4	26.5
Approach LOS	C		A		B	D

Intersection Summary				
Delay	20.2			
HCM Level of Service	C			
Intersection Capacity Utilization	52.4%	ICU Level of Service	A	
Analysis Period (min)	15			



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Volume (vph)	30	2	60	1	3	2	60	110	3	4	140	150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	12	12	11	12	12	13	12	12	13	12
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.912			0.949			0.998			0.931	
Flt Protected		0.984			0.994			0.983			0.999	
Satd. Flow (prot)	0	1782	0	0	1646	0	0	1926	0	0	1687	0
Flt Permitted		0.984			0.994			0.983			0.999	
Satd. Flow (perm)	0	1782	0	0	1646	0	0	1926	0	0	1687	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		965			377			732			1399	
Travel Time (s)		21.9			8.6			16.6			31.8	
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Heavy Vehicles (%)	0%	0%	13%	2%	10%	0%	0%	0%	0%	0%	13%	4%
Adj. Flow (vph)	38	3	76	1	4	3	76	139	4	5	177	190
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	117	0	0	8	0	0	219	0	0	372	0
Sign Control		Stop			Stop			Stop			Stop	

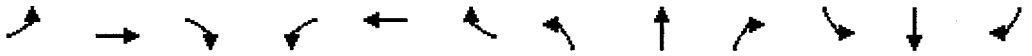
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	30	2	60	1	3	2	60	110	3	4	140	150
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Hourly flow rate (vph)	38	3	76	1	4	3	76	139	4	5	177	190

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	116	8	219	372
Volume Left (vph)	38	1	76	5
Volume Right (vph)	76	3	4	190
Hadj (s)	-0.18	-0.08	0.06	-0.16
Departure Headway (s)	5.1	5.4	4.7	4.3
Degree Utilization, x	0.16	0.01	0.29	0.45
Capacity (veh/h)	640	578	735	803
Control Delay (s)	9.0	8.4	9.6	10.8
Approach Delay (s)	9.0	8.4	9.6	10.8
Approach LOS	A	A	A	B

Intersection Summary				
Delay			10.1	
HCM Level of Service			B	
Intersection Capacity Utilization			45.9%	ICU Level of Service
Analysis Period (min)			15	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Volume (vph)	60	320	0	0	120	110	0	0	10	60	0	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	14	12	12	14	12	12	16	12	12	16	12
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.935			0.865			0.967	
Flt Protected		0.992									0.964	
Satd. Flow (prot)	0	1965	0	0	1847	0	0	1863	0	0	1949	0
Flt Permitted		0.992									0.964	
Satd. Flow (perm)	0	1965	0	0	1847	0	0	1863	0	0	1949	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1278			2158			895			916	
Travel Time (s)		29.0			49.0			20.3			20.8	
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles (%)	4%	2%	0%	0%	5%	0%	0%	0%	0%	4%	0%	0%
Adj. Flow (vph)	73	390	0	0	146	134	0	0	12	73	0	24
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	463	0	0	280	0	0	12	0	0	97	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Volume (veh/h)	60	320	0	0	120	110	0	0	10	60	0	20
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Hourly flow rate (vph)	73	390	0	0	146	134	0	0	12	73	0	24
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	280			390			774	817	390	762	750	213
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	280			390			774	817	390	762	750	213
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	94			100			100	100	98	76	100	97
cM capacity (veh/h)	1271			1179			295	295	663	299	323	832

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	463	280	12	98
Volume Left	73	0	0	73
Volume Right	0	134	12	24
cSH	1271	1179	663	356
Volume to Capacity	0.06	0.00	0.02	0.27
Queue Length 95th (ft)	5	0	1	27
Control Delay (s)	1.8	0.0	10.5	18.9
Lane LOS	A		B	C
Approach Delay (s)	1.8	0.0	10.5	18.9
Approach LOS			B	C

Intersection Summary			
Average Delay	3.3		
Intersection Capacity Utilization	54.4%	ICU Level of Service	A
Analysis Period (min)	15		

2010 BUILD TRAFFIC VOLUMES

AM PEAK HOUR

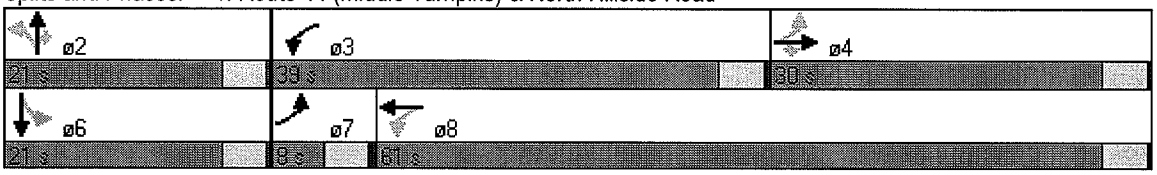
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	20	240	640	850	300	40	50	0	100	10	0	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		100	200		0	0		150	0		0
Storage Lanes	1		1	1		0	0		1	0		0
Taper Length (ft)	50		50	50		25	25		100	25		25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.982				0.850		0.932	
Flt Protected	0.950			0.950				0.950			0.976	
Satd. Flow (prot)	1805	1863	1538	1805	1818	0	0	1805	1615	0	1728	0
Flt Permitted	0.538			0.438				0.743			0.834	
Satd. Flow (perm)	1022	1863	1538	832	1818	0	0	1412	1615	0	1477	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			457		14				111		11	
Link Speed (mph)		30			45			30			30	
Link Distance (ft)		1971			1708			712			486	
Travel Time (s)		44.8			25.9			16.2			11.0	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	2%	5%	0%	3%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	22	267	711	944	333	44	56	0	111	11	0	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	22	267	711	944	377	0	0	56	111	0	22	0
Turn Type	pm+pt		Perm	pm+pt			Perm		Perm	Perm		
Protected Phases	7	4		3	8			2			6	
Permitted Phases	4		4	8			2		2	6		
Detector Phase	7	4	4	3	8		2	2	2	6	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Minimum Split (s)	8.0	20.0	20.0	8.0	20.0		20.0	20.0	20.0	20.0	20.0	
Total Split (s)	8.0	30.0	30.0	39.0	61.0	0.0	21.0	21.0	21.0	21.0	21.0	0.0
Total Split (%)	8.9%	33.3%	33.3%	43.3%	67.8%	0.0%	23.3%	23.3%	23.3%	23.3%	23.3%	0.0%
Maximum Green (s)	4.0	26.0	26.0	35.0	57.0		17.0	17.0	17.0	17.0	17.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5		0.5	0.5	0.5	0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	Min	Min	None	Min		None	None	None	None	None	
Walk Time (s)		5.0	5.0		5.0		5.0	5.0	5.0	5.0	5.0	
Flash Dont Walk (s)		11.0	11.0		11.0		11.0	11.0	11.0	11.0	11.0	
Pedestrian Calls (#/hr)		0	0		0		0	0	0	0	0	
v/c Ratio	0.05	0.43	0.87	0.90	0.26			0.32	0.38		0.12	
Control Delay	10.0	23.8	22.9	21.0	4.4			37.8	11.4		24.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0			0.0	0.0		0.0	
Total Delay	10.0	23.8	22.9	21.0	4.4			37.8	11.4		24.0	
Queue Length 50th (ft)	4	99	115	192	33			26	0		5	
Queue Length 95th (ft)	14	188	#383	#540	111			62	45		26	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		1891			1628			632			406	
Turn Bay Length (ft)	100		100	200					150			
Base Capacity (vph)	419	709	869	1059	1434			319	450		342	
Starvation Cap Reductn	0	0	0	0	0			0	0		0	
Spillback Cap Reductn	0	0	0	0	0			0	0		0	
Storage Cap Reductn	0	0	0	0	0			0	0		0	
Reduced v/c Ratio	0.05	0.38	0.82	0.89	0.26			0.18	0.25		0.06	

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 68.3
Natural Cycle: 90
Control Type: Actuated-Uncoordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Route 44 (Middle Turnpike) & North Hillside Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	20	240	640	850	300	40	50	0	100	10	0	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0			4.0	4.0		4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00			1.00	1.00		1.00	
Frt	1.00	1.00	0.85	1.00	0.98			1.00	0.85		0.93	
Flt Protected	0.95	1.00	1.00	0.95	1.00			0.95	1.00		0.98	
Satd. Flow (prot)	1805	1863	1538	1805	1819			1805	1615		1729	
Flt Permitted	0.54	1.00	1.00	0.44	1.00			0.74	1.00		0.83	
Satd. Flow (perm)	1022	1863	1538	832	1819			1412	1615		1478	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	22	267	711	944	333	44	56	0	111	11	0	11
RTOR Reduction (vph)	0	0	290	0	4	0	0	0	101	0	10	0
Lane Group Flow (vph)	22	267	421	944	373	0	0	56	10	0	12	0
Heavy Vehicles (%)	0%	2%	5%	0%	3%	0%	0%	0%	0%	0%	0%	0%
Turn Type	pm+pt		Perm	pm+pt			Perm		Perm	Perm		
Protected Phases	7	4		3	8			2			6	
Permitted Phases	4		4	8			2		2	6		
Actuated Green, G (s)	27.4	26.1	26.1	57.0	51.7			6.6	6.6		6.6	
Effective Green, g (s)	27.4	26.1	26.1	57.0	51.7			6.6	6.6		6.6	
Actuated g/C Ratio	0.38	0.36	0.36	0.80	0.72			0.09	0.09		0.09	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0			4.0	4.0		4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0			3.0	3.0		3.0	
Lane Grp Cap (vph)	405	679	561	1028	1313			130	149		136	
v/s Ratio Prot	0.00	0.14		c0.35	0.21							
v/s Ratio Perm	0.02		0.27	c0.39				c0.04	0.01		0.01	
v/c Ratio	0.05	0.39	0.75	0.92	0.28			0.43	0.07		0.09	
Uniform Delay, d1	13.9	16.9	19.9	7.0	3.5			30.7	29.7		29.7	
Progression Factor	1.00	1.00	1.00	1.00	1.00			1.00	1.00		1.00	
Incremental Delay, d2	0.1	0.4	5.5	12.6	0.1			2.3	0.2		0.3	
Delay (s)	14.0	17.3	25.4	19.5	3.6			33.0	29.9		30.0	
Level of Service	B	B	C	B	A			C	C		C	
Approach Delay (s)		22.9			15.0			30.9			30.0	
Approach LOS		C			B			C			C	

Intersection Summary			
HCM Average Control Delay	19.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	71.6	Sum of lost time (s)	8.0
Intersection Capacity Utilization	100.1%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

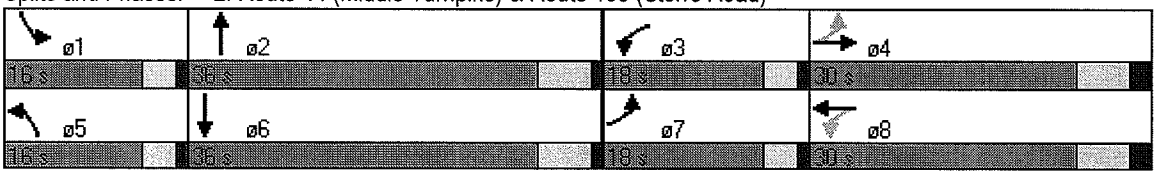
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	120	110	120	210	410	110	60	170	10	40	760	690
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	11	10	12	10	12	12	12	12	12
Storage Length (ft)	250		0	290		0	210		0	250		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	100		25	50		25	50		25	50		25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.922			0.968			0.992			0.929	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1678	1636	0	1745	1620	0	1652	3389	0	1641	3244	0
Flt Permitted	0.156			0.418			0.950			0.950		
Satd. Flow (perm)	276	1636	0	768	1620	0	1652	3389	0	1641	3244	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		51			13			6			235	
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		1708			2086			382			1110	
Travel Time (s)		25.9			31.6			8.7			25.2	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	4%	4%	3%	0%	7%	2%	2%	6%	0%	10%	1%	6%
Adj. Flow (vph)	136	125	136	239	466	125	68	193	11	45	864	784
Shared Lane Traffic (%)												
Lane Group Flow (vph)	136	261	0	239	591	0	68	204	0	45	1648	0
Turn Type	pm+pt			pm+pt			Prot			Prot		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8								
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	4.0	15.0		4.0	15.0		4.0	15.0		4.0	15.0	
Minimum Split (s)	8.0	21.7		8.0	21.7		8.0	20.7		8.0	20.7	
Total Split (s)	18.0	30.0	0.0	18.0	30.0	0.0	16.0	36.0	0.0	16.0	36.0	0.0
Total Split (%)	18.0%	30.0%	0.0%	18.0%	30.0%	0.0%	16.0%	36.0%	0.0%	16.0%	36.0%	0.0%
Maximum Green (s)	14.0	23.3		14.0	23.3		12.0	30.3		12.0	30.3	
Yellow Time (s)	3.0	4.7		3.0	4.7		3.0	4.7		3.0	4.7	
All-Red Time (s)	1.0	2.0		1.0	2.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	6.7	4.0	4.0	6.7	4.0	4.0	5.7	4.0	4.0	5.7	4.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.0	3.0		1.0	3.0		1.0	4.0		1.0	4.0	
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
v/c Ratio	0.59	0.57		0.54	1.26		0.54	0.15		0.43	1.24	
Control Delay	29.0	32.2		23.3	166.0		59.6	20.9		56.9	141.8	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	29.0	32.2		23.3	166.0		59.6	20.9		56.9	141.8	
Queue Length 50th (ft)	51	117		96	~474		43	44		28	~656	
Queue Length 95th (ft)	88	200		149	#703		82	72		61	#805	
Internal Link Dist (ft)		1628			2006			302			1030	
Turn Bay Length (ft)	250			290			210			250		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)	312	458		471	469		198	1336		197	1328	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.44	0.57		0.51	1.26		0.34	0.15		0.23	1.24	

Intersection Summary

Area Type: Other
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: Route 44 (Middle Turnpike) & Route 195 (Storrs Road)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	120	110	120	210	410	110	60	170	10	40	760	690
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	12	11	10	12	10	12	12	12	12	12
Total Lost time (s)	4.0	6.7		4.0	6.7		4.0	5.7		4.0	5.7	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	0.92		1.00	0.97		1.00	0.99		1.00	0.93	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1678	1636		1745	1621		1652	3388		1641	3243	
Flt Permitted	0.16	1.00		0.42	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	275	1636		768	1621		1652	3388		1641	3243	
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	136	125	136	239	466	125	68	193	11	45	864	784
RTOR Reduction (vph)	0	38	0	0	9	0	0	4	0	0	152	0
Lane Group Flow (vph)	136	223	0	239	582	0	68	200	0	45	1496	0
Heavy Vehicles (%)	4%	4%	3%	0%	7%	2%	2%	6%	0%	10%	1%	6%
Turn Type	pm+pt			pm+pt			Prot			Prot		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8								
Actuated Green, G (s)	34.7	25.7		39.9	28.3		6.8	37.7		4.6	35.5	
Effective Green, g (s)	34.7	25.7		39.9	28.3		6.8	37.7		4.6	35.5	
Actuated g/C Ratio	0.35	0.26		0.40	0.28		0.07	0.38		0.05	0.36	
Clearance Time (s)	4.0	6.7		4.0	6.7		4.0	5.7		4.0	5.7	
Vehicle Extension (s)	1.0	3.0		1.0	3.0		1.0	4.0		1.0	4.0	
Lane Grp Cap (vph)	222	420		420	459		112	1277		75	1151	
v/s Ratio Prot	0.06	0.14		c0.07	c0.36		c0.04	0.06		0.03	c0.46	
v/s Ratio Perm	0.16			0.16								
v/c Ratio	0.61	0.53		0.57	1.27		0.61	0.16		0.60	1.30	
Uniform Delay, d1	26.5	32.0		21.4	35.8		45.3	20.6		46.8	32.2	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	3.5	1.3		1.1	136.6		6.2	0.3		8.9	141.5	
Delay (s)	30.0	33.3		22.4	172.5		51.5	20.9		55.7	173.8	
Level of Service	C	C		C	F		D	C		E	F	
Approach Delay (s)		32.1			129.3			28.6			170.6	
Approach LOS		C			F			C			F	

Intersection Summary			
HCM Average Control Delay	130.5	HCM Level of Service	F
HCM Volume to Capacity ratio	1.12		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	17.7
Intersection Capacity Utilization	98.4%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

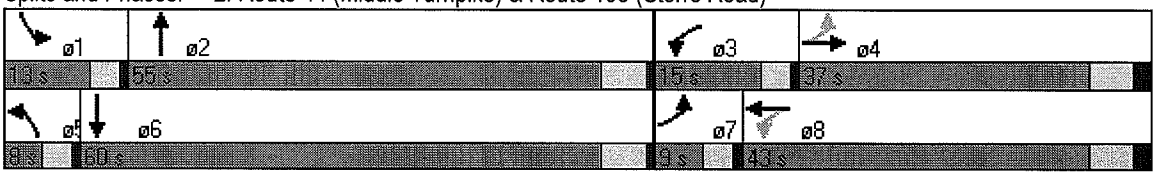
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	120	110	120	210	410	110	60	170	10	40	760	690
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	11	10	12	10	12	12	12	12	12
Storage Length (ft)	250		0	290		0	210		0	250		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	100		25	50		25	50		25	50		25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.922			0.968			0.992			0.929	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1678	1636	0	1745	1620	0	1652	3389	0	1641	3244	0
Flt Permitted	0.130			0.384			0.950			0.950		
Satd. Flow (perm)	230	1636	0	705	1620	0	1652	3389	0	1641	3244	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		44			12			6			250	
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		1708			2086			382			1110	
Travel Time (s)		25.9			31.6			8.7			25.2	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	4%	4%	3%	0%	7%	2%	2%	6%	0%	10%	1%	6%
Adj. Flow (vph)	136	125	136	239	466	125	68	193	11	45	864	784
Shared Lane Traffic (%)												
Lane Group Flow (vph)	136	261	0	239	591	0	68	204	0	45	1648	0
Turn Type	pm+pt			pm+pt			Prot			Prot		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8								
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	4.0	15.0		4.0	15.0		4.0	15.0		4.0	15.0	
Minimum Split (s)	8.0	21.7		8.0	21.7		8.0	20.7		8.0	20.7	
Total Split (s)	9.0	37.0	0.0	15.0	43.0	0.0	8.0	55.0	0.0	13.0	60.0	0.0
Total Split (%)	7.5%	30.8%	0.0%	12.5%	35.8%	0.0%	6.7%	45.8%	0.0%	10.8%	50.0%	0.0%
Maximum Green (s)	5.0	30.3		11.0	36.3		4.0	49.3		9.0	54.3	
Yellow Time (s)	3.0	4.7		3.0	4.7		3.0	4.7		3.0	4.7	
All-Red Time (s)	1.0	2.0		1.0	2.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	6.7	4.0	4.0	6.7	4.0	4.0	5.7	4.0	4.0	5.7	4.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.0	3.0		1.0	3.0		1.0	4.0		1.0	4.0	
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
v/c Ratio	1.01	0.58		0.64	1.19		1.24	0.14		0.49	1.03	
Control Delay	114.6	38.2		34.4	139.8		245.6	20.4		72.8	57.6	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	114.6	38.2		34.4	139.8		245.6	20.4		72.8	57.6	
Queue Length 50th (ft)	~70	148		127	~546		~65	47		34	~657	
Queue Length 95th (ft)	#180	231		189	#746		#157	74		71	#764	
Internal Link Dist (ft)		1628			2006			302			1030	
Turn Bay Length (ft)	250			290			210			250		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)	134	451		377	498		55	1508		123	1605	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	1.01	0.58		0.63	1.19		1.24	0.14		0.37	1.03	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: Route 44 (Middle Turnpike) & Route 195 (Storrs Road)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	120	110	120	210	410	110	60	170	10	40	760	690
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	12	11	10	12	10	12	12	12	12	12
Total Lost time (s)	4.0	6.7		4.0	6.7		4.0	5.7		4.0	5.7	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	0.92		1.00	0.97		1.00	0.99		1.00	0.93	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1678	1636		1745	1621		1652	3388		1641	3243	
Flt Permitted	0.13	1.00		0.38	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	230	1636		704	1621		1652	3388		1641	3243	
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	136	125	136	239	466	125	68	193	11	45	864	784
RTOR Reduction (vph)	0	33	0	0	8	0	0	3	0	0	137	0
Lane Group Flow (vph)	136	228	0	239	583	0	68	201	0	45	1511	0
Heavy Vehicles (%)	4%	4%	3%	0%	7%	2%	2%	6%	0%	10%	1%	6%
Turn Type	pm+pt			pm+pt			Prot			Prot		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8								
Actuated Green, G (s)	35.7	30.7		45.3	36.3		4.0	52.5		5.8	54.3	
Effective Green, g (s)	35.7	30.7		45.3	36.3		4.0	52.5		5.8	54.3	
Actuated g/C Ratio	0.30	0.26		0.38	0.30		0.03	0.44		0.05	0.45	
Clearance Time (s)	4.0	6.7		4.0	6.7		4.0	5.7		4.0	5.7	
Vehicle Extension (s)	1.0	3.0		1.0	3.0		1.0	4.0		1.0	4.0	
Lane Grp Cap (vph)	129	419		358	490		55	1482		79	1467	
v/s Ratio Prot	c0.04	0.14		0.06	c0.36		c0.04	0.06		0.03	c0.47	
v/s Ratio Perm	0.27			0.19								
v/c Ratio	1.05	0.54		0.67	1.19		1.24	0.14		0.57	1.03	
Uniform Delay, d1	41.5	38.6		28.8	41.8		58.0	20.2		55.9	32.9	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	94.5	1.4		3.6	104.0		198.2	0.2		5.5	31.6	
Delay (s)	136.0	40.1		32.5	145.8		256.2	20.4		61.4	64.4	
Level of Service	F	D		C	F		F	C		E	E	
Approach Delay (s)		72.9			113.2			79.3			64.3	
Approach LOS		E			F			E			E	

Intersection Summary			
HCM Average Control Delay	79.4	HCM Level of Service	E
HCM Volume to Capacity ratio	1.04		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	14.7
Intersection Capacity Utilization	98.4%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	120	110	120	210	410	110	60	170	10	40	760	690
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	11	10	12	10	12	12	12	12	12
Storage Length (ft)	250		0	290		0	210		0	250		0
Storage Lanes	2		0	1		0	1		0	1		1
Taper Length (ft)	100		25	50		25	50		25	50		25
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Frt		0.922			0.968			0.992				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3255	1636	0	1745	1620	0	1652	3389	0	1641	3574	1524
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3255	1636	0	1745	1620	0	1652	3389	0	1641	3574	1524
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		65			19			7				604
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		1708			2086			382			1110	
Travel Time (s)		25.9			31.6			8.7			25.2	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	4%	4%	3%	0%	7%	2%	2%	6%	0%	10%	1%	6%
Adj. Flow (vph)	136	125	136	239	466	125	68	193	11	45	864	784
Shared Lane Traffic (%)												
Lane Group Flow (vph)	136	261	0	239	591	0	68	204	0	45	864	784
Turn Type	Prot			Prot			Prot			Prot		Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												Free
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	4.0	15.0		4.0	15.0		4.0	15.0		4.0	15.0	
Minimum Split (s)	8.0	21.7		8.0	21.7		8.0	20.7		8.0	20.7	
Total Split (s)	8.0	26.2	0.0	18.0	36.2	0.0	8.0	25.8	0.0	10.0	27.8	0.0
Total Split (%)	10.0%	32.8%	0.0%	22.5%	45.3%	0.0%	10.0%	32.3%	0.0%	12.5%	34.8%	0.0%
Maximum Green (s)	4.0	19.5		14.0	29.5		4.0	20.1		6.0	22.1	
Yellow Time (s)	3.0	4.7		3.0	4.7		3.0	4.7		3.0	4.7	
All-Red Time (s)	1.0	2.0		1.0	2.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	6.7	4.0	4.0	6.7	4.0	4.0	5.7	4.0	4.0	5.7	4.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.0	3.0		1.0	3.0		1.0	4.0		1.0	4.0	
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
v/c Ratio	0.79	0.55		0.86	0.97		0.79	0.20		0.42	0.83	0.51
Control Delay	70.5	24.5		61.6	55.9		93.1	22.2		47.7	35.3	1.2
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	70.5	24.5		61.6	55.9		93.1	22.2		47.7	35.3	1.2
Queue Length 50th (ft)	35	85		115	277		35	41		22	216	0
Queue Length 95th (ft)	#82	156		#220	#474		#104	67		53	#306	0
Internal Link Dist (ft)		1628			2006			302			1030	
Turn Bay Length (ft)	250			290			210			250		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)	172	478		305	610		86	1017		123	1046	1524
Starvation Cap Reductn	0	0		0	0		0	0		0	0	0
Spillback Cap Reductn	0	0		0	0		0	0		0	0	0
Storage Cap Reductn	0	0		0	0		0	0		0	0	0
Reduced v/c Ratio	0.79	0.55		0.78	0.97		0.79	0.20		0.37	0.83	0.51

Intersection Summary

Area Type: Other

Cycle Length: 80

Actuated Cycle Length: 80

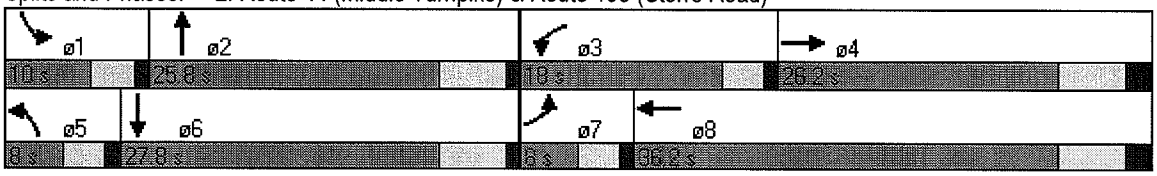
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green

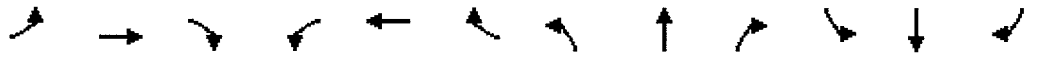
Natural Cycle: 80

Control Type: Actuated-Coordinated

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: Route 44 (Middle Turnpike) & Route 195 (Storrs Road)





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	120	110	120	210	410	110	60	170	10	40	760	690
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	12	11	10	12	10	12	12	12	12	12
Total Lost time (s)	4.0	6.7		4.0	6.7		4.0	5.7		4.0	5.7	4.0
Lane Util. Factor	0.97	1.00		1.00	1.00		1.00	0.95		1.00	0.95	1.00
Frt	1.00	0.92		1.00	0.97		1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3255	1636		1745	1621		1652	3388		1641	3574	1524
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	3255	1636		1745	1621		1652	3388		1641	3574	1524
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	136	125	136	239	466	125	68	193	11	45	864	784
RTOR Reduction (vph)	0	48	0	0	12	0	0	5	0	0	0	0
Lane Group Flow (vph)	136	213	0	239	579	0	68	199	0	45	864	784
Heavy Vehicles (%)	4%	4%	3%	0%	7%	2%	2%	6%	0%	10%	1%	6%
Turn Type	Prot			Prot			Prot			Prot		Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												Free
Actuated Green, G (s)	4.2	21.0		12.8	29.6		3.2	22.3		3.5	22.6	80.0
Effective Green, g (s)	4.2	21.0		12.8	29.6		3.2	22.3		3.5	22.6	80.0
Actuated g/C Ratio	0.05	0.26		0.16	0.37		0.04	0.28		0.04	0.28	1.00
Clearance Time (s)	4.0	6.7		4.0	6.7		4.0	5.7		4.0	5.7	
Vehicle Extension (s)	1.0	3.0		1.0	3.0		1.0	4.0		1.0	4.0	
Lane Grp Cap (vph)	171	429		279	600		66	944		72	1010	1524
v/s Ratio Prot	0.04	0.13		c0.14	c0.36		0.04	0.06		0.03	c0.24	
v/s Ratio Perm												c0.51
v/c Ratio	0.80	0.50		0.86	0.97		1.03	0.21		0.62	0.86	0.51
Uniform Delay, d1	37.5	25.0		32.7	24.7		38.4	22.1		37.6	27.2	0.0
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	20.7	0.9		21.2	27.9		119.5	0.5		11.5	9.2	1.2
Delay (s)	58.2	25.9		53.9	52.6		157.9	22.6		49.1	36.4	1.2
Level of Service	E	C		D	D		F	C		D	D	A
Approach Delay (s)		37.0			53.0			56.4			20.5	
Approach LOS		D			D			E			C	

Intersection Summary			
HCM Average Control Delay	34.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	4.0
Intersection Capacity Utilization	73.0%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

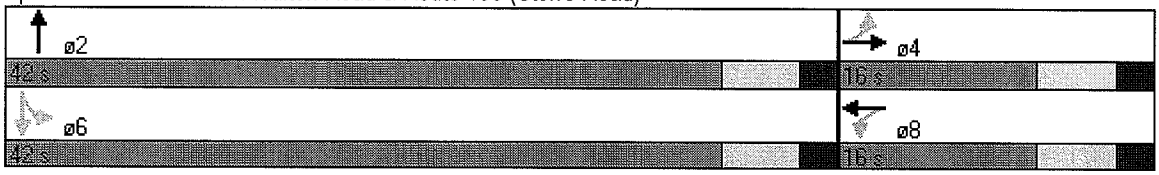
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL		NBR	SBL		SBR
Lane Configurations		↔			↔			↑			↰	
Volume (vph)	10	0	10	20	0	0	0		30	0		0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900		1900	1900		1900
Lane Width (ft)	12	16	12	12	16	12	12		12	12		12
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00
Frt		0.932										
Flt Protected		0.976			0.950							
Satd. Flow (prot)	0	1567	0	0	1948	0	0		0	0		0
Flt Permitted												
Satd. Flow (perm)	0	1606	0	0	2051	0	0		0	0		0
Right Turn on Red			Yes			Yes			Yes			No
Satd. Flow (RTOR)		12										
Link Speed (mph)		30			30							
Link Distance (ft)		333			142							
Travel Time (s)		7.6			3.2							
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86		0.86	0.86		0.86
Heavy Vehicles (%)	0%	0%	50%	5%	0%	50%	0%		21%	0%		0%
Adj. Flow (vph)	12	0	12	23	0	0	0		35	0		0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	24	0	0	23	0	0		0	0		0
Turn Type	Perm			Perm						custom		
Protected Phases		4			8			2				
Permitted Phases	4			8						6	6	
Detector Phase	4	4		8	8			2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0			15.0		15.0	15.0	
Minimum Split (s)	11.0	11.0		11.0	11.0			21.0		21.0	21.0	
Total Split (s)	16.0	16.0	0.0	16.0	16.0	0.0	0.0	42.0	0.0	42.0	42.0	0.0
Total Split (%)	27.6%	27.6%	0.0%	27.6%	27.6%	0.0%	0.0%	72.4%	0.0%	72.4%	72.4%	0.0%
Maximum Green (s)	10.0	10.0		10.0	10.0			36.0		36.0	36.0	
Yellow Time (s)	4.0	4.0		4.0	4.0			4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0			2.0		2.0	2.0	
Lost Time Adjust (s)	-1.0	-1.0	1.0	-1.0	-1.0	1.0	1.0	-1.0	1.0	-1.0	-1.0	1.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0		1.0	1.0			5.0		5.0	5.0	
Recall Mode	None	None		None	None			Min		Min	Min	
v/c Ratio		0.17			0.14			0.19			0.52	
Control Delay		15.8			19.8			1.3			3.2	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		15.8			19.8			1.3			3.2	
Queue Length 50th (ft)		4			9			0			0	
Queue Length 95th (ft)		19			22			47			221	
Internal Link Dist (ft)		253			62			22			346	
Turn Bay Length (ft)												
Base Capacity (vph)		224			273			1617			1745	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	

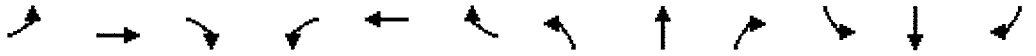
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBR
Storage Cap Reductn		0			0		0			0
Reduced v/c Ratio		0.11			0.08		0.19			0.52

Intersection Summary

Area Type: Other
Cycle Length: 58
Actuated Cycle Length: 80.9
Natural Cycle: 50
Control Type: Actuated-Uncoordinated

Splits and Phases: 3: Moulton Road & Route 195 (Storrs Road)





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	10	0	10	20	0	0	0	240	30	0	780	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	16	12	12	16	12	12	13	12	12	12	12
Total Lost time (s)		5.0			5.0			5.0			5.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frt		0.93			1.00			0.98			1.00	
Flt Protected		0.98			0.95			1.00			1.00	
Satd. Flow (prot)		1567			1948			1725			1863	
Flt Permitted		1.00			1.00			1.00			1.00	
Satd. Flow (perm)		1606			2051			1725			1863	
Peak-hour factor, PHF	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Adj. Flow (vph)	12	0	12	23	0	0	0	279	35	0	907	0
RTOR Reduction (vph)	0	12	0	0	0	0	0	3	0	0	0	0
Lane Group Flow (vph)	0	12	0	0	23	0	0	311	0	0	907	0
Heavy Vehicles (%)	0%	0%	50%	5%	0%	50%	0%	11%	21%	0%	2%	0%
Turn Type	Perm			Perm						custom		
Protected Phases		4			8			2				
Permitted Phases	4			8						6	6	
Actuated Green, G (s)		1.8			1.8			70.3			70.3	
Effective Green, g (s)		2.8			2.8			71.3			71.3	
Actuated g/C Ratio		0.03			0.03			0.85			0.85	
Clearance Time (s)		6.0			6.0			6.0			6.0	
Vehicle Extension (s)		1.0			1.0			5.0			5.0	
Lane Grp Cap (vph)		53			68			1462			1579	
v/s Ratio Prot								0.18				
v/s Ratio Perm		0.01			c0.01						c0.49	
v/c Ratio		0.23			0.34			0.21			0.57	
Uniform Delay, d1		39.6			39.7			1.2			1.9	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		0.8			1.1			0.2			0.8	
Delay (s)		40.4			40.8			1.3			2.7	
Level of Service		D			D			A			A	
Approach Delay (s)		40.4			40.8			1.3			2.7	
Approach LOS		D			D			A			A	

Intersection Summary			
HCM Average Control Delay	3.8	HCM Level of Service	A
HCM Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	84.1	Sum of lost time (s)	10.0
Intersection Capacity Utilization	53.6%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBR	NBL				ø2
Lane Configurations							
Volume (vph)	100	150	500				
Ideal Flow (vphpl)	1900	1900	1900				
Lane Width (ft)	12	13	10				
Storage Length (ft)	0	100	0				
Storage Lanes	1	1	1				
Taper Length (ft)	25	100	25				
Lane Util. Factor	1.00	1.00	1.00				
Frt		0.850					
Flt Protected	0.950		0.950				
Satd. Flow (prot)	1703	1545	1620				
Flt Permitted	0.950		0.155				
Satd. Flow (perm)	1703	1545	264				
Right Turn on Red		Yes					
Satd. Flow (RTOR)		170					
Link Speed (mph)	30						
Link Distance (ft)	1186						
Travel Time (s)	27.0						
Peak Hour Factor	0.88	0.88	0.88				
Heavy Vehicles (%)	6%	8%	4%				
Adj. Flow (vph)	114	170	568				
Shared Lane Traffic (%)							
Lane Group Flow (vph)	114	170	568				
Turn Type		Perm	custom			Perm	
Protected Phases	7		11	2 11	6		2
Permitted Phases		7	2			6	
Detector Phase	7	7	11	2 11	6	6	
Switch Phase							
Minimum Initial (s)	4.0	4.0	6.0		20.0	20.0	20.0
Minimum Split (s)	10.0	10.0	10.0		25.8	25.8	25.8
Total Split (s)	31.0	31.0	34.0	89.8	55.8	55.8	55.8
Total Split (%)	25.7%	25.7%	28.1%	74.3%	46.2%	46.2%	46%
Maximum Green (s)	25.0	25.0	30.0		50.0	50.0	50.0
Yellow Time (s)	3.0	3.0	3.0		3.9	3.9	3.9
All-Red Time (s)	3.0	3.0	1.0		1.9	1.9	1.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0	4.0	5.8	5.8	5.8	
Lead/Lag							
Lead-Lag Optimize?							
Vehicle Extension (s)	1.0	1.0	1.5		3.0	3.0	3.0
Recall Mode	None	None	None		C-Min	C-Min	C-Min
v/c Ratio	0.69	0.56	0.82	0.22	0.85	0.52	
Control Delay	72.9	14.4	49.2	3.2	45.2	15.1	
Queue Delay	0.0	0.0	89.0	0.8	0.0	0.0	
Total Delay	72.9	14.4	138.2	4.0	45.2	15.1	
Queue Length 50th (ft)	88	0	379	39	435	104	
Queue Length 95th (ft)	140	59	m392	m41	#621	188	
Internal Link Dist (ft)	1106			261	2624		
Turn Bay Length (ft)		100				130	

Lane Group	EBL	EBR	NBL			ø2
Base Capacity (vph)	352	455	694	1363	731	748
Starvation Cap Reductn	0	0	217	780	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.32	0.37	1.19	0.51	0.85	0.52

Intersection Summary

Area Type: Other

Cycle Length: 120.8

Actuated Cycle Length: 120.8

Offset: 14.2 (12%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow

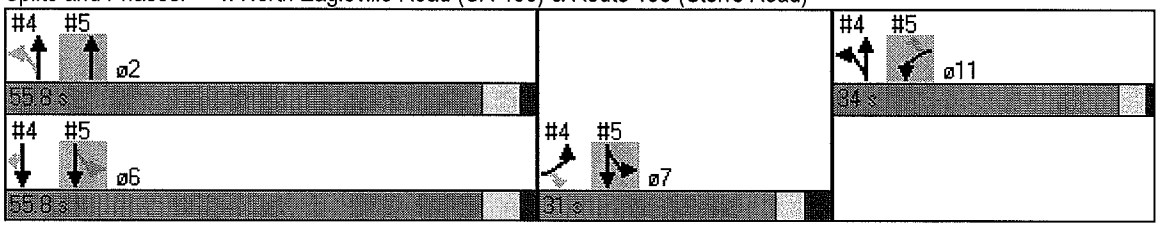
Natural Cycle: 90

Control Type: Actuated-Coordinated

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4: North Eagleville Road (SR 430) & Route 195 (Storrs Road)



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	100	150	500	260	550	340
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	12	13	10	13	11	11
Total Lost time (s)	6.0	6.0	4.0	5.8	5.8	5.8
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	1703	1545	1620	1693	1766	1531
Flt Permitted	0.95	1.00	0.16	1.00	1.00	1.00
Satd. Flow (perm)	1703	1545	265	1693	1766	1531
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	114	170	568	295	625	386
RTOR Reduction (vph)	0	154	0	0	0	114
Lane Group Flow (vph)	114	16	568	295	625	272
Heavy Vehicles (%)	6%	8%	4%	16%	4%	2%
Turn Type		Perm	custom			Perm
Protected Phases	7		11	2 11	6	
Permitted Phases		7	2			6
Actuated Green, G (s)	11.7	11.7	93.3	97.3	50.0	50.0
Effective Green, g (s)	11.7	11.7	93.3	93.3	50.0	50.0
Actuated g/C Ratio	0.10	0.10	0.77	0.77	0.41	0.41
Clearance Time (s)	6.0	6.0	4.0		5.8	5.8
Vehicle Extension (s)	1.0	1.0	1.5		3.0	3.0
Lane Grp Cap (vph)	165	150	690	1308	731	634
v/s Ratio Prot	c0.07		c0.29	0.17	c0.35	
v/s Ratio Perm		0.01	0.34			0.18
v/c Ratio	0.69	0.11	0.82	0.23	0.85	0.43
Uniform Delay, d1	52.8	49.8	24.4	3.8	32.1	25.2
Progression Factor	1.00	1.00	1.97	0.93	1.00	1.00
Incremental Delay, d2	9.6	0.1	3.7	0.0	12.2	2.1
Delay (s)	62.4	49.9	51.7	3.5	44.3	27.3
Level of Service	E	D	D	A	D	C
Approach Delay (s)	54.9			35.2	37.8	
Approach LOS	D			D	D	

Intersection Summary			
HCM Average Control Delay	39.0	HCM Level of Service	D
HCM Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	120.8	Sum of lost time (s)	15.8
Intersection Capacity Utilization	75.4%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	WBL	WBR		NBR			ø6
Lane Configurations							
Volume (vph)	20	60		30			
Ideal Flow (vphpl)	1900	1900		1900			
Lane Width (ft)	10	12		12			
Storage Length (ft)	100	0		0			
Storage Lanes	1	1		0			
Taper Length (ft)	25	25		25			
Lane Util. Factor	1.00	1.00		0.95			
Frt		0.850					
Flt Protected	0.950						
Satd. Flow (prot)	1478	1583		0			
Flt Permitted	0.950						
Satd. Flow (perm)	1478	1583		0			
Right Turn on Red		Yes		Yes			
Satd. Flow (RTOR)		62					
Link Speed (mph)	30						
Link Distance (ft)	1395						
Travel Time (s)	31.7						
Peak Hour Factor	0.96	0.96		0.96			
Heavy Vehicles (%)	14%	2%		20%			
Adj. Flow (vph)	21	62		31			
Shared Lane Traffic (%)							
Lane Group Flow (vph)	21	62		0			
Turn Type		Perm			custom		
Protected Phases	11		2		7	6 7	6
Permitted Phases		11			6		
Detector Phase	11	11	2		7	6 7	
Switch Phase							
Minimum Initial (s)	6.0	6.0	20.0		4.0		20.0
Minimum Split (s)	10.0	10.0	25.8		10.0		25.8
Total Split (s)	34.0	34.0	55.8	0.0	31.0	86.8	55.8
Total Split (%)	28.1%	28.1%	46.2%	0.0%	25.7%	71.9%	46%
Maximum Green (s)	30.0	30.0	50.0		25.0		50.0
Yellow Time (s)	3.0	3.0	3.9		3.0		3.9
All-Red Time (s)	1.0	1.0	1.9		3.0		1.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0	5.8	4.0	6.0	5.8	
Lead/Lag							
Lead-Lag Optimize?							
Vehicle Extension (s)	1.5	1.5	3.0		1.0		3.0
Recall Mode	None	None	C-Min		None		C-Min
v/c Ratio	0.04	0.10	1.02		0.52	0.64	
Control Delay	27.8	7.6	72.5		21.6	4.5	
Queue Delay	0.0	0.0	59.4		0.0	0.4	
Total Delay	27.8	7.7	131.9		21.6	4.9	
Queue Length 50th (ft)	11	0	~607		33	48	
Queue Length 95th (ft)	31	32	#868		m53	m34	
Internal Link Dist (ft)	1315		137			261	
Turn Bay Length (ft)	100				75		

Lane Group	WBL	WBR	NBR		ø6
Base Capacity (vph)	529	607	748	367	1165
Starvation Cap Reductn	0	0	0	0	181
Spillback Cap Reductn	0	70	98	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.04	0.12	1.17	0.28	0.64

Intersection Summary

Area Type: Other

Cycle Length: 120.8

Actuated Cycle Length: 120.8

Offset: 14.2 (12%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow

Natural Cycle: 90

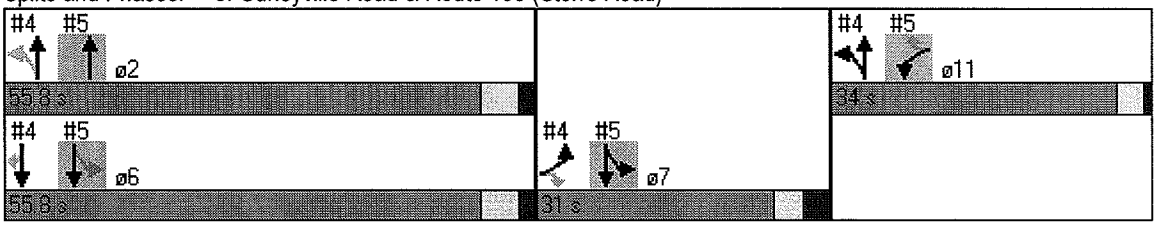
Control Type: Actuated-Coordinated

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Gurleyville Road & Route 195 (Storrs Road)



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	20	60	700	30	100	600
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	10	12	12	12	10	13
Total Lost time (s)	4.0	4.0	5.8		6.0	5.8
Lane Util. Factor	1.00	1.00	*0.50		1.00	1.00
Frt	1.00	0.85	0.99		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1478	1583	1804		1518	1737
Flt Permitted	0.95	1.00	1.00		0.08	1.00
Satd. Flow (perm)	1478	1583	1804		128	1737
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	21	62	729	31	104	625
RTOR Reduction (vph)	0	40	1	0	0	0
Lane Group Flow (vph)	21	22	759	0	104	625
Heavy Vehicles (%)	14%	2%	4%	20%	11%	13%
Turn Type		Perm			custom	
Protected Phases	11		2		7	6 7
Permitted Phases		11			6	
Actuated Green, G (s)	43.3	43.3	50.0		61.7	67.5
Effective Green, g (s)	43.3	43.3	50.0		61.7	67.5
Actuated g/C Ratio	0.36	0.36	0.41		0.51	0.56
Clearance Time (s)	4.0	4.0	5.8		6.0	
Vehicle Extension (s)	1.5	1.5	3.0		1.0	
Lane Grp Cap (vph)	530	567	747		200	971
v/s Ratio Prot	c0.01		c0.42		0.05	c0.36
v/s Ratio Perm		0.01			0.22	
v/c Ratio	0.04	0.04	1.02		0.52	0.64
Uniform Delay, d1	25.2	25.2	35.4		48.1	18.4
Progression Factor	1.00	1.00	1.00		0.45	0.13
Incremental Delay, d2	0.0	0.0	36.9		0.7	0.7
Delay (s)	25.2	25.2	72.3		22.5	3.2
Level of Service	C	C	E		C	A
Approach Delay (s)	25.2		72.3			5.9
Approach LOS	C		E			A

Intersection Summary			
HCM Average Control Delay	39.1	HCM Level of Service	D
HCM Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	120.8	Sum of lost time (s)	9.8
Intersection Capacity Utilization	44.7%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL		NBR			SBR
Lane Configurations												
Volume (vph)	50	10	30	0	10	10	120		10			190
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900		1900			1900
Lane Width (ft)	12	10	10	12	16	12	11		12			12
Storage Length (ft)	0		20	0		0	170		0			0
Storage Lanes	0		1	0		0	1		0			0
Taper Length (ft)	25		50	25		25	50		25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00			1.00
Frt			0.850		0.932							
Flt Protected		0.960					0.950					
Satd. Flow (prot)	0	1479	1322	0	1487	0	1694		0			0
Flt Permitted		0.745					0.346					
Satd. Flow (perm)	0	1148	1322	0	1487	0	617		0			0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			34		11							
Link Speed (mph)		30			30							
Link Distance (ft)		843			640							
Travel Time (s)		19.2			14.5							
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88		0.88			0.88
Heavy Vehicles (%)	18%	0%	14%	0%	57%	13%	3%		0%			3%
Adj. Flow (vph)	57	11	34	0	11	11	136		11			216
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	68	34	0	22	0	136		0			0
Turn Type	Perm		Perm	Perm			pm+pt			Perm		
Protected Phases		12			16		5	2			6	
Permitted Phases	12		12	16			2			6		
Detector Phase	12	12	12	16	16		5	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		3.0	28.0		28.0	28.0	
Minimum Split (s)	9.0	9.0	9.0	9.0	9.0		6.0	34.0		34.0	34.0	
Total Split (s)	19.0	19.0	19.0	19.0	19.0	0.0	11.0	45.0	0.0	34.0	34.0	0.0
Total Split (%)	23.8%	23.8%	23.8%	23.8%	23.8%	0.0%	13.8%	56.3%	0.0%	42.5%	42.5%	0.0%
Maximum Green (s)	15.0	15.0	15.0	15.0	15.0		8.0	39.0		28.0	28.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0		3.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		0.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.0	1.0	-1.0	-1.0	1.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	3.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag							Lead			Lag	Lag	
Lead-Lag Optimize?							Yes			Yes	Yes	
Vehicle Extension (s)	1.0	1.0	1.0	1.0	1.0		2.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None		Min	C-Min		C-Min	C-Min	
v/c Ratio		0.56	0.20		0.13		0.23	0.52		0.10	0.53	
Control Delay		50.0	13.9		22.7		2.9	5.0		6.8	9.1	
Queue Delay		0.0	0.0		0.0		0.0	0.5		0.0	0.0	
Total Delay		50.0	13.9		22.7		2.9	5.5		6.8	9.1	
Queue Length 50th (ft)		33	0		5		10	109		7	125	
Queue Length 95th (ft)		67	23		24		27	228		24	258	
Internal Link Dist (ft)		763			560			466			1874	
Turn Bay Length (ft)			20				170			170		

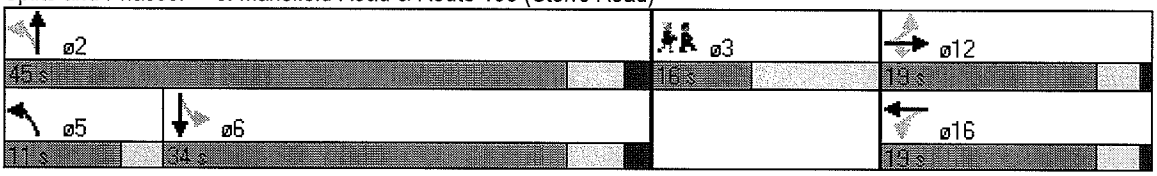
Lane Group	ø3
Lane Configurations	
Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	3
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	7.0
Minimum Split (s)	16.0
Total Split (s)	16.0
Total Split (%)	20%
Maximum Green (s)	7.0
Yellow Time (s)	9.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBR
Base Capacity (vph)		215	276		288		619	1559	441	1169
Starvation Cap Reductn		0	0		0		0	352	0	0
Spillback Cap Reductn		0	0		0		0	0	0	0
Storage Cap Reductn		0	0		0		0	0	0	0
Reduced v/c Ratio		0.32	0.12		0.08		0.22	0.67	0.10	0.53

Intersection Summary

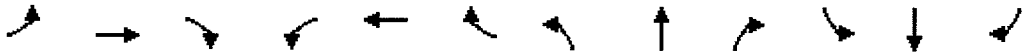
Area Type: Other
Cycle Length: 80
Actuated Cycle Length: 80
Offset: 29 (36%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
Natural Cycle: 65
Control Type: Actuated-Coordinated

Splits and Phases: 6: Mansfield Road & Route 195 (Storrs Road)



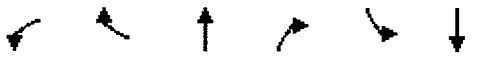
Lane Group	ø3
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	50	10	30	0	10	10	120	700	10	40	350	190
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	10	10	12	16	12	11	14	12	10	11	12
Total Lost time (s)		4.0	4.0		4.0		3.0	5.0		5.0	5.0	
Lane Util. Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Frt		1.00	0.85		0.93		1.00	1.00		1.00	0.95	
Flt Protected		0.96	1.00		1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1479	1322		1487		1694	1910		1685	1679	
Flt Permitted		0.75	1.00		1.00		0.35	1.00		0.36	1.00	
Satd. Flow (perm)		1148	1322		1487		617	1910		641	1679	
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	57	11	34	0	11	11	136	795	11	45	398	216
RTOR Reduction (vph)	0	0	31	0	10	0	0	0	0	0	12	0
Lane Group Flow (vph)	0	68	3	0	12	0	136	806	0	45	602	0
Heavy Vehicles (%)	18%	0%	14%	0%	57%	13%	3%	6%	0%	0%	4%	3%
Turn Type	Perm		Perm	Perm			pm+pt			Perm		
Protected Phases		12			16		5	2			6	
Permitted Phases	12		12	16			2			6		
Actuated Green, G (s)		7.5	7.5		7.5		62.5	62.5		53.4	53.4	
Effective Green, g (s)		7.5	7.5		7.5		62.5	63.5		54.4	54.4	
Actuated g/C Ratio		0.09	0.09		0.09		0.78	0.79		0.68	0.68	
Clearance Time (s)		4.0	4.0		4.0		3.0	6.0		6.0	6.0	
Vehicle Extension (s)		1.0	1.0		1.0		2.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		108	124		139		564	1516		436	1142	
v/s Ratio Prot					0.01		0.02	c0.42			0.36	
v/s Ratio Perm		c0.06	0.00				0.17			0.07		
v/c Ratio		0.63	0.03		0.09		0.24	0.53		0.10	0.53	
Uniform Delay, d1		34.9	32.9		33.1		3.0	2.9		4.4	6.4	
Progression Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		8.0	0.0		0.1		0.1	1.3		0.5	1.7	
Delay (s)		42.9	33.0		33.2		3.1	4.3		4.9	8.1	
Level of Service		D	C		C		A	A		A	A	
Approach Delay (s)		39.6			33.2			4.1			7.9	
Approach LOS		D			C			A			A	

Intersection Summary			
HCM Average Control Delay	8.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	82.4%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



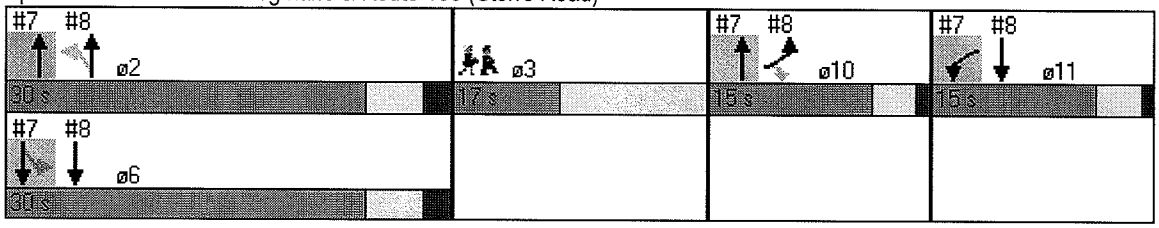
Lane Group	WBL	WBR		NBR			ø2	ø3	ø10
Lane Configurations									
Volume (vph)	60	40		100					
Ideal Flow (vphpl)	1900	1900		1900					
Lane Width (ft)	14	12		12					
Storage Length (ft)	0	0		0					
Storage Lanes	1	0		0					
Taper Length (ft)	25	25		25					
Lane Util. Factor	1.00	1.00		1.00					
Frt	0.945								
Flt Protected	0.971								
Satd. Flow (prot)	1823	0		0					
Flt Permitted	0.971								
Satd. Flow (perm)	1823	0		0					
Right Turn on Red		Yes		Yes					
Satd. Flow (RTOR)	37								
Link Speed (mph)	30								
Link Distance (ft)	1395								
Travel Time (s)	31.7								
Peak Hour Factor	0.96	0.96		0.96					
Adj. Flow (vph)	62	42		104					
Shared Lane Traffic (%)									
Lane Group Flow (vph)	104	0		0					
Turn Type					Perm				
Protected Phases	11		2 10			6	2	3	10
Permitted Phases					6				
Detector Phase	11		2 10		6	6			
Switch Phase									
Minimum Initial (s)	5.0				15.0	15.0	15.0	7.0	5.0
Minimum Split (s)	9.0				21.0	21.0	21.0	17.0	9.0
Total Split (s)	15.0	0.0	45.0	0.0	30.0	30.0	30.0	17.0	15.0
Total Split (%)	19.5%	0.0%	58.4%	0.0%	39.0%	39.0%	39%	22%	19%
Maximum Green (s)	11.0				24.0	24.0	24.0	7.0	11.0
Yellow Time (s)	3.0				4.0	4.0	4.0	10.0	3.0
All-Red Time (s)	1.0				2.0	2.0	2.0	0.0	1.0
Lost Time Adjust (s)	0.0	0.0	-1.0	1.0	-1.0	-1.0			
Total Lost Time (s)	4.0	4.0	5.0	5.0	5.0	5.0			
Lead/Lag									
Lead-Lag Optimize?									
Vehicle Extension (s)	2.0				3.0	3.0	3.0	3.0	3.0
Recall Mode	None				C-Max	C-Max	C-Max	Max	None
v/c Ratio	0.37		1.02		0.55	0.56			
Control Delay	24.4		31.8		48.0	25.7			
Queue Delay	0.0		187.7		0.0	0.0			
Total Delay	24.4		219.5		48.0	25.7			
Queue Length 50th (ft)	29		~197		20	135			
Queue Length 95th (ft)	73		m0		#75	217			
Internal Link Dist (ft)	1315		33			466			
Turn Bay Length (ft)					170				
Base Capacity (vph)	292		905		94	613			

Lane Group	WBL	WBR	NBR		ø2	ø3	ø10
Starvation Cap Reductn	0	271	0	0			
Spillback Cap Reductn	0	0	0	0			
Storage Cap Reductn	0	0	0	0			
Reduced v/c Ratio	0.36	1.46	0.55	0.56			

Intersection Summary

Area Type: Other
Cycle Length: 77
Actuated Cycle Length: 77
Offset: 1 (1%), Referenced to phase 2:NBT and 6:SBTL, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 7: Dog Lane & Route 195 (Storrs Road)



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	60	40	790	100	50	330
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	14	12	14	12	11	12
Total Lost time (s)	4.0		5.0		5.0	5.0
Lane Util. Factor	1.00		1.00		1.00	1.00
Frt	0.95		0.98		1.00	1.00
Flt Protected	0.97		1.00		0.95	1.00
Satd. Flow (prot)	1824		1957		1711	1863
Flt Permitted	0.97		1.00		0.16	1.00
Satd. Flow (perm)	1824		1957		285	1863
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	62	42	823	104	52	344
RTOR Reduction (vph)	32	0	6	0	0	0
Lane Group Flow (vph)	72	0	921	0	52	344
Turn Type					Perm	
Protected Phases	11		2 10			6
Permitted Phases					6	
Actuated Green, G (s)	10.7		35.3		24.3	24.3
Effective Green, g (s)	10.7		37.3		25.3	25.3
Actuated g/C Ratio	0.14		0.48		0.33	0.33
Clearance Time (s)	4.0				6.0	6.0
Vehicle Extension (s)	2.0				3.0	3.0
Lane Grp Cap (vph)	253		948		94	612
v/s Ratio Prot	c0.04		c0.47			0.18
v/s Ratio Perm					0.18	
v/c Ratio	0.29		0.97		0.55	0.56
Uniform Delay, d1	29.7		19.3		21.2	21.3
Progression Factor	1.00		0.81		1.00	1.00
Incremental Delay, d2	0.2		4.2		21.4	3.7
Delay (s)	29.9		19.8		42.6	25.0
Level of Service	C		B		D	C
Approach Delay (s)	29.9		19.8			27.3
Approach LOS	C		B			C

Intersection Summary			
HCM Average Control Delay	22.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	77.0	Sum of lost time (s)	31.0
Intersection Capacity Utilization	60.9%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

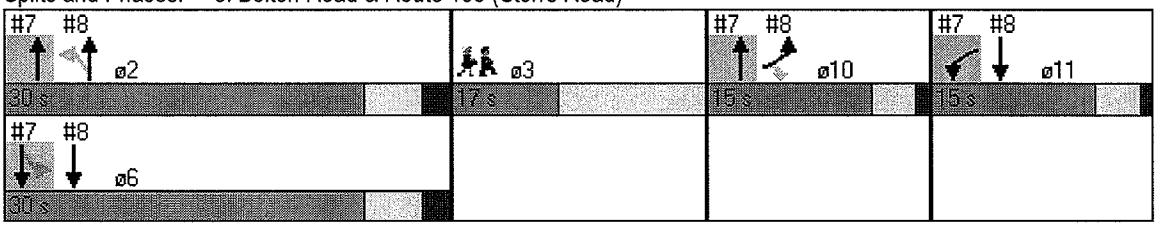
Lane Group	EBL	EBR				SBR	ø3	ø6	ø11
Lane Configurations									
Volume (vph)	20	50				80			
Ideal Flow (vphpl)	1900	1900				1900			
Lane Width (ft)	10	11				12			
Storage Length (ft)	0	290				0			
Storage Lanes	1	1				0			
Taper Length (ft)	25	50				25			
Lane Util. Factor	1.00	1.00				1.00			
Frt		0.850							
Flt Protected	0.950								
Satd. Flow (prot)	1348	1323				0			
Flt Permitted	0.950								
Satd. Flow (perm)	1348	1323				0			
Right Turn on Red		Yes				Yes			
Satd. Flow (RTOR)		52							
Link Speed (mph)	30								
Link Distance (ft)	908								
Travel Time (s)	20.6								
Peak Hour Factor	0.96	0.96				0.96			
Heavy Vehicles (%)	25%	18%				6%			
Adj. Flow (vph)	21	52				83			
Shared Lane Traffic (%)									
Lane Group Flow (vph)	21	52				0			
Turn Type		Perm	Perm						
Protected Phases	10			2	6 11		3	6	11
Permitted Phases		10	2						
Detector Phase	10	10	2	2	6 11				
Switch Phase									
Minimum Initial (s)	5.0	5.0	15.0	15.0			7.0	15.0	5.0
Minimum Split (s)	9.0	9.0	21.0	21.0			17.0	21.0	9.0
Total Split (s)	15.0	15.0	30.0	30.0	45.0	0.0	17.0	30.0	15.0
Total Split (%)	19.5%	19.5%	39.0%	39.0%	58.4%	0.0%	22%	39%	19%
Maximum Green (s)	11.0	11.0	24.0	24.0			7.0	24.0	11.0
Yellow Time (s)	3.0	3.0	4.0	4.0			10.0	4.0	3.0
All-Red Time (s)	1.0	1.0	2.0	2.0			0.0	2.0	1.0
Lost Time Adjust (s)	0.0	0.0	-1.0	-1.0	-1.0	1.0			
Total Lost Time (s)	4.0	4.0	5.0	5.0	5.0	5.0			
Lead/Lag									
Lead-Lag Optimize?									
Vehicle Extension (s)	3.0	3.0	3.0	3.0			3.0	3.0	2.0
Recall Mode	None	None	C-Max	C-Max			Max	C-Max	None
v/c Ratio	0.11	0.22	0.73	1.57	0.43				
Control Delay	30.4	11.9	46.0	290.9	2.5				
Queue Delay	0.1	0.0	0.0	406.0	0.8				
Total Delay	30.5	11.9	46.0	697.0	3.3				
Queue Length 50th (ft)	9	0	66	~631	4				
Queue Length 95th (ft)	29	30	#163	#849	1				
Internal Link Dist (ft)	828			733	33				
Turn Bay Length (ft)		290	90						

Lane Group	EBL	EBR				SBR	ø3	ø6	ø11
Base Capacity (vph)	193	234	214	576	927				
Starvation Cap Reductn	0	0	0	0	264				
Spillback Cap Reductn	22	0	0	210	0				
Storage Cap Reductn	0	0	0	0	0				
Reduced v/c Ratio	0.12	0.22	0.73	2.48	0.61				

Intersection Summary

Area Type: Other
Cycle Length: 77
Actuated Cycle Length: 77
Offset: 1 (1%), Referenced to phase 2:NBT and 6:SBTL, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 8: Bolton Road & Route 195 (Storrs Road)



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	20	50	150	870	310	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	10	11	11	11	14	12
Total Lost time (s)	4.0	4.0	5.0	5.0	5.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.85	1.00	1.00	0.97	
Flt Protected	0.95	1.00	0.95	1.00	1.00	
Satd. Flow (prot)	1348	1323	1601	1749	1792	
Flt Permitted	0.95	1.00	0.39	1.00	1.00	
Satd. Flow (perm)	1348	1323	650	1749	1792	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	21	52	156	906	323	83
RTOR Reduction (vph)	0	45	0	0	13	0
Lane Group Flow (vph)	21	7	156	906	393	0
Heavy Vehicles (%)	25%	18%	9%	5%	11%	6%
Turn Type		Perm	Perm			
Protected Phases	10			2	6 11	
Permitted Phases		10	2			
Actuated Green, G (s)	11.0	11.0	24.3	24.3	39.0	
Effective Green, g (s)	11.0	11.0	25.3	25.3	37.0	
Actuated g/C Ratio	0.14	0.14	0.33	0.33	0.48	
Clearance Time (s)	4.0	4.0	6.0	6.0		
Vehicle Extension (s)	3.0	3.0	3.0	3.0		
Lane Grp Cap (vph)	193	189	214	575	861	
v/s Ratio Prot	c0.02			c0.52	c0.22	
v/s Ratio Perm		0.01	0.24			
v/c Ratio	0.11	0.04	0.73	1.58	0.46	
Uniform Delay, d1	28.7	28.4	22.8	25.8	13.3	
Progression Factor	1.00	1.00	1.00	1.00	0.11	
Incremental Delay, d2	0.3	0.1	19.5	267.3	0.1	
Delay (s)	29.0	28.5	42.3	293.2	1.6	
Level of Service	C	C	D	F	A	
Approach Delay (s)	28.7			256.3	1.6	
Approach LOS	C			F	A	

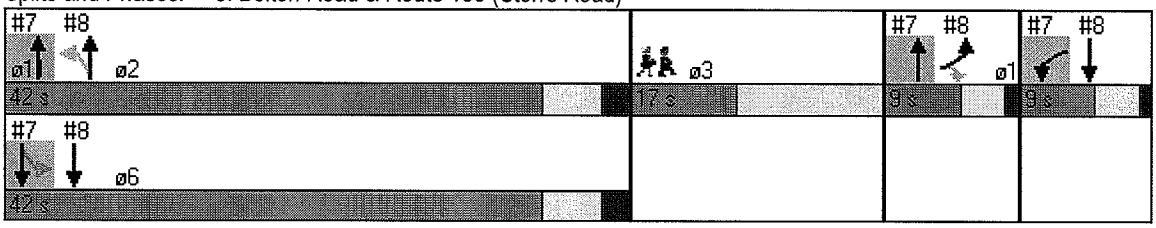
Intersection Summary			
HCM Average Control Delay	178.4	HCM Level of Service	F
HCM Volume to Capacity ratio	1.01		
Actuated Cycle Length (s)	77.0	Sum of lost time (s)	31.0
Intersection Capacity Utilization	57.5%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBR				SBR	ø3	ø6	ø11
Lane Configurations									
Volume (vph)	20	50				80			
Ideal Flow (vphpl)	1900	1900				1900			
Lane Width (ft)	10	11				12			
Storage Length (ft)	0	290				0			
Storage Lanes	1	1				0			
Taper Length (ft)	25	50				25			
Lane Util. Factor	1.00	1.00				1.00			
Frt		0.850							
Flt Protected	0.950								
Satd. Flow (prot)	1348	1323				0			
Flt Permitted	0.950								
Satd. Flow (perm)	1348	1323				0			
Right Turn on Red		Yes				Yes			
Satd. Flow (RTOR)		52							
Link Speed (mph)	30								
Link Distance (ft)	908								
Travel Time (s)	20.6								
Peak Hour Factor	0.96	0.96				0.96			
Heavy Vehicles (%)	25%	18%				6%			
Adj. Flow (vph)	21	52				83			
Shared Lane Traffic (%)									
Lane Group Flow (vph)	21	52				0			
Turn Type		Perm	Perm						
Protected Phases	10			2	6 11		3	6	11
Permitted Phases		10	2						
Detector Phase	10	10	2	2	6 11				
Switch Phase									
Minimum Initial (s)	5.0	5.0	15.0	15.0			7.0	15.0	5.0
Minimum Split (s)	9.0	9.0	21.0	21.0			17.0	21.0	9.0
Total Split (s)	9.0	9.0	42.0	42.0	51.0	0.0	17.0	42.0	9.0
Total Split (%)	11.7%	11.7%	54.5%	54.5%	66.2%	0.0%	22%	55%	12%
Maximum Green (s)	5.0	5.0	36.0	36.0			7.0	36.0	5.0
Yellow Time (s)	3.0	3.0	4.0	4.0			10.0	4.0	3.0
All-Red Time (s)	1.0	1.0	2.0	2.0			0.0	2.0	1.0
Lost Time Adjust (s)	0.0	0.0	-1.0	-1.0	-1.0	1.0			
Total Lost Time (s)	4.0	4.0	5.0	5.0	5.0	5.0			
Lead/Lag									
Lead-Lag Optimize?									
Vehicle Extension (s)	3.0	3.0	3.0	3.0			3.0	3.0	2.0
Recall Mode	None	None	C-Max	C-Max			Max	C-Max	None
v/c Ratio	0.24	0.39	0.42	1.08	0.38				
Control Delay	41.1	19.6	17.6	77.0	1.8				
Queue Delay	1.0	0.0	0.0	41.2	0.5				
Total Delay	42.0	19.6	17.6	118.3	2.3				
Queue Length 50th (ft)	10	0	46	~493	2				
Queue Length 95th (ft)	32	33	97	#711	1				
Internal Link Dist (ft)	828			733	33				
Turn Bay Length (ft)		290	90						

Lane Group	EBL	EBR				SBR	ø3	ø6	ø11
Base Capacity (vph)	88	135	368	840	1082				
Starvation Cap Reductn	0	0	0	0	319				
Spillback Cap Reductn	14	0	0	70	0				
Storage Cap Reductn	0	0	0	0	0				
Reduced v/c Ratio	0.28	0.39	0.42	1.18	0.53				

Intersection Summary	
Area Type:	Other
Cycle Length: 77	
Actuated Cycle Length: 77	
Offset: 1 (1%), Referenced to phase 2:NBT and 6:SBTL, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
~ Volume exceeds capacity, queue is theoretically infinite.	
Queue shown is maximum after two cycles.	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	

Splits and Phases: 8: Bolton Road & Route 195 (Storrs Road)



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	20	50	150	870	310	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	10	11	11	11	14	12
Total Lost time (s)	4.0	4.0	5.0	5.0	5.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.85	1.00	1.00	0.97	
Flt Protected	0.95	1.00	0.95	1.00	1.00	
Satd. Flow (prot)	1348	1323	1601	1749	1792	
Flt Permitted	0.95	1.00	0.45	1.00	1.00	
Satd. Flow (perm)	1348	1323	765	1749	1792	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	21	52	156	906	323	83
RTOR Reduction (vph)	0	49	0	0	13	0
Lane Group Flow (vph)	21	3	156	906	393	0
Heavy Vehicles (%)	25%	18%	9%	5%	11%	6%
Turn Type		Perm	Perm			
Protected Phases	10			2	6 11	
Permitted Phases		10	2			
Actuated Green, G (s)	5.0	5.0	36.0	36.0	45.0	
Effective Green, g (s)	5.0	5.0	37.0	37.0	43.0	
Actuated g/C Ratio	0.06	0.06	0.48	0.48	0.56	
Clearance Time (s)	4.0	4.0	6.0	6.0		
Vehicle Extension (s)	3.0	3.0	3.0	3.0		
Lane Grp Cap (vph)	88	86	368	840	1001	
v/s Ratio Prot	c0.02			c0.52	c0.22	
v/s Ratio Perm		0.00	0.20			
v/c Ratio	0.24	0.04	0.42	1.08	0.39	
Uniform Delay, d1	34.2	33.7	13.0	20.0	9.6	
Progression Factor	1.00	1.00	1.00	1.00	0.12	
Incremental Delay, d2	1.4	0.2	3.6	54.5	0.1	
Delay (s)	35.6	33.9	16.6	74.5	1.2	
Level of Service	D	C	B	E	A	
Approach Delay (s)	34.4			66.0	1.2	
Approach LOS	C			E	A	

Intersection Summary			
HCM Average Control Delay	47.4	HCM Level of Service	D
HCM Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	77.0	Sum of lost time (s)	31.0
Intersection Capacity Utilization	57.5%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

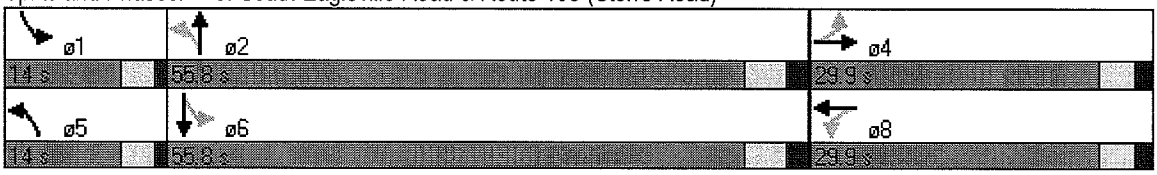
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	260	10	90	10	10	30	190	670	10	20	210	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	12	13	12	12	12	12	12	12	12
Storage Length (ft)	250		0	0		0	370		0	130		0
Storage Lanes	1		0	0		0	1		0	1		0
Taper Length (ft)	105		25	25		25	50		25	60		25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Frt		0.865			0.919			0.998			0.951	
Flt Protected	0.950				0.990		0.950			0.950		
Satd. Flow (prot)	1662	1520	0	0	1734	0	1770	1804	0	1641	3122	0
Flt Permitted	0.721				0.951		0.471			0.215		
Satd. Flow (perm)	1261	1520	0	0	1666	0	877	1804	0	371	3122	0
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)		98						1			109	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2484			547			502			588	
Travel Time (s)		56.5			12.4			11.4			13.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	0%	5%	0%	0%	5%	2%	5%	13%	10%	9%	12%
Adj. Flow (vph)	283	11	98	11	11	33	207	728	11	22	228	109
Shared Lane Traffic (%)												
Lane Group Flow (vph)	283	109	0	0	55	0	207	739	0	22	337	0
Turn Type	Perm			Perm			pm+pt			pm+pt		
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		3.0	15.0		3.0	15.0	
Minimum Split (s)	10.9	10.9		10.9	10.9		7.0	20.8		7.0	20.8	
Total Split (s)	29.9	29.9	0.0	29.9	29.9	0.0	14.0	55.8	0.0	14.0	55.8	0.0
Total Split (%)	30.0%	30.0%	0.0%	30.0%	30.0%	0.0%	14.0%	56.0%	0.0%	14.0%	56.0%	0.0%
Maximum Green (s)	25.0	25.0		25.0	25.0		10.0	50.0		10.0	50.0	
Yellow Time (s)	3.2	3.2		3.2	3.2		3.0	3.6		3.0	3.6	
All-Red Time (s)	1.7	1.7		1.7	1.7		1.0	2.2		1.0	2.2	
Lost Time Adjust (s)	-0.9	-0.9	0.0	-0.9	-0.9	0.0	0.0	-1.8	0.0	0.0	-1.8	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.5	1.5		1.5	1.5		1.5	2.5		1.5	2.5	
Recall Mode	None	None		None	None		None	Min		None	Min	
v/c Ratio	0.75	0.21			0.11		0.33	0.76		0.09	0.26	
Control Delay	39.6	8.2			22.7		8.8	20.3		8.6	10.0	
Queue Delay	0.0	0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay	39.6	8.2			22.7		8.8	20.3		8.6	10.0	
Queue Length 50th (ft)	92	3			14		41	217		4	34	
Queue Length 95th (ft)	#298	45			55		75	476		13	62	
Internal Link Dist (ft)		2404			467			422			508	
Turn Bay Length (ft)	250						370			130		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)	449	604			593		627	1121		335	1787	
Starvation Cap Reductn	0	0			0		0	0		0	0	
Spillback Cap Reductn	0	0			0		0	0		0	0	
Storage Cap Reductn	0	0			0		0	0		0	0	
Reduced v/c Ratio	0.63	0.18			0.09		0.33	0.66		0.07	0.19	

Intersection Summary

Area Type: Other
Cycle Length: 99.7
Actuated Cycle Length: 70.4
Natural Cycle: 65
Control Type: Actuated-Uncoordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 9: South Eagleville Road & Route 195 (Storrs Road)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	260	10	90	10	10	30	190	670	10	20	210	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	12	12	13	12	12	12	12	12	12	12
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00			1.00		1.00	1.00		1.00	0.95	
Frt	1.00	0.87			0.92		1.00	1.00		1.00	0.95	
Flt Protected	0.95	1.00			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1662	1521			1734		1770	1803		1641	3123	
Flt Permitted	0.72	1.00			0.95		0.47	1.00		0.21	1.00	
Satd. Flow (perm)	1261	1521			1665		878	1803		371	3123	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	283	11	98	11	11	33	207	728	11	22	228	109
RTOR Reduction (vph)	0	69	0	0	0	0	0	0	0	0	63	0
Lane Group Flow (vph)	283	40	0	0	55	0	207	739	0	22	274	0
Heavy Vehicles (%)	5%	0%	5%	0%	0%	5%	2%	5%	13%	10%	9%	12%
Turn Type	Perm			Perm			pm+pt			pm+pt		
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	20.2	20.2			20.2		41.5	36.0		30.0	28.5	
Effective Green, g (s)	21.1	21.1			21.1		41.5	37.8		30.0	30.3	
Actuated g/C Ratio	0.29	0.29			0.29		0.57	0.52		0.41	0.42	
Clearance Time (s)	4.9	4.9			4.9		4.0	5.8		4.0	5.8	
Vehicle Extension (s)	1.5	1.5			1.5		1.5	2.5		1.5	2.5	
Lane Grp Cap (vph)	368	443			485		614	941		180	1307	
v/s Ratio Prot		0.03					c0.04	c0.41		0.00	0.09	
v/s Ratio Perm	c0.22				0.03		0.15			0.05		
v/c Ratio	0.77	0.09			0.11		0.34	0.78		0.12	0.21	
Uniform Delay, d1	23.4	18.7			18.8		7.7	14.0		13.7	13.4	
Progression Factor	1.00	1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	8.4	0.0			0.0		0.1	4.2		0.1	0.1	
Delay (s)	31.9	18.7			18.8		7.8	18.2		13.8	13.5	
Level of Service	C	B			B		A	B		B	B	
Approach Delay (s)		28.2			18.8			15.9			13.5	
Approach LOS		C			B			B			B	

Intersection Summary			
HCM Average Control Delay	18.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	72.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	70.3%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

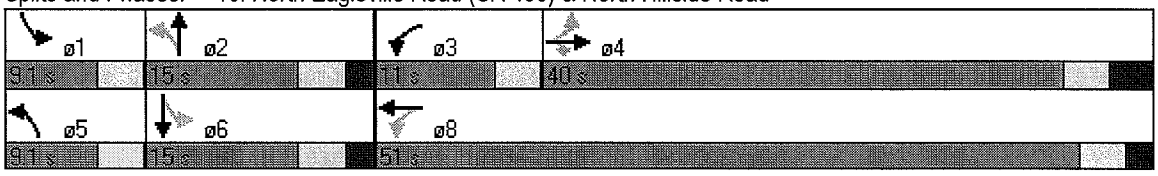
Lane Group		EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)		50	60	50	40	290	300	140	70	60	250	270
Ideal Flow (vphpl)		1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)		10	13	11	15	12	11	14	12	12	15	12
Storage Length (ft)			115	170		0	170		0	170		0
Storage Lanes			1	1		0	1		0	1		0
Taper Length (ft)			100	100		25	50		25	50		25
Lane Util. Factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.868			0.950			0.922	
Flt Protected				0.950			0.950			0.950		
Satd. Flow (prot)		1773	1503	1442	1738	0	1711	1834	0	1671	1880	0
Flt Permitted				0.668			0.336			0.440		
Satd. Flow (perm)		1773	1503	1014	1738	0	605	1834	0	774	1880	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			66		319			28			60	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		629			413			498			489	
Travel Time (s)		14.3			9.4			11.3			11.1	
Peak Hour Factor		0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)		0%	11%	21%	0%	5%	2%	3%	9%	8%	3%	2%
Adj. Flow (vph)		55	66	55	44	319	330	154	77	66	275	297
Shared Lane Traffic (%)												
Lane Group Flow (vph)		55	66	55	363	0	330	231	0	66	572	0
Turn Type	Perm		Perm	pm+pt			pm+pt			pm+pt		
Protected Phases		4		3	8		5	2		1	6	
Permitted Phases	4		4	8			2			6		
Detector Phase	4	4	4	3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	15.0	15.0	15.0	5.0	15.0		5.0	6.0		5.0	6.0	
Minimum Split (s)	21.0	21.0	21.0	8.1	20.0		8.1	11.0		8.1	11.0	
Total Split (s)	40.0	40.0	40.0	11.0	51.0	0.0	9.1	15.0	0.0	9.1	15.0	0.0
Total Split (%)	53.3%	53.3%	53.3%	14.6%	67.9%	0.0%	12.1%	20.0%	0.0%	12.1%	20.0%	0.0%
Maximum Green (s)	34.0	34.0	34.0	7.9	46.0		6.0	10.0		6.0	10.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	3.0	3.0	3.0	0.1	2.0		0.1	2.0		0.1	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	3.1	5.0	4.0	3.1	5.0	4.0	3.1	5.0	4.0
Lead/Lag	Lag	Lag	Lag	Lead			Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	2.0	3.0		2.0	3.0		2.0	3.0	
Recall Mode	C-Max	C-Max	C-Max	None	C-Max		None	None		None	None	
v/c Ratio	0.78	0.06	0.08	0.08	0.31		1.38	0.74		0.26	1.89	
Control Delay	31.1	10.6	3.6	5.5	2.0		222.3	44.6		23.4	436.8	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	31.1	10.6	3.6	5.5	2.0		222.3	44.6		23.4	436.8	
Queue Length 50th (ft)	145	13	0	8	7		~162	94		23	~396	
Queue Length 95th (ft)	#319	32	19	20	37		#311	#217		52	#587	
Internal Link Dist (ft)		549			333			418			409	
Turn Bay Length (ft)	50		115	170			170			170		

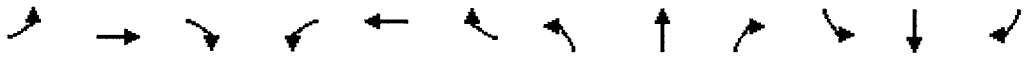
Lane Group		EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)	478	931	821	692	1188		239	314		256	302	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.78	0.06	0.08	0.08	0.31		1.38	0.74		0.26	1.89	

Intersection Summary

Area Type: Other
Cycle Length: 75.1
Actuated Cycle Length: 75.1
Offset: 37 (49%), Referenced to phase 4:EBTL and 8:WBTL, Start of Yellow
Natural Cycle: 100
Control Type: Actuated-Coordinated
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

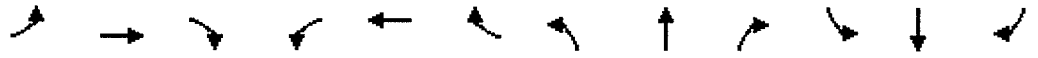
Splits and Phases: 10: North Eagleville Road (SR 430) & North Hillside Road





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	340	50	60	50	40	290	300	140	70	60	250	270
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	10	13	11	15	12	11	14	12	12	15	12
Total Lost time (s)	6.0	6.0	6.0	3.1	5.0		3.1	5.0		3.1	5.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.87		1.00	0.95		1.00	0.92	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1586	1773	1503	1442	1738		1711	1834		1671	1881	
Flt Permitted	0.54	1.00	1.00	0.67	1.00		0.34	1.00		0.44	1.00	
Satd. Flow (perm)	909	1773	1503	1013	1738		605	1834		775	1881	
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	374	55	66	55	44	319	330	154	77	66	275	297
RTOR Reduction (vph)	0	0	33	0	126	0	0	24	0	0	52	0
Lane Group Flow (vph)	374	55	33	55	237	0	330	207	0	66	520	0
Heavy Vehicles (%)	10%	0%	11%	21%	0%	5%	2%	3%	9%	8%	3%	2%
Turn Type	Perm		Perm	pm+pt			pm+pt			pm+pt		
Protected Phases		4		3	8		5	2		1	6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)	37.6	37.6	37.6	45.4	45.4		17.9	11.9		15.3	10.6	
Effective Green, g (s)	37.6	37.6	37.6	45.4	45.4		17.9	11.9		15.3	10.6	
Actuated g/C Ratio	0.50	0.50	0.50	0.60	0.60		0.24	0.16		0.20	0.14	
Clearance Time (s)	6.0	6.0	6.0	3.1	5.0		3.1	5.0		3.1	5.0	
Vehicle Extension (s)	3.0	3.0	3.0	2.0	3.0		2.0	3.0		2.0	3.0	
Lane Grp Cap (vph)	455	888	753	634	1051		233	291		214	265	
v/s Ratio Prot		0.03		0.00	c0.14		c0.11	0.11		0.02	c0.28	
v/s Ratio Perm	c0.41		0.02	0.05			0.22			0.04		
v/c Ratio	0.82	0.06	0.04	0.09	0.23		1.42	0.71		0.31	1.96	
Uniform Delay, d1	15.9	9.7	9.6	6.2	6.8		28.8	30.0		24.9	32.2	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	15.3	0.1	0.1	0.0	0.5		210.7	8.0		0.3	447.2	
Delay (s)	31.2	9.8	9.7	6.2	7.3		239.5	38.0		25.2	479.5	
Level of Service	C	A	A	A	A		F	D		C	F	
Approach Delay (s)		26.0			7.2			156.5			432.5	
Approach LOS		C			A			F			F	

Intersection Summary				
HCM Average Control Delay	179.7	HCM Level of Service	F	
HCM Volume to Capacity ratio	1.16			
Actuated Cycle Length (s)	75.1	Sum of lost time (s)	22.2	
Intersection Capacity Utilization	101.8%	ICU Level of Service	G	
Analysis Period (min)	15			
c Critical Lane Group				



Lane Group		EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)		50	60	50	40	290	300	140	70	60	250	270
Ideal Flow (vphpl)		1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)		10	13	11	15	12	11	14	12	12	15	12
Storage Length (ft)			115	170		0	170		0	170		0
Storage Lanes			1	1		0	1		0	1		0
Taper Length (ft)			100	100		25	50		25	50		25
Lane Util. Factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.868			0.950			0.922	
Flt Protected				0.950			0.950			0.950		
Satd. Flow (prot)		1773	1503	1442	1738	0	1711	1834	0	1671	1880	0
Flt Permitted				0.669			0.139			0.615		
Satd. Flow (perm)		1773	1503	1015	1738	0	250	1834	0	1082	1880	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			66		319			27			52	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		629			413			498			489	
Travel Time (s)		14.3			9.4			11.3			11.1	
Peak Hour Factor		0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)		0%	11%	21%	0%	5%	2%	3%	9%	8%	3%	2%
Adj. Flow (vph)		55	66	55	44	319	330	154	77	66	275	297
Shared Lane Traffic (%)												
Lane Group Flow (vph)		55	66	55	363	0	330	231	0	66	572	0
Turn Type	Perm		Perm	pm+pt			pm+pt			pm+pt		
Protected Phases		4		3	8		5	2		1	6	
Permitted Phases	4		4	8			2			6		
Detector Phase	4	4	4	3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	15.0	15.0	15.0	5.0	15.0		5.0	6.0		5.0	6.0	
Minimum Split (s)	21.0	21.0	21.0	8.1	20.0		8.1	11.0		8.1	11.0	
Total Split (s)	44.5	44.5	44.5	8.1	52.6	0.0	17.4	39.2	0.0	8.2	30.0	0.0
Total Split (%)	44.5%	44.5%	44.5%	8.1%	52.6%	0.0%	17.4%	39.2%	0.0%	8.2%	30.0%	0.0%
Maximum Green (s)	38.5	38.5	38.5	5.0	47.6		14.3	34.2		5.1	25.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	3.0	3.0	3.0	0.1	2.0		0.1	2.0		0.1	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	3.1	5.0	4.0	3.1	5.0	4.0	3.1	5.0	4.0
Lead/Lag	Lag	Lag	Lag	Lead			Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	2.0	3.0		2.0	3.0		2.0	3.0	
Recall Mode	C-Max	C-Max	C-Max	None	C-Max		None	None		None	None	
v/c Ratio	1.06	0.08	0.10	0.10	0.37		1.03	0.34		0.18	1.12	
Control Delay	96.4	20.0	5.6	13.9	3.9		85.7	23.0		18.3	111.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	96.4	20.0	5.6	13.9	3.9		85.7	23.0		18.3	111.6	
Queue Length 50th (ft)	~273	22	0	18	15		~175	96		24	~398	
Queue Length 95th (ft)	#453	47	26	39	64		#350	160		49	#609	
Internal Link Dist (ft)		549			333			418			409	
Turn Bay Length (ft)	50		115	170			170			170		

Lane Group		EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)	353	712	642	524	994		320	675		376	509	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	1.06	0.08	0.10	0.10	0.37		1.03	0.34		0.18	1.12	

Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 100

Offset: 0 (0%), Referenced to phase 4:EBTL and 8:WBTL, Start of Yellow

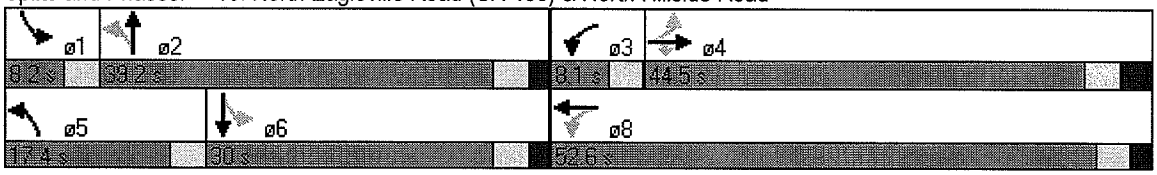
Natural Cycle: 100

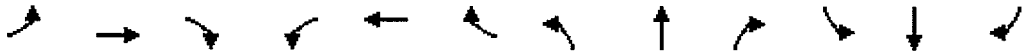
Control Type: Actuated-Coordinated

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 10: North Eagleville Road (SR 430) & North Hillside Road





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	340	50	60	50	40	290	300	140	70	60	250	270
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	10	13	11	15	12	11	14	12	12	15	12
Total Lost time (s)	6.0	6.0	6.0	3.1	5.0		3.1	5.0		3.1	5.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.87		1.00	0.95		1.00	0.92	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1586	1773	1503	1442	1738		1711	1834		1671	1881	
Flt Permitted	0.53	1.00	1.00	0.67	1.00		0.14	1.00		0.61	1.00	
Satd. Flow (perm)	879	1773	1503	1016	1738		251	1834		1081	1881	
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	374	55	66	55	44	319	330	154	77	66	275	297
RTOR Reduction (vph)	0	0	40	0	169	0	0	17	0	0	39	0
Lane Group Flow (vph)	374	55	26	55	194	0	330	214	0	66	533	0
Heavy Vehicles (%)	10%	0%	11%	21%	0%	5%	2%	3%	9%	8%	3%	2%
Turn Type	Perm		Perm	pm+pt			pm+pt			pm+pt		
Protected Phases		4		3	8		5	2		1	6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)	38.9	38.9	38.9	47.0	47.0		43.0	35.8		29.7	25.6	
Effective Green, g (s)	38.9	38.9	38.9	47.0	47.0		43.0	35.8		29.7	25.6	
Actuated g/C Ratio	0.39	0.39	0.39	0.47	0.47		0.43	0.36		0.30	0.26	
Clearance Time (s)	6.0	6.0	6.0	3.1	5.0		3.1	5.0		3.1	5.0	
Vehicle Extension (s)	3.0	3.0	3.0	2.0	3.0		2.0	3.0		2.0	3.0	
Lane Grp Cap (vph)	342	690	585	495	817		317	657		345	482	
v/s Ratio Prot		0.03		0.00	c0.11		c0.15	0.12		0.01	0.28	
v/s Ratio Perm	c0.43		0.02	0.05			c0.30			0.05		
v/c Ratio	1.09	0.08	0.04	0.11	0.24		1.04	0.33		0.19	1.11	
Uniform Delay, d1	30.6	19.3	19.0	14.7	15.8		45.1	23.3		25.7	37.2	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	76.1	0.2	0.1	0.0	0.7		61.6	0.3		0.1	73.3	
Delay (s)	106.7	19.5	19.1	14.7	16.5		106.7	23.6		25.8	110.5	
Level of Service	F	B	B	B	B		F	C		C	F	
Approach Delay (s)		85.3			16.3			72.5			101.7	
Approach LOS		F			B			E			F	

Intersection Summary			
HCM Average Control Delay	73.2	HCM Level of Service	E
HCM Volume to Capacity ratio	1.02		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	14.1
Intersection Capacity Utilization	101.8%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group		EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)		50	60	50	40	290	300	140	70	60	250	270
Ideal Flow (vphpl)		1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)		10	13	11	15	12	11	14	12	12	15	12
Storage Length (ft)			115	170		170	170		0	170		0
Storage Lanes			1	1		1	1		0	1		0
Taper Length (ft)			100	100		25	50		25	50		25
Lane Util. Factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.950			0.922	
Flt Protected				0.950			0.950			0.950		
Satd. Flow (prot)		1773	1503	1442	2090	1538	1711	1834	0	1671	1880	0
Flt Permitted				0.657			0.148			0.615		
Satd. Flow (perm)		1773	1503	997	2090	1538	266	1834	0	1082	1880	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			66			319		29			59	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		629			413			498			489	
Travel Time (s)		14.3			9.4			11.3			11.1	
Peak Hour Factor		0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)		0%	11%	21%	0%	5%	2%	3%	9%	8%	3%	2%
Adj. Flow (vph)		55	66	55	44	319	330	154	77	66	275	297
Shared Lane Traffic (%)												
Lane Group Flow (vph)		55	66	55	44	319	330	231	0	66	572	0
Turn Type	Perm		Perm	pm+pt		pm+ov	pm+pt			pm+pt		
Protected Phases		4		3	8	1	5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Detector Phase	4	4	4	3	8	1	5	2		1	6	
Switch Phase												
Minimum Initial (s)	15.0	15.0	15.0	5.0	15.0	5.0	5.0	6.0		5.0	6.0	
Minimum Split (s)	21.0	21.0	21.0	8.1	20.0	8.1	8.1	11.0		8.1	11.0	
Total Split (s)	35.8	35.8	35.8	8.2	44.0	12.6	17.0	33.4	0.0	12.6	29.0	0.0
Total Split (%)	39.8%	39.8%	39.8%	9.1%	48.9%	14.0%	18.9%	37.1%	0.0%	14.0%	32.2%	0.0%
Maximum Green (s)	29.8	29.8	29.8	5.1	39.0	9.5	13.9	28.4		9.5	24.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
All-Red Time (s)	3.0	3.0	3.0	0.1	2.0	0.1	0.1	2.0		0.1	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	3.1	5.0	3.1	3.1	5.0	4.0	3.1	5.0	4.0
Lead/Lag	Lag	Lag	Lag	Lead		Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes		Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	2.0	3.0	2.0	2.0	3.0		2.0	3.0	
Recall Mode	C-Max	C-Max	C-Max	None	C-Max	None	None	None		None	None	
v/c Ratio	0.88	0.09	0.12	0.12	0.05	0.32	0.94	0.35		0.15	1.05	
Control Delay	52.7	21.4	6.3	14.7	15.0	2.0	58.6	21.1		14.4	83.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	52.7	21.4	6.3	14.7	15.0	2.0	58.6	21.1		14.4	83.0	
Queue Length 50th (ft)	204	21	0	17	14	0	133	83		20	~332	
Queue Length 95th (ft)	#378	48	28	39	34	33	#299	149		42	#536	
Internal Link Dist (ft)		549			333			418			409	
Turn Bay Length (ft)	50		115	170		170	170			170		

Lane Group		EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)	425	619	568	478	906	1044	350	658		488	545	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.88	0.09	0.12	0.12	0.05	0.31	0.94	0.35		0.14	1.05	

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 4:EBTL and 8:WBTL, Start of Yellow

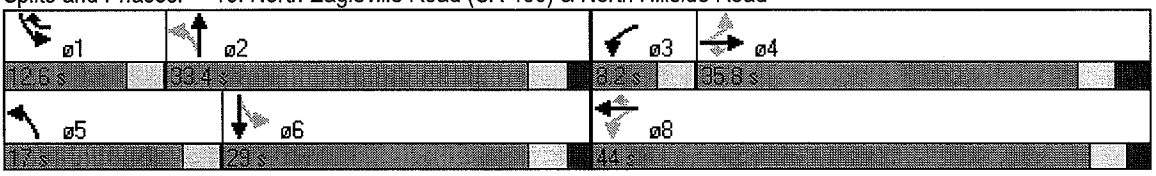
Natural Cycle: 90

Control Type: Actuated-Coordinated

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 10: North Eagleville Road (SR 430) & North Hillside Road



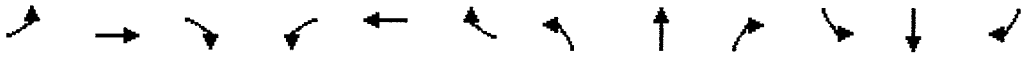
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	340	50	60	50	40	290	300	140	70	60	250	270
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	10	13	11	15	12	11	14	12	12	15	12
Total Lost time (s)	6.0	6.0	6.0	3.1	5.0	3.1	3.1	5.0		3.1	5.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.95		1.00	0.92	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1586	1773	1503	1442	2090	1538	1711	1834		1671	1881	
Flt Permitted	0.73	1.00	1.00	0.66	1.00	1.00	0.15	1.00		0.61	1.00	
Satd. Flow (perm)	1216	1773	1503	997	2090	1538	266	1834		1081	1881	
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	374	55	66	55	44	319	330	154	77	66	275	297
RTOR Reduction (vph)	0	0	43	0	0	158	0	19	0	0	43	0
Lane Group Flow (vph)	374	55	23	55	44	161	330	212	0	66	529	0
Heavy Vehicles (%)	10%	0%	11%	21%	0%	5%	2%	3%	9%	8%	3%	2%
Turn Type	Perm		Perm	pm+pt		pm+ov	pm+pt			pm+pt		
Protected Phases		4		3	8	1	5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)	30.8	30.8	30.8	39.0	39.0	45.5	41.0	31.4		30.5	24.0	
Effective Green, g (s)	30.8	30.8	30.8	39.0	39.0	45.5	41.0	31.4		30.5	24.0	
Actuated g/C Ratio	0.34	0.34	0.34	0.43	0.43	0.51	0.46	0.35		0.34	0.27	
Clearance Time (s)	6.0	6.0	6.0	3.1	5.0	3.1	3.1	5.0		3.1	5.0	
Vehicle Extension (s)	3.0	3.0	3.0	2.0	3.0	2.0	2.0	3.0		2.0	3.0	
Lane Grp Cap (vph)	416	607	514	452	906	778	344	640		409	502	
v/s Ratio Prot		0.03		0.01	0.02	c0.01	c0.15	0.12		0.01	0.28	
v/s Ratio Perm	c0.31		0.02	0.05		0.09	c0.29			0.04		
v/c Ratio	0.90	0.09	0.04	0.12	0.05	0.21	0.96	0.33		0.16	1.05	
Uniform Delay, d1	28.1	20.1	19.8	15.1	14.8	12.3	39.9	21.6		20.5	33.0	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	24.9	0.3	0.2	0.0	0.1	0.0	37.1	0.3		0.1	54.9	
Delay (s)	53.0	20.4	19.9	15.1	14.9	12.3	77.0	21.9		20.5	87.9	
Level of Service	D	C	B	B	B	B	E	C		C	F	
Approach Delay (s)		45.0			13.0			54.3			80.9	
Approach LOS		D			B			D			F	

Intersection Summary			
HCM Average Control Delay	52.0	HCM Level of Service	D
HCM Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.2
Intersection Capacity Utilization	84.3%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	10	390	0	20	40	70	0	30	40	370	90	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	12	12	12	12	11	12	12	16	12
Storage Length (ft)	0		100	0		210	0		0	0		0
Storage Lanes	0		1	0		1	0		0	0		0
Taper Length (ft)	25		100	25		100	25		25	25		25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850		0.923			0.997	
Flt Protected		0.999			0.984						0.962	
Satd. Flow (prot)	0	1839	1837	0	1476	1429	0	1639	0	0	2016	0
Flt Permitted		0.999			0.984						0.962	
Satd. Flow (perm)	0	1839	1837	0	1476	1429	0	1639	0	0	2016	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		892			1090			461			1200	
Travel Time (s)		20.3			24.8			10.5			27.3	
Peak Hour Factor	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74
Heavy Vehicles (%)	11%	3%	0%	8%	36%	13%	100%	4%	3%	1%	3%	50%
Adj. Flow (vph)	14	527	0	27	54	95	0	41	54	500	122	14
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	541	0	0	81	95	0	95	0	0	636	0
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other

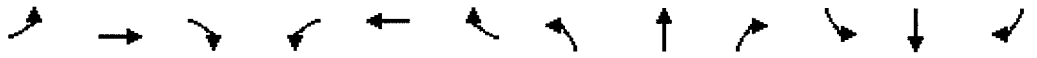
Control Type: Unsignalized



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	10	390	0	20	40	70	0	30	40	370	90	10
Peak Hour Factor	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74
Hourly flow rate (vph)	14	527	0	27	54	95	0	41	54	500	122	14

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1
Volume Total (vph)	541	0	81	95	95	635
Volume Left (vph)	14	0	27	0	0	500
Volume Right (vph)	0	0	0	95	54	14
Hadj (s)	0.07	0.00	0.62	-0.48	-0.28	0.19
Departure Headway (s)	7.2	7.1	8.6	7.5	7.6	6.7
Degree Utilization, x	1.07	0.00	0.19	0.20	0.20	1.18
Capacity (veh/h)	506	514	409	468	460	526
Control Delay (s)	86.7	8.9	12.5	11.2	12.5	123.2
Approach Delay (s)	86.7		11.8		12.5	123.2
Approach LOS	F		B		B	F

Intersection Summary				
Delay	88.8			
HCM Level of Service	F			
Intersection Capacity Utilization	66.9%	ICU Level of Service	C	
Analysis Period (min)	15			



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Volume (vph)	30	2	60	1	3	2	60	110	3	4	140	150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	12	12	11	12	12	13	12	12	13	12
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.912			0.949			0.998			0.931	
Flt Protected		0.984			0.994			0.983			0.999	
Satd. Flow (prot)	0	1782	0	0	1646	0	0	1926	0	0	1687	0
Flt Permitted		0.984			0.994			0.983			0.999	
Satd. Flow (perm)	0	1782	0	0	1646	0	0	1926	0	0	1687	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		965			377			732			1399	
Travel Time (s)		21.9			8.6			16.6			31.8	
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Heavy Vehicles (%)	0%	0%	13%	2%	10%	0%	0%	0%	0%	0%	13%	4%
Adj. Flow (vph)	38	3	76	1	4	3	76	139	4	5	177	190
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	117	0	0	8	0	0	219	0	0	372	0
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

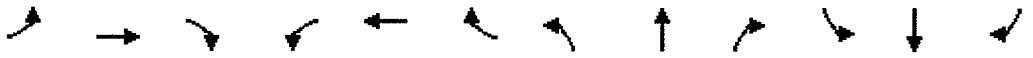
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	30	2	60	1	3	2	60	110	3	4	140	150
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Hourly flow rate (vph)	38	3	76	1	4	3	76	139	4	5	177	190

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	116	8	219	372
Volume Left (vph)	38	1	76	5
Volume Right (vph)	76	3	4	190
Hadj (s)	-0.18	-0.08	0.06	-0.16
Departure Headway (s)	5.1	5.4	4.7	4.3
Degree Utilization, x	0.16	0.01	0.29	0.45
Capacity (veh/h)	640	578	735	803
Control Delay (s)	9.0	8.4	9.6	10.8
Approach Delay (s)	9.0	8.4	9.6	10.8
Approach LOS	A	A	A	B

Intersection Summary			
Delay	10.1		
HCM Level of Service	B		
Intersection Capacity Utilization	45.9%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Volume (vph)	60	410	0	0	130	110	0	0	10	60	0	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	14	12	12	14	12	12	16	12	12	16	12
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.938			0.865			0.967	
Flt Protected		0.994									0.964	
Satd. Flow (prot)	0	1970	0	0	1851	0	0	1863	0	0	1949	0
Flt Permitted		0.994									0.964	
Satd. Flow (perm)	0	1970	0	0	1851	0	0	1863	0	0	1949	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1278			2158			895			916	
Travel Time (s)		29.0			49.0			20.3			20.8	
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles (%)	4%	2%	0%	0%	5%	0%	0%	0%	0%	4%	0%	0%
Adj. Flow (vph)	73	500	0	0	159	134	0	0	12	73	0	24
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	573	0	0	293	0	0	12	0	0	97	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Volume (veh/h)	60	410	0	0	130	110	0	0	10	60	0	20
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Hourly flow rate (vph)	73	500	0	0	159	134	0	0	12	73	0	24
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	293			500			896	939	500	884	872	226
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	293			500			896	939	500	884	872	226
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	94			100			100	100	98	70	100	97
cM capacity (veh/h)	1258			1075			244	251	575	247	274	819

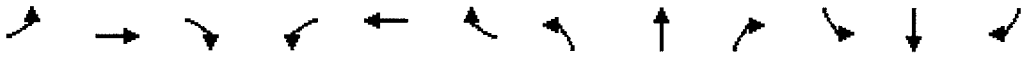
Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	573	293	12	98
Volume Left	73	0	0	73
Volume Right	0	134	12	24
cSH	1258	1075	575	299
Volume to Capacity	0.06	0.00	0.02	0.33
Queue Length 95th (ft)	5	0	2	34
Control Delay (s)	1.6	0.0	11.4	22.8
Lane LOS	A		B	C
Approach Delay (s)	1.6	0.0	11.4	22.8
Approach LOS			B	C

Intersection Summary			
Average Delay	3.4		
Intersection Capacity Utilization	59.7%	ICU Level of Service	B
Analysis Period (min)	15		

2010 NO BUILD TRAFFIC VOLUMES

PM PEAK HOUR

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	30	410	80	90	320	10	150	0	210	30	0	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	200		0	0		150	0		0
Storage Lanes	1		0	1		0	0		1	0		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.976			0.996				0.850		0.923	
Flt Protected	0.950			0.950				0.950			0.979	
Satd. Flow (prot)	1805	1809	0	1805	1839	0	0	1805	1615	0	1717	0
Flt Permitted	0.543			0.276				0.835			0.838	
Satd. Flow (perm)	1032	1809	0	524	1839	0	0	1586	1615	0	1470	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		19			3				233		44	
Link Speed (mph)		30			45			30			30	
Link Distance (ft)		1971			1708			712			486	
Travel Time (s)		44.8			25.9			16.2			11.0	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	2%	5%	0%	3%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	33	456	89	100	356	11	167	0	233	33	0	44
Shared Lane Traffic (%)												
Lane Group Flow (vph)	33	545	0	100	367	0	0	167	233	0	77	0
Turn Type	pm+pt			pm+pt			Perm		Perm	Perm		
Protected Phases	7	4		3	8			2			6	
Permitted Phases	4			8			2		2	6		
Detector Phase	7	4		3	8		2	2	2	6	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Minimum Split (s)	8.0	20.0		8.0	20.0		20.0	20.0	20.0	20.0	20.0	
Total Split (s)	8.0	37.0	0.0	9.0	38.0	0.0	24.0	24.0	24.0	24.0	24.0	0.0
Total Split (%)	11.4%	52.9%	0.0%	12.9%	54.3%	0.0%	34.3%	34.3%	34.3%	34.3%	34.3%	0.0%
Maximum Green (s)	4.0	33.0		5.0	34.0		20.0	20.0	20.0	20.0	20.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5	0.5	0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	Min		None	Min		None	None	None	None	None	
Walk Time (s)		5.0			5.0		5.0	5.0	5.0	5.0	5.0	
Flash Dont Walk (s)		11.0			11.0		11.0	11.0	11.0	11.0	11.0	
Pedestrian Calls (#/hr)		0			0		0	0	0	0	0	
v/c Ratio	0.06	0.67		0.24	0.37			0.43	0.41		0.20	
Control Delay	6.1	16.7		6.6	9.8			21.6	5.6		11.1	
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Delay	6.1	16.7		6.6	9.8			21.6	5.6		11.1	
Queue Length 50th (ft)	3	115		10	42			39	0		7	
Queue Length 95th (ft)	15	260		34	156			107	46		40	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		1891			1628			632			406	
Turn Bay Length (ft)	100			200					150			
Base Capacity (vph)	529	1012		414	1111			569	729		556	
Starvation Cap Reductn	0	0		0	0			0	0		0	
Spillback Cap Reductn	0	0		0	0			0	0		0	
Storage Cap Reductn	0	0		0	0			0	0		0	
Reduced v/c Ratio	0.06	0.54		0.24	0.33			0.29	0.32		0.14	

Intersection Summary	
Area Type:	Other
Cycle Length: 70	
Actuated Cycle Length: 49.2	
Natural Cycle: 55	
Control Type: Actuated-Uncoordinated	

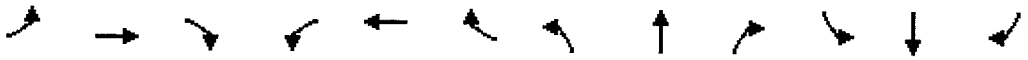
Splits and Phases: 1: Route 44 (Middle Turnpike) & North Hillside Road

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	30	410	80	90	320	10	150	0	210	30	0	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0	4.0		4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00			1.00	1.00		1.00	
Frt	1.00	0.98		1.00	1.00			1.00	0.85		0.92	
Flt Protected	0.95	1.00		0.95	1.00			0.95	1.00		0.98	
Satd. Flow (prot)	1805	1808		1805	1838			1805	1615		1717	
Flt Permitted	0.54	1.00		0.28	1.00			0.83	1.00		0.84	
Satd. Flow (perm)	1031	1808		523	1838			1586	1615		1470	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	33	456	89	100	356	11	167	0	233	33	0	44
RTOR Reduction (vph)	0	10	0	0	1	0	0	0	179	0	34	0
Lane Group Flow (vph)	33	535	0	100	366	0	0	167	54	0	43	0
Heavy Vehicles (%)	0%	2%	5%	0%	3%	0%	0%	0%	0%	0%	0%	0%
Turn Type	pm+pt			pm+pt			Perm		Perm	Perm		
Protected Phases	7	4		3	8			2			6	
Permitted Phases	4			8			2		2	6		
Actuated Green, G (s)	25.0	23.7		30.0	26.2			11.9	11.9		11.9	
Effective Green, g (s)	25.0	23.7		30.0	26.2			11.9	11.9		11.9	
Actuated g/C Ratio	0.49	0.46		0.58	0.51			0.23	0.23		0.23	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0	4.0		4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0	3.0		3.0	
Lane Grp Cap (vph)	521	834		400	937			367	374		340	
v/s Ratio Prot	0.00	c0.30		c0.02	0.20							
v/s Ratio Perm	0.03			0.13				c0.11	0.03		0.03	
v/c Ratio	0.06	0.64		0.25	0.39			0.46	0.14		0.13	
Uniform Delay, d1	6.9	10.6		5.9	7.7			17.0	15.7		15.6	
Progression Factor	1.00	1.00		1.00	1.00			1.00	1.00		1.00	
Incremental Delay, d2	0.1	1.7		0.3	0.3			0.9	0.2		0.2	
Delay (s)	7.0	12.3		6.3	8.0			17.9	15.9		15.8	
Level of Service	A	B		A	A			B	B		B	
Approach Delay (s)		12.0			7.6			16.7			15.8	
Approach LOS		B			A			B			B	

Intersection Summary			
HCM Average Control Delay	12.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	51.4	Sum of lost time (s)	16.0
Intersection Capacity Utilization	56.4%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	330	300	100	120	160	60	160	550	40	110	500	170
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	11	10	12	10	12	12	12	12	12
Storage Length (ft)	250		0	290		0	210		0	250		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	100		25	50		25	50		25	50		25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.962			0.959			0.990			0.962	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1678	1703	0	1745	1610	0	1652	3385	0	1641	3396	0
Flt Permitted	0.418			0.330			0.950			0.950		
Satd. Flow (perm)	738	1703	0	606	1610	0	1652	3385	0	1641	3396	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		16			18			8			48	
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		1708			2086			382			1110	
Travel Time (s)		25.9			31.6			8.7			25.2	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	4%	4%	3%	0%	7%	2%	2%	6%	0%	10%	1%	6%
Adj. Flow (vph)	363	330	110	132	176	66	176	604	44	121	549	187
Shared Lane Traffic (%)												
Lane Group Flow (vph)	363	440	0	132	242	0	176	648	0	121	736	0
Turn Type	pm+pt			pm+pt			Prot			Prot		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8								
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	4.0	15.0		4.0	15.0		4.0	15.0		4.0	15.0	
Minimum Split (s)	8.0	21.7		8.0	21.7		8.0	20.7		8.0	20.7	
Total Split (s)	18.0	30.0	0.0	18.0	30.0	0.0	16.0	36.0	0.0	16.0	36.0	0.0
Total Split (%)	18.0%	30.0%	0.0%	18.0%	30.0%	0.0%	16.0%	36.0%	0.0%	16.0%	36.0%	0.0%
Maximum Green (s)	14.0	23.3		14.0	23.3		12.0	30.3		12.0	30.3	
Yellow Time (s)	3.0	4.7		3.0	4.7		3.0	4.7		3.0	4.7	
All-Red Time (s)	1.0	2.0		1.0	2.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	6.7	4.0	4.0	6.7	4.0	4.0	5.7	4.0	4.0	5.7	4.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.0	3.0		1.0	3.0		1.0	4.0		1.0	4.0	
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
v/c Ratio	0.76	0.80		0.43	0.59		0.89	0.63		0.75	0.74	
Control Delay	32.2	44.7		21.6	38.1		86.0	33.0		70.1	35.4	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	32.2	44.7		21.6	38.1		86.0	33.0		70.1	35.4	
Queue Length 50th (ft)	154	246		47	129		112	187		75	211	
Queue Length 95th (ft)	#289	#471		88	212		#236	244		#145	270	
Internal Link Dist (ft)		1628			2006			302			1030	
Turn Bay Length (ft)	250			290			210			250		



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)	479	547		410	410		203	1043		197	1062	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.76	0.80		0.32	0.59		0.87	0.62		0.61	0.69	

Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 100

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 75

Control Type: Actuated-Coordinated

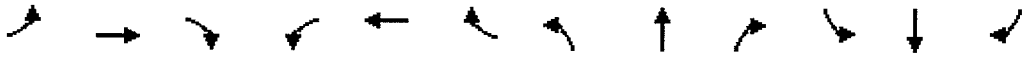
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: Route 44 (Middle Turnpike) & Route 195 (Storrs Road)

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	330	300	100	120	160	60	160	550	40	110	500	170
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	12	11	10	12	10	12	12	12	12	12
Total Lost time (s)	4.0	6.7		4.0	6.7		4.0	5.7		4.0	5.7	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	0.96		1.00	0.96		1.00	0.99		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1678	1704		1745	1610		1652	3384		1641	3395	
Flt Permitted	0.42	1.00		0.33	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	738	1704		605	1610		1652	3384		1641	3395	
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	363	330	110	132	176	66	176	604	44	121	549	187
RTOR Reduction (vph)	0	11	0	0	14	0	0	6	0	0	34	0
Lane Group Flow (vph)	363	429	0	132	228	0	176	642	0	121	702	0
Heavy Vehicles (%)	4%	4%	3%	0%	7%	2%	2%	6%	0%	10%	1%	6%
Turn Type	pm+pt			pm+pt			Prot			Prot		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8								
Actuated Green, G (s)	43.5	31.5		32.7	24.7		11.9	30.2		9.9	28.2	
Effective Green, g (s)	43.5	31.5		32.7	24.7		11.9	30.2		9.9	28.2	
Actuated g/C Ratio	0.44	0.32		0.33	0.25		0.12	0.30		0.10	0.28	
Clearance Time (s)	4.0	6.7		4.0	6.7		4.0	5.7		4.0	5.7	
Vehicle Extension (s)	1.0	3.0		1.0	3.0		1.0	4.0		1.0	4.0	
Lane Grp Cap (vph)	460	537		289	398		197	1022		162	957	
v/s Ratio Prot	c0.12	c0.25		0.04	0.14		c0.11	0.19		0.07	c0.21	
v/s Ratio Perm	0.23			0.11								
v/c Ratio	0.79	0.80		0.46	0.57		0.89	0.63		0.75	0.73	
Uniform Delay, d1	21.4	31.4		24.9	33.0		43.4	30.1		43.8	32.5	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	8.1	8.1		0.4	2.0		35.4	2.9		15.1	5.0	
Delay (s)	29.5	39.5		25.4	35.0		78.8	33.0		58.9	37.5	
Level of Service	C	D		C	D		E	C		E	D	
Approach Delay (s)		35.0			31.6			42.8			40.5	
Approach LOS		C			C			D			D	

Intersection Summary			
HCM Average Control Delay	38.4	HCM Level of Service	D
HCM Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	13.7
Intersection Capacity Utilization	75.9%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBR
Lane Configurations										
Volume (vph)	70	10	10	10	0	0	0	110	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	12	12	16	12	12	12	12	12
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.985								
Flt Protected		0.963			0.950					
Satd. Flow (prot)	0	1932	0	0	1948	0	0	0	0	0
Flt Permitted		0.768			0.761					
Satd. Flow (perm)	0	1541	0	0	1561	0	0	0	0	0
Right Turn on Red			Yes			Yes		Yes		No
Satd. Flow (RTOR)		8								
Link Speed (mph)		30			30					
Link Distance (ft)		333			142					
Travel Time (s)		7.6			3.2					
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	50%	5%	0%	50%	0%	21%	0%	0%
Adj. Flow (vph)	74	11	11	11	0	0	0	117	0	0
Shared Lane Traffic (%)										
Lane Group Flow (vph)	0	96	0	0	11	0	0	0	0	0
Turn Type	Perm			Perm					custom	
Protected Phases		4			8			2		
Permitted Phases	4			8					6	6
Detector Phase	4	4		8	8			2	6	6
Switch Phase										
Minimum Initial (s)	5.0	5.0		5.0	5.0			15.0	15.0	15.0
Minimum Split (s)	11.0	11.0		11.0	11.0			21.0	21.0	21.0
Total Split (s)	16.0	16.0	0.0	16.0	16.0	0.0	0.0	51.0	0.0	51.0	51.0	0.0
Total Split (%)	23.9%	23.9%	0.0%	23.9%	23.9%	0.0%	0.0%	76.1%	0.0%	76.1%	76.1%	0.0%
Maximum Green (s)	10.0	10.0		10.0	10.0			45.0		45.0	45.0	
Yellow Time (s)	4.0	4.0		4.0	4.0			4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0			2.0		2.0	2.0	
Lost Time Adjust (s)	-1.0	-1.0	1.0	-1.0	-1.0	1.0	1.0	-1.0	1.0	-1.0	-1.0	1.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag										
Lead-Lag Optimize?										
Vehicle Extension (s)	1.0	1.0		1.0	1.0			5.0		5.0	5.0	
Recall Mode	None	None		None	None			Min		Min	Min	
v/c Ratio		0.50			0.06			0.69			0.46	
Control Delay		30.7			24.1			9.2			5.3	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		30.7			24.1			9.2			5.3	
Queue Length 50th (ft)		28			3			159			86	
Queue Length 95th (ft)		73			16			354			171	
Internal Link Dist (ft)		253			62			22			346	
Turn Bay Length (ft)												
Base Capacity (vph)		236			232			1330			1435	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	

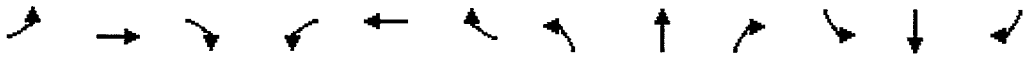


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBR
Storage Cap Reductn		0			0		0		0	
Reduced v/c Ratio		0.41			0.05		0.69		0.46	

Intersection Summary

Area Type: Other
Cycle Length: 67
Actuated Cycle Length: 75.6
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 3: Moulton Road & Route 195 (Storrs Road)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	70	10	10	10	0	0	0	750	110	0	620	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	16	12	12	16	12	12	13	12	12	12	12
Total Lost time (s)		5.0			5.0			5.0			5.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frt		0.98			1.00			0.98			1.00	
Flt Protected		0.96			0.95			1.00			1.00	
Satd. Flow (prot)		1931			1948			1718			1863	
Flt Permitted		0.77			0.76			1.00			1.00	
Satd. Flow (perm)		1540			1560			1718			1863	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	74	11	11	11	0	0	0	798	117	0	660	0
RTOR Reduction (vph)	0	7	0	0	0	0	0	6	0	0	0	0
Lane Group Flow (vph)	0	89	0	0	11	0	0	909	0	0	660	0
Heavy Vehicles (%)	0%	0%	50%	5%	0%	50%	0%	11%	21%	0%	2%	0%
Turn Type	Perm			Perm						custom		
Protected Phases		4			8			2				
Permitted Phases	4			8						6	6	
Actuated Green, G (s)		7.5			7.5			56.1			56.1	
Effective Green, g (s)		8.5			8.5			57.1			57.1	
Actuated g/C Ratio		0.11			0.11			0.76			0.76	
Clearance Time (s)		6.0			6.0			6.0			6.0	
Vehicle Extension (s)		1.0			1.0			5.0			5.0	
Lane Grp Cap (vph)		173			175			1298			1407	
v/s Ratio Prot								c0.53				
v/s Ratio Perm		c0.06			0.01						0.35	
v/c Ratio		0.51			0.06			0.70			0.47	
Uniform Delay, d1		31.6			30.0			4.8			3.5	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		1.1			0.1			2.2			0.5	
Delay (s)		32.7			30.0			7.0			4.0	
Level of Service		C			C			A			A	
Approach Delay (s)		32.7			30.0			7.0			4.0	
Approach LOS		C			C			A			A	

Intersection Summary			
HCM Average Control Delay	7.4	HCM Level of Service	A
HCM Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	75.6	Sum of lost time (s)	10.0
Intersection Capacity Utilization	59.1%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBR	NBL				ø2
Lane Configurations							
Volume (vph)	360	190	210				
Ideal Flow (vphpl)	1900	1900	1900				
Lane Width (ft)	12	13	10				
Storage Length (ft)	0	100	0				
Storage Lanes	1	1	1				
Taper Length (ft)	25	100	25				
Lane Util. Factor	1.00	1.00	1.00				
Frt		0.850					
Flt Protected	0.950		0.950				
Satd. Flow (prot)	1770	1636	1685				
Flt Permitted	0.950		0.282				
Satd. Flow (perm)	1770	1636	500				
Right Turn on Red		Yes					
Satd. Flow (RTOR)		86					
Link Speed (mph)	30						
Link Distance (ft)	1186						
Travel Time (s)	27.0						
Peak Hour Factor	0.92	0.92	0.92				
Heavy Vehicles (%)	2%	2%	0%				
Adj. Flow (vph)	391	207	228				
Shared Lane Traffic (%)							
Lane Group Flow (vph)	391	207	228				
Turn Type		Perm	custom			Perm	
Protected Phases	7		11	2 11	6		2
Permitted Phases		7	2			6	
Detector Phase	7	7	11	2 11	6	6	
Switch Phase							
Minimum Initial (s)	4.0	4.0	6.0		20.0	20.0	20.0
Minimum Split (s)	10.0	10.0	10.0		25.8	25.8	25.8
Total Split (s)	31.0	31.0	59.0	104.8	45.8	45.8	45.8
Total Split (%)	22.8%	22.8%	43.4%	77.2%	33.7%	33.7%	34%
Maximum Green (s)	25.0	25.0	55.0		40.0	40.0	40.0
Yellow Time (s)	3.0	3.0	3.0		3.9	3.9	3.9
All-Red Time (s)	3.0	3.0	1.0		1.9	1.9	1.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0	4.0	5.8	5.8	5.8	
Lead/Lag							
Lead-Lag Optimize?							
Vehicle Extension (s)	1.0	1.0	1.5		3.0	3.0	3.0
Recall Mode	None	None	None		C-Min	C-Min	C-Min
v/c Ratio	1.20	0.56	0.41	0.44	0.63	0.21	
Control Delay	162.2	35.4	7.4	3.7	27.4	11.7	
Queue Delay	0.0	0.0	0.0	0.8	0.0	0.0	
Total Delay	162.2	35.4	7.5	4.5	27.4	11.7	
Queue Length 50th (ft)	~418	97	16	51	358	45	
Queue Length 95th (ft)	#621	182	m54	91	562	101	
Internal Link Dist (ft)	1106			261	2624		
Turn Bay Length (ft)		100				130	

Lane Group	EBL	EBR	NBL				ø2
Base Capacity (vph)	326	371	851	1376	949	839	
Starvation Cap Reductn	0	0	43	449	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	
Reduced v/c Ratio	1.20	0.56	0.28	0.66	0.63	0.21	

Intersection Summary

Area Type: Other

Cycle Length: 135.8

Actuated Cycle Length: 135.8

Offset: 14.2 (10%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow

Natural Cycle: 80

Control Type: Actuated-Coordinated

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4: North Eagleville Road (SR 430) & Route 195 (Storrs Road)

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	360	190	210	560	550	160
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	12	13	10	13	11	11
Total Lost time (s)	6.0	6.0	4.0	5.8	5.8	5.8
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	1770	1636	1685	1888	1783	1516
Flt Permitted	0.95	1.00	0.28	1.00	1.00	1.00
Satd. Flow (perm)	1770	1636	500	1888	1783	1516
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	391	207	228	609	598	174
RTOR Reduction (vph)	0	70	0	0	0	32
Lane Group Flow (vph)	391	137	228	609	598	142
Heavy Vehicles (%)	2%	2%	0%	4%	3%	3%
Turn Type		Perm	custom			Perm
Protected Phases	7		11	2 11	6	
Permitted Phases		7	2			6
Actuated Green, G (s)	25.0	25.0	95.0	99.0	72.3	72.3
Effective Green, g (s)	25.0	25.0	95.0	95.0	72.3	72.3
Actuated g/C Ratio	0.18	0.18	0.70	0.70	0.53	0.53
Clearance Time (s)	6.0	6.0	4.0		5.8	5.8
Vehicle Extension (s)	1.0	1.0	1.5		3.0	3.0
Lane Grp Cap (vph)	326	301	548	1321	949	807
v/s Ratio Prot	c0.22		0.07	c0.32	c0.34	
v/s Ratio Perm		0.08	0.22			0.09
v/c Ratio	1.20	0.45	0.42	0.46	0.63	0.18
Uniform Delay, d1	55.4	49.3	10.6	9.0	22.3	16.4
Progression Factor	1.00	1.00	1.08	0.39	1.00	1.00
Incremental Delay, d2	115.5	0.4	0.1	0.1	3.2	0.5
Delay (s)	170.9	49.7	11.5	3.6	25.5	16.9
Level of Service	F	D	B	A	C	B
Approach Delay (s)	129.0			5.8	23.6	
Approach LOS	F			A	C	

Intersection Summary			
HCM Average Control Delay	45.4	HCM Level of Service	D
HCM Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	135.8	Sum of lost time (s)	17.6
Intersection Capacity Utilization	73.7%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	WBL	WBR		NBR			ø6
Lane Configurations							
Volume (vph)	80	120		60			
Ideal Flow (vphpl)	1900	1900		1900			
Lane Width (ft)	10	12		12			
Storage Length (ft)	100	0		0			
Storage Lanes	1	1		0			
Taper Length (ft)	25	25		25			
Lane Util. Factor	1.00	1.00		0.95			
Frt		0.850					
Flt Protected	0.950						
Satd. Flow (prot)	1620	1615		0			
Flt Permitted	0.950						
Satd. Flow (perm)	1620	1615		0			
Right Turn on Red		Yes		Yes			
Satd. Flow (RTOR)		129					
Link Speed (mph)	30						
Link Distance (ft)	1395						
Travel Time (s)	31.7						
Peak Hour Factor	0.93	0.93		0.93			
Heavy Vehicles (%)	4%	0%		1%			
Adj. Flow (vph)	86	129		65			
Shared Lane Traffic (%)							
Lane Group Flow (vph)	86	129		0			
Turn Type		Perm			custom		
Protected Phases	11		2		7	6 7	6
Permitted Phases		11			6		
Detector Phase	11	11	2		7	6 7	
Switch Phase							
Minimum Initial (s)	6.0	6.0	20.0		4.0		20.0
Minimum Split (s)	10.0	10.0	25.8		10.0		25.8
Total Split (s)	59.0	59.0	45.8	0.0	31.0	76.8	45.8
Total Split (%)	43.4%	43.4%	33.7%	0.0%	22.8%	56.6%	34%
Maximum Green (s)	55.0	55.0	40.0		25.0		40.0
Yellow Time (s)	3.0	3.0	3.9		3.0		3.9
All-Red Time (s)	1.0	1.0	1.9		3.0		1.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0	5.8	4.0	6.0	5.8	
Lead/Lag							
Lead-Lag Optimize?							
Vehicle Extension (s)	1.5	1.5	3.0		1.0		3.0
Recall Mode	None	None	C-Min		None		C-Min
v/c Ratio	0.32	0.34	0.78		0.31	0.47	
Control Delay	51.1	9.6	33.5		17.9	1.6	
Queue Delay	0.0	0.0	0.0		0.0	0.3	
Total Delay	51.1	9.6	33.5		17.9	2.0	
Queue Length 50th (ft)	68	0	535		30	20	
Queue Length 95th (ft)	112	53	#878		m91	26	
Internal Link Dist (ft)	1315		137			261	
Turn Bay Length (ft)	100				75		

Lane Group	WBL	WBR	NBR		ø6
Base Capacity (vph)	656	731	1000	376	1450
Starvation Cap Reductn	0	0	0	0	301
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.13	0.18	0.79	0.31	0.59

Intersection Summary

Area Type: Other
Cycle Length: 135.8
Actuated Cycle Length: 135.8
Offset: 14.2 (10%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow
Natural Cycle: 80
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Gurleyville Road & Route 195 (Storrs Road)

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	80	120	670	60	110	630
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	10	12	12	12	10	13
Total Lost time (s)	4.0	4.0	5.8		6.0	5.8
Lane Util. Factor	1.00	1.00	*0.50		1.00	1.00
Frt	1.00	0.85	0.99		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1620	1615	1875		1685	1906
Flt Permitted	0.95	1.00	1.00		0.07	1.00
Satd. Flow (perm)	1620	1615	1875		124	1906
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	86	129	720	65	118	677
RTOR Reduction (vph)	0	107	1	0	0	0
Lane Group Flow (vph)	86	22	784	0	118	677
Heavy Vehicles (%)	4%	0%	0%	1%	0%	3%
Turn Type		Perm			custom	
Protected Phases	11		2		7	6 7
Permitted Phases		11			6	
Actuated Green, G (s)	22.7	22.7	72.3		97.3	103.1
Effective Green, g (s)	22.7	22.7	72.3		97.3	103.1
Actuated g/C Ratio	0.17	0.17	0.53		0.72	0.76
Clearance Time (s)	4.0	4.0	5.8		6.0	
Vehicle Extension (s)	1.5	1.5	3.0		1.0	
Lane Grp Cap (vph)	271	270	998		376	1447
v/s Ratio Prot	c0.05		c0.42		0.06	c0.36
v/s Ratio Perm		0.01			0.17	
v/c Ratio	0.32	0.08	0.79		0.31	0.47
Uniform Delay, d1	49.7	47.7	25.5		33.8	6.1
Progression Factor	1.00	1.00	1.00		0.64	0.11
Incremental Delay, d2	0.2	0.0	6.2		0.1	0.1
Delay (s)	50.0	47.8	31.7		21.9	0.7
Level of Service	D	D	C		C	A
Approach Delay (s)	48.7		31.7			3.9
Approach LOS	D		C			A

Intersection Summary			
HCM Average Control Delay	21.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	135.8	Sum of lost time (s)	9.8
Intersection Capacity Utilization	46.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL		NBR			SBR
Lane Configurations												
Volume (vph)	180	10	110	0	10	30	110		0			150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900		1900			1900
Lane Width (ft)	12	10	10	12	16	12	11		12			12
Storage Length (ft)	0		20	0		0	170		0			0
Storage Lanes	0		1	0		0	1		0			0
Taper Length (ft)	25		50	25		25	50		25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00			1.00
Frt			0.850		0.898							
Flt Protected		0.955					0.950					
Satd. Flow (prot)	0	1632	1492	0	1934	0	1728		0			0
Flt Permitted		0.707					0.221					
Satd. Flow (perm)	0	1208	1492	0	1934	0	402		0			0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			58		31							
Link Speed (mph)		30			30							
Link Distance (ft)		843			640							
Travel Time (s)		19.2			14.5							
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96		0.96			0.96
Heavy Vehicles (%)	4%	0%	1%	0%	0%	0%	1%		0%			2%
Adj. Flow (vph)	188	10	115	0	10	31	115		0			156
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	198	115	0	41	0	115		0			0
Turn Type	Perm		Perm	Perm			pm+pt			Perm		
Protected Phases		12			16		5	2			6	
Permitted Phases	12		12	16			2			6		
Detector Phase	12	12	12	16	16		5	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		3.0	28.0		28.0	28.0	
Minimum Split (s)	9.0	9.0	9.0	9.0	9.0		6.0	34.0		34.0	34.0	
Total Split (s)	19.0	19.0	19.0	19.0	19.0	0.0	11.0	45.0	0.0	34.0	34.0	0.0
Total Split (%)	23.8%	23.8%	23.8%	23.8%	23.8%	0.0%	13.8%	56.3%	0.0%	42.5%	42.5%	0.0%
Maximum Green (s)	15.0	15.0	15.0	15.0	15.0		8.0	39.0		28.0	28.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0		3.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		0.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.0	1.0	-1.0	-1.0	1.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	3.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag							Lead			Lag	Lag	
Lead-Lag Optimize?							Yes			Yes	Yes	
Vehicle Extension (s)	1.0	1.0	1.0	1.0	1.0		2.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None		Min	C-Min		C-Min	C-Min	
v/c Ratio		0.73	0.30		0.09		0.30	0.38		0.04	0.71	
Control Delay		44.1	15.0		11.1		7.1	7.9		11.4	20.5	
Queue Delay		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Delay		44.1	15.0		11.1		7.1	7.9		11.4	20.5	
Queue Length 50th (ft)		91	23		4		17	99		5	235	
Queue Length 95th (ft)		153	60		26		40	182		18	#495	
Internal Link Dist (ft)		763			560			466			1874	
Turn Bay Length (ft)			20				170			170		

Lane Group	ø3
Lane Configurations	
Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	3
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	7.0
Minimum Split (s)	16.0
Total Split (s)	16.0
Total Split (%)	20%
Maximum Green (s)	7.0
Yellow Time (s)	9.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL		NBR		SBR
Base Capacity (vph)		282	393		476		412	1280		467	968
Starvation Cap Reductn		0	0		0		0	0		0	0
Spillback Cap Reductn		0	0		0		0	0		0	0
Storage Cap Reductn		0	0		0		0	0		0	0
Reduced v/c Ratio		0.70	0.29		0.09		0.28	0.38		0.04	0.71

Intersection Summary

Area Type: Other

Cycle Length: 80

Actuated Cycle Length: 80

Offset: 29 (36%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 80

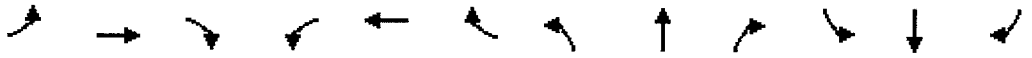
Control Type: Actuated-Coordinated

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 6: Mansfield Road & Route 195 (Storrs Road)

Lane Group	ø3
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	180	10	110	0	10	30	110	470	0	20	510	150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	10	10	12	16	12	11	14	12	10	11	12
Total Lost time (s)		4.0	4.0		4.0		3.0	5.0		5.0	5.0	
Lane Util. Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Frt		1.00	0.85		0.90		1.00	1.00		1.00	0.97	
Flt Protected		0.95	1.00		1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1631	1492		1934		1728	1930		1685	1766	
Flt Permitted		0.71	1.00		1.00		0.22	1.00		0.48	1.00	
Satd. Flow (perm)		1208	1492		1934		401	1930		859	1766	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	188	10	115	0	10	31	115	490	0	21	531	156
RTOR Reduction (vph)	0	0	45	0	24	0	0	0	0	0	10	0
Lane Group Flow (vph)	0	198	70	0	17	0	115	490	0	21	677	0
Heavy Vehicles (%)	4%	0%	1%	0%	0%	0%	1%	5%	0%	0%	0%	2%
Turn Type	Perm		Perm	Perm			pm+pt			Perm		
Protected Phases		12			16		5	2			6	
Permitted Phases	12		12	16			2			6		
Actuated Green, G (s)		18.0	18.0		18.0		52.0	52.0		42.4	42.4	
Effective Green, g (s)		18.0	18.0		18.0		52.0	53.0		43.4	43.4	
Actuated g/C Ratio		0.22	0.22		0.22		0.65	0.66		0.54	0.54	
Clearance Time (s)		4.0	4.0		4.0		3.0	6.0		6.0	6.0	
Vehicle Extension (s)		1.0	1.0		1.0		2.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		272	336		435		370	1279		466	958	
v/s Ratio Prot					0.01		0.03	c0.25			c0.38	
v/s Ratio Perm		c0.16	0.05				0.18			0.02		
v/c Ratio		0.73	0.21		0.04		0.31	0.38		0.05	0.71	
Uniform Delay, d1		28.7	25.2		24.2		8.4	6.1		8.6	13.6	
Progression Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		8.0	0.1		0.0		0.2	0.9		0.2	4.4	
Delay (s)		36.7	25.3		24.3		8.6	7.0		8.8	18.0	
Level of Service		D	C		C		A	A		A	B	
Approach Delay (s)		32.5			24.3			7.3			17.7	
Approach LOS		C			C			A			B	

Intersection Summary				
HCM Average Control Delay	16.9	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.70			
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	14.0	
Intersection Capacity Utilization	76.9%	ICU Level of Service	D	
Analysis Period (min)	15			
c Critical Lane Group				

Lane Group	WBL	WBR		NBR			ø2	ø3	ø10
Lane Configurations									
Volume (vph)	80	130		70					
Ideal Flow (vphpl)	1900	1900		1900					
Lane Width (ft)	14	12		12					
Storage Length (ft)	0	0		0					
Storage Lanes	1	0		0					
Taper Length (ft)	25	25		25					
Lane Util. Factor	1.00	1.00		1.00					
Frt	0.917								
Flt Protected	0.981								
Satd. Flow (prot)	1777	0		0					
Flt Permitted	0.981								
Satd. Flow (perm)	1777	0		0					
Right Turn on Red		Yes		Yes					
Satd. Flow (RTOR)	88								
Link Speed (mph)	30								
Link Distance (ft)	1395								
Travel Time (s)	31.7								
Peak Hour Factor	0.87	0.87		0.87					
Heavy Vehicles (%)	2%	3%		6%					
Adj. Flow (vph)	92	149		80					
Shared Lane Traffic (%)									
Lane Group Flow (vph)	241	0		0					
Turn Type					Perm				
Protected Phases	11		2 10			6	2	3	10
Permitted Phases					6				
Detector Phase	11		2 10		6	6			
Switch Phase									
Minimum Initial (s)	5.0				15.0	15.0	15.0	7.0	5.0
Minimum Split (s)	9.0				21.0	21.0	21.0	17.0	9.0
Total Split (s)	15.0	0.0	45.0	0.0	30.0	30.0	30.0	17.0	15.0
Total Split (%)	19.5%	0.0%	58.4%	0.0%	39.0%	39.0%	39%	22%	19%
Maximum Green (s)	11.0				24.0	24.0	24.0	7.0	11.0
Yellow Time (s)	3.0				4.0	4.0	4.0	10.0	3.0
All-Red Time (s)	1.0				2.0	2.0	2.0	0.0	1.0
Lost Time Adjust (s)	0.0	0.0	-1.0	1.0	-1.0	-1.0			
Total Lost Time (s)	4.0	4.0	5.0	5.0	5.0	5.0			
Lead/Lag									
Lead-Lag Optimize?									
Vehicle Extension (s)	2.0				3.0	3.0	3.0	3.0	3.0
Recall Mode	None				C-Max	C-Max	C-Max	Max	None
v/c Ratio	0.73		0.75		2.00	0.89			
Control Delay	34.8		6.8		508.1	44.9			
Queue Delay	0.9		1.9		0.0	4.1			
Total Delay	35.7		8.7		508.1	49.0			
Queue Length 50th (ft)	70		17		~140	238			
Queue Length 95th (ft)	#161		44		#215	#395			
Internal Link Dist (ft)	1315		33			466			
Turn Bay Length (ft)					170				

Lane Group	WBL	WBR	NBR		ø2	ø3	ø10
Base Capacity (vph)	329	906	92	593			
Starvation Cap Reductn	0	109	0	0			
Spillback Cap Reductn	13	0	0	30			
Storage Cap Reductn	0	0	0	0			
Reduced v/c Ratio	0.76	0.85	2.00	0.94			

Intersection Summary

Area Type: Other
Cycle Length: 77
Actuated Cycle Length: 77
Offset: 1 (1%), Referenced to phase 2:NBT and 6:SBTL, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 7: Dog Lane & Route 195 (Storrs Road)

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	80	130	520	70	160	460
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	14	12	14	12	11	12
Total Lost time (s)	4.0		5.0		5.0	5.0
Lane Util. Factor	1.00		1.00		1.00	1.00
Frt	0.92		0.98		1.00	1.00
Flt Protected	0.98		1.00		0.95	1.00
Satd. Flow (prot)	1776		1980		1678	1827
Flt Permitted	0.98		1.00		0.16	1.00
Satd. Flow (perm)	1776		1980		283	1827
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	92	149	598	80	184	529
RTOR Reduction (vph)	75	0	6	0	0	0
Lane Group Flow (vph)	166	0	672	0	184	529
Heavy Vehicles (%)	2%	3%	0%	6%	4%	4%
Turn Type					Perm	
Protected Phases	11		2 10			6
Permitted Phases					6	
Actuated Green, G (s)	11.0		35.0		24.0	24.0
Effective Green, g (s)	11.0		37.0		25.0	25.0
Actuated g/C Ratio	0.14		0.48		0.32	0.32
Clearance Time (s)	4.0				6.0	6.0
Vehicle Extension (s)	2.0				3.0	3.0
Lane Grp Cap (vph)	254		951		92	593
v/s Ratio Prot	c0.09		c0.34			0.29
v/s Ratio Perm					c0.65	
v/c Ratio	0.65		0.71		2.00	0.89
Uniform Delay, d1	31.2		15.7		26.0	24.7
Progression Factor	1.00		0.22		1.00	1.00
Incremental Delay, d2	4.5		1.9		486.2	18.2
Delay (s)	35.7		5.3		512.2	43.0
Level of Service	D		A		F	D
Approach Delay (s)	35.7		5.3			164.1
Approach LOS	D		A			F

Intersection Summary			
HCM Average Control Delay	79.2	HCM Level of Service	E
HCM Volume to Capacity ratio	1.43		
Actuated Cycle Length (s)	77.0	Sum of lost time (s)	31.0
Intersection Capacity Utilization	68.2%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBR				SBR	ø3	ø6	ø11
Lane Configurations									
Volume (vph)	120	80				30			
Ideal Flow (vphpl)	1900	1900				1900			
Lane Width (ft)	10	11				12			
Storage Length (ft)	0	290				0			
Storage Lanes	1	1				0			
Taper Length (ft)	25	50				25			
Lane Util. Factor	1.00	1.00				1.00			
Frt		0.850							
Flt Protected	0.950								
Satd. Flow (prot)	1685	1459				0			
Flt Permitted	0.950								
Satd. Flow (perm)	1685	1459				0			
Right Turn on Red		Yes				Yes			
Satd. Flow (RTOR)		91							
Link Speed (mph)	30								
Link Distance (ft)	908								
Travel Time (s)	20.6								
Peak Hour Factor	0.88	0.88				0.88			
Heavy Vehicles (%)	0%	7%				1%			
Adj. Flow (vph)	136	91				34			
Shared Lane Traffic (%)									
Lane Group Flow (vph)	136	91				0			
Turn Type		Perm	Perm						
Protected Phases	10			2	6 11		3	6	11
Permitted Phases		10	2						
Detector Phase	10	10	2	2	6 11				
Switch Phase									
Minimum Initial (s)	5.0	5.0	15.0	15.0			7.0	15.0	5.0
Minimum Split (s)	9.0	9.0	21.0	21.0			17.0	21.0	9.0
Total Split (s)	15.0	15.0	30.0	30.0	45.0	0.0	17.0	30.0	15.0
Total Split (%)	19.5%	19.5%	39.0%	39.0%	58.4%	0.0%	22%	39%	19%
Maximum Green (s)	11.0	11.0	24.0	24.0			7.0	24.0	11.0
Yellow Time (s)	3.0	3.0	4.0	4.0			10.0	4.0	3.0
All-Red Time (s)	1.0	1.0	2.0	2.0			0.0	2.0	1.0
Lost Time Adjust (s)	0.0	0.0	-1.0	-1.0	-1.0	1.0			
Total Lost Time (s)	4.0	4.0	5.0	5.0	5.0	5.0			
Lead/Lag									
Lead-Lag Optimize?									
Vehicle Extension (s)	3.0	3.0	3.0	3.0			3.0	3.0	2.0
Recall Mode	None	None	C-Max	C-Max			Max	C-Max	None
v/c Ratio	0.56	0.32	0.63	0.79	0.61				
Control Delay	40.8	10.6	57.5	35.3	5.3				
Queue Delay	0.3	0.0	0.0	0.0	6.0				
Total Delay	41.0	10.6	57.5	35.3	11.3				
Queue Length 50th (ft)	62	0	23	195	16				
Queue Length 95th (ft)	114	37	#81	#327	m38				
Internal Link Dist (ft)	828			733	33				
Turn Bay Length (ft)		290	90						

Lane Group	EBL	EBR				SBR	ø3	ø6	ø11
Base Capacity (vph)	241	286	90	579	1010				
Starvation Cap Reductn	0	0	0	0	334				
Spillback Cap Reductn	7	0	0	0	0				
Storage Cap Reductn	0	0	0	0	0				
Reduced v/c Ratio	0.58	0.32	0.63	0.79	0.91				

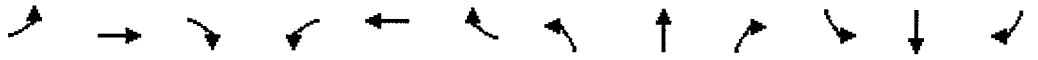
Intersection Summary

Area Type: Other
Cycle Length: 77
Actuated Cycle Length: 77
Offset: 1 (1%), Referenced to phase 2:NBT and 6:SBTL, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

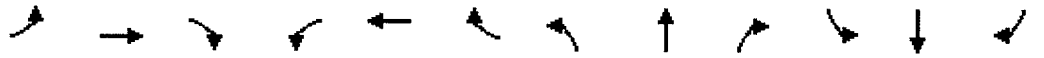
Splits and Phases: 8: Bolton Road & Route 195 (Storrs Road)

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	120	80	50	400	510	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	10	11	11	11	14	12
Total Lost time (s)	4.0	4.0	5.0	5.0	5.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.85	1.00	1.00	0.99	
Flt Protected	0.95	1.00	0.95	1.00	1.00	
Satd. Flow (prot)	1685	1459	1631	1783	1937	
Flt Permitted	0.95	1.00	0.16	1.00	1.00	
Satd. Flow (perm)	1685	1459	276	1783	1937	
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	136	91	57	455	580	34
RTOR Reduction (vph)	0	78	0	0	3	0
Lane Group Flow (vph)	136	13	57	455	611	0
Heavy Vehicles (%)	0%	7%	7%	3%	4%	1%
Turn Type		Perm	Perm			
Protected Phases	10			2	6 11	
Permitted Phases		10	2			
Actuated Green, G (s)	11.0	11.0	24.0	24.0	39.0	
Effective Green, g (s)	11.0	11.0	25.0	25.0	37.0	
Actuated g/C Ratio	0.14	0.14	0.32	0.32	0.48	
Clearance Time (s)	4.0	4.0	6.0	6.0		
Vehicle Extension (s)	3.0	3.0	3.0	3.0		
Lane Grp Cap (vph)	241	208	90	579	931	
v/s Ratio Prot	c0.08			c0.26	c0.32	
v/s Ratio Perm		0.01	0.21			
v/c Ratio	0.56	0.06	0.63	0.79	0.66	
Uniform Delay, d1	30.8	28.5	22.1	23.6	15.2	
Progression Factor	1.00	1.00	1.00	1.00	0.30	
Incremental Delay, d2	3.0	0.1	29.3	10.3	0.6	
Delay (s)	33.8	28.7	51.4	33.9	5.2	
Level of Service	C	C	D	C	A	
Approach Delay (s)	31.7			35.8	5.2	
Approach LOS	C			D	A	

Intersection Summary			
HCM Average Control Delay	21.2	HCM Level of Service	C
HCM Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	77.0	Sum of lost time (s)	31.0
Intersection Capacity Utilization	55.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	170	30	210	20	20	30	80	320	10	30	480	210
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	12	13	12	12	12	12	12	12	12
Storage Length (ft)	250		0	0		0	370		0	130		0
Storage Lanes	1		0	0		0	1		0	1		0
Taper Length (ft)	105		25	25		25	50		25	60		25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Frt		0.869			0.942			0.995			0.954	
Flt Protected	0.950				0.986		0.950			0.950		
Satd. Flow (prot)	1678	1572	0	0	1803	0	1736	1816	0	1805	3379	0
Flt Permitted	0.709				0.872		0.279			0.540		
Satd. Flow (perm)	1252	1572	0	0	1595	0	510	1816	0	1026	3379	0
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)		221						2			103	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2484			547			502			588	
Travel Time (s)		56.5			12.4			11.4			13.4	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	4%	5%	1%	4%	0%	0%	4%	4%	8%	0%	1%	4%
Adj. Flow (vph)	179	32	221	21	21	32	84	337	11	32	505	221
Shared Lane Traffic (%)												
Lane Group Flow (vph)	179	253	0	0	74	0	84	348	0	32	726	0
Turn Type	Perm			Perm			pm+pt			pm+pt		
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		3.0	15.0		3.0	15.0	
Minimum Split (s)	10.9	10.9		10.9	10.9		7.0	20.8		7.0	20.8	
Total Split (s)	29.9	29.9	0.0	29.9	29.9	0.0	14.0	55.8	0.0	14.0	55.8	0.0
Total Split (%)	30.0%	30.0%	0.0%	30.0%	30.0%	0.0%	14.0%	56.0%	0.0%	14.0%	56.0%	0.0%
Maximum Green (s)	25.0	25.0		25.0	25.0		10.0	50.0		10.0	50.0	
Yellow Time (s)	3.2	3.2		3.2	3.2		3.0	3.6		3.0	3.6	
All-Red Time (s)	1.7	1.7		1.7	1.7		1.0	2.2		1.0	2.2	
Lost Time Adjust (s)	-0.9	-0.9	0.0	-0.9	-0.9	0.0	0.0	-1.8	0.0	0.0	-1.8	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.5	1.5		1.5	1.5		1.5	2.5		1.5	2.5	
Recall Mode	None	None		None	None		None	Min		None	Min	
v/c Ratio	0.53	0.43			0.17		0.21	0.40		0.06	0.48	
Control Delay	22.8	6.7			16.0		7.2	11.3		6.6	11.1	
Queue Delay	0.0	0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay	22.8	6.7			16.0		7.2	11.3		6.6	11.1	
Queue Length 50th (ft)	42	7			16		9	42		3	66	
Queue Length 95th (ft)	109	55			48		30	157		15	140	
Internal Link Dist (ft)		2404			467			422			508	
Turn Bay Length (ft)	250						370			130		



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)	556	820			707		470	1253		588	2288	
Starvation Cap Reductn	0	0			0		0	0		0	0	
Spillback Cap Reductn	0	0			0		0	0		0	0	
Storage Cap Reductn	0	0			0		0	0		0	0	
Reduced v/c Ratio	0.32	0.31			0.10		0.18	0.28		0.05	0.32	

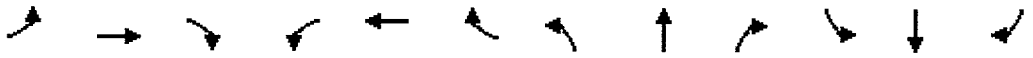
Intersection Summary	
Area Type:	Other
Cycle Length: 99.7	
Actuated Cycle Length: 46.1	
Natural Cycle: 45	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 9: South Eagleville Road & Route 195 (Storrs Road)

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	170	30	210	20	20	30	80	320	10	30	480	210
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	12	12	13	12	12	12	12	12	12	12
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00			1.00		1.00	1.00		1.00	0.95	
Frt	1.00	0.87			0.94		1.00	1.00		1.00	0.95	
Flt Protected	0.95	1.00			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1678	1572			1802		1736	1816		1805	3380	
Flt Permitted	0.71	1.00			0.87		0.28	1.00		0.54	1.00	
Satd. Flow (perm)	1252	1572			1594		509	1816		1026	3380	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	179	32	221	21	21	32	84	337	11	32	505	221
RTOR Reduction (vph)	0	164	0	0	0	0	0	1	0	0	59	0
Lane Group Flow (vph)	179	89	0	0	74	0	84	347	0	32	667	0
Heavy Vehicles (%)	4%	5%	1%	4%	0%	0%	4%	4%	8%	0%	1%	4%
Turn Type	Perm			Perm			pm+pt			pm+pt		
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	11.4	11.4			11.4		23.8	20.4		20.2	18.6	
Effective Green, g (s)	12.3	12.3			12.3		23.8	22.2		20.2	20.4	
Actuated g/C Ratio	0.26	0.26			0.26		0.49	0.46		0.42	0.42	
Clearance Time (s)	4.9	4.9			4.9		4.0	5.8		4.0	5.8	
Vehicle Extension (s)	1.5	1.5			1.5		1.5	2.5		1.5	2.5	
Lane Grp Cap (vph)	320	402			408		339	838		457	1434	
v/s Ratio Prot		0.06					c0.02	0.19		0.00	c0.20	
v/s Ratio Perm	c0.14				0.05		0.11			0.03		
v/c Ratio	0.56	0.22			0.18		0.25	0.41		0.07	0.46	
Uniform Delay, d1	15.5	14.1			14.0		6.8	8.6		8.2	9.9	
Progression Factor	1.00	1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.2	0.1			0.1		0.1	0.2		0.0	0.2	
Delay (s)	16.8	14.2			14.0		6.9	8.9		8.3	10.1	
Level of Service	B	B			B		A	A		A	B	
Approach Delay (s)		15.3			14.0			8.5			10.0	
Approach LOS		B			B			A			B	

Intersection Summary			
HCM Average Control Delay	11.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	48.1	Sum of lost time (s)	16.0
Intersection Capacity Utilization	56.0%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group		EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)		100	70	90	110	60	210	240	200	90	110	50
Ideal Flow (vphpl)		1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)		10	13	11	15	12	11	14	12	12	15	12
Storage Length (ft)			115	170		0	170		0	170		0
Storage Lanes			1	1		0	1		0	1		0
Taper Length (ft)			100	100		25	50		25	50		25
Lane Util. Factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.947			0.932			0.953	
Flt Protected				0.950			0.950			0.950		
Satd. Flow (prot)		1705	1652	1662	1874	0	1694	1880	0	1805	1965	0
Flt Permitted				0.630			0.438			0.258		
Satd. Flow (perm)		1705	1652	1102	1874	0	781	1880	0	490	1965	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			80		50			42			23	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		629			413			498			489	
Travel Time (s)		14.3			9.4			11.3			11.1	
Peak Hour Factor		0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)		4%	1%	5%	0%	16%	3%	0%	1%	0%	2%	0%
Adj. Flow (vph)		114	80	102	125	68	239	273	227	102	125	57
Shared Lane Traffic (%)												
Lane Group Flow (vph)		114	80	102	193	0	239	500	0	102	182	0
Turn Type	Perm		Perm	pm+pt			pm+pt			pm+pt		
Protected Phases		4		3	8		5	2		1	6	
Permitted Phases	4		4	8			2			6		
Detector Phase	4	4	4	3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	15.0	15.0	15.0	5.0	15.0		5.0	6.0		5.0	6.0	
Minimum Split (s)	21.0	21.0	21.0	8.1	20.0		8.1	11.0		8.1	11.0	
Total Split (s)	40.0	40.0	40.0	11.0	51.0	0.0	15.1	19.0	0.0	15.1	19.0	0.0
Total Split (%)	47.0%	47.0%	47.0%	12.9%	59.9%	0.0%	17.7%	22.3%	0.0%	17.7%	22.3%	0.0%
Maximum Green (s)	34.0	34.0	34.0	7.9	46.0		12.0	14.0		12.0	14.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	3.0	3.0	3.0	0.1	2.0		0.1	2.0		0.1	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	3.1	5.0	4.0	3.1	5.0	4.0	3.1	5.0	4.0
Lead/Lag	Lag	Lag	Lag	Lead			Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	2.0	3.0		2.0	3.0		2.0	3.0	
Recall Mode	C-Max	C-Max	C-Max	None	C-Max		None	None		None	None	
v/c Ratio	0.05	0.15	0.11	0.15	0.19		0.60	1.06		0.39	0.50	
Control Delay	16.0	16.7	4.5	9.3	7.8		27.3	92.3		23.2	33.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	16.0	16.7	4.5	9.3	7.8		27.3	92.3		23.2	33.5	
Queue Length 50th (ft)	7	37	0	24	36		93	~299		36	78	
Queue Length 95th (ft)	22	71	25	45	67		151	#510		69	139	
Internal Link Dist (ft)		549			333			418			409	
Turn Bay Length (ft)	50		115	170			170			170		



Lane Group		EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)	505	737	760	672	1036		410	470		351	364	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.05	0.15	0.11	0.15	0.19		0.58	1.06		0.29	0.50	

Intersection Summary

Area Type: Other

Cycle Length: 85.1

Actuated Cycle Length: 85.1

Offset: 37 (43%), Referenced to phase 4:EBTL and 8:WBTL, Start of Yellow

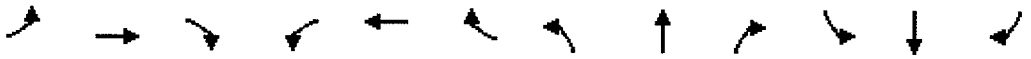
Natural Cycle: 60

Control Type: Actuated-Coordinated

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 10: North Eagleville Road (SR 430) & North Hillside Road



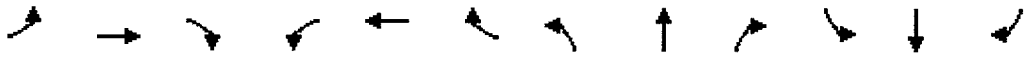
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	20	100	70	90	110	60	210	240	200	90	110	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	10	13	11	15	12	11	14	12	12	15	12
Total Lost time (s)	6.0	6.0	6.0	3.1	5.0		3.1	5.0		3.1	5.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.95		1.00	0.93		1.00	0.95	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1745	1705	1652	1662	1874		1694	1880		1805	1965	
Flt Permitted	0.64	1.00	1.00	0.63	1.00		0.44	1.00		0.26	1.00	
Satd. Flow (perm)	1169	1705	1652	1102	1874		781	1880		490	1965	
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	23	114	80	102	125	68	239	273	227	102	125	57
RTOR Reduction (vph)	0	0	47	0	23	0	0	32	0	0	19	0
Lane Group Flow (vph)	23	114	33	102	170	0	239	468	0	102	163	0
Heavy Vehicles (%)	0%	4%	1%	5%	0%	16%	3%	0%	1%	0%	2%	0%
Turn Type	Perm		Perm	pm+pt			pm+pt			pm+pt		
Protected Phases		4		3	8		5	2		1	6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)	35.6	35.6	35.6	45.4	45.4		29.7	19.8		22.3	15.5	
Effective Green, g (s)	35.6	35.6	35.6	45.4	45.4		29.7	19.8		22.3	15.5	
Actuated g/C Ratio	0.42	0.42	0.42	0.53	0.53		0.35	0.23		0.26	0.18	
Clearance Time (s)	6.0	6.0	6.0	3.1	5.0		3.1	5.0		3.1	5.0	
Vehicle Extension (s)	3.0	3.0	3.0	2.0	3.0		2.0	3.0		2.0	3.0	
Lane Grp Cap (vph)	489	713	691	625	1000		392	437		233	358	
v/s Ratio Prot		0.07		0.01	c0.09		c0.08	c0.25		0.03	0.08	
v/s Ratio Perm	0.02		0.02	0.08			0.13			0.08		
v/c Ratio	0.05	0.16	0.05	0.16	0.17		0.61	1.07		0.44	0.46	
Uniform Delay, d1	14.7	15.4	14.7	9.9	10.2		21.3	32.6		38.2	31.0	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.2	0.5	0.1	0.0	0.4		1.8	63.1		0.5	0.9	
Delay (s)	14.9	15.9	14.8	10.0	10.5		23.1	95.8		38.7	32.0	
Level of Service	B	B	B	A	B		C	F		D	C	
Approach Delay (s)		15.4			10.3			72.3			34.4	
Approach LOS		B			B			E			C	

Intersection Summary			
HCM Average Control Delay	45.3	HCM Level of Service	D
HCM Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	85.1	Sum of lost time (s)	8.1
Intersection Capacity Utilization	59.0%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	20	80	0	90	190	330	0	130	40	180	60	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	12	12	12	12	11	12	12	16	12
Storage Length (ft)	0		100	0		210	0		0	0		0
Storage Lanes	0		1	0		1	0		0	0		0
Taper Length (ft)	25		100	25		100	25		25	25		25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850		0.968			0.990	
Flt Protected		0.990			0.984						0.967	
Satd. Flow (prot)	0	1735	1837	0	1857	1615	0	1760	0	0	2022	0
Flt Permitted		0.990			0.984						0.967	
Satd. Flow (perm)	0	1735	1837	0	1857	1615	0	1760	0	0	2022	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		892			1090			461			1200	
Travel Time (s)		20.3			24.8			10.5			27.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	10%	8%	0%	0%	1%	0%	0%	1%	1%	0%	0%	25%
Adj. Flow (vph)	22	87	0	98	207	359	0	141	43	196	65	22
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	109	0	0	305	359	0	184	0	0	283	0
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other

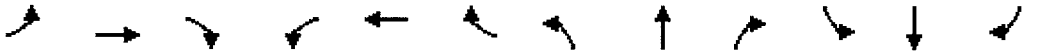
Control Type: Unsignalized



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	20	80	0	90	190	330	0	130	40	180	60	20
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	22	87	0	98	207	359	0	141	43	196	65	22

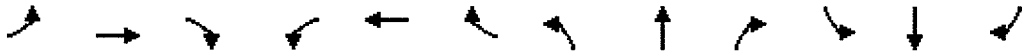
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1
Volume Total (vph)	109	0	304	359	185	283
Volume Left (vph)	22	0	98	0	0	196
Volume Right (vph)	0	0	0	359	43	22
Hadj (s)	0.24	0.00	0.17	-0.70	-0.12	0.12
Departure Headway (s)	7.3	7.0	6.4	5.5	6.3	6.3
Degree Utilization, x	0.22	0.00	0.54	0.55	0.32	0.49
Capacity (veh/h)	444	472	544	633	522	541
Control Delay (s)	11.1	8.8	15.5	13.8	12.2	15.2
Approach Delay (s)	11.1		14.6		12.2	15.2
Approach LOS	B		B		B	C

Intersection Summary				
Delay	14.1			
HCM Level of Service	B			
Intersection Capacity Utilization	55.3%	ICU Level of Service	B	
Analysis Period (min)	15			



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Volume (vph)	140	6	130	8	3	4	100	220	6	13	200	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	12	12	11	12	12	13	12	12	13	12
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.936			0.960			0.997			0.957	
Flt Protected		0.975			0.974			0.985			0.998	
Satd. Flow (prot)	0	1919	0	0	1607	0	0	1877	0	0	1779	0
Flt Permitted		0.975			0.974			0.985			0.998	
Satd. Flow (perm)	0	1919	0	0	1607	0	0	1877	0	0	1779	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		965			377			732			1399	
Travel Time (s)		21.9			8.6			16.6			31.8	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	2%	0%	3%	13%	0%	0%	0%	4%	0%	0%	5%	7%
Adj. Flow (vph)	159	7	148	9	3	5	114	250	7	15	227	114
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	314	0	0	17	0	0	371	0	0	356	0
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	140	6	130	8	3	4	100	220	6	13	200	100
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Hourly flow rate (vph)	159	7	148	9	3	5	114	250	7	15	227	114

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	314	17	370	356
Volume Left (vph)	159	9	114	15
Volume Right (vph)	148	5	7	114
Hadj (s)	-0.14	0.06	0.10	-0.09
Departure Headway (s)	5.7	6.7	5.6	5.4
Degree Utilization, x	0.50	0.03	0.57	0.54
Capacity (veh/h)	582	418	611	630
Control Delay (s)	14.3	9.9	15.8	14.5
Approach Delay (s)	14.3	9.9	15.8	14.5
Approach LOS	B	A	C	B

Intersection Summary				
Delay			14.9	
HCM Level of Service			B	
Intersection Capacity Utilization			64.3%	ICU Level of Service C
Analysis Period (min)			15	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Volume (vph)	50	230	10	10	370	130	10	0	10	210	10	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	14	12	12	14	12	12	16	12	12	16	12
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.995			0.966			0.932			0.967	
Flt Protected		0.992			0.999			0.976			0.965	
Satd. Flow (prot)	0	1956	0	0	1887	0	0	1959	0	0	1953	0
Flt Permitted		0.992			0.999			0.976			0.965	
Satd. Flow (perm)	0	1956	0	0	1887	0	0	1959	0	0	1953	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1278			2158			895			916	
Travel Time (s)		29.0			49.0			20.3			20.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	4%	2%	0%	0%	5%	0%	0%	0%	0%	4%	0%	0%
Adj. Flow (vph)	54	250	11	11	402	141	11	0	11	228	11	76
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	315	0	0	554	0	0	22	0	0	315	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Volume (veh/h)	50	230	10	10	370	130	10	0	10	210	10	70
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	54	250	11	11	402	141	11	0	11	228	11	76
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	543			261			940	929	255	870	864	473
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	543			261			940	929	255	870	864	473
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	95			99			95	100	99	10	96	87
cM capacity (veh/h)	1015			1315			198	253	788	254	276	595

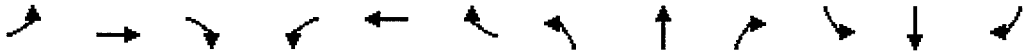
Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	315	554	22	315
Volume Left	54	11	11	228
Volume Right	11	141	11	76
cSH	1015	1315	317	295
Volume to Capacity	0.05	0.01	0.07	1.07
Queue Length 95th (ft)	4	1	5	304
Control Delay (s)	2.0	0.2	17.2	110.2
Lane LOS	A	A	C	F
Approach Delay (s)	2.0	0.2	17.2	110.2
Approach LOS			C	F

Intersection Summary				
Average Delay	29.7			
Intersection Capacity Utilization	71.2%	ICU Level of Service	C	
Analysis Period (min)	15			

2010 BUILD TRAFFIC VOLUMES

PM PEAK HOUR

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	30	410	180	230	320	10	650	0	790	30	0	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		100	200		0	0		150	0		0
Storage Lanes	1		1	1		0	0		1	0		0
Taper Length (ft)	50		50	50		25	25		100	25		25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.996				0.850		0.923	
Flt Protected	0.950			0.950				0.950			0.979	
Satd. Flow (prot)	1805	1863	1538	1805	1839	0	0	1805	1615	0	1717	0
Flt Permitted	0.425			0.145				0.707			0.628	
Satd. Flow (perm)	808	1863	1538	276	1839	0	0	1343	1615	0	1101	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			116		2				277		44	
Link Speed (mph)		30			45			30			30	
Link Distance (ft)		1971			1708			712			486	
Travel Time (s)		44.8			25.9			16.2			11.0	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	2%	5%	0%	3%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	33	456	200	256	356	11	722	0	878	33	0	44
Shared Lane Traffic (%)												
Lane Group Flow (vph)	33	456	200	256	367	0	0	722	878	0	77	0
Turn Type	pm+pt		Perm	pm+pt			Perm		Perm	Perm		
Protected Phases	7	4		3	8			2			6	
Permitted Phases	4		4	8			2		2	6		
Detector Phase	7	4	4	3	8		2	2	2	6	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Minimum Split (s)	8.0	20.0	20.0	8.0	20.0		20.0	20.0	20.0	20.0	20.0	
Total Split (s)	8.0	26.0	26.0	13.0	31.0	0.0	51.0	51.0	51.0	51.0	51.0	0.0
Total Split (%)	8.9%	28.9%	28.9%	14.4%	34.4%	0.0%	56.7%	56.7%	56.7%	56.7%	56.7%	0.0%
Maximum Green (s)	4.0	22.0	22.0	9.0	27.0		47.0	47.0	47.0	47.0	47.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5		0.5	0.5	0.5	0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	Min	Min	None	Min		None	None	None	None	None	
Walk Time (s)		5.0	5.0		5.0		5.0	5.0	5.0	5.0	5.0	
Flash Dont Walk (s)		11.0	11.0		11.0		11.0	11.0	11.0	11.0	11.0	
Pedestrian Calls (#/hr)		0	0		0		0	0	0	0	0	
v/c Ratio	0.12	1.00	0.43	0.98	0.59			1.03	0.90		0.13	
Control Delay	19.1	78.7	15.8	77.0	30.5			65.5	27.2		6.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0			0.0	0.0		0.0	
Total Delay	19.1	78.7	15.8	77.0	30.5			65.5	27.2		6.3	
Queue Length 50th (ft)	12	~261	38	102	180			~444	313		9	
Queue Length 95th (ft)	30	#457	100	#252	278			#659	#612		31	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		1891			1628			632			406	
Turn Bay Length (ft)	100		100	200					150			
Base Capacity (vph)	269	455	464	260	618			701	976		596	
Starvation Cap Reductn	0	0	0	0	0			0	0		0	
Spillback Cap Reductn	0	0	0	0	0			0	0		0	
Storage Cap Reductn	0	0	0	0	0			0	0		0	
Reduced v/c Ratio	0.12	1.00	0.43	0.98	0.59			1.03	0.90		0.13	

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

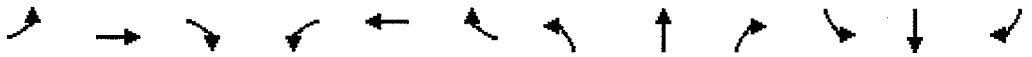
Natural Cycle: 90

Control Type: Actuated-Uncoordinated

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Route 44 (Middle Turnpike) & North Hillside Road

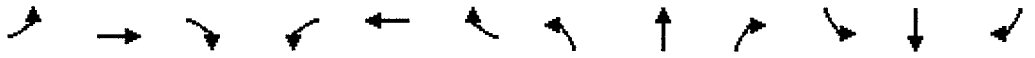


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	30	410	180	230	320	10	650	0	790	30	0	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0			4.0	4.0		4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00			1.00	1.00		1.00	
Frt	1.00	1.00	0.85	1.00	1.00			1.00	0.85		0.92	
Flt Protected	0.95	1.00	1.00	0.95	1.00			0.95	1.00		0.98	
Satd. Flow (prot)	1805	1863	1538	1805	1838			1805	1615		1717	
Flt Permitted	0.42	1.00	1.00	0.14	1.00			0.71	1.00		0.63	
Satd. Flow (perm)	807	1863	1538	275	1838			1343	1615		1101	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	33	456	200	256	356	11	722	0	878	33	0	44
RTOR Reduction (vph)	0	0	86	0	1	0	0	0	135	0	21	0
Lane Group Flow (vph)	33	456	114	256	366	0	0	722	743	0	56	0
Heavy Vehicles (%)	0%	2%	5%	0%	3%	0%	0%	0%	0%	0%	0%	0%
Turn Type	pm+pt		Perm	pm+pt			Perm		Perm	Perm		
Protected Phases	7	4		3	8			2			6	
Permitted Phases	4		4	8			2		2	6		
Actuated Green, G (s)	26.0	23.6	23.6	36.6	30.2			47.0	47.0		47.0	
Effective Green, g (s)	26.0	23.6	23.6	36.6	30.2			47.0	47.0		47.0	
Actuated g/C Ratio	0.28	0.26	0.26	0.40	0.33			0.51	0.51		0.51	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0			4.0	4.0		4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0			3.0	3.0		3.0	
Lane Grp Cap (vph)	255	480	396	260	606			689	829		565	
v/s Ratio Prot	0.00	0.24		c0.10	0.20							
v/s Ratio Perm	0.03		0.07	c0.30				c0.54	0.46		0.05	
v/c Ratio	0.13	0.95	0.29	0.98	0.60			1.05	0.90		0.10	
Uniform Delay, d1	24.1	33.4	27.3	22.8	25.7			22.3	20.1		11.4	
Progression Factor	1.00	1.00	1.00	1.00	1.00			1.00	1.00		1.00	
Incremental Delay, d2	0.2	28.8	0.4	51.1	1.7			47.5	12.3		0.1	
Delay (s)	24.3	62.2	27.7	74.0	27.4			69.8	32.4		11.5	
Level of Service	C	E	C	E	C			E	C		B	
Approach Delay (s)		50.4			46.5			49.3			11.5	
Approach LOS		D			D			D			B	

Intersection Summary			
HCM Average Control Delay	48.0	HCM Level of Service	D
HCM Volume to Capacity ratio	1.00		
Actuated Cycle Length (s)	91.6	Sum of lost time (s)	8.0
Intersection Capacity Utilization	87.0%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	740	470	100	120	200	60	160	550	40	110	500	270
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	11	10	12	10	12	12	12	12	12
Storage Length (ft)	250		0	290		0	210		0	250		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	100		25	50		25	50		25	50		25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.974			0.965			0.990			0.947	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1678	1723	0	1745	1617	0	1652	3385	0	1641	3327	0
Flt Permitted	0.332			0.172			0.950			0.950		
Satd. Flow (perm)	586	1723	0	316	1617	0	1652	3385	0	1641	3327	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		10			14			8			104	
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		1708			2086			382			1110	
Travel Time (s)		25.9			31.6			8.7			25.2	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	4%	4%	3%	0%	7%	2%	2%	6%	0%	10%	1%	6%
Adj. Flow (vph)	813	516	110	132	220	66	176	604	44	121	549	297
Shared Lane Traffic (%)												
Lane Group Flow (vph)	813	626	0	132	286	0	176	648	0	121	846	0
Turn Type	pm+pt			pm+pt			Prot			Prot		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8								
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	4.0	15.0		4.0	15.0		4.0	15.0		4.0	15.0	
Minimum Split (s)	8.0	21.7		8.0	21.7		8.0	20.7		8.0	20.7	
Total Split (s)	18.0	30.0	0.0	18.0	30.0	0.0	16.0	36.0	0.0	16.0	36.0	0.0
Total Split (%)	18.0%	30.0%	0.0%	18.0%	30.0%	0.0%	16.0%	36.0%	0.0%	16.0%	36.0%	0.0%
Maximum Green (s)	14.0	23.3		14.0	23.3		12.0	30.3		12.0	30.3	
Yellow Time (s)	3.0	4.7		3.0	4.7		3.0	4.7		3.0	4.7	
All-Red Time (s)	1.0	2.0		1.0	2.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	6.7	4.0	4.0	6.7	4.0	4.0	5.7	4.0	4.0	5.7	4.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.0	3.0		1.0	3.0		1.0	4.0		1.0	4.0	
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
v/c Ratio	1.83	1.14		0.59	0.74		0.92	0.63		0.75	0.82	
Control Delay	404.6	118.9		28.9	46.7		91.2	32.7		70.1	36.6	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	404.6	118.9		28.9	46.7		91.2	32.7		70.1	36.6	
Queue Length 50th (ft)	~811	~492		50	161		112	181		75	228	
Queue Length 95th (ft)	#946	#751		88	#279		#236	244		#145	304	
Internal Link Dist (ft)		1628			2006			302			1030	
Turn Bay Length (ft)	250			290			210			250		



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)	444	547		326	387		198	1042		197	1081	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	1.83	1.14		0.40	0.74		0.89	0.62		0.61	0.78	

Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 100

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 120

Control Type: Actuated-Coordinated

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: Route 44 (Middle Turnpike) & Route 195 (Storrs Road)

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	740	470	100	120	200	60	160	550	40	110	500	270
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	12	11	10	12	10	12	12	12	12	12
Total Lost time (s)	4.0	6.7		4.0	6.7		4.0	5.7		4.0	5.7	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	0.97		1.00	0.97		1.00	0.99		1.00	0.95	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1678	1722		1745	1617		1652	3384		1641	3328	
Flt Permitted	0.33	1.00		0.17	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	586	1722		315	1617		1652	3384		1641	3328	
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	813	516	110	132	220	66	176	604	44	121	549	297
RTOR Reduction (vph)	0	7	0	0	11	0	0	6	0	0	74	0
Lane Group Flow (vph)	813	619	0	132	275	0	176	642	0	121	772	0
Heavy Vehicles (%)	4%	4%	3%	0%	7%	2%	2%	6%	0%	10%	1%	6%
Turn Type	pm+pt			pm+pt			Prot			Prot		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8								
Actuated Green, G (s)	43.4	31.4		31.3	23.3		11.6	30.3		9.9	28.6	
Effective Green, g (s)	43.4	31.4		31.3	23.3		11.6	30.3		9.9	28.6	
Actuated g/C Ratio	0.43	0.31		0.31	0.23		0.12	0.30		0.10	0.29	
Clearance Time (s)	4.0	6.7		4.0	6.7		4.0	5.7		4.0	5.7	
Vehicle Extension (s)	1.0	3.0		1.0	3.0		1.0	4.0		1.0	4.0	
Lane Grp Cap (vph)	430	541		213	377		192	1025		162	952	
v/s Ratio Prot	c0.30	0.36		0.05	0.17		c0.11	0.19		0.07	c0.23	
v/s Ratio Perm	c0.52			0.14								
v/c Ratio	1.89	1.14		0.62	0.73		0.92	0.63		0.75	0.81	
Uniform Delay, d1	24.9	34.3		28.0	35.4		43.7	30.0		43.8	33.2	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	409.5	85.1		3.7	7.1		41.2	2.9		15.1	7.4	
Delay (s)	434.4	119.4		31.7	42.5		84.9	32.9		58.9	40.6	
Level of Service	F	F		C	D		F	C		E	D	
Approach Delay (s)		297.4			39.1			44.0			42.9	
Approach LOS		F			D			D			D	

Intersection Summary			
HCM Average Control Delay	143.1	HCM Level of Service	F
HCM Volume to Capacity ratio	1.32		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	13.7
Intersection Capacity Utilization	103.5%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	740	470	100	120	200	60	160	550	40	110	500	270
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	11	10	12	10	12	12	12	12	12
Storage Length (ft)	250		0	290		0	210		0	250		0
Storage Lanes	2		0	1		0	1		0	1		1
Taper Length (ft)	100		25	50		25	50		25	50		25
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Frt		0.974			0.965			0.990				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3255	1723	0	1745	1617	0	1652	3385	0	1641	3574	1524
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3255	1723	0	1745	1617	0	1652	3385	0	1641	3574	1524
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		14			15			8				297
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		1708			2086			382			1110	
Travel Time (s)		25.9			31.6			8.7			25.2	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	4%	4%	3%	0%	7%	2%	2%	6%	0%	10%	1%	6%
Adj. Flow (vph)	813	516	110	132	220	66	176	604	44	121	549	297
Shared Lane Traffic (%)												
Lane Group Flow (vph)	813	626	0	132	286	0	176	648	0	121	549	297
Turn Type	Prot			Prot			Prot			Prot		Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												Free
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	4.0	15.0		4.0	15.0		4.0	15.0		4.0	15.0	
Minimum Split (s)	8.0	21.7		8.0	21.7		8.0	20.7		8.0	20.7	
Total Split (s)	27.0	40.0	0.0	11.0	24.0	0.0	14.0	28.0	0.0	11.0	25.0	0.0
Total Split (%)	30.0%	44.4%	0.0%	12.2%	26.7%	0.0%	15.6%	31.1%	0.0%	12.2%	27.8%	0.0%
Maximum Green (s)	23.0	33.3		7.0	17.3		10.0	22.3		7.0	19.3	
Yellow Time (s)	3.0	4.7		3.0	4.7		3.0	4.7		3.0	4.7	
All-Red Time (s)	1.0	2.0		1.0	2.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	6.7	4.0	4.0	6.7	4.0	4.0	5.7	4.0	4.0	5.7	4.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.0	3.0		1.0	3.0		1.0	4.0		1.0	4.0	
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
v/c Ratio	0.97	0.97		0.89	0.87		0.93	0.80		0.91	0.75	0.19
Control Delay	58.0	58.3		93.8	61.3		92.6	40.0		100.7	40.5	0.3
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	58.0	58.3		93.8	61.3		92.6	40.0		100.7	40.5	0.3
Queue Length 50th (ft)	236	338		76	152		101	178		70	153	0
Queue Length 95th (ft)	#359	#565		#190	#299		#229	242		#177	211	0
Internal Link Dist (ft)		1628			2006			302			1030	
Turn Bay Length (ft)	250			290			210			250		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)	842	646		148	328		189	845		133	766	1524
Starvation Cap Reductn	0	0		0	0		0	0		0	0	0
Spillback Cap Reductn	0	0		0	0		0	0		0	0	0
Storage Cap Reductn	0	0		0	0		0	0		0	0	0
Reduced v/c Ratio	0.97	0.97		0.89	0.87		0.93	0.77		0.91	0.72	0.19

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

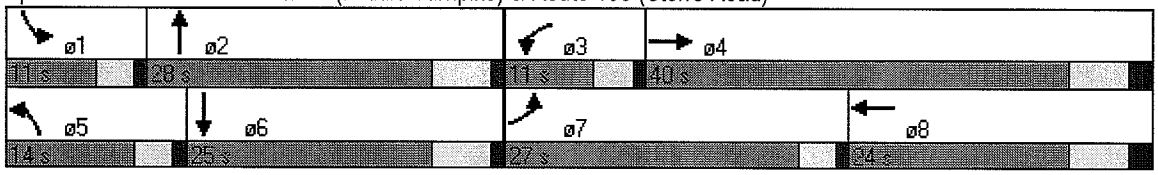
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green

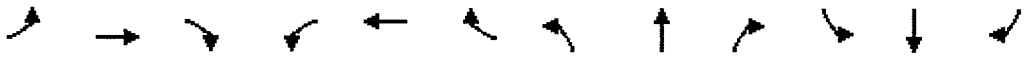
Natural Cycle: 90

Control Type: Actuated-Coordinated

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

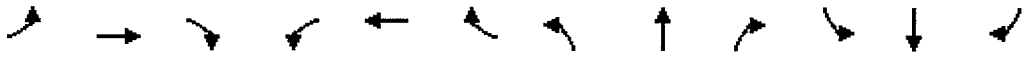
Splits and Phases: 2: Route 44 (Middle Turnpike) & Route 195 (Storrs Road)





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	740	470	100	120	200	60	160	550	40	110	500	270
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	12	11	10	12	10	12	12	12	12	12
Total Lost time (s)	4.0	6.7		4.0	6.7		4.0	5.7		4.0	5.7	4.0
Lane Util. Factor	0.97	1.00		1.00	1.00		1.00	0.95		1.00	0.95	1.00
Frt	1.00	0.97		1.00	0.97		1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3255	1722		1745	1617		1652	3384		1641	3574	1524
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	3255	1722		1745	1617		1652	3384		1641	3574	1524
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	813	516	110	132	220	66	176	604	44	121	549	297
RTOR Reduction (vph)	0	9	0	0	12	0	0	6	0	0	0	0
Lane Group Flow (vph)	813	617	0	132	274	0	176	642	0	121	549	297
Heavy Vehicles (%)	4%	4%	3%	0%	7%	2%	2%	6%	0%	10%	1%	6%
Turn Type	Prot			Prot			Prot			Prot		Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												Free
Actuated Green, G (s)	23.3	33.3		7.6	17.6		10.3	21.4		7.3	18.4	90.0
Effective Green, g (s)	23.3	33.3		7.6	17.6		10.3	21.4		7.3	18.4	90.0
Actuated g/C Ratio	0.26	0.37		0.08	0.20		0.11	0.24		0.08	0.20	1.00
Clearance Time (s)	4.0	6.7		4.0	6.7		4.0	5.7		4.0	5.7	
Vehicle Extension (s)	1.0	3.0		1.0	3.0		1.0	4.0		1.0	4.0	
Lane Grp Cap (vph)	843	637		147	316		189	805		133	731	1524
v/s Ratio Prot	c0.25	c0.36		0.08	0.17		c0.11	c0.19		0.07	0.15	
v/s Ratio Perm												c0.19
v/c Ratio	0.96	0.97		0.90	0.87		0.93	0.80		0.91	0.75	0.19
Uniform Delay, d1	32.9	27.8		40.8	35.1		39.5	32.3		41.0	33.6	0.0
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	22.4	27.7		44.1	21.2		45.6	8.1		50.1	7.0	0.3
Delay (s)	55.3	55.5		84.9	56.3		85.1	40.3		91.1	40.6	0.3
Level of Service	E	E		F	E		F	D		F	D	A
Approach Delay (s)		55.4			65.3			49.9			34.6	
Approach LOS		E			E			D			C	

Intersection Summary				
HCM Average Control Delay	49.8	HCM Level of Service	D	
HCM Volume to Capacity ratio	0.82			
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	77.1%	ICU Level of Service	D	
Analysis Period (min)	15			
c Critical Lane Group				



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBR
Lane Configurations										
Volume (vph)	70	10	10	10	0	0	0	110	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	12	12	16	12	12	12	12	12
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.985								
Flt Protected		0.963			0.950					
Satd. Flow (prot)	0	1932	0	0	1948	0	0	0	0	0
Flt Permitted		0.768			0.761					
Satd. Flow (perm)	0	1541	0	0	1561	0	0	0	0	0
Right Turn on Red			Yes			Yes		Yes		No
Satd. Flow (RTOR)		8								
Link Speed (mph)		30			30					
Link Distance (ft)		333			142					
Travel Time (s)		7.6			3.2					
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	50%	5%	0%	50%	0%	21%	0%	0%
Adj. Flow (vph)	74	11	11	11	0	0	0	117	0	0
Shared Lane Traffic (%)										
Lane Group Flow (vph)	0	96	0	0	11	0	0	0	0	0
Turn Type	Perm			Perm					custom	
Protected Phases		4			8			2		
Permitted Phases	4			8					6	6
Detector Phase	4	4		8	8			2	6	6
Switch Phase										
Minimum Initial (s)	5.0	5.0		5.0	5.0			15.0	15.0	15.0
Minimum Split (s)	11.0	11.0		11.0	11.0			21.0	21.0	21.0
Total Split (s)	16.0	16.0	0.0	16.0	16.0	0.0	0.0	51.0	0.0	51.0	51.0	0.0
Total Split (%)	23.9%	23.9%	0.0%	23.9%	23.9%	0.0%	0.0%	76.1%	0.0%	76.1%	76.1%	0.0%
Maximum Green (s)	10.0	10.0		10.0	10.0			45.0		45.0	45.0	
Yellow Time (s)	4.0	4.0		4.0	4.0			4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0			2.0		2.0	2.0	
Lost Time Adjust (s)	-1.0	-1.0	1.0	-1.0	-1.0	1.0	1.0	-1.0	1.0	-1.0	-1.0	1.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag										
Lead-Lag Optimize?										
Vehicle Extension (s)	1.0	1.0		1.0	1.0			5.0		5.0	5.0	
Recall Mode	None	None		None	None			Min		Min	Min	
v/c Ratio		0.50			0.06			0.69			0.46	
Control Delay		30.7			24.1			9.2			5.3	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		30.7			24.1			9.2			5.3	
Queue Length 50th (ft)		28			3			159			86	
Queue Length 95th (ft)		73			16			354			171	
Internal Link Dist (ft)		253			62			22			346	
Turn Bay Length (ft)												
Base Capacity (vph)		236			232			1330			1435	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBR
Storage Cap Reductn		0			0		0			0
Reduced v/c Ratio		0.41			0.05		0.69			0.46

Intersection Summary

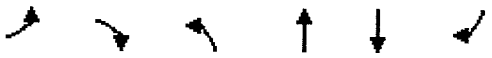
Area Type: Other
Cycle Length: 67
Actuated Cycle Length: 75.6
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 3: Moulton Road & Route 195 (Storrs Road)

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	70	10	10	10	0	0	0	750	110	0	620	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	16	12	12	16	12	12	13	12	12	12	12
Total Lost time (s)		5.0			5.0			5.0			5.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frt		0.98			1.00			0.98			1.00	
Flt Protected		0.96			0.95			1.00			1.00	
Satd. Flow (prot)		1931			1948			1718			1863	
Flt Permitted		0.77			0.76			1.00			1.00	
Satd. Flow (perm)		1540			1560			1718			1863	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	74	11	11	11	0	0	0	798	117	0	660	0
RTOR Reduction (vph)	0	7	0	0	0	0	0	6	0	0	0	0
Lane Group Flow (vph)	0	89	0	0	11	0	0	909	0	0	660	0
Heavy Vehicles (%)	0%	0%	50%	5%	0%	50%	0%	11%	21%	0%	2%	0%
Turn Type	Perm			Perm						custom		
Protected Phases		4			8			2				
Permitted Phases	4			8						6	6	
Actuated Green, G (s)		7.5			7.5			56.1			56.1	
Effective Green, g (s)		8.5			8.5			57.1			57.1	
Actuated g/C Ratio		0.11			0.11			0.76			0.76	
Clearance Time (s)		6.0			6.0			6.0			6.0	
Vehicle Extension (s)		1.0			1.0			5.0			5.0	
Lane Grp Cap (vph)		173			175			1298			1407	
v/s Ratio Prot								c0.53				
v/s Ratio Perm		c0.06			0.01						0.35	
v/c Ratio		0.51			0.06			0.70			0.47	
Uniform Delay, d1		31.6			30.0			4.8			3.5	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		1.1			0.1			2.2			0.5	
Delay (s)		32.7			30.0			7.0			4.0	
Level of Service		C			C			A			A	
Approach Delay (s)		32.7			30.0			7.0			4.0	
Approach LOS		C			C			A			A	

Intersection Summary			
HCM Average Control Delay	7.4	HCM Level of Service	A
HCM Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	75.6	Sum of lost time (s)	10.0
Intersection Capacity Utilization	59.1%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBR	NBL				ø2
Lane Configurations							
Volume (vph)	360	440	280				
Ideal Flow (vphpl)	1900	1900	1900				
Lane Width (ft)	12	13	10				
Storage Length (ft)	0	100	0				
Storage Lanes	1	1	1				
Taper Length (ft)	25	100	25				
Lane Util. Factor	1.00	1.00	1.00				
Frt		0.850					
Flt Protected	0.950		0.950				
Satd. Flow (prot)	1770	1636	1685				
Flt Permitted	0.950		0.281				
Satd. Flow (perm)	1770	1636	498				
Right Turn on Red		Yes					
Satd. Flow (RTOR)		199					
Link Speed (mph)	30						
Link Distance (ft)	1186						
Travel Time (s)	27.0						
Peak Hour Factor	0.92	0.92	0.92				
Heavy Vehicles (%)	2%	2%	0%				
Adj. Flow (vph)	391	478	304				
Shared Lane Traffic (%)							
Lane Group Flow (vph)	391	478	304				
Turn Type		Perm	custom			Perm	
Protected Phases	7		11	2 11	6		2
Permitted Phases		7	2			6	
Detector Phase	7	7	11	2 11	6	6	
Switch Phase							
Minimum Initial (s)	4.0	4.0	6.0		20.0	20.0	20.0
Minimum Split (s)	10.0	10.0	10.0		25.8	25.8	25.8
Total Split (s)	31.0	31.0	59.0	104.8	45.8	45.8	45.8
Total Split (%)	22.8%	22.8%	43.4%	77.2%	33.7%	33.7%	34%
Maximum Green (s)	25.0	25.0	55.0		40.0	40.0	40.0
Yellow Time (s)	3.0	3.0	3.0		3.9	3.9	3.9
All-Red Time (s)	3.0	3.0	1.0		1.9	1.9	1.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0	4.0	5.8	5.8	5.8	
Lead/Lag							
Lead-Lag Optimize?							
Vehicle Extension (s)	1.0	1.0	1.5		3.0	3.0	3.0
Recall Mode	None	None	None		C-Min	C-Min	C-Min
v/c Ratio	1.20	1.03	0.55	0.44	0.63	0.21	
Control Delay	162.2	81.1	16.5	3.8	27.5	11.7	
Queue Delay	0.0	0.7	0.0	1.1	0.1	0.0	
Total Delay	162.2	81.8	16.5	4.9	27.6	11.7	
Queue Length 50th (ft)	~418	~298	46	49	358	45	
Queue Length 95th (ft)	#621	#519	m114	m87	562	101	
Internal Link Dist (ft)	1106			261	2624		
Turn Bay Length (ft)		100				130	



Lane Group	EBL	EBR	NBL				ø2
Base Capacity (vph)	326	464	850	1376	947	837	
Starvation Cap Reductn	0	0	42	497	0	0	
Spillback Cap Reductn	0	1	0	0	17	0	
Storage Cap Reductn	0	0	0	0	0	0	
Reduced v/c Ratio	1.20	1.03	0.38	0.69	0.64	0.21	

Intersection Summary

Area Type: Other
Cycle Length: 135.8
Actuated Cycle Length: 135.8
Offset: 14.2 (10%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4: North Eagleville Road (SR 430) & Route 195 (Storrs Road)

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	360	440	280	560	550	160
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	12	13	10	13	11	11
Total Lost time (s)	6.0	6.0	4.0	5.8	5.8	5.8
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	1770	1636	1685	1888	1783	1516
Flt Permitted	0.95	1.00	0.28	1.00	1.00	1.00
Satd. Flow (perm)	1770	1636	498	1888	1783	1516
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	391	478	304	609	598	174
RTOR Reduction (vph)	0	162	0	0	0	32
Lane Group Flow (vph)	391	316	304	609	598	142
Heavy Vehicles (%)	2%	2%	0%	4%	3%	3%
Turn Type		Perm	custom			Perm
Protected Phases	7		11	2 11	6	
Permitted Phases		7	2			6
Actuated Green, G (s)	25.0	25.0	95.0	99.0	72.1	72.1
Effective Green, g (s)	25.0	25.0	95.0	95.0	72.1	72.1
Actuated g/C Ratio	0.18	0.18	0.70	0.70	0.53	0.53
Clearance Time (s)	6.0	6.0	4.0		5.8	5.8
Vehicle Extension (s)	1.0	1.0	1.5		3.0	3.0
Lane Grp Cap (vph)	326	301	549	1321	947	805
v/s Ratio Prot	c0.22		c0.09	0.32	c0.34	
v/s Ratio Perm		0.19	0.29			0.09
v/c Ratio	1.20	1.05	0.55	0.46	0.63	0.18
Uniform Delay, d1	55.4	55.4	11.5	9.0	22.5	16.5
Progression Factor	1.00	1.00	2.42	0.42	1.00	1.00
Incremental Delay, d2	115.5	65.2	0.4	0.1	3.2	0.5
Delay (s)	170.9	120.6	28.4	3.9	25.7	17.0
Level of Service	F	F	C	A	C	B
Approach Delay (s)	143.2			12.0	23.7	
Approach LOS	F			B	C	

Intersection Summary			
HCM Average Control Delay	60.2	HCM Level of Service	E
HCM Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	135.8	Sum of lost time (s)	15.8
Intersection Capacity Utilization	77.6%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

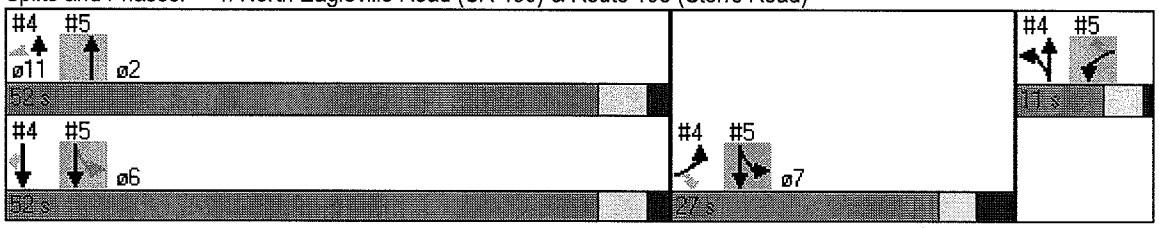
Lane Group	EBL	EBR	NBL				ø2
Lane Configurations							
Volume (vph)	360	440	280				
Ideal Flow (vphpl)	1900	1900	1900				
Lane Width (ft)	12	13	10				
Storage Length (ft)	0	100	0				
Storage Lanes	1	1	1				
Taper Length (ft)	25	100	25				
Lane Util. Factor	1.00	1.00	1.00				
Frt		0.850					
Flt Protected	0.950		0.950				
Satd. Flow (prot)	1770	1636	1685				
Flt Permitted	0.950		0.279				
Satd. Flow (perm)	1770	1636	495				
Right Turn on Red		Yes					
Satd. Flow (RTOR)		319					
Link Speed (mph)	30						
Link Distance (ft)	1186						
Travel Time (s)	27.0						
Peak Hour Factor	0.92	0.92	0.92				
Heavy Vehicles (%)	2%	2%	0%				
Adj. Flow (vph)	391	478	304				
Shared Lane Traffic (%)							
Lane Group Flow (vph)	391	478	304				
Turn Type		Perm	custom			Perm	
Protected Phases	7		11	2 11	6		2
Permitted Phases		7	2			6	
Detector Phase	7	7	11	2 11	6	6	
Switch Phase							
Minimum Initial (s)	4.0	4.0	6.0		20.0	20.0	20.0
Minimum Split (s)	10.0	10.0	10.0		25.8	25.8	25.8
Total Split (s)	27.0	27.0	11.0	63.0	52.0	52.0	52.0
Total Split (%)	30.0%	30.0%	12.2%	70.0%	57.8%	57.8%	58%
Maximum Green (s)	21.0	21.0	7.0		46.2	46.2	46.2
Yellow Time (s)	3.0	3.0	3.0		3.9	3.9	3.9
All-Red Time (s)	3.0	3.0	1.0		1.9	1.9	1.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0	4.0	5.8	5.8	5.8	
Lead/Lag							
Lead-Lag Optimize?							
Vehicle Extension (s)	1.0	1.0	1.5		3.0	3.0	3.0
Recall Mode	None	None	None		C-Min	C-Min	C-Min
v/c Ratio	0.95	0.76	0.74	0.51	0.67	0.21	
Control Delay	69.4	19.9	19.0	5.0	21.1	3.6	
Queue Delay	0.0	0.0	0.0	0.6	0.0	0.0	
Total Delay	69.4	19.9	19.0	5.6	21.1	3.6	
Queue Length 50th (ft)	220	80	45	47	237	7	
Queue Length 95th (ft)	#395	#214	m67	m77	353	38	
Internal Link Dist (ft)	1106			261	2624		
Turn Bay Length (ft)		100				130	

Lane Group	EBL	EBR	NBL			ø2
Base Capacity (vph)	415	628	411	1224	915	850
Starvation Cap Reductn	0	0	0	275	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.94	0.76	0.74	0.64	0.65	0.20

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4: North Eagleville Road (SR 430) & Route 195 (Storrs Road)



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	360	440	280	560	550	160
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	12	13	10	13	11	11
Total Lost time (s)	6.0	6.0	4.0	5.8	5.8	5.8
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	1770	1636	1685	1888	1783	1516
Flt Permitted	0.95	1.00	0.28	1.00	1.00	1.00
Satd. Flow (perm)	1770	1636	494	1888	1783	1516
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	391	478	304	609	598	174
RTOR Reduction (vph)	0	245	0	0	0	74
Lane Group Flow (vph)	391	233	304	609	598	100
Heavy Vehicles (%)	2%	2%	0%	4%	3%	3%
Turn Type		Perm	custom			Perm
Protected Phases	7		11	2 11	6	
Permitted Phases		7	2			6
Actuated Green, G (s)	20.9	20.9	53.3	57.3	45.2	45.2
Effective Green, g (s)	20.9	20.9	53.3	53.3	45.2	45.2
Actuated g/C Ratio	0.23	0.23	0.59	0.59	0.50	0.50
Clearance Time (s)	6.0	6.0	4.0		5.8	5.8
Vehicle Extension (s)	1.0	1.0	1.5		3.0	3.0
Lane Grp Cap (vph)	411	380	400	1118	895	761
v/s Ratio Prot	c0.22		c0.07	0.32	0.34	
v/s Ratio Perm		0.14	c0.38			0.07
v/c Ratio	0.95	0.61	0.76	0.54	0.67	0.13
Uniform Delay, d1	34.0	30.9	11.6	11.0	16.8	11.9
Progression Factor	1.00	1.00	1.40	0.46	1.00	1.00
Incremental Delay, d2	31.8	2.1	4.0	0.2	3.9	0.4
Delay (s)	65.8	33.0	20.2	5.3	20.7	12.3
Level of Service	E	C	C	A	C	B
Approach Delay (s)	47.8			10.2	18.8	
Approach LOS	D			B	B	

Intersection Summary			
HCM Average Control Delay	25.6	HCM Level of Service	C
HCM Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	77.6%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	WBL	WBR		NBR			ø6
Lane Configurations							
Volume (vph)	80	120		60			
Ideal Flow (vphpl)	1900	1900		1900			
Lane Width (ft)	10	12		12			
Storage Length (ft)	100	0		0			
Storage Lanes	1	1		0			
Taper Length (ft)	25	25		25			
Lane Util. Factor	1.00	1.00		0.95			
Frt		0.850					
Flt Protected	0.950						
Satd. Flow (prot)	1620	1615		0			
Flt Permitted	0.950						
Satd. Flow (perm)	1620	1615		0			
Right Turn on Red		Yes		Yes			
Satd. Flow (RTOR)		129					
Link Speed (mph)	30						
Link Distance (ft)	1395						
Travel Time (s)	31.7						
Peak Hour Factor	0.93	0.93		0.93			
Heavy Vehicles (%)	4%	0%		1%			
Adj. Flow (vph)	86	129		65			
Shared Lane Traffic (%)							
Lane Group Flow (vph)	86	129		0			
Turn Type		Perm			custom		
Protected Phases	11		2		7	6 7	6
Permitted Phases		11			6		
Detector Phase	11	11	2		7	6 7	
Switch Phase							
Minimum Initial (s)	6.0	6.0	20.0		4.0		20.0
Minimum Split (s)	10.0	10.0	25.8		10.0		25.8
Total Split (s)	59.0	59.0	45.8	0.0	31.0	76.8	45.8
Total Split (%)	43.4%	43.4%	33.7%	0.0%	22.8%	56.6%	34%
Maximum Green (s)	55.0	55.0	40.0		25.0		40.0
Yellow Time (s)	3.0	3.0	3.9		3.0		3.9
All-Red Time (s)	1.0	1.0	1.9		3.0		1.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0	5.8	4.0	6.0	5.8	
Lead/Lag							
Lead-Lag Optimize?							
Vehicle Extension (s)	1.5	1.5	3.0		1.0		3.0
Recall Mode	None	None	C-Min		None		C-Min
v/c Ratio	0.32	0.34	0.86		0.33	0.65	
Control Delay	50.9	9.5	39.0		23.9	4.9	
Queue Delay	0.0	0.0	0.0		0.0	0.7	
Total Delay	50.9	9.5	39.0		23.9	5.6	
Queue Length 50th (ft)	68	0	631		33	112	
Queue Length 95th (ft)	112	53	#1024		m72	m134	
Internal Link Dist (ft)	1315		137			261	
Turn Bay Length (ft)	100				75		

Lane Group	WBL	WBR	NBR		ø6
Base Capacity (vph)	656	731	998	362	1447
Starvation Cap Reductn	0	0	0	0	218
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.13	0.18	0.86	0.33	0.77

Intersection Summary

Area Type: Other
Cycle Length: 135.8
Actuated Cycle Length: 135.8
Offset: 14.2 (10%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

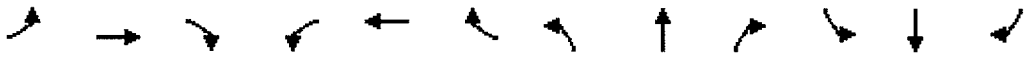
Splits and Phases: 5: Gurleyville Road & Route 195 (Storrs Road)

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	80	120	740	60	110	880
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	10	12	12	12	10	13
Total Lost time (s)	4.0	4.0	5.8		6.0	5.8
Lane Util. Factor	1.00	1.00	*0.50		1.00	1.00
Frt	1.00	0.85	0.99		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1620	1615	1877		1685	1906
Flt Permitted	0.95	1.00	1.00		0.06	1.00
Satd. Flow (perm)	1620	1615	1877		98	1906
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	86	129	796	65	118	946
RTOR Reduction (vph)	0	107	1	0	0	0
Lane Group Flow (vph)	86	22	860	0	118	946
Heavy Vehicles (%)	4%	0%	0%	1%	0%	3%
Turn Type		Perm			custom	
Protected Phases	11		2		7	6 7
Permitted Phases		11			6	
Actuated Green, G (s)	22.9	22.9	72.1		97.1	102.9
Effective Green, g (s)	22.9	22.9	72.1		97.1	102.9
Actuated g/C Ratio	0.17	0.17	0.53		0.72	0.76
Clearance Time (s)	4.0	4.0	5.8		6.0	
Vehicle Extension (s)	1.5	1.5	3.0		1.0	
Lane Grp Cap (vph)	273	272	997		362	1444
v/s Ratio Prot	c0.05		c0.46		0.06	c0.50
v/s Ratio Perm		0.01			0.17	
v/c Ratio	0.32	0.08	0.86		0.33	0.66
Uniform Delay, d1	49.6	47.6	27.6		38.0	7.9
Progression Factor	1.00	1.00	1.00		0.77	0.39
Incremental Delay, d2	0.2	0.0	9.8		0.1	0.5
Delay (s)	49.8	47.6	37.3		29.4	3.5
Level of Service	D	D	D		C	A
Approach Delay (s)	48.5		37.3			6.4
Approach LOS	D		D			A

Intersection Summary			
HCM Average Control Delay	23.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	135.8	Sum of lost time (s)	9.8
Intersection Capacity Utilization	59.5%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL		NBR			SBR
Lane Configurations												
Volume (vph)	180	10	110	0	10	30	110		0			150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900		1900			1900
Lane Width (ft)	12	10	10	12	16	12	11		12			12
Storage Length (ft)	0		20	0		0	170		0			0
Storage Lanes	0		1	0		0	1		0			0
Taper Length (ft)	25		50	25		25	50		25			25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00			1.00
Frt			0.850		0.898							
Flt Protected		0.955					0.950					
Satd. Flow (prot)	0	1632	1492	0	1934	0	1728		0			0
Flt Permitted		0.707					0.089					
Satd. Flow (perm)	0	1208	1492	0	1934	0	162		0			0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			58		31							
Link Speed (mph)		30			30							
Link Distance (ft)		843			640							
Travel Time (s)		19.2			14.5							
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96		0.96			0.96
Heavy Vehicles (%)	4%	0%	1%	0%	0%	0%	1%		0%			2%
Adj. Flow (vph)	188	10	115	0	10	31	115		0			156
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	198	115	0	41	0	115		0			0
Turn Type	Perm		Perm	Perm			pm+pt			Perm		
Protected Phases		12			16		5	2			6	
Permitted Phases	12		12	16			2			6		
Detector Phase	12	12	12	16	16		5	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		3.0	28.0		28.0	28.0	
Minimum Split (s)	9.0	9.0	9.0	9.0	9.0		6.0	34.0		34.0	34.0	
Total Split (s)	19.0	19.0	19.0	19.0	19.0	0.0	11.0	45.0	0.0	34.0	34.0	0.0
Total Split (%)	23.8%	23.8%	23.8%	23.8%	23.8%	0.0%	13.8%	56.3%	0.0%	42.5%	42.5%	0.0%
Maximum Green (s)	15.0	15.0	15.0	15.0	15.0		8.0	39.0		28.0	28.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0		3.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		0.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.0	1.0	-1.0	-1.0	1.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	3.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag							Lead			Lag	Lag	
Lead-Lag Optimize?							Yes			Yes	Yes	
Vehicle Extension (s)	1.0	1.0	1.0	1.0	1.0		2.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None		Min	C-Min		C-Min	C-Min	
v/c Ratio		0.73	0.30		0.09		0.47	0.44		0.05	0.98	
Control Delay		44.1	15.0		11.1		13.5	8.5		11.9	46.0	
Queue Delay		0.0	0.0		0.0		0.0	0.4		0.0	0.0	
Total Delay		44.1	15.0		11.1		13.5	8.9		11.9	46.0	
Queue Length 50th (ft)		91	23		4		17	120		5	431	
Queue Length 95th (ft)		153	60		26		55	219		19	#815	
Internal Link Dist (ft)		763			560			466			1874	
Turn Bay Length (ft)			20				170			170		

Lane Group	ø3
Lane Configurations	
Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	3
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	7.0
Minimum Split (s)	16.0
Total Split (s)	16.0
Total Split (%)	20%
Maximum Green (s)	7.0
Yellow Time (s)	9.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL		NBR		SBR
Base Capacity (vph)		282	393		476		276	1280		433	969
Starvation Cap Reductn		0	0		0		0	282		0	0
Spillback Cap Reductn		0	0		0		0	0		0	0
Storage Cap Reductn		0	0		0		0	0		0	0
Reduced v/c Ratio		0.70	0.29		0.09		0.42	0.56		0.05	0.98

Intersection Summary

Area Type: Other
Cycle Length: 80
Actuated Cycle Length: 80
Offset: 29 (36%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
Natural Cycle: 100
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 6: Mansfield Road & Route 195 (Storrs Road)

Lane Group	ø3
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	180	10	110	0	10	30	110	540	0	20	760	150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	10	10	12	16	12	11	14	12	10	11	12
Total Lost time (s)		4.0	4.0		4.0		3.0	5.0		5.0	5.0	
Lane Util. Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Frt		1.00	0.85		0.90		1.00	1.00		1.00	0.98	
Flt Protected		0.95	1.00		1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1631	1492		1934		1728	1930		1685	1785	
Flt Permitted		0.71	1.00		1.00		0.09	1.00		0.45	1.00	
Satd. Flow (perm)		1208	1492		1934		161	1930		804	1785	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	188	10	115	0	10	31	115	562	0	21	792	156
RTOR Reduction (vph)	0	0	45	0	24	0	0	0	0	0	6	0
Lane Group Flow (vph)	0	198	70	0	17	0	115	562	0	21	942	0
Heavy Vehicles (%)	4%	0%	1%	0%	0%	0%	1%	5%	0%	0%	0%	2%
Turn Type	Perm		Perm	Perm			pm+pt			Perm		
Protected Phases		12			16		5	2			6	
Permitted Phases	12		12	16			2			6		
Actuated Green, G (s)		18.0	18.0		18.0		52.0	52.0		42.1	42.1	
Effective Green, g (s)		18.0	18.0		18.0		52.0	53.0		43.1	43.1	
Actuated g/C Ratio		0.22	0.22		0.22		0.65	0.66		0.54	0.54	
Clearance Time (s)		4.0	4.0		4.0		3.0	6.0		6.0	6.0	
Vehicle Extension (s)		1.0	1.0		1.0		2.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		272	336		435		240	1279		433	962	
v/s Ratio Prot					0.01		c0.04	0.29			c0.53	
v/s Ratio Perm		c0.16	0.05				0.27			0.03		
v/c Ratio		0.73	0.21		0.04		0.48	0.44		0.05	0.98	
Uniform Delay, d1		28.7	25.2		24.2		15.8	6.4		8.7	18.0	
Progression Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		8.0	0.1		0.0		0.6	1.1		0.2	24.3	
Delay (s)		36.7	25.3		24.3		16.3	7.5		9.0	42.3	
Level of Service		D	C		C		B	A		A	D	
Approach Delay (s)		32.5			24.3			9.0			41.6	
Approach LOS		C			C			A			D	

Intersection Summary			
HCM Average Control Delay	28.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	83.2%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	WBL	WBR		NBR			ø2	ø3	ø10
Lane Configurations									
Volume (vph)	80	130		70					
Ideal Flow (vphpl)	1900	1900		1900					
Lane Width (ft)	14	12		12					
Storage Length (ft)	0	0		0					
Storage Lanes	1	0		0					
Taper Length (ft)	25	25		25					
Lane Util. Factor	1.00	1.00		1.00					
Frt	0.917								
Flt Protected	0.981								
Satd. Flow (prot)	1777	0		0					
Flt Permitted	0.981								
Satd. Flow (perm)	1777	0		0					
Right Turn on Red		Yes		Yes					
Satd. Flow (RTOR)	88								
Link Speed (mph)	30								
Link Distance (ft)	1395								
Travel Time (s)	31.7								
Peak Hour Factor	0.87	0.87		0.87					
Heavy Vehicles (%)	2%	3%		6%					
Adj. Flow (vph)	92	149		80					
Shared Lane Traffic (%)									
Lane Group Flow (vph)	241	0		0					
Turn Type					Perm				
Protected Phases	11		2 10			6	2	3	10
Permitted Phases					6				
Detector Phase	11		2 10		6	6			
Switch Phase									
Minimum Initial (s)	5.0				15.0	15.0	15.0	7.0	5.0
Minimum Split (s)	9.0				21.0	21.0	21.0	17.0	9.0
Total Split (s)	15.0	0.0	45.0	0.0	30.0	30.0	30.0	17.0	15.0
Total Split (%)	19.5%	0.0%	58.4%	0.0%	39.0%	39.0%	39%	22%	19%
Maximum Green (s)	11.0				24.0	24.0	24.0	7.0	11.0
Yellow Time (s)	3.0				4.0	4.0	4.0	10.0	3.0
All-Red Time (s)	1.0				2.0	2.0	2.0	0.0	1.0
Lost Time Adjust (s)	0.0	0.0	-1.0	1.0	-1.0	-1.0			
Total Lost Time (s)	4.0	4.0	5.0	5.0	5.0	5.0			
Lead/Lag									
Lead-Lag Optimize?									
Vehicle Extension (s)	2.0				3.0	3.0	3.0	3.0	3.0
Recall Mode	None				C-Max	C-Max	C-Max	Max	None
v/c Ratio	0.73		0.75		2.00	1.38			
Control Delay	34.8		5.5		508.1	205.4			
Queue Delay	5.0		3.3		0.0	275.7			
Total Delay	39.8		8.8		508.1	481.2			
Queue Length 50th (ft)	70		0		~140	~527			
Queue Length 95th (ft)	#161		m0		#215	#703			
Internal Link Dist (ft)	1315		33			466			
Turn Bay Length (ft)					170				

Lane Group	WBL	WBR	NBR		ø2	ø3	ø10
Base Capacity (vph)	329	906	92	593			
Starvation Cap Reductn	0	142	0	0			
Spillback Cap Reductn	45	0	0	183			
Storage Cap Reductn	0	0	0	0			
Reduced v/c Ratio	0.85	0.89	2.00	1.99			

Intersection Summary

Area Type: Other
Cycle Length: 77
Actuated Cycle Length: 77
Offset: 1 (1%), Referenced to phase 2:NBT and 6:SBTL, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 7: Dog Lane & Route 195 (Storrs Road)

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	80	130	520	70	160	710
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	14	12	14	12	11	12
Total Lost time (s)	4.0		5.0		5.0	5.0
Lane Util. Factor	1.00		1.00		1.00	1.00
Frt	0.92		0.98		1.00	1.00
Flt Protected	0.98		1.00		0.95	1.00
Satd. Flow (prot)	1776		1980		1678	1827
Flt Permitted	0.98		1.00		0.16	1.00
Satd. Flow (perm)	1776		1980		283	1827
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	92	149	598	80	184	816
RTOR Reduction (vph)	75	0	6	0	0	0
Lane Group Flow (vph)	166	0	672	0	184	816
Heavy Vehicles (%)	2%	3%	0%	6%	4%	4%
Turn Type					Perm	
Protected Phases	11		2 10			6
Permitted Phases					6	
Actuated Green, G (s)	11.0		35.0		24.0	24.0
Effective Green, g (s)	11.0		37.0		25.0	25.0
Actuated g/C Ratio	0.14		0.48		0.32	0.32
Clearance Time (s)	4.0				6.0	6.0
Vehicle Extension (s)	2.0				3.0	3.0
Lane Grp Cap (vph)	254		951		92	593
v/s Ratio Prot	c0.09		c0.34			0.45
v/s Ratio Perm					c0.65	
v/c Ratio	0.65		0.71		2.00	1.38
Uniform Delay, d1	31.2		15.7		26.0	26.0
Progression Factor	1.00		0.23		1.00	1.00
Incremental Delay, d2	4.5		1.3		486.2	179.7
Delay (s)	35.7		4.9		512.2	205.7
Level of Service	D		A		F	F
Approach Delay (s)	35.7		4.9			262.1
Approach LOS	D		A			F

Intersection Summary			
HCM Average Control Delay	142.8	HCM Level of Service	F
HCM Volume to Capacity ratio	1.43		
Actuated Cycle Length (s)	77.0	Sum of lost time (s)	31.0
Intersection Capacity Utilization	68.2%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

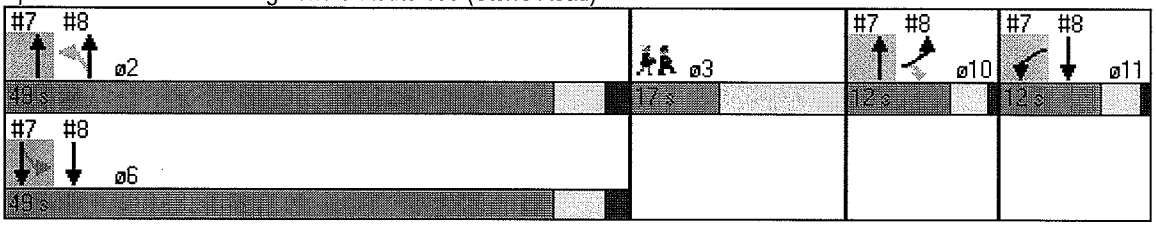
Lane Group	WBL	WBR		NBR			ø2	ø3	ø10
Lane Configurations									
Volume (vph)	80	130		70					
Ideal Flow (vphpl)	1900	1900		1900					
Lane Width (ft)	14	12		12					
Storage Length (ft)	0	0		0					
Storage Lanes	1	0		0					
Taper Length (ft)	25	25		25					
Lane Util. Factor	1.00	1.00		1.00					
Frt	0.917								
Flt Protected	0.981								
Satd. Flow (prot)	1777	0		0					
Flt Permitted	0.981								
Satd. Flow (perm)	1777	0		0					
Right Turn on Red		Yes		Yes					
Satd. Flow (RTOR)	71								
Link Speed (mph)	30								
Link Distance (ft)	1395								
Travel Time (s)	31.7								
Peak Hour Factor	0.87	0.87		0.87					
Heavy Vehicles (%)	2%	3%		6%					
Adj. Flow (vph)	92	149		80					
Shared Lane Traffic (%)									
Lane Group Flow (vph)	241	0		0					
Turn Type					Perm				
Protected Phases	11		2 10			6	2	3	10
Permitted Phases					6				
Detector Phase	11		2 10		6	6			
Switch Phase									
Minimum Initial (s)	5.0				15.0	15.0	15.0	7.0	5.0
Minimum Split (s)	9.0				21.0	21.0	21.0	17.0	9.0
Total Split (s)	12.0	0.0	61.0	0.0	49.0	49.0	49.0	17.0	12.0
Total Split (%)	13.3%	0.0%	67.8%	0.0%	54.4%	54.4%	54%	19%	13%
Maximum Green (s)	8.0				43.0	43.0	43.0	7.0	8.0
Yellow Time (s)	3.0				4.0	4.0	4.0	10.0	3.0
All-Red Time (s)	1.0				2.0	2.0	2.0	0.0	1.0
Lost Time Adjust (s)	0.0	0.0	-1.0	1.0	-1.0	-1.0			
Total Lost Time (s)	4.0	4.0	5.0	5.0	5.0	5.0			
Lead/Lag									
Lead-Lag Optimize?									
Vehicle Extension (s)	2.0				3.0	3.0	3.0	3.0	3.0
Recall Mode	None				C-Max	C-Max	C-Max	Max	None
v/c Ratio	1.08		0.60		0.86	0.91			
Control Delay	113.4		3.4		59.1	38.1			
Queue Delay	17.1		0.5		0.0	15.2			
Total Delay	130.4		4.0		59.1	53.3			
Queue Length 50th (ft)	~115		0		88	410			
Queue Length 95th (ft)	#250		m0		#211	#623			
Internal Link Dist (ft)	1315		33			466			
Turn Bay Length (ft)					170				

Lane Group	WBL	WBR	NBR		ø2	ø3	ø10
Base Capacity (vph)	223	1127	213	893			
Starvation Cap Reductn	0	150	0	88			
Spillback Cap Reductn	9	0	0	32			
Storage Cap Reductn	0	0	0	0			
Reduced v/c Ratio	1.13	0.69	0.86	1.01			

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 7: Dog Lane & Route 195 (Storrs Road)



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	80	130	520	70	160	710
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	14	12	14	12	11	12
Total Lost time (s)	4.0		5.0		5.0	5.0
Lane Util. Factor	1.00		1.00		1.00	1.00
Frt	0.92		0.98		1.00	1.00
Flt Protected	0.98		1.00		0.95	1.00
Satd. Flow (prot)	1776		1980		1678	1827
Flt Permitted	0.98		1.00		0.25	1.00
Satd. Flow (perm)	1776		1980		435	1827
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	92	149	598	80	184	816
RTOR Reduction (vph)	65	0	5	0	0	0
Lane Group Flow (vph)	176	0	673	0	184	816
Heavy Vehicles (%)	2%	3%	0%	6%	4%	4%
Turn Type					Perm	
Protected Phases	11		2 10			6
Permitted Phases					6	
Actuated Green, G (s)	8.0		51.0		43.0	43.0
Effective Green, g (s)	8.0		53.0		44.0	44.0
Actuated g/C Ratio	0.09		0.59		0.49	0.49
Clearance Time (s)	4.0				6.0	6.0
Vehicle Extension (s)	2.0				3.0	3.0
Lane Grp Cap (vph)	158		1166		213	893
v/s Ratio Prot	c0.10		c0.34			c0.45
v/s Ratio Perm					0.42	
v/c Ratio	1.12		0.58		0.86	0.91
Uniform Delay, d1	41.0		11.5		20.3	21.2
Progression Factor	1.00		0.18		1.00	1.00
Incremental Delay, d2	106.1		0.5		34.4	15.3
Delay (s)	147.1		2.6		54.7	36.6
Level of Service	F		A		D	D
Approach Delay (s)	147.1		2.6			39.9
Approach LOS	F		A			D

Intersection Summary			
HCM Average Control Delay	40.2	HCM Level of Service	D
HCM Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	31.0
Intersection Capacity Utilization	68.2%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBR				SBR	ø3	ø6	ø11
Lane Configurations									
Volume (vph)	120	80				30			
Ideal Flow (vphpl)	1900	1900				1900			
Lane Width (ft)	10	11				12			
Storage Length (ft)	0	290				0			
Storage Lanes	1	1				0			
Taper Length (ft)	25	50				25			
Lane Util. Factor	1.00	1.00				1.00			
Frt		0.850							
Flt Protected	0.950								
Satd. Flow (prot)	1685	1459				0			
Flt Permitted	0.950								
Satd. Flow (perm)	1685	1459				0			
Right Turn on Red		Yes				Yes			
Satd. Flow (RTOR)		91							
Link Speed (mph)	30								
Link Distance (ft)	908								
Travel Time (s)	20.6								
Peak Hour Factor	0.88	0.88				0.88			
Heavy Vehicles (%)	0%	7%				1%			
Adj. Flow (vph)	136	91				34			
Shared Lane Traffic (%)									
Lane Group Flow (vph)	136	91				0			
Turn Type		Perm	Perm						
Protected Phases	10			2	6 11		3	6	11
Permitted Phases		10	2						
Detector Phase	10	10	2	2	6 11				
Switch Phase									
Minimum Initial (s)	5.0	5.0	15.0	15.0			7.0	15.0	5.0
Minimum Split (s)	9.0	9.0	21.0	21.0			17.0	21.0	9.0
Total Split (s)	15.0	15.0	30.0	30.0	45.0	0.0	17.0	30.0	15.0
Total Split (%)	19.5%	19.5%	39.0%	39.0%	58.4%	0.0%	22%	39%	19%
Maximum Green (s)	11.0	11.0	24.0	24.0			7.0	24.0	11.0
Yellow Time (s)	3.0	3.0	4.0	4.0			10.0	4.0	3.0
All-Red Time (s)	1.0	1.0	2.0	2.0			0.0	2.0	1.0
Lost Time Adjust (s)	0.0	0.0	-1.0	-1.0	-1.0	1.0			
Total Lost Time (s)	4.0	4.0	5.0	5.0	5.0	5.0			
Lead/Lag									
Lead-Lag Optimize?									
Vehicle Extension (s)	3.0	3.0	3.0	3.0			3.0	3.0	2.0
Recall Mode	None	None	C-Max	C-Max			Max	C-Max	None
v/c Ratio	0.56	0.32	0.64	0.92	0.89				
Control Delay	40.8	10.6	58.6	49.8	16.8				
Queue Delay	0.3	0.0	0.0	5.2	147.9				
Total Delay	41.1	10.6	58.6	54.9	164.7				
Queue Length 50th (ft)	62	0	23	244	157				
Queue Length 95th (ft)	114	37	#82	#416	m39				
Internal Link Dist (ft)	828			733	33				
Turn Bay Length (ft)		290	90						

Lane Group	EBL	EBR				SBR	ø3	ø6	ø11
Base Capacity (vph)	241	286	89	579	1010				
Starvation Cap Reductn	0	0	0	0	335				
Spillback Cap Reductn	8	0	0	25	0				
Storage Cap Reductn	0	0	0	0	0				
Reduced v/c Ratio	0.58	0.32	0.64	0.96	1.33				

Intersection Summary

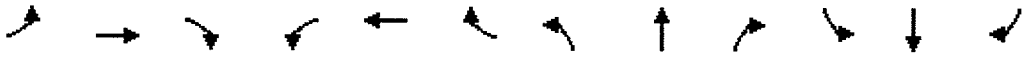
Area Type: Other
Cycle Length: 77
Actuated Cycle Length: 77
Offset: 1 (1%), Referenced to phase 2:NBT and 6:SBTL, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 8: Bolton Road & Route 195 (Storrs Road)

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	120	80	50	470	760	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	10	11	11	11	14	12
Total Lost time (s)	4.0	4.0	5.0	5.0	5.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.85	1.00	1.00	0.99	
Flt Protected	0.95	1.00	0.95	1.00	1.00	
Satd. Flow (prot)	1685	1459	1631	1783	1941	
Flt Permitted	0.95	1.00	0.16	1.00	1.00	
Satd. Flow (perm)	1685	1459	275	1783	1941	
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	136	91	57	534	864	34
RTOR Reduction (vph)	0	78	0	0	2	0
Lane Group Flow (vph)	136	13	57	534	896	0
Heavy Vehicles (%)	0%	7%	7%	3%	4%	1%
Turn Type		Perm	Perm			
Protected Phases	10			2	6 11	
Permitted Phases		10	2			
Actuated Green, G (s)	11.0	11.0	24.0	24.0	39.0	
Effective Green, g (s)	11.0	11.0	25.0	25.0	37.0	
Actuated g/C Ratio	0.14	0.14	0.32	0.32	0.48	
Clearance Time (s)	4.0	4.0	6.0	6.0		
Vehicle Extension (s)	3.0	3.0	3.0	3.0		
Lane Grp Cap (vph)	241	208	89	579	933	
v/s Ratio Prot	c0.08			0.30	c0.46	
v/s Ratio Perm		0.01	0.21			
v/c Ratio	0.56	0.06	0.64	0.92	0.96	
Uniform Delay, d1	30.8	28.5	22.2	25.1	19.3	
Progression Factor	1.00	1.00	1.00	1.00	0.85	
Incremental Delay, d2	3.0	0.1	30.3	22.5	3.3	
Delay (s)	33.8	28.7	52.5	47.5	19.6	
Level of Service	C	C	D	D	B	
Approach Delay (s)	31.7			48.0	19.6	
Approach LOS	C			D	B	

Intersection Summary			
HCM Average Control Delay	31.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	77.0	Sum of lost time (s)	31.0
Intersection Capacity Utilization	56.0%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	190	30	210	20	20	30	80	370	10	30	650	290
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	12	13	12	12	12	12	12	12	12
Storage Length (ft)	250		0	0		0	370		0	130		0
Storage Lanes	1		0	0		0	1		0	1		0
Taper Length (ft)	105		25	25		25	50		25	60		25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Frt		0.869			0.942			0.996			0.954	
Flt Protected	0.950				0.986		0.950			0.950		
Satd. Flow (prot)	1678	1572	0	0	1803	0	1736	1818	0	1805	3379	0
Flt Permitted	0.816				0.878		0.166			0.509		
Satd. Flow (perm)	1441	1572	0	0	1606	0	303	1818	0	967	3379	0
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)		221						2			106	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2484			547			502			588	
Travel Time (s)		56.5			12.4			11.4			13.4	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	4%	5%	1%	4%	0%	0%	4%	4%	8%	0%	1%	4%
Adj. Flow (vph)	200	32	221	21	21	32	84	389	11	32	684	305
Shared Lane Traffic (%)												
Lane Group Flow (vph)	200	253	0	0	74	0	84	400	0	32	989	0
Turn Type	Perm			Perm			pm+pt			pm+pt		
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		3.0	15.0		3.0	15.0	
Minimum Split (s)	10.9	10.9		10.9	10.9		7.0	20.8		7.0	20.8	
Total Split (s)	29.9	29.9	0.0	29.9	29.9	0.0	14.0	55.8	0.0	14.0	55.8	0.0
Total Split (%)	30.0%	30.0%	0.0%	30.0%	30.0%	0.0%	14.0%	56.0%	0.0%	14.0%	56.0%	0.0%
Maximum Green (s)	25.0	25.0		25.0	25.0		10.0	50.0		10.0	50.0	
Yellow Time (s)	3.2	3.2		3.2	3.2		3.0	3.6		3.0	3.6	
All-Red Time (s)	1.7	1.7		1.7	1.7		1.0	2.2		1.0	2.2	
Lost Time Adjust (s)	-0.9	-0.9	0.0	-0.9	-0.9	0.0	0.0	-1.8	0.0	0.0	-1.8	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.5	1.5		1.5	1.5		1.5	2.5		1.5	2.5	
Recall Mode	None	None		None	None		None	Min		None	Min	
v/c Ratio	0.53	0.44			0.18		0.26	0.41		0.06	0.63	
Control Delay	25.9	7.4			19.8		8.0	11.5		7.2	14.4	
Queue Delay	0.0	0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay	25.9	7.4			19.8		8.0	11.5		7.2	14.4	
Queue Length 50th (ft)	59	8			20		10	59		4	120	
Queue Length 95th (ft)	143	63			58		35	204		17	242	
Internal Link Dist (ft)		2404			467			422			508	
Turn Bay Length (ft)	250						370			130		



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)	567	753			632		399	1214		591	2161	
Starvation Cap Reductn	0	0			0		0	0		0	0	
Spillback Cap Reductn	0	0			0		0	0		0	0	
Storage Cap Reductn	0	0			0		0	0		0	0	
Reduced v/c Ratio	0.35	0.34			0.12		0.21	0.33		0.05	0.46	

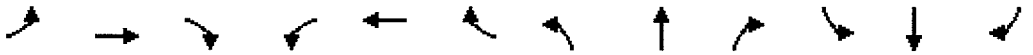
Intersection Summary	
Area Type:	Other
Cycle Length: 99.7	
Actuated Cycle Length: 57	
Natural Cycle: 45	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 9: South Eagleville Road & Route 195 (Storrs Road)

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	190	30	210	20	20	30	80	370	10	30	650	290
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	12	12	13	12	12	12	12	12	12	12
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00			1.00		1.00	1.00		1.00	0.95	
Frt	1.00	0.87			0.94		1.00	1.00		1.00	0.95	
Flt Protected	0.95	1.00			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1678	1572			1802		1736	1817		1805	3378	
Flt Permitted	0.82	1.00			0.88		0.17	1.00		0.51	1.00	
Satd. Flow (perm)	1442	1572			1605		303	1817		968	3378	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	200	32	221	21	21	32	84	389	11	32	684	305
RTOR Reduction (vph)	0	165	0	0	0	0	0	1	0	0	57	0
Lane Group Flow (vph)	200	88	0	0	74	0	84	399	0	32	932	0
Heavy Vehicles (%)	4%	5%	1%	4%	0%	0%	4%	4%	8%	0%	1%	4%
Turn Type	Perm			Perm			pm+pt			pm+pt		
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	13.9	13.9			13.9		33.4	28.5		26.8	25.2	
Effective Green, g (s)	14.8	14.8			14.8		33.4	30.3		26.8	27.0	
Actuated g/C Ratio	0.25	0.25			0.25		0.57	0.52		0.46	0.46	
Clearance Time (s)	4.9	4.9			4.9		4.0	5.8		4.0	5.8	
Vehicle Extension (s)	1.5	1.5			1.5		1.5	2.5		1.5	2.5	
Lane Grp Cap (vph)	364	396			405		292	938		465	1554	
v/s Ratio Prot		0.06					c0.02	0.22		0.00	c0.28	
v/s Ratio Perm	c0.14				0.05		0.14			0.03		
v/c Ratio	0.55	0.22			0.18		0.29	0.43		0.07	0.60	
Uniform Delay, d1	19.1	17.4			17.2		7.2	8.8		8.8	11.8	
Progression Factor	1.00	1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.9	0.1			0.1		0.2	0.2		0.0	0.5	
Delay (s)	20.0	17.5			17.3		7.4	9.0		8.9	12.3	
Level of Service	B	B			B		A	A		A	B	
Approach Delay (s)		18.6			17.3			8.8			12.2	
Approach LOS		B			B			A			B	

Intersection Summary			
HCM Average Control Delay	13.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	58.7	Sum of lost time (s)	16.0
Intersection Capacity Utilization	63.3%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group		EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)		100	70	90	110	130	210	240	200	340	160	300
Ideal Flow (vphpl)		1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)		10	13	11	15	12	11	14	12	12	15	12
Storage Length (ft)			115	170		0	170		0	170		0
Storage Lanes			1	1		0	1		0	1		0
Taper Length (ft)			100	100		25	50		25	50		25
Lane Util. Factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.919			0.932			0.902	
Flt Protected				0.950			0.950			0.950		
Satd. Flow (prot)		1705	1652	1662	1767	0	1694	1880	0	1805	1872	0
Flt Permitted				0.631			0.286			0.272		
Satd. Flow (perm)		1705	1652	1104	1767	0	510	1880	0	517	1872	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			80		109			42			95	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		629			413			498			489	
Travel Time (s)		14.3			9.4			11.3			11.1	
Peak Hour Factor		0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)		4%	1%	5%	0%	16%	3%	0%	1%	0%	2%	0%
Adj. Flow (vph)		114	80	102	125	148	239	273	227	386	182	341
Shared Lane Traffic (%)												
Lane Group Flow (vph)		114	80	102	273	0	239	500	0	386	523	0
Turn Type	Perm		Perm	pm+pt			pm+pt			pm+pt		
Protected Phases		4		3	8		5	2		1	6	
Permitted Phases	4		4	8			2			6		
Detector Phase	4	4	4	3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	15.0	15.0	15.0	5.0	15.0		5.0	6.0		5.0	6.0	
Minimum Split (s)	21.0	21.0	21.0	8.1	20.0		8.1	11.0		8.1	11.0	
Total Split (s)	40.0	40.0	40.0	11.0	51.0	0.0	15.1	19.0	0.0	15.1	19.0	0.0
Total Split (%)	47.0%	47.0%	47.0%	12.9%	59.9%	0.0%	17.7%	22.3%	0.0%	17.7%	22.3%	0.0%
Maximum Green (s)	34.0	34.0	34.0	7.9	46.0		12.0	14.0		12.0	14.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	3.0	3.0	3.0	0.1	2.0		0.1	2.0		0.1	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	3.1	5.0	4.0	3.1	5.0	4.0	3.1	5.0	4.0
Lead/Lag	Lag	Lag	Lag	Lead			Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	2.0	3.0		2.0	3.0		2.0	3.0	
Recall Mode	C-Max	C-Max	C-Max	None	C-Max		None	None		None	None	
v/c Ratio	0.24	0.15	0.11	0.15	0.27		0.75	1.45		1.09	1.30	
Control Delay	18.4	16.7	4.5	9.3	6.9		36.7	247.4		98.8	179.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	18.4	16.7	4.5	9.3	6.9		36.7	247.4		98.8	179.1	
Queue Length 50th (ft)	39	37	0	24	42		93	~353		~180	~328	
Queue Length 95th (ft)	77	71	25	45	79		#157	#526		#340	#505	
Internal Link Dist (ft)		549			333			418			409	
Turn Bay Length (ft)	50		115	170			170			170		



Lane Group		EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)	469	737	760	673	1005		334	344		355	403	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.24	0.15	0.11	0.15	0.27		0.72	1.45		1.09	1.30	

Intersection Summary

Area Type: Other

Cycle Length: 85.1

Actuated Cycle Length: 85.1

Offset: 37 (43%), Referenced to phase 4:EBTL and 8:WBTL, Start of Yellow

Natural Cycle: 75

Control Type: Actuated-Coordinated

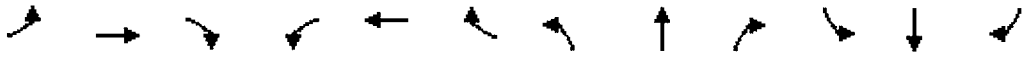
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 10: North Eagleville Road (SR 430) & North Hillside Road

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	100	100	70	90	110	130	210	240	200	340	160	300
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	10	13	11	15	12	11	14	12	12	15	12
Total Lost time (s)	6.0	6.0	6.0	3.1	5.0		3.1	5.0		3.1	5.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.92		1.00	0.93		1.00	0.90	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1745	1705	1652	1662	1767		1694	1880		1805	1873	
Flt Permitted	0.59	1.00	1.00	0.63	1.00		0.29	1.00		0.27	1.00	
Satd. Flow (perm)	1086	1705	1652	1104	1767		509	1880		517	1873	
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	114	114	80	102	125	148	239	273	227	386	182	341
RTOR Reduction (vph)	0	0	46	0	50	0	0	35	0	0	79	0
Lane Group Flow (vph)	114	114	34	102	223	0	239	465	0	386	444	0
Heavy Vehicles (%)	0%	4%	1%	5%	0%	16%	3%	0%	1%	0%	2%	0%
Turn Type	Perm		Perm	pm+pt			pm+pt			pm+pt		
Protected Phases		4		3	8		5	2		1	6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)	36.2	36.2	36.2	46.0	46.0		25.3	14.0		26.7	14.7	
Effective Green, g (s)	36.2	36.2	36.2	46.0	46.0		25.3	14.0		26.7	14.7	
Actuated g/C Ratio	0.43	0.43	0.43	0.54	0.54		0.30	0.16		0.31	0.17	
Clearance Time (s)	6.0	6.0	6.0	3.1	5.0		3.1	5.0		3.1	5.0	
Vehicle Extension (s)	3.0	3.0	3.0	2.0	3.0		2.0	3.0		2.0	3.0	
Lane Grp Cap (vph)	462	725	703	634	955		309	309		344	324	
v/s Ratio Prot		0.07		0.01	c0.13		0.10	c0.25		c0.16	0.24	
v/s Ratio Perm	0.10		0.02	0.08			0.13			0.19		
v/c Ratio	0.25	0.16	0.05	0.16	0.23		0.77	1.50		1.12	1.37	
Uniform Delay, d1	15.7	15.1	14.3	9.6	10.3		37.3	35.6		38.8	35.2	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.3	0.5	0.1	0.0	0.6		10.5	243.3		85.8	185.7	
Delay (s)	17.0	15.5	14.5	9.7	10.9		47.7	278.8		124.5	220.9	
Level of Service	B	B	B	A	B		D	F		F	F	
Approach Delay (s)		15.8			10.5			204.1			180.0	
Approach LOS		B			B			F			F	

Intersection Summary					
HCM Average Control Delay	138.7	HCM Level of Service		F	
HCM Volume to Capacity ratio	0.66				
Actuated Cycle Length (s)	85.1	Sum of lost time (s)		16.2	
Intersection Capacity Utilization	86.6%	ICU Level of Service		E	
Analysis Period (min)	15				
c Critical Lane Group					



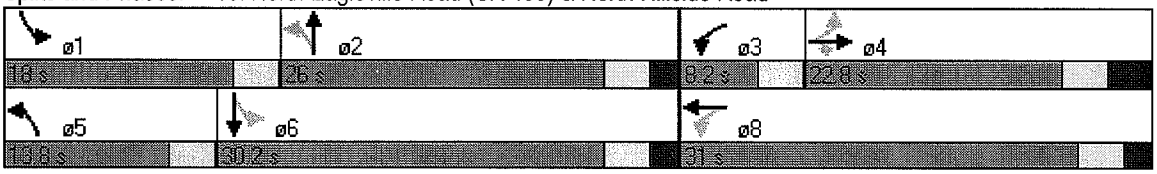
Lane Group		EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)		100	70	90	110	130	210	240	200	340	160	300
Ideal Flow (vphpl)		1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)		10	13	11	15	12	11	14	12	12	15	12
Storage Length (ft)			115	170		0	170		0	170		0
Storage Lanes			1	1		0	1		0	1		0
Taper Length (ft)			100	100		25	50		25	50		25
Lane Util. Factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.919			0.932			0.902	
Flt Protected				0.950			0.950			0.950		
Satd. Flow (prot)		1705	1652	1662	1767	0	1694	1880	0	1805	1872	0
Flt Permitted				0.593			0.210			0.170		
Satd. Flow (perm)		1705	1652	1037	1767	0	374	1880	0	323	1872	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			80		87			55			135	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		629			413			498			489	
Travel Time (s)		14.3			9.4			11.3			11.1	
Peak Hour Factor		0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)		4%	1%	5%	0%	16%	3%	0%	1%	0%	2%	0%
Adj. Flow (vph)		114	80	102	125	148	239	273	227	386	182	341
Shared Lane Traffic (%)												
Lane Group Flow (vph)		114	80	102	273	0	239	500	0	386	523	0
Turn Type	Perm		Perm	pm+pt			pm+pt			pm+pt		
Protected Phases		4		3	8		5	2		1	6	
Permitted Phases	4		4	8			2			6		
Detector Phase	4	4	4	3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	15.0	15.0	15.0	5.0	15.0		5.0	6.0		5.0	6.0	
Minimum Split (s)	21.0	21.0	21.0	8.1	20.0		8.1	11.0		8.1	11.0	
Total Split (s)	22.8	22.8	22.8	8.2	31.0	0.0	13.8	26.0	0.0	18.0	30.2	0.0
Total Split (%)	30.4%	30.4%	30.4%	10.9%	41.3%	0.0%	18.4%	34.7%	0.0%	24.0%	40.3%	0.0%
Maximum Green (s)	16.8	16.8	16.8	5.1	26.0		10.7	21.0		14.9	25.2	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	3.0	3.0	3.0	0.1	2.0		0.1	2.0		0.1	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	3.1	5.0	4.0	3.1	5.0	4.0	3.1	5.0	4.0
Lead/Lag	Lag	Lag	Lag	Lead			Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	2.0	3.0		2.0	3.0		2.0	3.0	
Recall Mode	C-Max	C-Max	C-Max	None	C-Max		None	None		None	None	
v/c Ratio	0.40	0.25	0.16	0.23	0.39		0.73	0.91		0.87	0.74	
Control Delay	30.0	25.8	7.3	17.1	14.2		26.5	46.1		36.8	23.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	30.0	25.8	7.3	17.1	14.2		26.5	46.1		36.8	23.5	
Queue Length 50th (ft)	46	44	0	31	62		54	199		110	155	
Queue Length 95th (ft)	93	86	30	62	119		#114	#358		#241	258	
Internal Link Dist (ft)		549			333			418			409	
Turn Bay Length (ft)	50		115	170			170			170		

Lane Group		EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)	288	452	497	452	706		353	570		464	725	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.40	0.25	0.16	0.23	0.39		0.68	0.88		0.83	0.72	

Intersection Summary

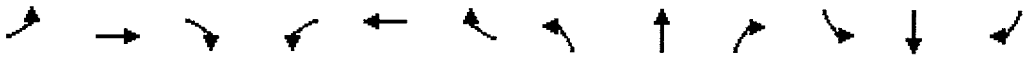
Area Type: Other
Cycle Length: 75
Actuated Cycle Length: 75
Offset: 0 (0%), Referenced to phase 4:EBTL and 8:WBTL, Start of Yellow
Natural Cycle: 75
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 10: North Eagleville Road (SR 430) & North Hillside Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	100	100	70	90	110	130	210	240	200	340	160	300
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	10	13	11	15	12	11	14	12	12	15	12
Total Lost time (s)	6.0	6.0	6.0	3.1	5.0		3.1	5.0		3.1	5.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.92		1.00	0.93		1.00	0.90	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1745	1705	1652	1662	1767		1694	1880		1805	1873	
Flt Permitted	0.59	1.00	1.00	0.59	1.00		0.21	1.00		0.17	1.00	
Satd. Flow (perm)	1086	1705	1652	1037	1767		374	1880		323	1873	
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	114	114	80	102	125	148	239	273	227	386	182	341
RTOR Reduction (vph)	0	0	60	0	55	0	0	40	0	0	91	0
Lane Group Flow (vph)	114	114	20	102	218	0	239	460	0	386	432	0
Heavy Vehicles (%)	0%	4%	1%	5%	0%	16%	3%	0%	1%	0%	2%	0%
Turn Type	Perm		Perm	pm+pt			pm+pt			pm+pt		
Protected Phases		4		3	8		5	2		1	6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)	19.2	19.2	19.2	27.6	27.6		30.0	20.4		37.4	24.7	
Effective Green, g (s)	19.2	19.2	19.2	27.6	27.6		30.0	20.4		37.4	24.7	
Actuated g/C Ratio	0.26	0.26	0.26	0.37	0.37		0.40	0.27		0.50	0.33	
Clearance Time (s)	6.0	6.0	6.0	3.1	5.0		3.1	5.0		3.1	5.0	
Vehicle Extension (s)	3.0	3.0	3.0	2.0	3.0		2.0	3.0		2.0	3.0	
Lane Grp Cap (vph)	278	436	423	417	650		319	511		436	617	
v/s Ratio Prot		0.07		0.01	c0.12		0.10	0.24		c0.16	0.23	
v/s Ratio Perm	c0.10		0.01	0.08			0.20			c0.28		
v/c Ratio	0.41	0.26	0.05	0.24	0.34		0.75	0.90		0.89	0.70	
Uniform Delay, d1	23.2	22.2	21.0	16.0	17.1		16.9	26.3		17.5	21.9	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	4.4	1.5	0.2	0.1	1.4		8.2	18.8		18.4	3.6	
Delay (s)	27.6	23.7	21.2	16.1	18.5		25.1	45.1		36.0	25.5	
Level of Service	C	C	C	B	B		C	D		D	C	
Approach Delay (s)		24.5			17.8			38.6			30.0	
Approach LOS		C			B			D			C	

Intersection Summary			
HCM Average Control Delay	30.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	14.1
Intersection Capacity Utilization	86.6%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Lane Group		EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)		100	70	90	110	130	210	240	200	340	160	300
Ideal Flow (vphpl)		1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)		10	13	11	15	12	11	14	12	12	15	12
Storage Length (ft)			115	170		170	170		0	170		0
Storage Lanes			1	1		1	1		0	1		0
Taper Length (ft)			100	100		25	50		25	50		25
Lane Util. Factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.932			0.902	
Flt Protected				0.950			0.950			0.950		
Satd. Flow (prot)		1705	1652	1662	2090	1392	1694	1880	0	1805	1872	0
Flt Permitted				0.593			0.210			0.170		
Satd. Flow (perm)		1705	1652	1037	2090	1392	374	1880	0	323	1872	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			80			148		55			135	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		629			413			498			489	
Travel Time (s)		14.3			9.4			11.3			11.1	
Peak Hour Factor		0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)		4%	1%	5%	0%	16%	3%	0%	1%	0%	2%	0%
Adj. Flow (vph)		114	80	102	125	148	239	273	227	386	182	341
Shared Lane Traffic (%)												
Lane Group Flow (vph)		114	80	102	125	148	239	500	0	386	523	0
Turn Type	Perm		Perm	pm+pt		pm+ov	pm+pt			pm+pt		
Protected Phases		4		3	8	1	5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Detector Phase	4	4	4	3	8	1	5	2		1	6	
Switch Phase												
Minimum Initial (s)	15.0	15.0	15.0	5.0	15.0	5.0	5.0	6.0		5.0	6.0	
Minimum Split (s)	21.0	21.0	21.0	8.1	20.0	8.1	8.1	11.0		8.1	11.0	
Total Split (s)	22.8	22.8	22.8	8.2	31.0	18.0	13.8	26.0	0.0	18.0	30.2	0.0
Total Split (%)	30.4%	30.4%	30.4%	10.9%	41.3%	24.0%	18.4%	34.7%	0.0%	24.0%	40.3%	0.0%
Maximum Green (s)	16.8	16.8	16.8	5.1	26.0	14.9	10.7	21.0		14.9	25.2	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
All-Red Time (s)	3.0	3.0	3.0	0.1	2.0	0.1	0.1	2.0		0.1	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	3.1	5.0	3.1	3.1	5.0	4.0	3.1	5.0	4.0
Lead/Lag	Lag	Lag	Lag	Lead		Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes		Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	2.0	3.0	2.0	2.0	3.0		2.0	3.0	
Recall Mode	C-Max	C-Max	C-Max	None	C-Max	None	None	None		None	None	
v/c Ratio	0.35	0.25	0.16	0.23	0.16	0.16	0.73	0.91		0.87	0.74	
Control Delay	28.3	25.8	7.3	17.1	17.5	1.6	26.5	46.1		36.8	23.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	28.3	25.8	7.3	17.1	17.5	1.6	26.5	46.1		36.8	23.5	
Queue Length 50th (ft)	46	44	0	31	40	0	54	199		110	155	
Queue Length 95th (ft)	91	86	30	62	74	18	#114	#358		#241	258	
Internal Link Dist (ft)		549			333			418			409	
Turn Bay Length (ft)	50		115	170		170	170			170		

Lane Group		EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)	329	452	497	452	770	936	353	570		464	725	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.35	0.25	0.16	0.23	0.16	0.16	0.68	0.88		0.83	0.72	

Intersection Summary

Area Type: Other

Cycle Length: 75

Actuated Cycle Length: 75

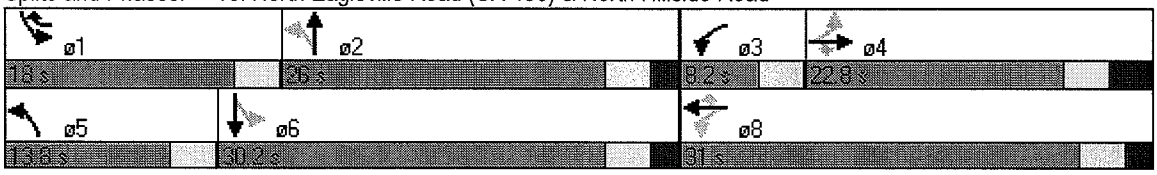
Offset: 0 (0%), Referenced to phase 4:EBTL and 8:WBTL, Start of Yellow

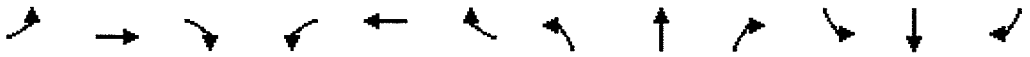
Natural Cycle: 75

Control Type: Actuated-Coordinated

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 10: North Eagleville Road (SR 430) & North Hillside Road





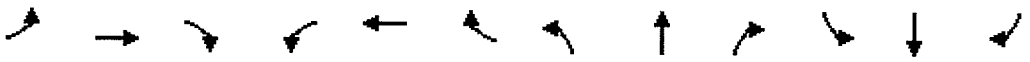
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	100	100	70	90	110	130	210	240	200	340	160	300
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	10	13	11	15	12	11	14	12	12	15	12
Total Lost time (s)	6.0	6.0	6.0	3.1	5.0	3.1	3.1	5.0		3.1	5.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.93		1.00	0.90	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1745	1705	1652	1662	2090	1392	1694	1880		1805	1873	
Flt Permitted	0.68	1.00	1.00	0.59	1.00	1.00	0.21	1.00		0.17	1.00	
Satd. Flow (perm)	1243	1705	1652	1037	2090	1392	374	1880		323	1873	
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	114	114	80	102	125	148	239	273	227	386	182	341
RTOR Reduction (vph)	0	0	60	0	0	66	0	40	0	0	91	0
Lane Group Flow (vph)	114	114	20	102	125	82	239	460	0	386	432	0
Heavy Vehicles (%)	0%	4%	1%	5%	0%	16%	3%	0%	1%	0%	2%	0%
Turn Type	Perm		Perm	pm+pt		pm+ov	pm+pt			pm+pt		
Protected Phases		4		3	8	1	5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)	19.2	19.2	19.2	27.6	27.6	41.5	30.0	20.4		37.4	24.7	
Effective Green, g (s)	19.2	19.2	19.2	27.6	27.6	41.5	30.0	20.4		37.4	24.7	
Actuated g/C Ratio	0.26	0.26	0.26	0.37	0.37	0.55	0.40	0.27		0.50	0.33	
Clearance Time (s)	6.0	6.0	6.0	3.1	5.0	3.1	3.1	5.0		3.1	5.0	
Vehicle Extension (s)	3.0	3.0	3.0	2.0	3.0	2.0	2.0	3.0		2.0	3.0	
Lane Grp Cap (vph)	318	436	423	417	769	770	319	511		436	617	
v/s Ratio Prot		0.07		c0.01	0.06	0.02	0.10	0.24		c0.16	0.23	
v/s Ratio Perm	c0.09		0.01	0.08		0.04	0.20			c0.28		
v/c Ratio	0.36	0.26	0.05	0.24	0.16	0.11	0.75	0.90		0.89	0.70	
Uniform Delay, d1	22.9	22.2	21.0	16.0	15.9	7.9	16.9	26.3		17.5	21.9	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	3.1	1.5	0.2	0.1	0.5	0.0	8.2	18.8		18.4	3.6	
Delay (s)	26.0	23.7	21.2	16.1	16.4	8.0	25.1	45.1		36.0	25.5	
Level of Service	C	C	C	B	B	A	C	D		D	C	
Approach Delay (s)		23.9			13.0			38.6			30.0	
Approach LOS		C			B			D			C	

Intersection Summary			
HCM Average Control Delay	29.2	HCM Level of Service	C
HCM Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	12.2
Intersection Capacity Utilization	68.7%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	20	130	0	90	340	430	0	130	40	210	60	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	12	12	12	12	11	12	12	16	12
Storage Length (ft)	0		100	0		210	0		0	0		0
Storage Lanes	0		1	0		1	0		0	0		0
Taper Length (ft)	25		100	25		100	25		25	25		25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850		0.968			0.991	
Flt Protected		0.993			0.990						0.965	
Satd. Flow (prot)	0	1743	1837	0	1866	1615	0	1760	0	0	2024	0
Flt Permitted		0.993			0.990						0.965	
Satd. Flow (perm)	0	1743	1837	0	1866	1615	0	1760	0	0	2024	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		892			1090			461			1200	
Travel Time (s)		20.3			24.8			10.5			27.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	10%	8%	0%	0%	1%	0%	0%	1%	1%	0%	0%	25%
Adj. Flow (vph)	22	141	0	98	370	467	0	141	43	228	65	22
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	163	0	0	468	467	0	184	0	0	315	0
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other

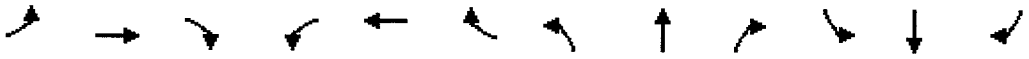
Control Type: Unsignalized



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	20	130	0	90	340	430	0	130	40	210	60	20
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	22	141	0	98	370	467	0	141	43	228	65	22

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1
Volume Total (vph)	163	0	467	467	185	315
Volume Left (vph)	22	0	98	0	0	228
Volume Right (vph)	0	0	0	467	43	22
Hadj (s)	0.21	0.00	0.12	-0.70	-0.12	0.13
Departure Headway (s)	8.0	7.8	6.8	6.0	7.2	7.0
Degree Utilization, x	0.36	0.00	0.89	0.78	0.37	0.61
Capacity (veh/h)	426	449	520	589	473	496
Control Delay (s)	14.3	9.6	41.6	25.8	14.3	20.4
Approach Delay (s)	14.3		33.7		14.3	20.4
Approach LOS	B		D		B	C

Intersection Summary				
Delay	26.9			
HCM Level of Service	D			
Intersection Capacity Utilization	69.4%	ICU Level of Service	C	
Analysis Period (min)	15			



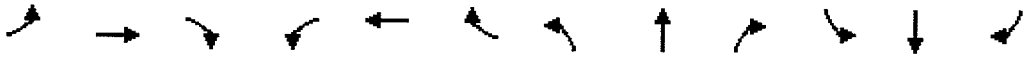
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Volume (vph)	140	6	130	8	3	4	100	220	6	13	200	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	12	12	11	12	12	13	12	12	13	12
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.936			0.960			0.997			0.957	
Flt Protected		0.975			0.974			0.985			0.998	
Satd. Flow (prot)	0	1919	0	0	1607	0	0	1877	0	0	1779	0
Flt Permitted		0.975			0.974			0.985			0.998	
Satd. Flow (perm)	0	1919	0	0	1607	0	0	1877	0	0	1779	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		965			377			732			1399	
Travel Time (s)		21.9			8.6			16.6			31.8	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	2%	0%	3%	13%	0%	0%	0%	4%	0%	0%	5%	7%
Adj. Flow (vph)	159	7	148	9	3	5	114	250	7	15	227	114
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	314	0	0	17	0	0	371	0	0	356	0
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	140	6	130	8	3	4	100	220	6	13	200	100
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Hourly flow rate (vph)	159	7	148	9	3	5	114	250	7	15	227	114

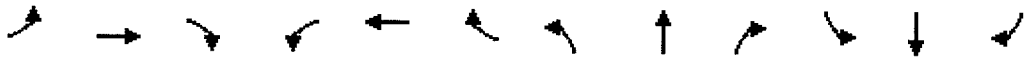
Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	314	17	370	356
Volume Left (vph)	159	9	114	15
Volume Right (vph)	148	5	7	114
Hadj (s)	-0.14	0.06	0.10	-0.09
Departure Headway (s)	5.7	6.7	5.6	5.4
Degree Utilization, x	0.50	0.03	0.57	0.54
Capacity (veh/h)	582	418	611	630
Control Delay (s)	14.3	9.9	15.8	14.5
Approach Delay (s)	14.3	9.9	15.8	14.5
Approach LOS	B	A	C	B

Intersection Summary			
Delay	14.9		
HCM Level of Service	B		
Intersection Capacity Utilization	64.3%	ICU Level of Service	C
Analysis Period (min)	15		



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Volume (vph)	50	250	10	10	450	130	10	0	10	210	10	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	14	12	12	14	12	12	16	12	12	16	12
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.996			0.970			0.932			0.967	
Flt Protected		0.992			0.999			0.976			0.965	
Satd. Flow (prot)	0	1958	0	0	1892	0	0	1959	0	0	1953	0
Flt Permitted		0.992			0.999			0.976			0.965	
Satd. Flow (perm)	0	1958	0	0	1892	0	0	1959	0	0	1953	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1278			2158			895			916	
Travel Time (s)		29.0			49.0			20.3			20.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	4%	2%	0%	0%	5%	0%	0%	0%	0%	4%	0%	0%
Adj. Flow (vph)	54	272	11	11	489	141	11	0	11	228	11	76
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	337	0	0	641	0	0	22	0	0	315	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Volume (veh/h)	50	250	10	10	450	130	10	0	10	210	10	70
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	54	272	11	11	489	141	11	0	11	228	11	76
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	630			283			1049	1038	277	978	973	560
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	630			283			1049	1038	277	978	973	560
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	94			99			93	100	99	0	95	86
cM capacity (veh/h)	942			1291			163	217	766	213	238	532

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	337	641	22	315
Volume Left	54	11	11	228
Volume Right	11	141	11	76
cSH	942	1291	269	250
Volume to Capacity	0.06	0.01	0.08	1.26
Queue Length 95th (ft)	5	1	7	392
Control Delay (s)	2.0	0.2	19.6	185.4
Lane LOS	A	A	C	F
Approach Delay (s)	2.0	0.2	19.6	185.4
Approach LOS			C	F

Intersection Summary			
Average Delay	45.4		
Intersection Capacity Utilization	73.4%	ICU Level of Service	D
Analysis Period (min)	15		

2005.147.A20

TRAFFIC DATA SOLUTIONS

Route 44
400 feet west of Route 195
Mansfield, CT

Site Code: 00000000000000000000
Station ID: 00000000000000000000

Latitude: 0' 0.000 Undefined

Start	30-Oct-06		Tue		Wed		Thu		Fri		Sat		Sun		Week Average	
Time	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
12:00 AM	*	*	*	*	*	*	26	24	34	33	*	*	*	*	30	28
01:00	*	*	*	*	*	*	14	12	31	21	*	*	*	*	22	16
02:00	*	*	*	*	*	*	9	10	9	13	*	*	*	*	9	12
03:00	*	*	*	*	*	*	3	10	11	7	*	*	*	*	7	8
04:00	*	*	*	*	*	*	9	10	11	17	*	*	*	*	10	14
05:00	*	*	*	*	*	*	23	45	22	39	*	*	*	*	22	42
06:00	*	*	*	*	*	*	73	158	62	151	*	*	*	*	68	154
07:00	*	*	*	*	*	*	151	**289**	160	223	*	*	*	*	156	256
08:00	*	*	*	*	*	*	**222**	270	258	251	*	*	*	*	**240**	**260**
09:00	*	*	*	*	*	*	186	216	218	227	*	*	*	*	202	222
10:00	*	*	*	*	217	189	190	207	230	230	*	*	*	*	212	209
11:00	*	*	*	*	**221**	**198**	214	197	**260**	**256**	*	*	*	*	232	217
12:00 PM	*	*	*	*	223	259	266	277	**309**	**310**	*	*	*	*	266	282
01:00	*	*	*	*	210	219	244	253	298	308	*	*	*	*	251	260
02:00	*	*	*	*	300	296	280	284	*	*	*	*	*	*	290	290
03:00	*	*	*	*	341	286	388	327	*	*	*	*	*	*	364	306
04:00	*	*	*	*	358	300	388	**330**	*	*	*	*	*	*	373	315
05:00	*	*	*	*	**360**	**340**	**408**	301	*	*	*	*	*	*	**384**	**320**
06:00	*	*	*	*	282	238	311	287	*	*	*	*	*	*	296	262
07:00	*	*	*	*	195	158	191	221	*	*	*	*	*	*	193	190
08:00	*	*	*	*	153	157	181	177	*	*	*	*	*	*	167	167
09:00	*	*	*	*	155	147	158	154	*	*	*	*	*	*	156	150
10:00	*	*	*	*	80	63	86	86	*	*	*	*	*	*	83	74
11:00	*	*	*	*	40	41	50	57	*	*	*	*	*	*	45	49
Lane	0	0	0	0	3135	2891	4071	4202	1913	2086	0	0	0	0	4078	4103
Day	0		0		6026		8273		3999		0		0		8181	
AM Peak					11:00	11:00	08:00	07:00	11:00	11:00					08:00	08:00
Vol.					221	198	222	289	260	256					240	260
PM Peak					17:00	17:00	17:00	16:00	12:00	12:00					17:00	17:00
Vol.					360	340	408	330	309	310					384	320

Comb. Total	0	0	6026	8273	3999	0	0	8181

ADT Not Calculated

COPY

TRAFFIC DATA SOLUTIONS

Site Code: 00000000000000000000
Station ID: 00000000000000000000

Moulton Road
300 feet northeast of Rte 195
Mansfield, CT

Latitude: 0' 0.000 Undefined

Start Time	30-Oct-06 NB	30-Oct-06 SB	Tue NB	Tue SB	Wed NB	Wed SB	Thu NB	Thu SB	Fri NB	Fri SB	Sat NB	Sat SB	Sun NB	Sun SB	Week Average NB	Week Average SB
12:00 AM	*	*	*	*	*	*	2	29	4	23	*	*	*	*	3	26
01:00	*	*	*	*	*	*	1	4	2	16	*	*	*	*	2	10
02:00	*	*	*	*	*	*	0	9	0	5	*	*	*	*	0	7
03:00	*	*	*	*	*	*	0	0	1	5	*	*	*	*	0	2
04:00	*	*	*	*	*	*	0	0	0	2	*	*	*	*	0	1
05:00	*	*	*	*	*	*	2	3	0	0	*	*	*	*	1	2
06:00	*	*	*	*	*	*	4	6	5	6	*	*	*	*	4	6
07:00	*	*	*	*	*	*	24	25	6	18	*	*	*	*	15	22
08:00	*	*	*	*	*	*	10	11	16	23	*	*	*	*	13	17
09:00	*	*	*	*	*	*	15	32	17	36	*	*	*	*	16	34
10:00	*	*	*	*	9	39	8	34	6	49	*	*	*	*	8	41
11:00	*	*	*	*	9	30	11	43	6	40	*	*	*	*	9	38
12:00 PM	*	*	*	*	11	54	9	76	14	61	*	*	*	*	11	60
01:00	*	*	*	*	6	61	9	53	*	*	*	*	*	*	8	57
02:00	*	*	*	*	4	98	6	80	*	*	*	*	*	*	5	89
03:00	*	*	*	*	9	96	11	113	*	*	*	*	*	*	10	104
04:00	*	*	*	*	6	130	5	95	*	*	*	*	*	*	6	112
05:00	*	*	*	*	9	110	11	103	*	*	*	*	*	*	10	106
06:00	*	*	*	*	11	73	9	73	*	*	*	*	*	*	10	73
07:00	*	*	*	*	10	65	6	58	*	*	*	*	*	*	8	62
08:00	*	*	*	*	4	66	8	49	*	*	*	*	*	*	6	58
09:00	*	*	*	*	1	73	2	77	*	*	*	*	*	*	2	75
10:00	*	*	*	*	5	45	11	40	*	*	*	*	*	*	8	42
11:00	*	*	*	*	1	34	4	37	*	*	*	*	*	*	2	36
Lane	0	0	0	0	95	974	168	1050	77	274	0	0	0	0	157	1080
Day	0		0		1069		1218		351		0		0		1237	
AM Peak					10:00	10:00	07:00	11:00	09:00	10:00					09:00	10:00
Vol.					9	39	24	43	17	49					16	41
PM Peak					12:00	16:00	15:00	15:00	12:00	12:00					12:00	16:00
Vol.					11	130	11	113	14	51					11	112
Comb. Total	0		0		1069		1218		351		0		0		1237	

ADT Not Calculated

COPY

TRAFFIC DATA SOLUTIONS

Site Code: 00000000000000000100
Station ID: 00000000000000000000

Route 195
300 feet north of North Eagleville Road
Mansfield, CT

Latitude: 0' 0.000 Undefined

Start	04-Dec-06		Tue		Wed		Thu		Fri		Sat		Sun		Week Average	
Time	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB
12:00 AM	*	*	91	132	69	125	*	*	*	*	*	*	*	*	80	128
01:00	*	*	44	76	35	68	*	*	*	*	*	*	*	*	40	72
02:00	*	*	20	39	18	43	*	*	*	*	*	*	*	*	19	41
03:00	*	*	25	21	25	22	*	*	*	*	*	*	*	*	25	22
04:00	*	*	19	18	15	19	*	*	*	*	*	*	*	*	17	18
05:00	*	*	91	44	120	36	*	*	*	*	*	*	*	*	106	40
06:00	*	*	260	142	264	138	*	*	*	*	*	*	*	*	262	140
07:00	*	*	**763**	241	642	225	*	*	*	*	*	*	*	*	702	233
08:00	*	*	709	280	**761**	269	*	*	*	*	*	*	*	*	**735**	274
09:00	**642**	346	712	267	667	326	*	*	*	*	*	*	*	*	674	313
10:00	614	367	574	321	512	**374**	*	*	*	*	*	*	*	*	567	354
11:00	547	**462**	464	**445**	*	*	*	*	*	*	*	*	*	*	506	**454**
12:00 PM	**550**	565	473	492	*	*	*	*	*	*	*	*	*	*	512	528
01:00	511	522	519	453	*	*	*	*	*	*	*	*	*	*	**515**	488
02:00	508	553	429	586	*	*	*	*	*	*	*	*	*	*	468	570
03:00	466	622	**546**	616	*	*	*	*	*	*	*	*	*	*	506	619
04:00	428	**721**	444	668	*	*	*	*	*	*	*	*	*	*	436	694
05:00	537	713	434	**692**	*	*	*	*	*	*	*	*	*	*	486	**702**
06:00	468	549	488	667	*	*	*	*	*	*	*	*	*	*	478	608
07:00	339	555	406	499	*	*	*	*	*	*	*	*	*	*	372	527
08:00	331	433	287	448	*	*	*	*	*	*	*	*	*	*	309	440
09:00	217	367	256	433	*	*	*	*	*	*	*	*	*	*	236	400
10:00	187	289	213	295	*	*	*	*	*	*	*	*	*	*	200	292
11:00	136	228	129	235	*	*	*	*	*	*	*	*	*	*	132	232
Lane	6481	7292	8396	8110	3128	1645	0	0	0	0	0	0	0	0	8383	8189
Day	13773		16506		4773		0		0		0		0		16572	
AM Peak	09:00	11:00	07:00	11:00	08:00	10:00									08:00	11:00
Vol.	642	462	763	445	761	374									735	454
PM Peak	12:00	16:00	15:00	17:00											13:00	17:00
Vol.	550	721	546	692											515	702

Comb. Total	13773	16506	4773	0	0	0	0	16572
ADT	Not Calculated							

TRAFFIC DATA SOLUTIONS

Site Code: 00000000000000201800
Station ID: 00000000000000000000

Route 195
250 feet south of Gurleyville Road
Mansfield, CT

Latitude: 0' 0.000 Undefined

Start Time	30-Oct-06 SB	30-Oct-06 NB	Tue SB	Tue NB	Wed SB	Wed NB	Thu SB	Thu NB	Fri SB	Fri NB	Sat SB	Sat NB	Sun SB	Sun NB	Week Average SB	Week Average NB
12:00 AM	*	*	*	*	*	*	73	94	98	135	*	*	*	*	86	114
01:00	*	*	*	*	*	*	60	69	85	96	*	*	*	*	72	82
02:00	*	*	*	*	*	*	25	36	51	45	*	*	*	*	38	40
03:00	*	*	*	*	*	*	18	36	27	42	*	*	*	*	22	39
04:00	*	*	*	*	*	*	14	27	14	29	*	*	*	*	14	28
05:00	*	*	*	*	*	*	62	67	70	55	*	*	*	*	66	61
06:00	*	*	*	*	*	*	215	193	201	189	*	*	*	*	208	191
07:00	*	*	*	*	*	*	391	**381**	**424**	322	*	*	*	*	**408**	352
08:00	*	*	*	*	*	*	**397**	343	396	327	*	*	*	*	396	335
09:00	*	*	*	*	*	*	351	309	376	406	*	*	*	*	364	358
10:00	*	*	*	*	291	231	330	309	339	363	*	*	*	*	320	301
11:00	*	*	*	*	**358**	**354**	348	348	408	**407**	*	*	*	*	371	**370**
12:00 PM	*	*	*	*	352	357	**403**	345	**329**	**351**	*	*	*	*	361	351
01:00	*	*	*	*	363	361	382	338	*	*	*	*	*	*	**372**	350
02:00	*	*	*	*	273	315	374	**392**	*	*	*	*	*	*	324	354
03:00	*	*	*	*	327	280	262	215	*	*	*	*	*	*	294	248
04:00	*	*	*	*	313	295	313	236	*	*	*	*	*	*	313	266
05:00	*	*	*	*	311	242	326	281	*	*	*	*	*	*	318	262
06:00	*	*	*	*	**381**	334	320	278	*	*	*	*	*	*	350	306
07:00	*	*	*	*	353	**420**	379	353	*	*	*	*	*	*	366	**386**
08:00	*	*	*	*	255	349	289	336	*	*	*	*	*	*	272	342
09:00	*	*	*	*	241	364	183	312	*	*	*	*	*	*	212	338
10:00	*	*	*	*	162	239	200	196	*	*	*	*	*	*	181	218
11:00	*	*	*	*	119	171	111	193	*	*	*	*	*	*	115	182
Lane	0	0	0	0	4099	4312	5826	5687	2818	2767	0	0	0	0	5843	5874
Day	0		0		8411		11513		5585		0		0		11717	
AM Peak					11:00	11:00	08:00	07:00	07:00	11:00					07:00	11:00
Vol.					358	354	397	381	424	407					408	370
PM Peak					18:00	19:00	12:00	14:00	12:00	12:00					13:00	19:00
Vol.					381	420	403	392	329	351					372	386

Comb. Total	0		0		8411		11513		5585		0		0		11717	

ADT Not Calculated

COPY

TRAFFIC DATA SOLUTIONS

Site Code: 00000000000000000000
Station ID: 00000000000000000000

North Eagleville Road
200 feet east of North Hillside Road
Mansfield, CT

Latitude: 0' 0.000 Undefined

Start	04-Dec-06		Tue		Wed		Thu		Fri		Sat		Sun		Week Average	
Time	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
12:00 AM	*	*	77	82	64	65	*	*	*	*	*	*	*	*	70	74
01:00	*	*	26	29	31	41	*	*	*	*	*	*	*	*	28	35
02:00	*	*	14	19	15	15	*	*	*	*	*	*	*	*	14	17
03:00	*	*	36	4	46	6	*	*	*	*	*	*	*	*	41	5
04:00	*	*	8	9	13	8	*	*	*	*	*	*	*	*	10	8
05:00	*	*	45	17	45	10	*	*	*	*	*	*	*	*	45	14
06:00	*	*	125	52	144	54	*	*	*	*	*	*	*	*	134	53
07:00	*	*	366	110	301	94	*	*	*	*	*	*	*	*	334	102
08:00	*	*	346	152	**387**	160	*	*	*	*	*	*	*	*	**366**	156
09:00	*	*	**368**	152	348	155	*	*	*	*	*	*	*	*	358	154
10:00	**325**	158	314	196	278	**179**	*	*	*	*	*	*	*	*	306	178
11:00	284	**237**	250	**201**	*	*	*	*	*	*	*	*	*	*	267	**219**
12:00 PM	294	278	**275**	267	*	*	*	*	*	*	*	*	*	*	284	272
01:00	**308**	276	266	273	*	*	*	*	*	*	*	*	*	*	**287**	274
02:00	262	253	224	234	*	*	*	*	*	*	*	*	*	*	243	244
03:00	226	345	255	326	*	*	*	*	*	*	*	*	*	*	240	336
04:00	234	323	216	**368**	*	*	*	*	*	*	*	*	*	*	225	**346**
05:00	246	**348**	245	296	*	*	*	*	*	*	*	*	*	*	246	322
06:00	222	299	264	291	*	*	*	*	*	*	*	*	*	*	243	295
07:00	217	254	225	243	*	*	*	*	*	*	*	*	*	*	221	248
08:00	186	195	164	216	*	*	*	*	*	*	*	*	*	*	175	206
09:00	150	162	136	162	*	*	*	*	*	*	*	*	*	*	143	162
10:00	135	121	145	157	*	*	*	*	*	*	*	*	*	*	140	139
11:00	102	93	96	107	*	*	*	*	*	*	*	*	*	*	99	100
Lane	3191	3342	4486	3963	1672	787	0	0	0	0	0	0	0	0	4519	3959
Day	6533		8449		2459		0		0		0		0		8478	
AM Peak	10:00	11:00	09:00	11:00	08:00	10:00									08:00	11:00
Vol.	325	237	368	201	387	179									366	219
PM Peak	13:00	17:00	12:00	16:00											13:00	16:00
Vol.	308	348	275	368											287	346

Comb. Total	6533	8449	2459	0	0	0	0	8478
ADT	Not Calculated							

TRAFFIC DATA SOLUTIONS

Site Code: 00000000001002001100
Station ID: 00000000000000000000

North Hillside Road
400 feet north of North Eagleville Rd
University of Connecticut

Latitude: 0' 0.000 Undefined

Start	30-Oct-06		Tue		Wed		Thu		Fri		Sat		Sun		Week Average	
Time	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB
12:00 AM	*	*	*	*	*	*	68	73	73	79	*	*	*	*	70	76
01:00	*	*	*	*	*	*	32	29	55	45	*	*	*	*	44	37
02:00	*	*	*	*	*	*	4	4	37	30	*	*	*	*	20	17
03:00	*	*	*	*	*	*	11	12	16	14	*	*	*	*	14	13
04:00	*	*	*	*	*	*	5	7	9	16	*	*	*	*	7	12
05:00	*	*	*	*	*	*	28	19	24	22	*	*	*	*	26	20
06:00	*	*	*	*	*	*	49	66	60	78	*	*	*	*	54	72
07:00	*	*	*	*	*	*	114	98	122	100	*	*	*	*	118	99
08:00	*	*	*	*	*	*	175	**148**	153	134	*	*	*	*	164	**141**
09:00	*	*	*	*	*	*	134	127	165	137	*	*	*	*	150	132
10:00	*	*	*	*	*	*	**184**	115	**211**	129	*	*	*	*	**198**	122
11:00	*	*	*	*	*	*	145	125	205	**152**	*	*	*	*	175	138
12:00 PM	*	*	*	*	*	*	215	97	**217**	**139**	*	*	*	*	216	118
01:00	*	*	*	*	220	132	183	164	*	*	*	*	*	*	202	148
02:00	*	*	*	*	198	**148**	198	142	*	*	*	*	*	*	198	145
03:00	*	*	*	*	239	131	264	143	*	*	*	*	*	*	252	137
04:00	*	*	*	*	**257**	147	**282**	137	*	*	*	*	*	*	**270**	142
05:00	*	*	*	*	221	124	215	125	*	*	*	*	*	*	218	124
06:00	*	*	*	*	179	138	198	**172**	*	*	*	*	*	*	188	**155**
07:00	*	*	*	*	120	125	150	165	*	*	*	*	*	*	135	145
08:00	*	*	*	*	113	114	198	168	*	*	*	*	*	*	156	141
09:00	*	*	*	*	158	124	185	149	*	*	*	*	*	*	172	136
10:00	*	*	*	*	126	118	155	117	*	*	*	*	*	*	140	118
11:00	*	*	*	*	86	91	105	108	*	*	*	*	*	*	96	100
Lane	0	0	0	0	1917	1392	3297	2510	1347	1075	0	0	0	0	3283	2488
Day	0		0		3309		5807		2422		0		0		5771	
AM Peak							10:00	08:00	10:00	11:00					10:00	08:00
Vol.							184	148	211	152					198	141
PM Peak					16:00	14:00	16:00	18:00	12:00	12:00					16:00	18:00
Vol.					257	148	282	172	217	139					270	155

Comb. Total	0		0		3309		5807		2422		0		0		5771	

ADT Not Calculated

COPY

TRAFFIC DATA SOLUTIONS

South Eagleville Road
300 feet west of Route 195
Mansfield, CT

Site Code: 00000000000000000000
Station ID: 00000000000000000000

Latitude: 0' 0.000 Undefined

Start	30-Oct-06		Tue		Wed		Thu		Fri		Sat		Sun		Week Average	
Time	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
12:00 AM	*	*	*	*	*	*	34	36	51	32	*	*	*	*	42	34
01:00	*	*	*	*	*	*	25	17	39	19	*	*	*	*	32	18
02:00	*	*	*	*	*	*	15	10	19	11	*	*	*	*	17	10
03:00	*	*	*	*	*	*	8	11	10	5	*	*	*	*	9	8
04:00	*	*	*	*	*	*	11	6	10	6	*	*	*	*	10	6
05:00	*	*	*	*	*	*	26	47	28	45	*	*	*	*	27	46
06:00	*	*	*	*	*	*	88	76	81	64	*	*	*	*	84	70
07:00	*	*	*	*	*	*	**283**	220	**276**	207	*	*	*	*	**280**	214
08:00	*	*	*	*	*	*	228	**223**	231	**211**	*	*	*	*	230	**217**
09:00	*	*	*	*	*	*	198	174	192	179	*	*	*	*	195	176
10:00	*	*	*	*	*	*	177	169	164	180	*	*	*	*	170	174
11:00	*	*	*	*	**161**	**169**	160	136	186	163	*	*	*	*	169	156
12:00 PM	*	*	*	*	205	201	209	171	**218**	**196**	*	*	*	*	211	189
01:00	*	*	*	*	194	180	217	190	*	*	*	*	*	*	206	185
02:00	*	*	*	*	256	213	225	223	*	*	*	*	*	*	240	218
03:00	*	*	*	*	259	295	281	295	*	*	*	*	*	*	270	295
04:00	*	*	*	*	315	302	313	**338**	*	*	*	*	*	*	314	320
05:00	*	*	*	*	**338**	**330**	**320**	335	*	*	*	*	*	*	**329**	**332**
06:00	*	*	*	*	261	278	300	246	*	*	*	*	*	*	280	262
07:00	*	*	*	*	191	182	229	179	*	*	*	*	*	*	210	180
08:00	*	*	*	*	159	128	162	91	*	*	*	*	*	*	160	110
09:00	*	*	*	*	174	155	170	246	*	*	*	*	*	*	172	200
10:00	*	*	*	*	107	84	95	75	*	*	*	*	*	*	101	80
11:00	*	*	*	*	53	42	66	50	*	*	*	*	*	*	60	46
Lane	0	0	0	0	2673	2559	3840	3564	1505	1318	0	0	0	0	3818	3546
Day	0		0		5232		7404		2823		0		0		7364	
AM Peak					11:00	11:00	07:00	08:00	07:00	08:00					07:00	08:00
Vol.					161	169	283	223	276	211					280	217
PM Peak					17:00	17:00	17:00	16:00	12:00	12:00					17:00	17:00
Vol.					338	330	320	338	218	196					329	332

Comb. Total	0		0		5232		7404		2823		0		0		7364	
ADT	Not Calculated															

COPY

Site Code: 00000000000000000000
Station ID: 00000000000000000000

Alumni Road
300 feet southwest of Hillside Road
University of Connecticut

Latitude: 0' 0.000 Undefined

Start Time	30-Oct-06 NEB	30-Oct-06 SWB	Tue NEB	Tue SWB	Wed NEB	Wed SWB	Thu NEB	Thu SWB	Fri NEB	Fri SWB	Sat NEB	Sat SWB	Sun NEB	Sun SWB	Week Average NEB	Week Average SWB
12:00 AM	*	*	*	*	*	*	39	34	44	49	*	*	*	*	42	42
01:00	*	*	*	*	*	*	29	13	49	32	*	*	*	*	39	22
02:00	*	*	*	*	*	*	11	5	14	11	*	*	*	*	12	8
03:00	*	*	*	*	*	*	4	1	7	4	*	*	*	*	6	2
04:00	*	*	*	*	*	*	2	3	1	1	*	*	*	*	2	2
05:00	*	*	*	*	*	*	4	5	6	10	*	*	*	*	5	8
06:00	*	*	*	*	*	*	23	20	17	27	*	*	*	*	20	24
07:00	*	*	*	*	*	*	80	46	54	45	*	*	*	*	67	46
08:00	*	*	*	*	*	*	78	33	52	51	*	*	*	*	65	42
09:00	*	*	*	*	*	*	104	32	53	64	*	*	*	*	78	48
10:00	*	*	*	*	*	*	118	18	55	74	*	*	*	*	86	46
11:00	*	*	*	*	*	*	88	28	70	106	*	*	*	*	79	67
12:00 PM	*	*	*	*	73	76	103	82	112	90	*	*	*	*	96	83
01:00	*	*	*	*	83	99	77	84	82	83	*	*	*	*	81	89
02:00	*	*	*	*	82	94	80	76	*	*	*	*	*	*	81	85
03:00	*	*	*	*	121	107	105	111	*	*	*	*	*	*	113	109
04:00	*	*	*	*	113	142	126	115	*	*	*	*	*	*	120	128
05:00	*	*	*	*	208	210	190	168	*	*	*	*	*	*	199	189
06:00	*	*	*	*	170	149	198	158	*	*	*	*	*	*	184	154
07:00	*	*	*	*	147	120	140	92	*	*	*	*	*	*	144	106
08:00	*	*	*	*	116	81	114	96	*	*	*	*	*	*	115	88
09:00	*	*	*	*	179	89	217	85	*	*	*	*	*	*	198	87
10:00	*	*	*	*	91	92	86	79	*	*	*	*	*	*	88	86
11:00	*	*	*	*	51	37	57	46	*	*	*	*	*	*	54	42
Lane	0	0	0	0	1434	1296	2073	1430	616	647	0	0	0	0	1974	1603
Day	0		0		2730		3503		1263		0		0		3577	
AM Peak							10:00	07:00	11:00	11:00					10:00	11:00
Vol.							118	46	70	106					86	67
PM Peak					17:00	17:00	21:00	17:00	12:00	12:00					17:00	17:00
Vol.					208	210	217	168	112	90					199	189

Comb. Total	0		0		2730		3503		1263		0		0		3577	

ADT Not Calculated

COPY

TRAFFIC DATA SOLUTIONS

Site Code: 00000000000000000300
Station ID: 00000000000000000000

Hillside Road
100 feet south of Alumni Road
Mansfield, CT

Latitude: 0' 0.000 Undefined

Start Time	04-Dec-06 NB	04-Dec-06 SB	Tue NB	Tue SB	Wed NB	Wed SB	Thu NB	Thu SB	Fri NB	Fri SB	Sat NB	Sat SB	Sun NB	Sun SB	Week Average NB	Week Average SB
12:00 AM	*	*	78	51	77	44	*	*	*	*	*	*	*	*	78	48
01:00	*	*	54	18	50	25	*	*	*	*	*	*	*	*	52	22
02:00	*	*	10	8	12	11	*	*	*	*	*	*	*	*	11	10
03:00	*	*	13	7	10	9	*	*	*	*	*	*	*	*	12	8
04:00	*	*	9	7	9	7	*	*	*	*	*	*	*	*	9	7
05:00	*	*	11	17	9	15	*	*	*	*	*	*	*	*	10	16
06:00	*	*	30	48	36	46	*	*	*	*	*	*	*	*	33	47
07:00	*	*	147	135	122	112	*	*	*	*	*	*	*	*	134	124
08:00	*	*	150	138	169	181	*	*	*	*	*	*	*	*	160	160
09:00	*	*	188	190	169	183	*	*	*	*	*	*	*	*	178	186
10:00	102	115	177	173	177	150	*	*	*	*	*	*	*	*	152	146
11:00	191	173	175	144	*	*	*	*	*	*	*	*	*	*	183	158
12:00 PM	186	198	205	200	*	*	*	*	*	*	*	*	*	*	196	199
01:00	199	213	213	209	*	*	*	*	*	*	*	*	*	*	206	211
02:00	188	206	179	159	*	*	*	*	*	*	*	*	*	*	184	182
03:00	218	193	205	223	*	*	*	*	*	*	*	*	*	*	212	208
04:00	224	278	173	247	*	*	*	*	*	*	*	*	*	*	198	262
05:00	244	286	246	260	*	*	*	*	*	*	*	*	*	*	245	273
06:00	208	229	244	260	*	*	*	*	*	*	*	*	*	*	226	244
07:00	198	203	228	220	*	*	*	*	*	*	*	*	*	*	213	212
08:00	208	173	229	166	*	*	*	*	*	*	*	*	*	*	218	170
09:00	206	149	184	112	*	*	*	*	*	*	*	*	*	*	195	130
10:00	154	101	153	121	*	*	*	*	*	*	*	*	*	*	154	111
11:00	141	71	135	83	*	*	*	*	*	*	*	*	*	*	138	77
Lane	2667	2588	3436	3196	840	783	0	0	0	0	0	0	0	0	3397	3211
Day	5255		6632		1623		0		0		0		0		6608	
AM Peak	11:00	11:00	09:00	09:00	10:00	09:00									11:00	09:00
Vol.	191	173	188	190	177	183									183	186
PM Peak	17:00	17:00	17:00	17:00											17:00	17:00
Vol.	244	286	246	260											245	273

Comb. Total	5255	6632	1623	0	0	0	0	6608
ADT	Not Calculated							

TRAFFIC DATA SOLUTIONS

Stadium Road
250 feet west of Hillside Road
University of Connecticut

Site Code: 00000000000000000000
Station ID: 00000000000000000000

Latitude: 0' 0.000 Undefined

Start	30-Oct-06		Tue		Wed		Thu		Fri		Sat		Sun		Week Average	
Time	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
12:00 AM	*	*	*	*	*	*	18	44	42	51	*	*	*	*	30	48
01:00	*	*	*	*	*	*	9	25	22	43	*	*	*	*	16	34
02:00	*	*	*	*	*	*	6	12	6	21	*	*	*	*	6	16
03:00	*	*	*	*	*	*	2	3	3	5	*	*	*	*	2	4
04:00	*	*	*	*	*	*	3	5	1	2	*	*	*	*	2	4
05:00	*	*	*	*	*	*	11	6	14	8	*	*	*	*	12	7
06:00	*	*	*	*	*	*	38	22	35	20	*	*	*	*	36	21
07:00	*	*	*	*	*	*	160	48	109	40	*	*	*	*	134	44
08:00	*	*	*	*	*	*	156	51	138	64	*	*	*	*	147	58
09:00	*	*	*	*	*	*	166	67	90	83	*	*	*	*	128	75
10:00	*	*	*	*	*	*	125	110	115	68	*	*	*	*	120	89
11:00	*	*	*	*	*	*	98	73	133	98	*	*	*	*	116	86
12:00 PM	*	*	*	*	*	*	128	129	111	124	*	*	*	*	120	126
01:00	*	*	*	*	131	114	118	119	*	*	*	*	*	*	124	116
02:00	*	*	*	*	101	143	82	121	*	*	*	*	*	*	92	132
03:00	*	*	*	*	130	173	117	164	*	*	*	*	*	*	124	168
04:00	*	*	*	*	161	227	153	231	*	*	*	*	*	*	157	229
05:00	*	*	*	*	200	302	155	227	*	*	*	*	*	*	178	264
06:00	*	*	*	*	259	183	361	190	*	*	*	*	*	*	310	186
07:00	*	*	*	*	153	130	110	123	*	*	*	*	*	*	132	126
08:00	*	*	*	*	44	145	41	134	*	*	*	*	*	*	42	140
09:00	*	*	*	*	69	339	50	343	*	*	*	*	*	*	60	341
10:00	*	*	*	*	66	93	70	90	*	*	*	*	*	*	68	92
11:00	*	*	*	*	45	70	49	52	*	*	*	*	*	*	47	61
Lane	0	0	0	0	1359	1919	2226	2389	819	627	0	0	0	0	2203	2467
Day	0		0		3278		4615		1446		0		0		4670	
AM Peak							09:00	10:00	08:00	11:00					08:00	10:00
Vol.							166	110	138	98					147	89
PM Peak					18:00	21:00	18:00	21:00	12:00	12:00					18:00	21:00
Vol.					259	339	361	343	111	124					310	341

Comb. Total	0		0		3278		4615		1446		0		0		4670	

ADT Not Calculated

COPY

TRAFFIC DATA SOLUTIONS

Site Code: 00000000000000000000
Station ID: 00000000000000000000

Separtist Road
450 feet south of Stadium Road
Mansfield, CT

Latitude: 0' 0.000 Undefined

Start Time	04-Dec-06		Tue		Wed		Thu		Fri		Sat		Sun		Week Average	
	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
12:00 AM	*	*	11	33	14	25	*	*	*	*	*	*	*	*	12	29
01:00	*	*	5	9	8	8	*	*	*	*	*	*	*	*	6	8
02:00	*	*	7	3	6	4	*	*	*	*	*	*	*	*	6	4
03:00	*	*	4	2	3	2	*	*	*	*	*	*	*	*	4	2
04:00	*	*	4	1	3	3	*	*	*	*	*	*	*	*	4	2
05:00	*	*	6	10	6	8	*	*	*	*	*	*	*	*	6	9
06:00	*	*	34	10	26	9	*	*	*	*	*	*	*	*	30	10
07:00	*	*	112	46	120	57	*	*	*	*	*	*	*	*	116	52
08:00	*	*	122	51	116	38	*	*	*	*	*	*	*	*	119	44
09:00	*	*	97	45	99	57	*	*	*	*	*	*	*	*	98	51
10:00	*	*	87	52	78	62	*	*	*	*	*	*	*	*	82	57
11:00	70	51	69	66	76	54	*	*	*	*	*	*	*	*	72	57
12:00 PM	62	69	81	91	*	*	*	*	*	*	*	*	*	*	72	80
01:00	74	73	63	84	*	*	*	*	*	*	*	*	*	*	68	78
02:00	73	97	61	96	*	*	*	*	*	*	*	*	*	*	67	96
03:00	88	185	94	198	*	*	*	*	*	*	*	*	*	*	91	192
04:00	96	151	101	171	*	*	*	*	*	*	*	*	*	*	98	161
05:00	84	164	94	140	*	*	*	*	*	*	*	*	*	*	89	152
06:00	82	115	88	110	*	*	*	*	*	*	*	*	*	*	85	112
07:00	54	71	56	76	*	*	*	*	*	*	*	*	*	*	55	74
08:00	59	60	35	67	*	*	*	*	*	*	*	*	*	*	47	64
09:00	37	49	42	55	*	*	*	*	*	*	*	*	*	*	40	52
10:00	28	25	32	31	*	*	*	*	*	*	*	*	*	*	30	28
11:00	13	26	11	25	*	*	*	*	*	*	*	*	*	*	12	26
Lane	820	1136	1316	1472	555	327	0	0	0	0	0	0	0	0	1309	1440
Day	1956		2788		882		0		0		0		0		2749	
AM Peak	11:00	11:00	08:00	11:00	07:00	10:00									08:00	10:00
Vol.	70	51	122	66	120	62									119	57
PM Peak	16:00	15:00	16:00	15:00											16:00	15:00
Vol.	96	185	101	198											98	192

Comb. Total	1956	2788	882	0	0	0	0	2749
ADT	Not Calculated							