

# Chapter 4

# **Existing Infrastructure System Inventory**

The following chapter highlights the existing transportation network that serves the Springfield Line study area. The infrastructure that is discussed includes roadways, livery service, intercity bus, local bus transit, para-transit services, ride-sharing services, and connecting intercity rail. Utilities in the corridor are also evaluated.

## 4.1 Parallel Roadway Traffic Volumes, Speed and Levels of Service

I-91 is the primary parallel roadway competing with potential commuter rail service along the Springfield Line. Route 5, which also serves the corridor, primarily provides local access to commercial land uses, residential land uses and town centers. Speed and delay runs were completed on I-91 during the AM and PM peak periods in the most congested sections of the I-91 corridor; namely, the New Haven, Hartford, and Springfield areas. Specifically, in New Haven, the speed and delay segments were in each direction from Exit 1 to Exit 8. In the Hartford area, the speed and delay segments were in each direction from Exit 21 to Exit 40. Finally, in Springfield, the speed and delay segments were in each direction from Exit 49 in Connecticut, to Exit 13 in Massachusetts. Figures 4.1-1 through 4.1-3 show the travel speeds along Interstate 91 during each peak period for New Haven, Hartford, and Springfield respectively.

As Figure 4.1-1 shows, southbound I-91 in New Haven during the AM peak shows significant speed reduction from Exit 6 to Exit 1, with speeds at or below 35 mph. The remainder of this southbound segment experiences moderate speed reduction during the AM peak. Northbound, there is little to no speed reduction during the AM peak. During the PM peak period, there is a moderate reduction in speed in the southbound direction from Exit 6 to Exit 3, and a more significant speed reduction from Exit 3 to Exit 1. In the northbound direction, there is little to no speed reduction from Exit 1 to Exit 6, with a decrease in speed on approach to Exit 8.

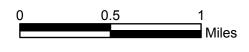
In Hartford, as shown in Figure 4.1-2, there is a significant reduction in travel speed in the southbound direction approaching the downtown area during the AM peak period. The travel speed begins to recover to the south of Hartford, with pockets of lower speeds proximate to major interchanges. In the northbound direction, travel speeds are reduced in the vicinity of Exit 29, and through downtown Hartford. During the PM peak period, southbound delay is less apparent north of Hartford, but moderate reductions in travel speed are still encountered in the downtown area and to the south. In the northbound



Exit 8 Exit 6 Exit 3 **NEW HAVEN** Exit 1

Interstate 91 - AM Peak Period

Interstate 91 - PM Peak Period





# Speed and Delay Results New Haven Area

New Haven - Hartford - Springfield Commuter Rail Feasibility Study

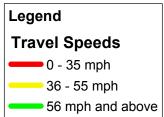
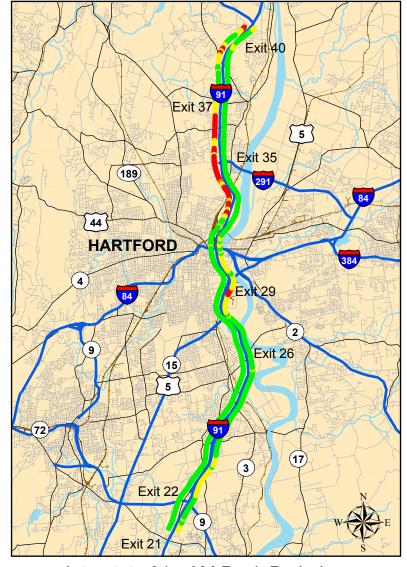
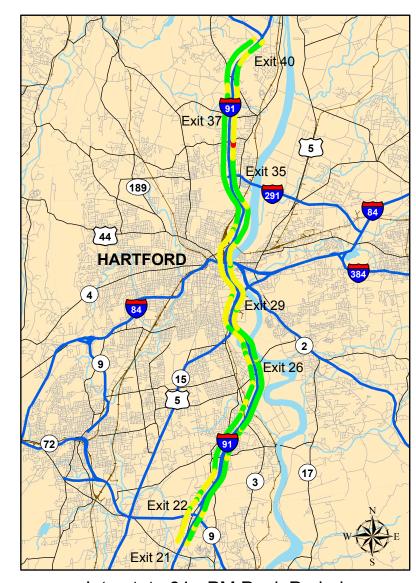


Figure 4.1-1



Interstate 91 - AM Peak Period



Interstate 91 - PM Peak Period





# Speed and Delay Results Hartford Area

New Haven - Hartford - Springfield Commuter Rail Feasibility Study

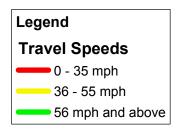
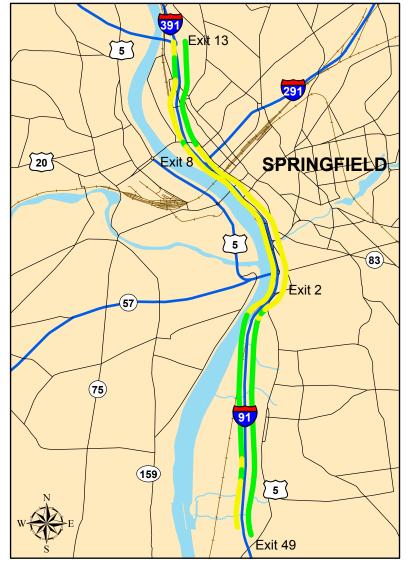


Figure 4.1-2



Exit 13 5 Exit 8 20 SPRINGFIELD 83 Exit 2 **(57)** 159 Interstate 91 - PM Peak Period

Interstate 91 - AM Peak Period







# **Speed and Delay Results Springfield Area**

New Haven - Hartford - Springfield Commuter Rail Feasibility Study

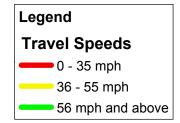


Figure 4.1-3



direction, there is still moderate speed reduction in the vicinity of Exit 29, as well as through downtown Hartford and to the north of Exit 35.

Figure 4.1-3 shows speed and delay results on I-91 in the Springfield area. Of the three locations where speed and delay runs were performed, the Springfield area showed the least delay. Travel speeds were experienced to be similar during both the AM and PM peak periods. Light to moderate delay was experienced both northbound and southbound between Exits 2 and 8, in the vicinity of downtown Springfield.

Level of service (LOS) is a qualitative measure describing driver satisfaction with a number of factors that influence the degree of traffic congestion. These factors include speed and travel time, traffic interruption, freedom of maneuverability, safety, driving comfort and convenience, and delay. In the context of this existing conditions report, LOS was considered for Interstate 91 for its mainline roadway, freeway ramp junctions, and freeway weaves.

In general there are six levels of service describing mainline flow conditions. The highest, Level of Service A, describes a condition of free flow, with low volumes and high speeds. Level of Service B represents a stable traffic flow with operating speeds beginning to be restricted somewhat by traffic conditions. Level of Service C, which is normally utilized for design purposes, describes a stable condition of traffic operation. It entails moderately restricted movements due to higher traffic volumes, but traffic conditions are not objectionable to motorists. Level of Service D reflects a condition of more restrictive movements for motorists and influence of congestion becomes more noticeable. Level of Service E is representative of the actual capacity of the roadway or intersection and involves delay to all motorists due to congestion. The lowest, Level of Service F, is described as force flow and is characterized by volumes greater than the theoretical roadway capacity. Complete congestion occurs, and in extreme cases, the volume passing a given point drops to zero. This is considered as an unacceptable traffic operating condition.

Table 4.1-1 highlights the LOS criteria for freeway sections. Table 4.1-2 highlights the LOS criteria for freeway-ramp junctions. Table 4.1-3 highlights the LOS criteria for freeway weaving sections. All three types of LOS criteria are based on maximum density defined in terms of passenger cars per mile per lane.



Table 4.1-1 LOS Criteria for Freeway Sections

Level of Service	Density Range (passenger cars/mile/lane)
A	0-11
В	>11-18
С	>18-26
D	>26-35
Е	>35-45
F	> 45

Source: 2000 Highway Capacity Manual, Transportation Research Board

Table 4.1-2 LOS Criteria for Freeway-Ramp Junctions

Level of Service	Maximum Density (passenger cars/mile/lane)
A	≤10
В	>10-20
С	>20-28
D	>28-35
Е	>35

Source: 2000 Highway Capacity Manual, Transportation Research Board

Table 4.1-3 LOS Criteria for Weaving Areas

Level of Service	Maximum Density (passenger cars/mile/lane)
A	≤10
В	>10-20
С	>20-28
D	>28-35
Е	>35-43
F	>43

Source: 2000 Highway Capacity Manual, Transportation Research Board

Tables 4.1-4 through 4.1-6 summarize the LOS of I-91 between New Haven and the Massachusetts border. As Table 4.1-4 shows, freeway mainline operations on I- 91 are very acceptable in many locations, but operate at a poor LOS in certain spots. It should be noted that LOS figures are calculated only from roadway volumes and lane capacity, and therefore do not take into account other sources of congestion. For example, on southbound I-91 between Exits 4 and 1 in New Haven, there is substantial congestion caused by backups further downstream on I-95. However, the Levels of Service shown in the table do not take the I-95 congestion into account, but were instead calculated as generally acceptable, based strictly on volumes and numbers of lanes on I-91. (The speed and delay analysis in Figures 4.1-1 to 4.1-3 did take other such delay into consideration).



Table 4.1-4
Existing Condition Freeway Level of Service Analysis (LOS) Summary

Section Alena I 01	Northbound LOS		Southbound LOS		
Section Along I-91	AM Peak	PM Peak	AM Peak	PM Peak	
South of Exit 1	С	D	С	D	
Between Exit 1 and Exit 0	С	D	D	С	
Between Exit 0 and Exit 2	D	D	D	D	
Between Exit 2 and Exit 3	D	D	Е	D	
Between Exit 3 and Exit 4	С	F	D	D	
Between Exit 4 and Exit 5	С	F	Е	D	
Between Exit 5 and Exit 6	С	D	F	D	
Between Exit 6 and Exit 7	С	D	F	D	
Between Exit 7 and Exit 8	С	D	F	Е	
Between Exit 8 and Exit 9	В	С	D	С	
Between Exit 9 and Exit 10	В	С	С	С	
Between Exit 10 and Exit 11	С	С	С	С	
Between Exit 11 and Exit 12	В	С	С	С	
Between Exit 12 and Exit 13	В	С	С	В	
Between Exit 13 and Exit 14	В	С	С	В	
Between Exit 14 and Exit 15	В	С	С	С	
Between Exit 15 and Exit 16	В	С	С	В	
Between Exit 16 and Exit 17	С	С	С	С	
Between Exit 17 and Exit 18	С	С	С	С	
Between Exit 18 and Exit 19	D	С	С	D	
Between Exit 19 and Exit 20	D	С	С	D	
Between Exit 20 and Exit 21	D	С	С	D	
Between Exit 21 and Exit 22	D	D	D	D	
Between Exit 22 and Exit 23	Е	С	С	D	
Between Exit 23 and Exit 24	D	С	С	D	
Between Exit 24 and Exit 25	F	Е	Е	F	
Between Exit 25 and Exit 26	D	С	С	F	
Between Exit 26 and Exit 27	D	С	D	F	
Between Exit 27 and Exit 28	Е	С	D	F	
Between Exit 28 and Exit 29	Е	С	С	Е	
Between Exit 29 and Exit 30	С	В	С	С	
Between Exit 30 and Exit 31	С	С	С	D	
Between Exit 31 and Exit 32	С	С	D	D	
Between Exit 32 and Exit 33	С	D	D	D	
Between Exit 33 and Exit 34	D	F	Е	Е	
Between Exit 34 and Exit 35	D	F	Е	D	
Between Exit 35 and Exit 36	Е	F	Е	F	
Between Exit 36 and Exit 37	Е	F	D	Е	
Between Exit 37 and Exit 38	D	Е	D	D	



Section Along I 01	Northbo	Northbound LOS		Southbound LOS	
Section Along I-91	AM Peak	PM Peak	AM Peak	PM Peak	
Between Exit 38 and Exit 39	В	D	D	C	
Between Exit 39 and Exit 40	В	D	D	C	
Between Exit 40 and Exit 41	ı	-	D	В	
Between Exit 41 and Exit 42	-	-	С	В	
Between Exit 40 and Exit 42	В	D	-	-	
Between Exit 42 and Exit 44	В	D	D	В	
Between Exit 44 and Exit 45	В	D	F	В	
Between Exit 45 and Exit 46	В	Е	Е	В	
Between Exit 46 and Exit 47	В	D	D	В	
Between Exit 47 and Exit 48	В	D	D	В	
Between Exit 48 and Exit 49	В	С	С	В	
North of Exit 49	В	С	В	В	

Note—"-" indicates that there is no such segment.

Heading northbound from New Haven in the AM peak hour, traffic operates at a calculated satisfactory LOS (LOS D or better) until the segment between Exit 22 north to Exit 23 (Middletown-Rocky Hill area), and from Exit 27 north to Exit 29 (Capitol Area), which was calculated as operating at LOS E, essentially at capacity. From Exit 24 to 25 (Wethersfield) was calculated as operating at a failing LOS F. North of downtown Hartford, northbound AM peak traffic was calculated at an acceptable LOS with the exception of between Exits 35 and 37 in Windsor.

During the PM peak hour, traffic was calculated as operating at LOS F between Exits 3 and 5 in New Haven, then operates at an acceptable level of service until Exits 24 through 25 (Wethersfield), where it is at capacity, LOS E. Congestion at LOS F was calculated next between Exits 33 and 37 (north Hartford through Windsor). From that point north, most traffic operations are acceptable, though two patches of LOS E traffic were calculated between Exit 37 and 38 (Windsor) and between Exits 45 and 46 (East Windsor – Enfield).

Southbound traffic on the Interstate 91 mainline during the AM peak from the Massachusetts border to New Haven generally operates at acceptable levels of service. Exceptions were calculated between Exits 46 and 44 (LOS E, then LOS F) in Enfield and East Windsor, then at LOS E, or capacity conditions, between Exit 36 and Exit 33 (southern Windsor and north Hartford). Traffic operations were calculated as satisfactory from this point until Exit 25 to Exit 24 (Wethersfield – Rocky Hill border), where LOS E conditions were identified. No further congestion is calculated until New Haven, where the mainline between Exits 8 through 5 was calculated as operating at LOS F, and LOS E conditions were calculated between Exits 5 and 4 and Exits 3 and 2.

During the PM Peak, southbound Interstate 91 mainline traffic was calculated as first encountering congestion between Exits 37 and 35 (LOS E, then LOS F) in Windsor. The southbound segment between Exits 34 and 33 in north Hartford was determined to



operate at LOS E. Between Exit 29 and 28 on the south side of Hartford, traffic was calculated as operating at capacity conditions, LOS E, and this deteriorates to LOS F conditions between Exits 28 and 24, from south Hartford all the way to the Wethersfield/Rocky Hill border. From that point south, all traffic was determined to operate at satisfactory levels of service with the exception of LOS E conditions calculated between Exits 8 and 7 in New Haven.

Table 4.1-5 illustrates the calculated performance of traffic conditions on freeway onand off-ramps, and notes which roadways interchange at those ramps with Interstate 91. Level of service is not analyzed where there is a lane drop or addition. For segments with a "weave" (entering traffic and exiting traffic between two interchanges uses an auxiliary lane to serve the weave), a weaving analysis was performed instead, found in Table 4.1-6.

As Table 4.1-5 shows, in the northbound direction during the AM Peak, LOS F conditions were not calculated until ramps from Exit 23 through Exit 29 (in Rocky Hill, Wethersfield, south Hartford and downtown Hartford). North of Hartford, all freeway ramps were calculated to operate better than LOS F. Refer to the table to determine whether these ramps are on- or off-ramps.

In the northbound direction during the PM Peak, the Exit 8 off ramp in New Haven is expected to operate at LOS F. North of downtown Hartford, ramps calculated to operate at LOS F are found from Exit 33 to Exit 38 (north Hartford and Windsor). North of Exit 38, all ramps were calculated to operate better than LOS F.

Heading southbound on Interstate 91 from the Massachusetts border during the AM Peak, ramps for Exits 39, 38, and 35 in Windsor operate at LOS F. The next ramps exhibiting LOS F are at Exits 7 and 6 in New Haven.

During the PM Peak, southbound ramps determined to operate at LOS F were identified at Exits 37 through 34 (central Windsor to its border with Hartford). Further south in Hartford, ramps calculated as operating at LOS F are found at Exits 29 through 22 (downtown Hartford to Route 9 in Cromwell). Exit 17's southbound off-ramp to the Wilbur Cross Parkway in Meriden (Route 15) was calculated as operating at LOS F. From that ramp south to New Haven, all other ramps operate acceptably.



Table 4.1-5
Existing Condition Freeway Ramp Level of Service Analysis Summary

Interchange on I 01	North L(		Southbound LOS	
Interchange on I-91	AM Peak	PM Peak	AM Peak	PM Peak
Exit 0 - Off Ramp to I-95 N.B.	-	-	**	**
Exit 0 - On Ramp from I-95 S.B.	**	**	-	-
Exit 1 - Off Ramp to Route 34 W.B.	-	-	**	**
Exit 1 - On Ramp from Route 34 E.B.	**	**	-	-
Exit 2 - On Ramp from Hamilton Street	С	С	-	-
Exit 2 - Off Ramp to Hamilton Street	-	-	*	*
Exit 3 - Off Ramp to Trumbull Street	D	D	Е	С
Exit 3 - On Ramp from Trumbull Street	*	*	*	*
Exit 4 - Off Ramp to Humphrey Street	-	-	Е	С
Exit 5 - Off Ramp to James Street/ Rte. 5	*	*	-	-
Exit 5 - On Ramp from U.S. Route 5	-	-	**	**
Exit 6 - Off Ramp to Willow Street	*	*	F	D
Exit 6 - On Ramp from Willow Street	В	С	-	-
Exit 7 - On Ramp from Ferry Street	В	С	-	-
Exit 7 - Off Ramp to Middletown Ave.	-	-	F	D
Exit 8 - Off Ramp to Routes 17 & 80	С	F	D	С
Exit 8 - On Ramp from Routes 17 & 80	В	С	С	В
Exit 9 - Off Ramp to Montewese Ave.	С	D	С	С
<b>Exit 9 -</b> On Ramp from Montewese Ave.	В	В	В	В
Exit 10 - Off Ramp to Route 40	С	D	С	С
Exit 10 - On Ramp from Route 40	С	С	С	В
Exit 11 - Off Ramp to Routes 5 & 22	C	D	-	-
Exit 11 - On Ramp from Valley Service Road	-	-	С	C
Exit 12 - Off Ramp to Rte 5/ Washington Ave	С	С	С	С
Exit 12 - On Ramp from Rte 5/ Washington	В	С	С	С
<b>Exit 13 -</b> Off Ramp to Rte 702/ Wharton Brk.	C	С	С	С
Conn.				
Exit 13 - On Ramp from Rte 702/ Wharton Brk.	В	С	С	C
Conn.				
<b>Exit 14 -</b> Off Ramp to Rte 150 & Rte 738	В	C	C	C
<b>Exit 14 -</b> On Ramp from Rte 150 & Rte 738	C	C	С	В
Exit 15 - Off Ramp to Route 68	C	C	C	C
Exit 15 - On Ramp from Route 68	C	C	C	C
Exit 16 - Off Ramp to East Main Street	C	D	-	-
Exit 16 - On Ramp from East Main Street	-	-	C	C
Exit 17 - Off Ramp to Rte 15 (Wilbur Cross	С	C	Е	F
Pkwy.)				



Interchange on I 01		bound OS	Southbound LOS	
Interchange on I-91	AM Peak	PM Peak	AM Peak	PM Peak
<b>Exit 17</b> - On Ramp from Rte 15 (Wilbur Cross Pkwy.)	D	D	С	С
Exit 18 - Off Ramp to Route 66	Е	Е	-	-
Exit 18 - On Ramp from Route 66	D	D	-	-
Exit 18 - Off Ramp to I-691	-	-	С	D
Exit 18 - On Ramp from I-691	-	-	D	Е
Exit 19 - Off Ramp to Baldwin Ave.	-	=	С	D
Exit 19 - On Ramp from Baldwin Ave.	D	С	-	-
Exit 20 - Off Ramp to Country Club Road	D	D	С	D
Exit 20 - On Ramp from Country Club Road	D	С	С	D
Exit 21 - Off Ramp to Route 372	D	D	D	D
Exit 21 - On Ramp from Route 372	D	D	C	D
Exit 22 - Off Ramp to Route 9 N.B. & S.B.	D	D	-	-
Exit 22 - Off Ramp to Route 9 S.B.	_	_	**	**
Exit 22 - Off Ramp to Route 9 N.B.	_	_	Е	F
Exit 22 - On Ramp from Route 9 S.B.	D	D	D	D
Exit 22 - On Ramp from Route 9 N.B.	**	**	D	D
Exit 23 - Off Ramp to West Street	F	D	D	D
Exit 23 - On Ramp from West Street	C	C	В	C
Exit 24 - Off Ramp to Route 99	F	E	E	F
Exit 24 - On Ramp from Route 99	F	E	D	F
Exit 25 - Off Ramp to Route 3 N.B. & S.B.	**	**	-	-
Exit 25 - Off Ramp to Route 3 N.B.	_	_	D	F
Exit 25 - Off Ramp to Route 3 S.B.	_	_	D	E
Exit 25 - On Ramp from Route 3 N.B. & S.B.	**	**	**	**
			D	F
Exit 26 - Off Ramp to Marsh Street	F	C	D	F
Exit 26 - On Ramp from Marsh Street	**	**	ש	Г
Exit 27 - Off Ramp to Brainard Road		, ,	**	**
Exit 27 - Off Ramp to Airport Road	-	-	**	**
Exit 27 - On Ramp from Routes 5 & 15	E	C	1.1.	4.4
Exit 28 - Off Ramp to Routes 5 & 15			**	**
Exit 28 - Off Ramp to Routes 5 & 15 SB	-	-		
Exit 28 - On Ramp from Airport Rd / Rte 5/15	-	- C	D	F
Exit 28 - On Ramp from Routes 5 & 15	F	С	- **	- **
Exit 28 - On Ramp from Routes 5 & 15 SB	-	- E	**	**
Exit 29 - Off Ramp to Charter Oak Bridge	E	F	-	-
Exit 29 - Off Ramp to Whitehead Highway	F	E	*	*
Exit 29 - Off Ramp to Collector/ Distributor	F	D	-	-
Exit 29 - On Ramp from Whitehead Highway	-	-	В	F
Exit 30 - On Ramp from I-84 EB & Morgan St	-	-	**	**



Name
Exit 30 - Off Ramp to I-84 EB         -         -         D         D           Exit 31 - Off Ramp to State Street         -         -         **         **           Exit 31 - On Ramp from State Street         C         C         *         *           Exit 32 - Off Ramp to Trumbull St & I-84 WB         -         -         **         **           Exit 32 - On Ramp from Collector/ Distributor         **         **         -         -
Exit 31 - Off Ramp to State Street       -       -       **       **         Exit 31 - On Ramp from State Street       C       C       *       *         Exit 32 - Off Ramp to Trumbull St & I-84 WB       -       -       **       **         Exit 32 - On Ramp from Collector/ Distributor       **       -       -       -
Exit 31 - Off Ramp to State Street       -       -       **       **         Exit 31 - On Ramp from State Street       C       C       *         Exit 32 - Off Ramp to Trumbull St & I-84 WB       -       -       **       **         Exit 32 - On Ramp from Collector/ Distributor       **       -       -       -
Exit 31 - On Ramp from State Street  C C *  Exit 32 - Off Ramp to Trumbull St & I-84 WB **  Exit 32 - On Ramp from Collector/ Distributor  **
Exit 32 - Off Ramp to Trumbull St & I-84 WB - ** **  Exit 32 - On Ramp from Collector/ Distributor **
Exit 32 - On Ramp from Collector/ Distributor ** **
LAR SE OH KUMU HUM I UT D.D. W. W.D.
Exit 33 - Off Ramp to Jennings Road A A E E
Exit 33 - Off Ramp to HOV Lane C D
Exit 33 - On Ramp from Jennings Road D F ** **
Exit 33 - On Ramp from HOV Lane - D E
Exit 34 - Off Ramp to Route 159 D F E F
Exit 34 - On Ramp from Route 159 D F D D
<b>Exit 35 -</b> Off Ramp to I-291 & Route 218 D F
<b>Exit 35 -</b> Off Ramp to Route 218 E <b>F</b>
<b>Exit 35 -</b> Off Ramp to I-291 - E <b>F</b>
Exit 35 - On Ramp from Route 218 C D
<b>Exit 35 -</b> On Ramp from I-291
<b>Exit 35 -</b> On Ramp from I-291 & Route 218 - <b>F</b> E
Exit 36 - Off Ramp to Route 178 * * E F
Exit 36 - On Ramp from Route 178 D F D F
Exit 37 - Off Ramp to Route 305 E F D D
Exit 37 - On Ramp from Route 305 D E D F
Exit 38 - Off Ramp to Route 75 D E F D
Exit 38 - On Ramp from Route 75 C F D E
Exit 38 - On Ramp from HOV lane ** **
Exit 39 - Off Ramp to Kennedy Road C E
Exit 39 - On Ramp from Kennedy Road F D
Exit 40 - Off Ramp to Route 20 C E E C
Exit 40 - On Ramp from Route 20 B C E D
Exit 40 - Off Ramp to HOV Lane - ** **
Exit 41 - Off Ramp to South Center Street - * *
<b>Exit 42 -</b> Off Ramp to S.R. 569 B D
<b>Exit 42 -</b> On Ramp from S.R. 569 B C
Exit 42 - Off Ramp to Route 159 - D B
Exit 42 - On Ramp from Route 159 - * *
Exit 44 - Off Ramp to Route 55
Exit 44 - On Ramp from Route 55 * * * **
Exit 45 - Off Ramp to Route 140 * * E C
Exit 45 - On Ramp from Route 140  B  B  *
Exit 46 - Off Ramp to Route 5 (King Street)  C  E  C  C  C



Interchange on I 01		Northbound LOS		Southbound LOS	
Interchange on I-91	AM Peak	PM Peak	AM Peak	PM Peak	
<b>Exit 46</b> - On Ramp from Route 5 (King Street)	В	D	Е	C	
Exit 47 - Off Ramp to Route 190 E.B.	С	Е	*	*	
Exit 47 - Off Ramp to Route 190 W.B.	*	*	*	*	
Exit 47 - On Ramp from Route 190 E.B.	*	*	D	C	
Exit 47 - On Ramp from Route 190 W.B.	*	*	*	*	
Exit 48 - Off Ramp to Route 220	*	*	С	С	
Exit 48 - On Ramp from Route 220	В	С	*	*	
Exit 49 - Off Ramp to Route 5	В	D	С	С	
Exit 49 - On Ramp from Route 5	В	С	С	С	

Notes: \* Indicates Weaving Analysis (see Table 4.1-6).

Table 4.1-6 notes the calculated performance of weaving sections, where traffic entering from an on-ramp "weaves" (merges, then diverges) with traffic exiting at the next off-ramp in a dedicated auxiliary lane between the two ramps. No northbound weaves were calculated to operate at LOS F during the AM Peak hour. Two northbound weaves, both in New Haven, were calculated to operate at LOS F during the PM Peak: between Exits 3 and 5 (Trumbull Street Connector on-ramp and Route 5 [State Street] off-Ramp) and between Exits 3 and 6 (Trumbull Street Connector on-ramp and Willow Street off-ramp). Southbound, only one weave was determined to operate at LOS F, during the AM peak: between Exits 45 and 44 (the Route 140 [Bridge St.] on-ramp and Route 5 Connector off-ramp, both in Enfield). No southbound weaves were calculated as operating poorly during the PM peak hour.

<sup>\*\*</sup> Indicates Loss/ Addition of Lane(s) at Ramp

<sup>&</sup>quot;-" Indicates there is no such interchange ramp.



Table 4.1-6
Existing Condition Freeway Weaving Analysis Level of Service (LOS) Summary

Section along I 01		Exit on/	LOS	
	Section along I-91	Exit off	AM Peak	PM Peak
	Trumbull St. Connector to James St./ Rte. 5	Exit 3/ Exit 5	C	F
	Trumbull St. Connector to Willow St.	Exit 3/ Exit 6	C	F
Northbound	I-291 to Route 178	Exit 35/ Exit 36	Е	Е
Direction	Route 55 to Route 140	Exit 44/ Exit 45	A	C
	Route 190 E.B. to Route 190 W.B.	Exit 47E/ Exit 47W	В	С
	Route 190 W.B. to Route 220	Exit 47W/ Exit 48	В	D
	Trumbull St. Connector to Hamilton St.	Exit 3/ Exit 2	Е	D
	State St. to Whitehead Highway	Exit 31/ Exit 29	С	С
Southbound	Route 159 to South Center Street	Exit 42/ Exit 41	С	В
Direction	Route 140 to Route 5	Exit 45/ Exit 44	F	В
	Route 220 to Route 190 W.B.	Exit 48/ Exit 47W	D	В
	Route 190 W.B. to Route 190 E.B.	Exit 47W/ Exit 47E	С	В

To summarize the conditions along I-91 between New Haven and the Massachusetts border, based upon the speed and delay runs and Level of Service analyses, there are generally few and isolated locations of severe congestion. As noted earlier, some of the congestion that is present is more attributed to other factors than I-91 capacity (e.g., southbound congestion on I-91 in New Haven is more attributable to I-95 congestion further downstream). In Meriden, there is some minor congestion that can in part be attributed to the lane drop to two lanes in each direction between Exits 16 and 18. In the Hartford area, there is congestion both north and south of the city, following peak directions towards and away from the city, which can be attributed to high volumes, poor operations from frequent ramps and weaving sections.



### 4.2 Livery Services

Bradley International Airport in Windsor Locks, Connecticut provides Central Connecticut and Central/Western Massachusetts with airline service. Nine operating surface transportation (seven limousine) services operate at the airport. These limousine services are listed in Table 4.2-1.

Table 4.2-1
Livery Services at Bradley International Airport

Service	Service Area	Service Type
(listed Alphabetically)		
Advantage Limousine, Inc.	Passenger Destination	Private limousine
Bradways Limo Service	Western Massachusetts	Private limousine
Connecticut Limo	West to Danbury, South to	Van share
	Bridgeport	
Joshua's Limousine Service	Connecticut, New England	Private limousine
Lindsey Limousine	Passenger Destination	Private limousine
Thomas Transportation	Massachusetts, New Hampshire,	Van share
	Vermont	
Valley Transporter	Passenger Destination	Van share

Source: http://www.bradleyairport.com/easy/transportation.shtml.

Taxi service is readily available between 7:00 AM and midnight with flat rates to various destinations. After hours, taxi services can be contacted by airport phone, or hailed. CTTransit provides fixed route bus service to Hartford. Peter Pan provides intercity bus service to Springfield. The seven limousine services in Table 4.2-1 are described below.

- 1. Advantage Limousine, Inc. provides two types of private livery services. The Springfield-based firm offers towncar service as well as stretch limousine service to transport their clientele to any location. All Advantage services are private vehicle and driver-for-hire arrangements.
- 2. Bradways Limo Service provides private limousine service to all of Massachusetts and does serve Bradley International Airport. A written request has been made in order to collect additional data. All Bradways services are private vehicle and driver for hire arrangements.
- 3. Connecticut Limo provides shared ride trips to and from Bradley and posts a fare table on their website. The Limousine service itself is a shared ride service that uses vans/buses and travels from one Connecticut Limo terminal to another. Service to/from Bradley International Airport is hourly between 8 AM and 12:45 AM. Table 4.2-2 details Connecticut Limo's fare table. Trips in italics are within the Springfield New Haven corridor.



Table 4.2-2 Connecticut Limo Fare Table for Service to/from Bradley International

	Regular Fares	Regular Fares	First Companion	Additional Companion
Terminal/Stop	One-way	Roundtrip	Roundtrip	Roundtrip
Bridgeport	\$37	\$70	\$74	\$37
Danbury	\$34	\$64	\$68	\$34
Farmington	\$22	\$40	\$44	\$22
Hartford	\$18	\$32	\$36	\$18
Meriden	\$29	\$54	\$58	\$29
Milford	\$32	\$60	\$64	\$32
New Haven	\$31	\$58	\$62	\$31
North Haven	\$30	\$56	\$60	\$30
Southbury	\$32	\$60	\$64	\$32
Waterbury	\$28	\$52	\$56	\$28

Source: www.ctlimo.com.

- 4. Joshua's Limousine service is based in Southeast Connecticut, but they will travel anywhere. In accordance to Connecticut regulations and laws, Joshua's charges the customer from when the vehicle leaves headquarters until the vehicle returns from the trip. Joshua's offers private trips by Towncar, which cost a flat \$129 for three hours and \$45 per hour after that, prorated every 15 minutes. In addition, Joshua's requires a refundable security deposit of \$100. Gratuity is not included.
- 5. Lindsey Limousine has been contacted, but no connections have been established to generate data.
- 6. Thomas Transporter provides service to and from Bradley International Airport to Massachusetts, New Hampshire and Vermont. The service is a shared-ride service. However, none of the destinations are within the study corridor.
- 7. Valley Transporter is a Central Massachusetts livery service with a base in Springfield, Massachusetts. The company website (<a href="http://www.valleytransporter.com">http://www.valleytransporter.com</a>) indicates that one shared van serves Bradley from Springfield each hour. Reservations are required.

Fares for the livery services are shown in Table 4.2-3.



Table 4.2-3
Livery Services at Bradley International Airport One-way Regular Fare

Service (listed Alphabetically)	New	Hartford	Springfield
	Haven		
Advantage Limousine, Inc.	\$120	\$120	\$75
Bradways Limo Service	NA	NA	
Connecticut Limo	\$31	\$18	NA
Joshua's Limousine Service	\$129	\$129	\$151
Lindsey Limousine			
Thomas Transportation	NA	NA	NA
Valley Transporter	NA	NA	\$30-35

All price quotes are directly from the livery services on December 11, 2002.

## 4.3 Intercity Bus Operations

Intercity bus service is provided within the study corridor, generally using I-91. The major bus stations in the corridor are in New Haven, Hartford, and Springfield; however, stations in Meriden, Enfield and Windsor Locks also are served by some intercity bus service. East-West intercity bus routes also serve all of the major cities in the corridor. Routes on the I-95 corridor serve New Haven; routes on the I-84 corridor serve Hartford; and routes on the I-90 corridor serve Springfield.

Greyhound and Peter Pan - Greyhound and Peter Pan coordinate operations, mostly along I-91 within the New Haven - Springfield corridor. Intercity bus passengers may buy tickets from either company and use them for almost all trips between Springfield and New Haven. Peter Pan is the principal service provider to points east of Springfield. The corridor has six intercity bus terminals: New Haven, Meriden, Hartford, Bradley International Airport (Windsor Locks), Enfield, and Springfield. Peter Pan serves Windsor Locks and Enfield exclusively and Greyhound and Peter Pan both serve the other four stations.



## Table 4.3-1 Northbound Corridor Service Provided by Greyhound and Peter Pan within the Corridor

New			Windsor		
Haven	Meriden	Hartford	Locks	<b>Enfield</b>	Springfield
		0:35			1:05
		2:15			2:50
		7:40			8:20
<u>8:15</u>		<u>9:15</u>			<u>9:50</u>
		10:15	10:45		11:30
		11:15			11:50
		<u>12:15</u>			<u>12:50</u>
		13:10			13:50
		14:15			14:50
		<u>15:15</u>			<u>15:55</u>
			15:15		16:00
<u>14:40</u>	<u>15:15</u>	<u>16:15</u>			<u>17:00</u>
		17:10			17:50
				17:45	18:00
16:30		17:30			
		18:15			18:50
		19:15			19:50
			19:45		20:30
		20:15			21:00
19:30	20:05	20:50			
		21:15			22:00
		23:15			0:01

Notes: Greyhound services are marked with <u>underlines</u>, Peter Pan services are indicated with *italics*. Source: <u>www.greyhound.com</u> and <u>www.peterpanbus.com</u>. Information represents conditions as reported on October 7, 2002.



## Table 4.3-2 Southbound Corridor Service Provided by Greyhound and Peter Pan within the Corridor

Springfield	Enfield	Windsor Locks	Hartford	Meriden	New Haven
5:45			6:20		
7:00			7:50		
8:00	8:15	8:45			
8:15			8:40		
			10:00	11:05	11:30
10:15			10:50		
12:15			12:50		
13:00		13:45			
13:15			13:50		
			14:15	15:20	15:45
<u>14:15</u>			14:50		
15:15			15:50		
16:15			16:50		
<u>17:15</u>			17:50		
			18:00		19:00
<u>18:15</u>			18:50		
19:15			19:50		
19:45		20:30			
21:00			21:50		
			22:00		23:10
23:00		1 '4 1 1'	23:35		. 1

Notes: Greyhound services are marked with <u>underlines</u>, Peter Pan services are indicated with *italics*. Source: <u>www.greyhound.com</u> and <u>www.peterpanbus.com</u>. Information represents conditions as reported on October 7, 2002.

Table 4.3-3 Greyhound/Peter Pan Fares for Inter-corridor Services

From/To	New Haven	Meriden	Hartford	Bradley Airport	Enfield	Springfield
New Haven	NA					
Meriden	\$10.00	NA				
Hartford	\$11.00	\$10.00	NA	\$11.25		
Bradley						
Airport	NA	NA	NA	NA		
Enfield	\$19.25	\$15.25	\$10.25	NA	NA	
Springfield	\$19.00	\$19.00	\$8.00	\$14.00	\$8.00	NA

Source: <u>www.greyhound.com</u> and <u>www.peterpanbus.com</u>. Information represents conditions as reported on October 7, 2002.

Bus service for Bradley International Airport is limited to trips <u>from</u> Bradley Airport to Hartford and between Bradley Airport and Springfield. Neither Peter Pan nor Greyhound



offer bus service <u>to</u> Bradley from Hartford. Private livery services, such as Connecticut Limousine, offer transit services to and from Bradley.

Table 4.3-4
Greyhound/Peter Pan Travel Times for One Seat Inter-Corridor Services

	New			Bradley		
From/To	Haven	Meriden	Hartford	Airport	Enfield	Springfield
New Haven	NA					
Meriden	0:30	NA				
Hartford	1:13	0:55	NA	0:30		
Bradley Airport	NA	NA	NA	NA		
Enfield	NA	NA	NA	NA	NA	
Springfield	2:05	1:45	0:45	0:45	0:15	NA

Even though Greyhound and Peter Pan have established bus fares for travel to and from Enfield, the only one seat service that is offered is a daily roundtrip between Springfield and Enfield.

The intercity bus stations in the corridor are described below:

**New Haven** - Greyhound and Peter Pan service to and from New Haven operates from Union Station. New Haven has limited bus service in the North-South corridor. However, the Boston-Providence-New Haven-New York City corridor via I-95 is very busy. Buses serving these metropolitan areas often stop in New Haven. From New Haven, Greyhound and Peter Pan provide corridor service to Meriden, Hartford and Springfield, Massachusetts. Trips from Springfield, Massachusetts to New Haven require a transfer at Hartford.

**Meriden -** Greyhound and Peter Pan use a station on Broad Street in Meriden to provide service within the study corridor. The bus station is ½ mile east of the Meriden train station. Services that stop in Meriden also serve New Haven, Hartford and Springfield.

**Hartford** - Greyhound and Peter Pan use Union Station in Hartford to provide service in the New Haven-Springfield corridor, as well as the I-84 corridor. Hartford is the most active station in the corridor, with most of its trips serving Springfield. The majority of the trips between Hartford and Springfield have fares of \$8 in each direction; however, Peter Pan does provide three additional trips from Springfield to Hartford that have an additional fare of \$2.

**Windsor Locks -** Peter Pan has a station in Windsor Locks at Bradley International Airport. Direct service is offered from Hartford to Bradley once a day. Return trips are available through Connecticut Limousine. Peter Pan bus service between Bradley and Springfield accounts for all of the Bradley service to that city. Three daily roundtrips are made between the two stations. The Hartford to Bradley service continues to Springfield. The Springfield-Bradley service charges passengers \$14.00 for a one way trip. An



additional weekend trip from Bradley is also provided to Hartford, as is a trip from Springfield to Bradley. Service between New Haven and Bradley can be made with a transfer at Hartford. Peter Pan is the service provider for buses at Bradley.

**Enfield -** Peter Pan is the only service provider to Enfield, stopping at the Enfield Mall. Direct service from Enfield is available to Springfield only. All other trips within the corridor must be made via connection at Springfield; however, connecting service is often slow and impractical. Peter Pan provides Enfield with one daily round trip and an additional bus on Friday from Springfield.

**Springfield** - Greyhound and Peter Pan provide service to four locations in Springfield; however, the principal station in Springfield is the Springfield Bus Terminal. The bus terminal is about ½ mile west of the train station. Other bus stations within the City include the Springfield Hilton, the Springfield Plaza, and the Springfield Sheraton. Springfield's terminal provides Greyhound and Peter Pan with one-seat services in the within the study corridor and also the I-90 corridor, which links Springfield with Albany. Peter Pan provides services to the east of Springfield and south to Enfield and Windsor Locks.

<u>Bonanza</u> - Bonanza provides bus service to Hartford and Springfield, but does not offer service in the North-South corridor. These two stations are used as intermediate stops on services to Providence, Albany and New York City that use regional highways such as Interstates 84 and 90 and Route 6. For the most part, services to and from Hartford and Springfield charge passengers about \$20 one way. Twenty Bonanza buses serve Hartford and four buses serve Springfield everyday. Tables 4.3-5 through 4.3-7 summarize the Bonanza services available to Hartford and Springfield.

Table 4.3-5
Bonanza Bus Service between Providence and Albany (Serving Springfield)

Read Do	own		Read Up		
10:30 AM	3:15 PM	Providence	1:40 PM	7:55 PM	
12:10 PM	5:05 PM	Arrive Springfield	12:01 PM	6:15 PM	
12:15 PM	5:15 PM	Depart Springfield	11:40 AM	6:00 PM	
1:00 PM	6:00 PM	Lee	10:55 AM	5:10 PM	
discharge only	discharge only	Lenox	10:45 AM	5:00 PM	
1:20 PM	6:15 PM	Pittsfield	10:30 AM	4:45 PM	
2:15 PM	7:05 PM	Albany	9:40 AM	3:50 PM	

Source: www.bonanzabus.com.



Table 4.3-6
Bonanza Bus Eastbound Service to New York City – Hartford – Providence

New York		8:45	10:15	12:15	2:15	4:15	5:15	6:15	7:30	9:30
Yonkers		9:20	10:50	12:50	2:50			6:50		
White Plains		9:40								
Danbury	7:30	10:25	11:45	1:45	3:45	5:45	6:45	7:45	8:55	10:55
Southbury	7:50	10:45	12:05	2:05	4:05	6:05	7:05	8:05	9:15	11:15
Waterbury	8:05	11:05	12:25	2:25	4:25	6:25	7:25	8:25	9:35	11:35
Farmington	8:30	11:35	12:55	2:55	4:55	6:55	7:55	8:55	10:00	12:01
Ar Hartford	8:45	11:50	1:10	3:10	5:10	7:10	8:10	9:10	10:15	12:15
Dp Hartford	9:15	12:15		3:30	5:45					
Manchester	9:25	12:25		3:40	5:55					
Storrs	9:55	12:55		4:10	6:25					
Willimantic	10:15	1:15		4:30	6:45					
Danielson	10:45	1:45			7:15					
Providence	11:30	2:30		5:40	8:00					

Note: PM hours shown in **bold**. **Source:** www.bonanzabus.com.

Table 4.3-7
Bonanza Bus Westbound Service to Providence – Hartford - New York City

Providence						9:00		1:00	3:15	6:15
Danielson						9:45		1:45	3:55	7:00
Willimantic						10:15		2:15	4:30	7:30
Storrs						10:35		2:35	4:50	7:50
Manchester						11:05		3:05	5:20	
Hartford						11:15		3:15	5:30	8:25
Hartford	5:00	6:00	7:00	8:00	9:30	11:30	1:30	3:30	5:45	8:30
Farmington	5:15	6:15	7:15	8:15	9:45	11:45	1:45	3:45	6:00	8:45
Waterbury	5:45	6:45	7:45	8:45	10:15	12:15	2:15	4:15	6:30	9:15
Southbury	6:05	7:05	8:05	9:05	10:35	12:35	2:35	4:35	6:50	9:35
Danbury	6:25	7:25	8:25	9:25	10:55	12:55	2:55	4:55	7:10	9:55
White Plains									8:00	10:45
Yonkers	7:20				11:50	1:50	3:50	5:50	8:15	11:00
New York	7:55	8:55	9:55	10:55	12:25	2:25	4:25	6:35	8:50	11:30

Note: PM hours shown in **bold**. Source: www.bonanzabus.com.



<u>Arrow</u> - Arrow Line, Inc, a Coach USA company, provides some intercity bus service within the New Haven-Springfield Corridor. Hartford is served by several of Arrow's various services. Routes that serve Hartford include bus service between Farmington and Foxwoods and commuter service between Willimantic and Hartford and Meriden and Hartford. Connecticut DOT subsidizes the commuter services. CTTransit accepts Arrow monthly bus passes for service within Downtown Hartford. The Meriden service will be discussed in more detail in Section 4.4.3 below.

<u>DATTCO</u> - DATTCO, headquartered in New Britain, provides a variety of bus services in Connecticut. Among the different types of services offered by DATTCO, two bus routes make stops in communities within the study corridor. One service, called the S-Route, operates buses between Madison and New Haven on weekdays. This will be discussed in the Section 4.4.1 below. DATTCO's "Commuter Express" provides bus service between Hartford and Old Saybrook, with stops in Old Saybrook, Essex, Chester, Middletown and Hartford. This route is served with three morning and three evening peak direction trips on weekdays.

### 4.4 Transit Service and Ridership

## 4.4.1 New Haven, Hamden and North Haven

CTTransit provides local and express bus service in the greater Hartford, New Haven and Stamford areas. Fifteen routes serve New Haven, with service to the two railroad stations in New Haven and a free parking shuttle between New Haven Union Station and the Temple Street garage nearby. The S route serving Madison from downtown New Haven is operated by DATTCO. CTTransit's New Haven Division services encompass 14 towns and provided over 33,000 unlinked passenger trips on a typical weekday in 2001.



## **Table 4.4-1** New Haven Bus Routes with 2001 Weekday\* Ridership

Route	Route Name	Destination(s)	Headways	Weekday Boardings	Month Boardings Recorded
В	Whalley Avenue	New Haven	5 to 15 minutes	4,364	November
	Congress Avenue	West Haven	5 to 20 minutes	3,083	November
С	North Haven	North Haven, Wallingford, Meriden	15 to 60 minutes	1,093	November
D	Grand Avenue	New Haven	10 to 20 minutes	3,491	November
	Dixwell Avenue	Hamden	10 to 30 minutes	4,644	November
F	West Chapel Street	New Haven	10 to 30 minutes	2,007	November
	East Haven	Branford	15 to 30 minutes	980	November
G	Shelton Ave/ East Chapel Street	New Haven	20 to 30 minutes	780	November
J	Whitney Avenue	Centerville, Cheshire, Waterbury	10 to 60 minutes	1,370	November
	Kimberly Avenue	Milford	5 to 35 minutes	2,065	November
L	North Branford	North Branford	65 minutes	98	November
M	Washington Ave/ State Street	New Haven	9 to 75 minutes	2,225	November
О	Winchester Avenue	New Haven	15 to 62 minutes	1,045	November
	Sylvan Avenue <sup>1</sup>	New Haven	10 to 60 minutes	1,991	November
Q	State Street/ Edgewood Ave.	New Haven	15 to 60 minutes	1,914	November
$S^2$	Route 1 Madison	Madison	30 to 95 minutes	N/A	November
Z	Goffe Street/ Sargent Drive	New Haven	5 to 30 minutes	2,027	November
CC	Commuter Connection Downtown New Haven	New Haven	25 to 80 minutes	306	November
	Commuter Connection Sargent Drive	New Haven	23 to 85 minutes	39	November
26	I-95 Express	Guilford, Madison	N/A	13	November
CP	Free Coliseum Parking Shuttle**	Union Station, New Haven	5 to 39 minutes	N/A	November
Total				33,535	

<sup>\*2001</sup> ridership reflects a single day's boardings \*\*Recently replaced by a similar service to Temple St. Garage. **Source:** CTTransit and Connecticut DOT data. .

<sup>&</sup>lt;sup>1</sup> Includes two one way trips of Post Mall Flyer (PMF) <sup>2</sup> Route operated by DATTCO.



Routes B, J, M, and the Coliseum Parking Shuttle serve Union Station. The two commuter connection routes serve Shoreline East's State Street Station.

**Route B Whalley Avenue** – The route connects downtown New Haven to Amity, Brookside, and Rockview via Whalley Avenue and Fitch Street daily serving Southern Connecticut State University. A different routing is in use on Saturdays and a third routing on Sundays and Holidays. Service is offered from 4:48 AM to 1:15 AM on weekdays.

**Route B Congress Avenue** – This route connects West Haven to downtown New Haven via the University of New Haven, the Veterans Administration (VA) Hospital and the West Haven Green. Weekday service is offered between 5:10 AM and 12:52 AM.

**Route C North Haven** – The C route connects Meriden, Wallingford, and North Haven to downtown New Haven via Grand and Quinnipiac Avenues and Route 5. Major stops along the route include the *Wallingford rail station*, Blue Cross/Blue Shield and the Gateway Community & Technical College. The route also offers express service via I-91 in the peak periods. Service operates between 5:25 AM.and 10:45 PM on weekdays. Weekend service is only provided on Saturday.

**Route D Grand Avenue** – The Grand Avenue route connects the Bella Vista Senior Complex to downtown New Haven. Major stops along the route include the Super K-Mart on I-91. Weekday service operates between 6:00 A.M.and 1:27 AM.

**Route D Dixwell Avenue** – This route connects Hamden to downtown New Haven via Broadway and Dixwell Avenues. A spur is operated to Putnam Place Shopping Center on weekdays. Stops along the routes include Centerville, Paier College of Art, Hamden Center and the Department of Social Services. Weekday service is offered between 5:20 AM and 12:57 AM.

**Route F West Chapel Street** – Route F provides service from Derby, Ansonia, and Seymour to downtown New Haven between 5:45 AM and 10:10 AM on weekdays. Major stops on this route include the *Derby, Ansonia and Seymour rail stations*, the Hospital of St. Raphael, and the Silvermine Industrial Park.

**Route F East Haven** – The route serves Branford and Moumauguin Terminus daily. Major stops along this route include the VF Factory outlet, Shoreline Trolley Museum, Branhaven Plaza and the *Branford rail station* (served by Shore Line East). Weekday service is provided between 5:25 AM and 10:10 PM.

**Route G Shelton Avenue** – The G route connects the Shelton Terminus, Morris Cove and East Haven to downtown New Haven daily. Sunday and Holiday service is combined with the F-East Haven route. Stops along the route include Lighthouse Park and the *Tweed New Haven Airport*. Service is operated between 5:32 A.M.and 10:20pm on weekdays.



**Route J Whitney Avenue** – The route connects Waterbury, Cheshire, Hamden and Centerville to downtown New Haven between 5:02 AM and 1:20 AM on weekdays. Sunday service is truncated to Mount Carmel and Hamden only. Major stops along the line include the *New Haven Union Station*, the *Waterbury rail station*, the Peabody Museum, and the Hamden Plaza.

**Route J Kimberly Avenue** – This route J serves Milford and Savin Rock daily but only goes as far as Savin Rock on Sundays. There is one express bus that operates along I-95 inbound to New Haven at 6:00 PM on weekdays. Major stops along this route include *New Haven Union Station*, West Haven Green, *Milford rail station*, and the Connecticut Post Mall.

**Route L North Branford** – The L route connects North Branford to downtown New Haven on weekdays only between 6:45 AM and 6:35 PM. Two outbound trips in the morning serve the Super Kmart on Route 80.

**Route M State Street/ Washington Avenue** – This route is through-routed from the terminus in West Haven through downtown New Haven north to Hamden and North Haven. Major stops include the VA Hospital, Department of Social Services, and the Motor Vehicle Department. Service is provided six days a week on both routes, with weekday service offered between 6:00 AM and 10:40 PM.

**Route O Winchester Avenue** – The Winchester Avenue route connects Leeder Hill and Pine Rock in Hamden to downtown New Haven daily. Sunday service is truncated to Millrock and Newhall. Stops along the route include Albertus Magnus College and the Yale Divinity School. Weekday service is operated from 6:15 AM to 9:42 PM.

**Route O Sylvan Avenue** – The O Sylvan Avenue route connects Milford, Orange and West Haven to downtown New Haven daily. There are several express runs that serve the Connecticut Post Mall via I-95. Major stops along this route include the Yale-New Haven Hospital, Hospital of Saint Raphael, Quigley Stadium and the Connecticut Post Mall. There is also an opportunity to transfer to the Coastal Link at the Post Mall. Weekday service is provided between 5:25 AM and 10:48 PM.

**Route Q State Street Edgewood Avenue** – The Q route connects Lombard and Beverly Hills to downtown New Haven via Edgewood Avenue and State Street. Stops along this route include Edgewood Park, CTTransit, and the Wilbur Cross Annex. Weekday service is operated from 5:30 AM to 11:08 PM daily.

**Route S Route 1 Madison** – The S route is operated by DATTCO and connects Madison and Old Saybrook to downtown New Haven. Only one trip in each direction serves Old Saybrook. Service is offered on weekdays between 5:40 AM and 6:50 PM. This route primarily serves as a connecting service for the Shoreline Shuttle bus and the Shore Line East trains. The Shore Line East train service is operated by the Connecticut DOT and provides commuter service between New London and New Haven. This connection



allows for continuous transit between New Haven and Old Saybrook. Connections in Madison to the Shoreline Shuttle provide another option for service between Madison and Old Saybrook.

**Route Z Goffe Street Sargent Drive** – The Z route connects West Hills and Savin Rock with downtown New Haven. Major stops include Savin Rock, Gateway Technical Community College, Long Wharf and West Rock State Park. Sunday and holiday service combines with the FN and Q routes. Weekday service is offered from 5:45 AM to 11:45 PM.

**Downtown Commuter Connection North and South** – Two downtown commuter connection routes provide a weekday commuter shuttle between the State Street Station (Shore Line East) and downtown New Haven locations, including the Yale New Haven Hospital. Shuttles are timed to wait until trains arrive at the station in the morning, and trains are held until the shuttle arrives in the evening.

The Commuter Connection North shuttle service makes a 17-20 minute loop through the northern portions of downtown New Haven, and varies in the destinations served. It serves six morning trains that arrive between 6:35 AM and 9:57 AM. The afternoon/evening service serves seven trains that depart between 3:22 PM and 6:57 PM, following the same loop.

The Commuter Connection South service serves the southern portions of downtown New Haven on a 17-22 minute loop that varies in the destinations served. It serves five morning trains arriving between 6:12 AM and 8:02 AM. The afternoon/evening service serves three trains that depart at 5:02, 5:28, and 7:48 PM, following the same loop.

**Sargent Drive Commuter Connection** – This route functions in a similar fashion as the Downtown Commuter Connection routes. The route provides service between State Street Station and Gateway Community College, Long Wharf Maritime, and the Sport Haven. Service is provided between 6:15 AM and 10:12 AM in the morning and between 3:59 PM and 7:43 PM in the evening.

**26 Madison/ Guilford Express** – One trip in the peak direction is provided in the peak period between two Park and Ride lots in Madison and Guilford and downtown New Haven. Stops on this route include the Yale New Haven Hospital and Yale University.

**Temple Street Garage Parking Shuttle** – To alleviate parking demand at the New Haven Union Station parking garage, this shuttle is offered as a free service between the Temple Street Garage and Union Station. Service is offered between 4:31 AM and 1:08 AM on weekdays. This service formerly operated out the New Haven Coliseum Garage, and has recently been moved to the Temple Street Garage as the Coliseum is slated for demolition.



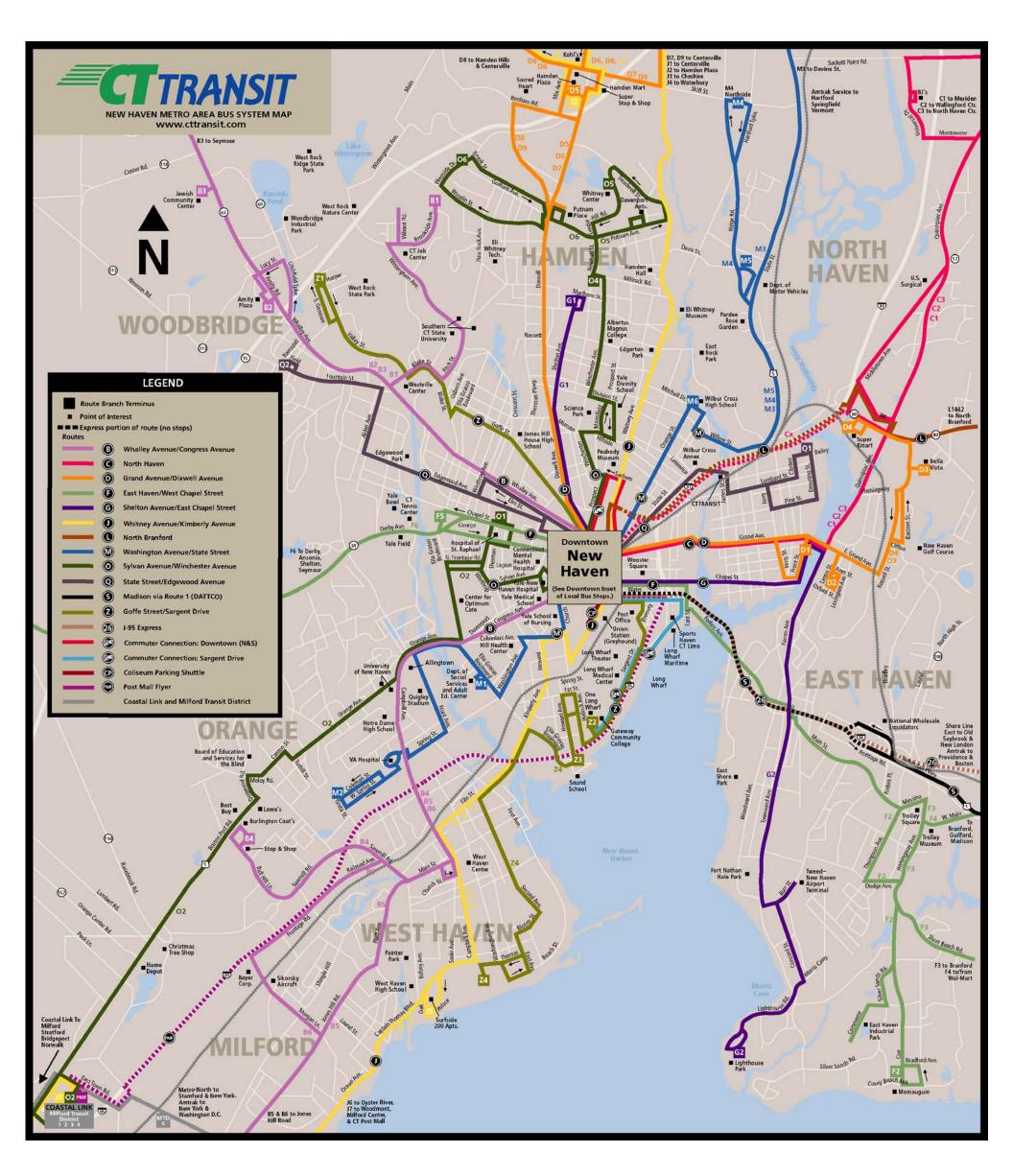


Figure 4.4-1 CTTransit's New Haven Division Route Map



### 4.4.2 Wallingford

CTTransit serves Wallingford on one intercity route out of New Haven and one local route provided by Northeast Transportation Company (NET). Over 1,100 boardings were made on the two routes in 2001 on a typical weekday. Most of the ridership comes from CTTransit's intercity route, with the local route targeting midday traffic. Figure 4.4-2 shows NET's Wallingford Route.

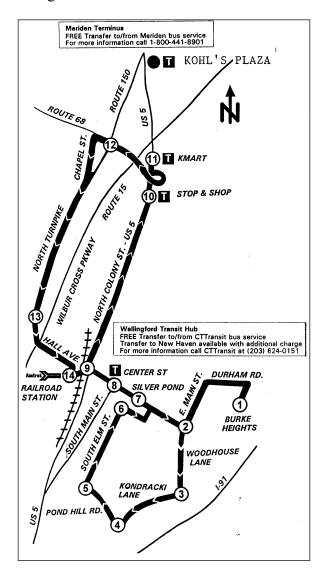


Figure 4.4-2 NET Wallingford Route Map

**NET Wallingford Bus Route** – The NET route operates between Burke Heights and the Route 5 K-Mart shopping center on weekdays only between 9:00 AM and 4:35 PM. The route also serves the Wallingford train station, which receives eight of the 11 daily Amtrak trains between Springfield and New Haven. The route has a loose figure "8" shape, and service is run in one direction along the loop. Running time on the 15.6 mile



route is 55 minutes. Free transfers are available to Meriden Bus Services and New Haven Route C.

**Route C North Haven** – See description of Route C under New Haven. Free transfers to the local NET route are available at several locations, including Stop and Shop and K-Mart on Route 5. Transfers are available at the Wallingford train station for an additional charge.

Table 4.4-2 Wallingford Bus Routes 2001 Weekday Ridership

Route	Route Name	Destination(s)	Headways	Weekday Riders	Month Boardings Recorded
	NET Wallingford Local	Wallingford	60 minutes	51	October
С	North Haven	North Haven, Wallingford, Meriden	15 to 60 minutes	1,093*	November
Total			•	1,144	

<sup>\*</sup> Total for all spurs of Route C

Source: CTTransit and Connecticut DOT data.

#### 4.4.3 Meriden

Meriden's Amtrak train station is the focal point of the city's bus network. Northeast Transportation (NET) under contract to CTTransit and ConnDOT operates three routes in Meriden, Routes A, B, and C. Service operates in one direction loops along figure "8" routes on weekdays only between 6:30 AM and 6:00 PM and all routes meet at the Meriden Amtrak Station in a "pulse" system to facilitate transfers at that location. CTTransit Hartford also provides bus service with an express route to Hartford, and the New Britain Transportation Company (NBTC), with one route to New Britain. The five services reported over 700 boardings on a typical weekday in 2001. Figure 4.4-3 shows the Meriden Routes.



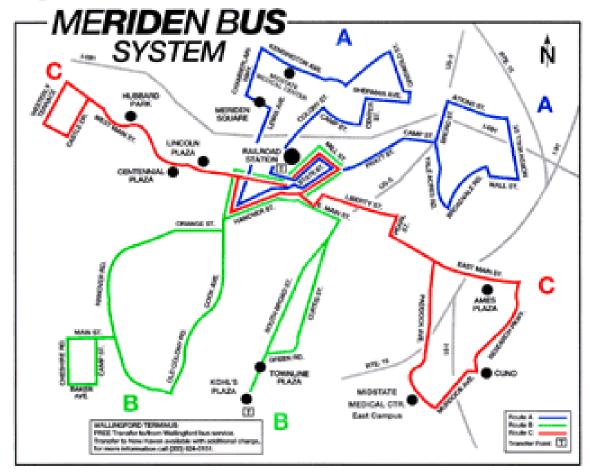


Figure 4.4-3 Meriden Bus System

**Route** A - Route A operates to Yale Acres and Meriden Square. Major stops on the route include the Westfield Shopping Town and the Mid Maine Medical Center.

**Route B** – Route B operates two segments in Southern Meriden connecting with CTTransit and Wallingford Services at Kohl's Plaza. Route B serves the Veteran's Memorial Medical Center West Campus as well as Kohl's Plaza.

**Route** C – Route C operates along East and West Main Streets including stops at VMMC's East Campus and Centennial Plaza.

**Route 60 Meriden-Hartford Express** – Meriden is also served by one express bus route operated by the Meriden Transit District. The route operates from the Bee Street Commuter Lot and Center Plaza in Meriden to Central Row in downtown Hartford.

**New Britain Transit A Arch Street/ Meriden Square** – New Britain Transportation Company (NBTC) operates one route into Meriden from downtown New Britain. The route serves Meriden Square hourly between 8:30 AM and 6:30 PM on weekdays.



# Table 4.4-3 Meriden Bus Routes 2001 Weekday Ridership

Route	Route Name	Headways	Weekday Riders	Month Boardings Recorded
A	Yale Acres – Westfield Shopping	60 minutes	133	October
	Town			
В	Kohl's – South Meriden	60 minutes	158	October
С	West Main St. – East Main St.	60 minutes	203	October
60	Meriden-Hartford Express		61	November
A	Arch Street – Meriden Square Mall	60 minutes	155	Unknown
(NBTC)				
Total			710	

**Source:** CTTransit and Connecticut DOT data.

#### **4.4.4** Berlin

Berlin is served by NBTC on one local route to downtown New Britain, as well as by CTTransit's Berlin Turnpike Flyer and Route T. Each route provides different services: Route BK provides all day service between Berlin and New Britain, Route BTF provides commuter service to Hartford, and Route T offers midday service to complement Route BTF. Only the service to New Britain (Route BK) passes near, but does not stop at, the Amtrak station on the rail corridor. The three services carried over 3,500 boardings on average in Berlin on a typical weekday in 2001.

**BK Berlin Kensington/ Berlin Turnpike** – This route serves the Kensington neighborhood of Berlin with downtown New Britain via South Main Street Farmington Avenue. Stops along the route include Webster Square Plaza, Home Depot, and Willow Brook Park. Weekday service is offered hourly between 6:00 AM and 7:00 PM. This route passes near Amtrak's Berlin station, but does not stop at the station.

**BTF Berlin Turnpike Flyer** – The Berlin Turnpike Flyer connects Newington and downtown Hartford via the Berlin Turnpike. Major stops along the route include the ConnDOT Newington headquarters and several shopping centers. Service is provided in the peak periods, between 6:10 AM and 8:05 AM out of Hartford, and between 4:35 PM and 10:30 PM.

**T Franklin Avenue** – The T route out of downtown Hartford operates one spur down the Berlin Turnpike between 8:20 AM and 4:40 PM. The service complements the Berlin Turnpike Flyer. Major stops on the route include the ConnDOT Newington Headquarters and Hartford Hospital.



# Table 4.4-4 Berlin Bus Routes 2001 Weekday Ridership

Route	Route Name	Headways	Weekday Riders	Month Boardings Recorded
BK	Berlin Kensington	60 minutes	195	Unknown
BTF	Berlin Turnpike Flyer	10 to 85 minutes	N/A	N/A
T	Franklin Avenue	60 minutes	3,377	December
Total			3,572	

**Source:** CTTransit and ConnDOT data.

#### 4.4.5 Newington

CTTransit's Hartford Division provides the town of Newington with three routes; the P and W (local routes), and the 7 Newington Commuter Express route. All three of these routes are CTTransit Hartford services, linking Newington with Hartford, as well as New Britain and West Hartford. The three services had over 1,500 daily boardings in 2001. There is no railroad station in Newington at this time, although at one point in history a Newington Junction Station did exist. Figure 4.4-4 (in section 4.4-7, Hartford), shows the CTTransit Hartford Division system.

**P New Britain** – The P New Britain route operates from Downtown Hartford to New Britain, providing access to Trinity College, Newington Center and Hartford Hospital. Service operates every 30 minutes throughout the day, as well as on Saturday. No Sunday service is offered on this route. DATTCO and CTTransit jointly operate this route.

W Capitol Avenue – The route travels west from Downtown Hartford on Capitol Avenue. The W2 branch continues west on Capitol and south on South Quaker Lane through West Hartford to the route terminus at Veterans Hospital in Newington. Service is offered hourly during the midday and from 15-20 minutes during the peak. Saturday service is offered hourly to the Veterans Hospital terminus. No Sunday service is operated on this line. This route passes by the site of the historic Newington Junction station.

**7 Newington Commuter Express** – The route operates four daily round trips between the Newington Park and Ride Lot on the Berlin Turnpike and downtown Hartford on weekdays.



# Table 4.4-5 Newington Bus Routes 2001 Weekday Ridership

Route	Route Name	Headways	Weekday Riders	Month Boardings Recorded
P	New Britain	30 minutes	805	August (2000)
W	Capitol Avenue	15 to 60 minutes	627	December
7	Newington Commuter Express	20 to 50 minutes	98	April
Total			1,530	

Source: CTTransit and ConnDOT data.

#### 4.4.6 West Hartford

Several routes from CTTransit's Hartford Division including the A, E, K, Q, W, 2 and 9 serve West Hartford. The majority of the routes only serve West Hartford and Hartford, but some routes extend to Farmington and Unionville. Route Q passes the former site of the Hartford, Providence & Fishkill railroad station in West Hartford at the intersection of New Britain Avenue and New Park Avenue. Routes that stop in West Hartford generated over 16,000 boardings during a typical weekday in 2001.

**Route A Hillside Avenue** – After passing through Downtown Hartford, both A1 and A2 trips continue on as A3, traveling south on Hillside Ave. to Storrs St. Service is provided on the routes between 5:55 AM and 1:24 AM on weekdays with 7 to 30 minutes headways on the trunk.

Route E Farmington Avenue – The route consists of a trunk route with seven different route designations, and four basic deviations. The Farmington Avenue/West Hartford Center route (E) runs west out of Downtown Hartford to West Hartford Center, and has service as frequently as every five minutes during the peak and ten minutes midday. Service on the trunk route is provided past midnight. Service is also provided to the University of Connecticut Health Center, Unionville, and Tunxis Community College via Farmington Center, Bishops Corner, Westfarms Mall, Corbins Corner Park and Ride lot and the Webster Hill terminus.

**Route K Park Street** – Route K operates west of Hartford along Park Street/Road., and has three variations within West Hartford: The three West Hartford variations are operated about every half-hour throughout the day, resulting in 10 minute headways on the Park Avenue trunk. Saturday service is provided on all three West Hartford K routes, but only to New Park Ave. on Sundays. Service is provided on the routes from 4:59 AM until 1:21 AM.

**Route Q New Britain Avenue** – The route begins in Bloomfield, and runs south to Downtown Hartford. It then extends west from Downtown Hartford to West Hartford. In West Hartford, there are three variations to the route: Q2 extends along New Britain



Ave. to Westfarms Mall, Q3 is a shorter version of Q2, terminating at Elmwood Center, and Q4 ends at a terminus on New Park Ave. Approximately half-hour headways on each Q branch result in 10 minute service along the New Britain Avenue trunk portion of the route. Saturday service is operated on all three branches, resulting in 20 minute service along New Britain Avenue. Hourly service is provided along New Britain Ave. to Westfarms Mall on Sunday. Service is offered between 5:15 AM and 10:49 PM on weekdays.

**Route W Capitol Avenue** – Route R travels west from Downtown Hartford on Capitol Avenue. The W1 branch turns south on Oakwood Avenue and terminates at BJs Wholesale Club on New Park Avenue. The W2 branch continues west on Capitol and south on South Quaker Lane through West Hartford to the route terminus at Veterans Hospital in Newington. Service is offered hourly during the midday and from 15-20 minutes during the peak from 6:20 AM to 6:30 PM. Saturday service is offered hourly to the Veterans Hospital terminus. No Sunday service is operated on this line.

Route 2 Corbins— Route 2 travels west from Downtown Hartford using I-84. Most of the commuter buses terminate at the Corbins Parking and Ride lot, while the few others serve Farm Springs Road. Route 2 provides customers with six trips in each peak direction and a few reverse peak trips as well. Morning service is operated between 6:35 AM and 8:45 AM. The one morning peak trip from Farm Springs Road leaves at 7:47 AM and is the last bus in the morning schedule. Two of the reverse commute buses serve make all the stops between downtown and Corbins. The third travels directly from Hartford to Farm Springs Road. The peak service in the afternoon runs between 3:40 PM and 5:55 PM. The one bus to the Farm Springs Road area leaves Hartford at 4:40 PM and arrives at 5:15 PM. The first reverse-commute bus serves the Farm Springs Road area and proceeds directly to Downtown Hartford. The second bus is the return trip of the peak service to the Farm Springs Road area and it too travels directly to Downtown Hartford. The service is only operated on weekdays.

**Route 9 Unionville-** This weekday commuter service connects Downtown Hartford with Farmington and Unionville via I-84. Only two peak direction buses are provided in each direction, as well as three reverse commute trips. The morning peak offers service between 6:42 AM and 7:50 AM on a 31-minute headway. The two reverse commute services operate between 6:05 AM and 7:10 AM on a 30-minute headway. The reverse commute service does not stop at the Farmington Park and Ride lot in the morning. The afternoon peak is run between 4:10 PM and 5:59 PM on an hour headway. The reverse commute bus runs between 5:59 PM and 6:34 PM.



# Table 4.4-6 West Hartford Bus Routes 2001 Weekday Ridership

Route	Route Name	Headways	Weekday Riders	Month Boardings Recorded
A	Hillside Avenue	7 to 30 minutes	1,181	December
Е	Farmington Avenue	10 to 75 minutes	6,439	December
K	Park Street	5 to 10 minutes	4,510	December
Q	New Britain Avenue	9 to 34 minutes	3,364	December
W	Capitol Avenue	15 to 60 minutes	627	December
2	Corbins	20 to 25 minutes	208	August
9	Unionville	30 to 31 minutes	76	November
Tota	16,405			

Source: CTTransit and ConnDOT data.

#### 4.4.7 Hartford

Hartford is a major hub that is served by a myriad of local and express routes. Several of these routes provide service to the rail corridor. Routes A, E, F and S pass by Hartford's Union Station intermodal hub. The CTTransit network uses Hartford to connect with over a dozen of the towns in Hartford County. (See Figure 4.4-4) On a typical weekday in 2001, rail corridor bus services had 29,800 boardings.

**Route A Hillside Avenue** – After passing through Downtown Hartford, both A1 and A2 trips continue on as A3, traveling south on Hillside Ave. to Storrs St. Service is provided on the routes between 5:55 AM and 1:24 AM on weekdays with seven to 30 minutes headways on the trunk.

Route E Farmington Avenue – The route consists of a trunk route with seven different route designations, and four basic deviations. The Farmington Avenue/ West Hartford Center route (E) runs west out of Downtown Hartford to West Hartford Center, and has service as frequently as every five minutes during the peak and ten minutes midday. Service on the trunk route is provided past midnight. Service is also provided to the University of Connecticut Health Center, Unionville, and Tunxis Community College via Farmington Center, Bishops Corner, Westfarms Mall, Corbins Corner Park and Ride lot and the Webster Hill terminus. All E trips serve Hartford's Union Station.

**Route F Ashley Street** – This route links Bowles Park in Bloomfield with downtown Hartford, including Hartford's Union Station. Weekday service is provided between 5:18 AM and 12 AM, with 15 minute headway peak service, 20 midday headway service, and hourly service at night. Saturday service is provided with 30 minute headways, while Sunday service is operated hourly.



Route K North Main Street – The K2 spur of the K route extends north of downtown Hartford via North Main Street to the Wilson Park and Ride Lot in Windsor. Stops along this route include the Richardson Mall, Board of Education Services for the Blind, and the Connecticut Department of Labor. Weekday service starts at 4:40 AM and ends at 12:55 AM with 20 minute headways all day. Weekend service is offered on this route.

**Route K Park Street** – Route K operates west of Hartford along Park St/Rd., and has three variations within West Hartford: The three West Hartford variations are operated about every half-hour throughout the day, resulting in 10 minute headways on the Park Avenue trunk. Saturday service is provided on all three West Hartford K routes, but only to New Park Ave. on Sundays. Service is provided on the routes from 4:59 AM until 1:21 AM.

**Route L Tower Avenue Crosstown** – The L route serves one stop in Windsor twice hourly, one bus in each direction, between 6:27 AM and 10:25 PM on weekdays. The route provides connections to the Buckland Hills Mall in Manchester and Copaco Shopping Center in Bloomfield. Weekend service is offered on this route.

**Route N Windsor** – The N route Windsor operates from downtown Hartford to Bradley International Airport via Main Street, Windsor Avenue and Route 75. Major stops along the route include the Windsor Railroad Station, Poquonock Park and Ride, Griffin Office Park and Bradley International Airport. Service is provided every 25 to 60 minutes between 5:38 AM and 9:04 PM on weekdays. Reduced service is offered on the weekend.

Route Q New Britain Avenue – The route begins in Bloomfield, and runs south to Downtown Hartford. It then extends west from Downtown Hartford to West Hartford. In West Hartford, there are three variations to the route: Q2 extends along New Britain Ave. to Westfarms Mall, Q3 is a shorter version of Q2, terminating at Elmwood Center, and Q4 ends at a terminus on New Park Ave. Approximately half-hour headways on each Q branch result in 10 minute service along the New Britain Avenue trunk portion of the route. Saturday service is operated on all three branches, resulting in 20 minute service along New Britain Avenue. Hourly service is provided along New Britain Ave. to Westfarms Mall on Sunday. Service is offered between 5:15 AM and 10:49 PM on weekdays.



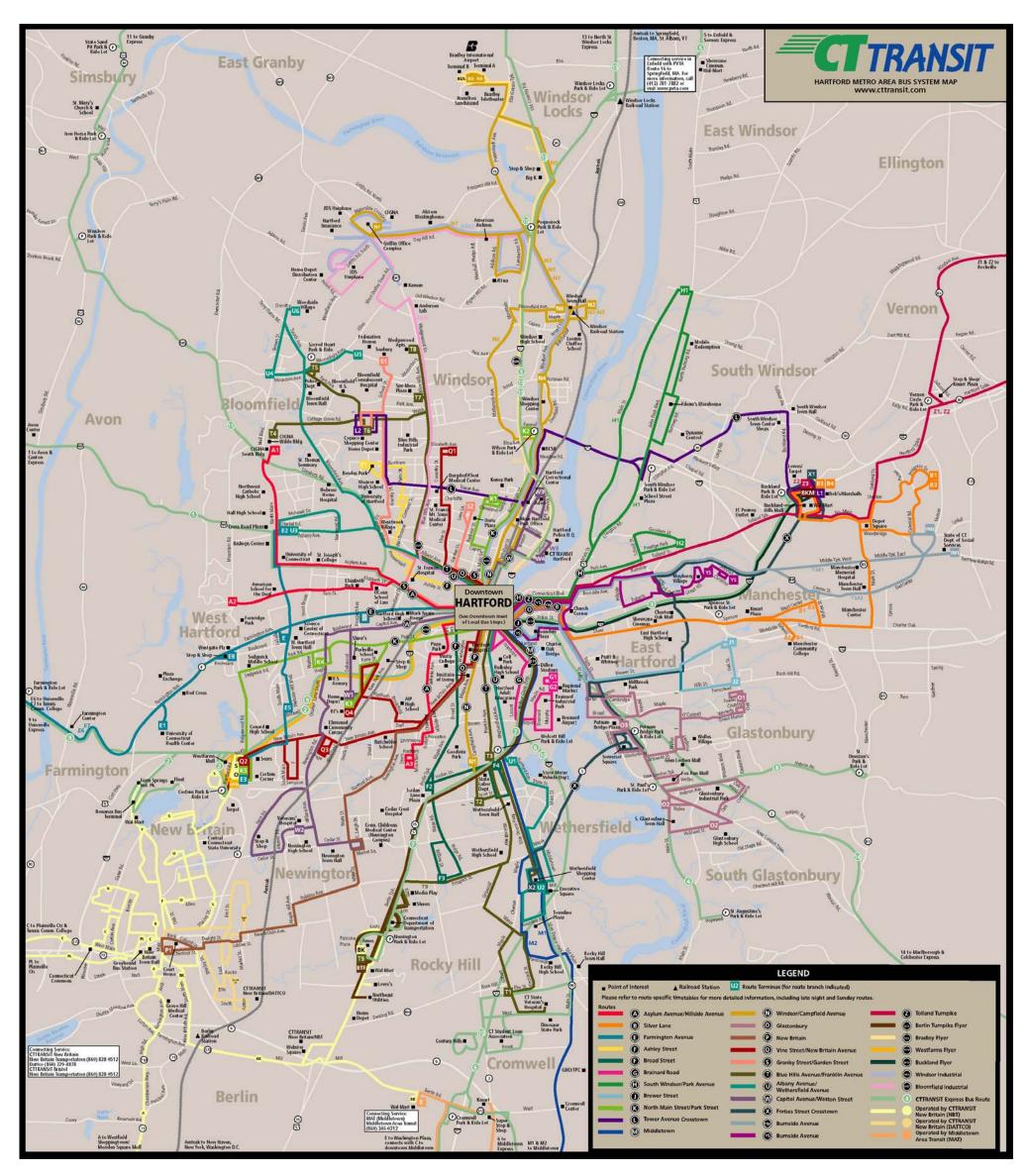


Figure 4.4-4: CTTransit's Hartford Division



Route S Granby Street/Garden Street- Route S consists of two branches that connect in Downtown Hartford. Typically, the service operated as a service that travels between Garden Street and Hartford and a service that operates between Granby Street and Hartford. The services run on approximately 40 minute headways, but are staggered so that an S bus arrives or leaves downtown Hartford every 20 minutes or so. Most peak-hour buses are operated as one service route and runs on 30 minute headways. Garden Street service is offered between 6:30 AM and 6:13 PM and provides 41 total trips. Service to Granby Street operates between 5:22 AM and 7:50 PM with 50 total trips. Saturday service is operated as one bus route and provides hourly service between 6:50 AM and 7:22 PM.

Route T Blue Hills Avenue- Route T has seven different service variations between Downtown Hartford and points north off of Blue Hills Avenue. Service in Downtown Hartford is operated at ten-minute headways from for most of the day with some five-, 15- and 20 minute headways interspersed throughout the day as well. After 7:15 PM service headways are greatly reduced. Service is provided between 4:50 AM and 1:21 AM. All services go as far north as Blue Hills and Tower before splitting to serve areas to the north and west the branch point. Most sub-routes on the route provide hourly service to the outlying station. Route T7 is operated every 30 minutes. Saturday service provides coverage for all of the subroutes. Outlying stations receive service every hour and Hartford receives service every 15 minutes. After 5:50 PM, service is only provided on Route T6, which serves the Copaco shopping area. Saturday service runs between 6:40 AM and 11:29 PM. Sunday service is run as Route KT, which provides service between Downtown Hartford and Bloomfield and is an extended version of Route T6.

Route W Capitol Avenue – Route W travels west from Downtown Hartford on Capitol Avenue. The W1 branch turns south on Oakwood Avenue and terminates at BJs Wholesale Club on New Park Avenue. The W2 branch continues west on Capitol and south on South Quaker Lane through West Hartford to the route terminus at Veterans Hospital in Newington. Service is offered hourly during the midday and from 15 to 20 minutes during the peak hours between 6:20 AM to 6:30 PM. Saturday service is offered hourly to the Veterans Hospital terminus. No Sunday service is operated on this line.

Route W Weston Street – Route W service on Weston Street is operated from Downtown Hartford traveling north to two locations: CTTransit offices and Advo. Advo can be considered an extension of the service to CTTransit and is typically served on hour headways, with half hourly service offered at peak periods. Service to the CTTransit office is provided at headways that are as short as three minutes and as long as seventy minutes. Midday service is operated at headways of 15 to 30 minutes. Peak service is provided with 30-minute headways. The service is operated between 5:35 AM and 6 PM. Weekend service runs from Downtown Hartford to CTTransit. Saturday headways are 30 minutes and Sunday headways are an hour. Saturday service runs between 8:15 AM and 5:43 PM and Sunday service is operated between 7:00 AM and 5:24 PM.



Route 2 Corbins Express - Route 2 travels west from Downtown Hartford using I-84. Most of the commuter buses terminate at the Corbins Park and Ride lot, while the few others serve Farm Springs Road. Route 2 provides customers with six trips in each peak direction and a few reverse-peak trips as well. Morning service is operated between 6:35 AM and 8:45 AM. The one morning peak trip from Farm Springs Road leaves at 7:47 AM and is the last bus in the morning schedule. Two of the reverse commute buses serve make all the stops between Downtown Hartford and Corbins. The third travels directly from Hartford to Farm Springs Road. The peak service in the afternoon runs between 3:40 PM and 5:55 PM. The one bus to the Farm Springs Road area leaves Hartford at 4:40 PM and arrives at 5:15 PM. The first reverse commute bus serves the Farm Springs Road area and proceeds directly to Downtown Hartford. The second bus is the return trip of the peak service to the Farm Springs Road area and it too travels directly to Downtown Hartford. The service is only operated on weekdays.

**Route 5/13 Enfield Express** – Somers/Windsor Locks Express – Express Routes 5 and 13 provide a connection from Enfield and Windsor Locks to Downtown Hartford. Service departs out of the Windsor Locks Park and Ride Lot for Hartford every ten to 25 minutes in the morning between 6:20 AM and 8:25 AM, and departs Hartford every ten to 45 minutes from 2:50 PM to 6:30 PM. There is reverse-peak service offered on both routes. These routes also pass by the Windsor Locks rail station.

**Route 9 Unionville Express** - This weekday commuter service connects Downtown Hartford with Farmington and Unionville via I-84. Only two peak direction buses are provided in each direction, as well as three reverse commute trips. The morning peak offers service between 6:42 AM and 7:50 AM on a 31-minute headway. The two reverse commute services operate between 6:05 AM and 7:10 AM on a 30-minute headway. The reverse commute service does not stop at the Farmington Park and Ride lot in the morning. The afternoon peak is run between 4:10 PM and 5:59 PM on an hour headway. The reverse commute bus runs between 5:59 PM and 6:34 PM.

**Route 15 Windsor Express** – Three peak direction trips are provided in each peak period between Day Hill Road and Poquonock Park and Ride in Windsor and downtown Hartford via the I-91 High Occupancy Vehicle (HOV) lane. No weekend service is offered on this route.

**BDL Bradley Flyer** – The Bradley Flyer serves Bradley International Airport as an express route via the I-91 HOV lane or as a local on North Main Street in Hartford, serving all stops. Stops along the route include the Poquonock Park and Ride Lot. Hourly service is provided between 4:10 AM and 12:55 AM on weekdays. Weekend service has the same span of service but fewer trips are offered.

**BMF Bloomfield Industrial** – Three morning peak trips and four evening peak trips are provided by the CTTransit to serve the Bloomfield industrial area on weekdays. Morning buses leave Downtown Hartford on half hour headways between 6:05 AM and 7:05 AM. Afternoon service collects riders in Bloomfield between 4:05 PM and 5:56 PM, with the last three buses leaving on half hour headways.



**WND Windsor Industrial** – Three Windsor trips are provided in the morning and two Hartford trips in the afternoon on the WND route. The service is supplemented by Route N and the Bradley Flyer on the main trunk of the route. No weekend service is offered on this route.

Table 4.4-7 Hartford Bus Routes 2001 Weekday Ridership

			Weekday	Month Boardings
Route	Route Name	Headways	Riders	Recorded
A	Hillside Avenue	7 to 30 minutes	1,181	December
Е	Farmington Avenue	10 to 75 minutes	6,439	December
F	Ashley Street	12 to 85 minutes	2,073	December
K	North Main Street	20 minutes	3,746	December
K	Park Street	5 to 10 minutes	4,510	December
L	Tower Ave Crosstown	60 minutes	289	November
N	Windsor	25 to 60 minutes	1,196	December
Q	New Britain Avenue	9 to 34 minutes	3,364	December
S	Granby St./Garden St.	7 to 28 minutes	1,730	December
T	Blue Hills Avenue	10 to 80 minutes	4,663	December
W	Capitol Avenue	15 to 60 minutes	627	December
W	Weston St.	15 to 30 minutes	417	December
2	Corbins	20 to 25 minutes	208	August
5/13	Enfield-Somers/ Windsor	10 to 50 minutes	866	April
	Locks Express	in peak		
9	Unionville	30 to 31 minutes	76	November
15	Windsor Express	30 minutes	N/A	N/A
BDL	Bradley Flyer	60 minutes	410	December
WND/	Windsor/ Bloomfield	22 to 50 minutes	104	August
BMF	Industrial			
Total			29,826	_

**Source:** CTTransit and ConnDOT data. 2001 ridership reflects a single day's boardings recorded in November 2001.

### 4.4.8 Windsor

CTTransit routes based in Hartford, including routes K, L, and N, serve Windsor. There is also peak service offered to the Windsor Industrial Park by local and express routes. Route N serves the *Windsor rail station*. The Windsor services attracted over 5,000 boardings on a typical weekday in 2001.

**Route K North Main Street** – The K2 spur of the K route extends north of downtown Hartford via North Main Street to the Wilson Park and Ride Lot in Windsor. Stops along



this route include the Richardson Mall, Board of Education Services for the Blind, and the Connecticut Department of Labor. Weekday service starts at 4:40 AM and ends at 12:55 AM with 20 minute headways all day. Weekend service is offered on this route.

**Route L Tower Avenue Crosstown** – The L route serves one stop in Windsor twice hourly, one bus in each direction, between 6:27 AM and 10:25 PM on weekdays. The route provides connections to the Buckland Hills Mall in Manchester and Copaco Shopping Center in Bloomfield. Weekend service is offered on this route.

**Route N Windsor** – The N route Windsor operates from downtown Hartford to Bradley International Airport via Main Street, Windsor Avenue and Route 75. Major stops along the route include the Windsor rail station, Poquonock Park and Ride, Griffin Office Park and Bradley International Airport. Service is provided every 25 to 60 minutes between 5:38 AM and 9:04 PM on weekdays. Reduced service is offered on the weekend.

**WND** Windsor Industrial – Three Windsor trips are provided in the morning and two Hartford trips in the afternoon on the WND route. Route N and the Bradley Flyer on the main trunk of the route supplement the limited service provided. No weekend service is offered on this route.

**Route 15 Windsor Express** – Three peak direction trips are provided in each peak period between Day Hill Road and Poquonock Park and Ride in Windsor and downtown Hartford via the I-91 HOV lane. No weekend service is offered on this route.

Table 4.4-8
Windsor Bus Routes 2001 Weekday Ridership

			Weekday	Month Boardings
Route	Route Name	Headways	Riders	Recorded
K	North Main Street	20 minutes	3,746	December
L	Tower Ave	60 minutes	289	November
	Crosstown			
N	Windsor	25 to 60 minutes	1,196	December
WND/	Windsor/	22 to 50 minutes	104	August
BMF	Bloomfield			
	Industrial			
15	Windsor Express	30 minutes	N/A	NA
	<u>Total</u>		5,335	

Source: CTTransit and ConnDOT data.

#### 4.4.9 Windsor Locks

CTTransit's Hartford Division serves Windsor Locks with three bus routes. Route 5 passes by the Windsor Locks rail station. CTTransit's service in Windsor Locks had nearly 2,500 boardings on a typical weekday in 2001. Service in Windsor Locks also connects with Enfield and Bradley Airport.



**Route N Windsor** – The N Windsor route serves Windsor Locks with two spurs of the route, N3 and N5. Both spurs serve Bradley International Airport, via Poquonock Avenue or Kennedy Road. The serve operates approximately hourly between 5:38 AM and 6:16 PM. There is little midday service on the two spurs. The N route service is supplemented by the Bradley Flyer route from the Poquonock Park and Ride Lot, for trips along Kennedy Road and trips destined for the Bradley International Airport.

**Route 5/13 Enfield – Somers/ Windsor Locks Express** – Express Routes 5 and 13 provide a connection from Enfield and Windsor Locks to downtown Hartford. Service departs out of the Windsor Locks Park and Ride Lot for Hartford every ten to 25 minutes in the morning between 6:20 AM and 8:25 AM, and departs Hartford every ten to 45 minutes from 2:50 PM to 6:30 PM. There is reverse peak service offered on both routes. Route 5 also passes the Windsor Locks rail station.

**BDL Bradley Flyer** – The Bradley Flyer serves Bradley International Airport as an express route via the I-91 HOV lane or as a local on North Main Street in Hartford, serving all stops. Stops along the route include the Poquonock Park and Ride Lot. Hourly service is provided between 4:10 AM and 12:55 AM on weekdays. Weekend service has the same span of service but fewer trips are offered.

Table 4.4-9
Windsor Locks Bus Routes 2001 Weekday Ridership

			Weekday	Month Boardings
Route	Route Name	Headways	Riders	Recorded
N	Windsor	25 to 60 minutes	1,196	December
5/13	Enfield-Somers/ Windsor	10 to 50 minutes	866	April
	Locks Express	in peak		
BDL	Bradley Flyer	60 minutes	410	December
	<u>Total</u>		2,472	

Source: CTTransit and ConnDOT data.

#### **4.4.10** Enfield

Both Springfield's Pioneer Valley Transit Authority (PVTA) and CTTransit's Hartford Division serve Enfield. PVTA service is provided by Route 16 to Springfield. CTTransit operates an express bus between Enfield and Hartford. CTTransit's Enfield service generated 866 daily boardings on a typical weekday in 2001, while the PVTA's service only generated an average of 74 daily boardings in June 2002.

CTTransit Route 5/13 Enfield – Somers/Windsor Locks Express – CTTransit's Express Routes 5 and 13 provide a connection from Enfield and Windsor Locks to downtown Hartford. Service departs out of the Enfield Park and Ride Lot on Freshwater Boulevard destined for Hartford every ten to 20 minutes in the morning between 6:12



AM and 8:10 AM, and departs Hartford every ten to 50 minutes from 2:50 PM to 6:30 PM. There is reverse peak service offered on both routes.

**PVTA Route 16 Longmeadow/ Enfield** – PVTA's Route16 serves Enfield Center and Enfield Square from Springfield, MA on weekdays and Saturdays with connections to Route 5 at the Freshwater Commuter Lot in Enfield. Service is offered between 6:20 AM and 7:05 PM with headways ranging from 70 minutes to three hours. Only seven trips are offered between Springfield and Enfield.

Table 4.4-10 Enfield Bus Routes 2001 Weekday Ridership

Route	Route Name	Headways	Weekday Riders
5/13	Enfield-Somers/ Windsor Locks Express	10 to 50 minutes in peak	866
PVTA Service (Average daily riders)			
16	Longmeadow/ Enfield	70 to 180 minutes	74
Tota	al		940

Sources: CTTransit and ConnDOT data. 2001 ridership reflects a single day's boardings recorded in April 2001. First Transit collected PVTA ridership data in June 2002

## 4.4.11 Longmeadow, MA

The PVTA provides Longmeadow, Massachusetts with two bus routes. There is no railroad passenger station in Longmeadow. These two routes averaged 475 boardings each service day in June 2002.

**Route 5 Dickinson-Jewish Home/ Springfield Bus Terminal** – This route provides service from the Springfield Bus Terminal to northern Longmeadow on weekdays and Saturdays. Service is provided hourly between 5:15 AM and 6:15 PM. Saturday service operates on hourly headways as well between 7:30 AM and 6:30 PM.

**Route 16 Longmeadow/ Enfield** — Route 16 serves Enfield Center and Enfield Square from Springfield, MA on weekdays and Saturdays with connections to Route 5 at the Freshwater Commuter Lot in Enfield. Service is offered between 6:20 AM and 7:05 PM with headways ranging from 70 minutes to three hours. Only seven trips are offered between Springfield and Enfield.



# Table 4.4-11 Longmeadow Bus Routes 2001 Daily Ridership

Route	Route Name	Headways	<b>Average Daily Riders</b>
5	Dickinson-Jewish Home/ Springfield Bus Terminal	60 minutes	401
16	Longmeadow/ Enfield	70 to 180 minutes	74
<u>Total</u>			475

**Source:** Sandra Sheehan of the PVTA. Ridership data collected by First Transit June 2002

## 4.4.12 Springfield, MA

Springfield, Massachusetts is the principal hub for PVTA service. Every bus route in Springfield stops at the intermodal center in Downtown Springfield. The intermodal center allows people to connect to Amtrak service and intercity bus service. Eighteen PVTA routes serve the Springfield area, linking Springfield with Enfield, Connecticut, Longmeadow, East Longmeadow, West Springfield, Agawam, Chicopee, Holyoke and Ludlow, Massachusetts. In the month of June 2002, the Springfield bus routes generated a total of 525,225 boardings<sup>3</sup>.

Figures 4.4-5 and 4.4-6 show the communities served by PVTA and the general location of routes.

Route 1 Fairfield Mall/ Sumner-Allen – This route provides service between Chicopee and Springfield, making an intermediate stop at the Springfield Bus Terminal. Buses operate at 15-minute headways during the peak and 20-minute headways midday on weekdays; headways can vary from 10 minutes to 85 minutes. Weekday service is operated between 5:00 AM and 11:55 PM. Saturday service is provided at half hour headways and at hour headways at night. Saturday hours of operations are between 6:20 AM and 11:30 PM. Sunday service is provided on hour headways with one two-hour headway in each direction as well. Service is provided between 9:00 AM and 7:00 PM. Summer service is provided using a similar schedule.

<sup>&</sup>lt;sup>3</sup> June tends to be a low ridership month for the PVTA's Springfield bus services because of the reduced college population in the summer.



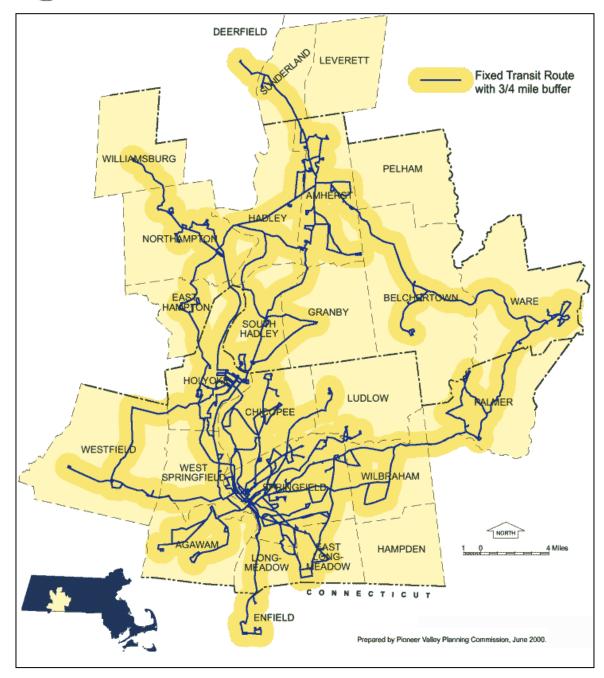


Figure 4.4-5 PVTA Route Map



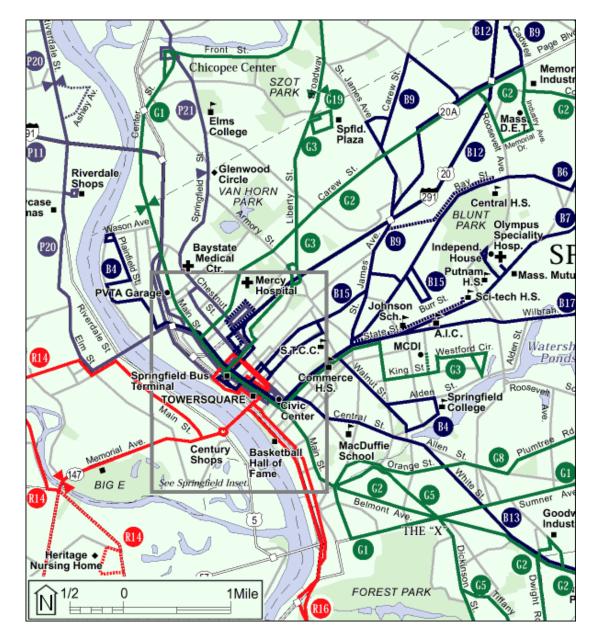


Figure 4.4-6
PVTA Springfield Route Map

Route 2 Carew-East Springfield/ Belmont-Dwight Road — Route 2 service operates between Springfield and East Longmeadow making a stop at the Springfield Bus Terminal. Weekday service is provided between 4:45 AM and 11:30 PM, typically with 15 minute peak headways and 20 minute off-peak headways. Some variations in the schedule exist to provide headways at ten minutes to 105 minutes. Saturday service is run between 5:37 AM and 12:40 AM. Typically Saturday service is provided at 30-minute headways, but irregular headways at the beginning and end of the service day provide headways that range between 18 and 60 minutes. Sunday service is provided on



hour headways with one two-hour headway in each direction as well. Service is provided between 9:00 AM and 7:00 PM. Summer service is provided with a very similar schedule.

Route 3 Springfield Plaza via Liberty/ King-Westford — This bus route operates entirely in Springfield, serving Springfield plaza to the north and the King-Westford Circle to the south. The route does have an intermediate stop at the Springfield Bus Terminal. Weekday service is offered between 5:25 AM and 10:35 PM. Headways of 30 minutes are typical on this route, with some service offered with 20- to 90-minute headways. Saturday service is provided between 7:50 AM and 10:30 PM. Again, headways are usually 30 minutes with some variance in the evening. Sunday service provides considerably less service. The service day is from 9:50 AM to 6 PM, but this service makes runs to the southern part of the route and has few buses serving the north. The north is served with 60- to 90-minute headways, while the south receives 30-minute headways.

Route 4 Plainfield/ Walnut Street- Springfield College – This bus route provides service between Springfield College and Plainfield Avenue seven days a week. Weekday service runs between 5:45 AM and 10:40 PM on a variety of headways. Peak headways are 20 minutes. Midday headways are 40 minutes and evening headways run at 30 minutes. Service to and from Springfield College is only offered between 6:40 AM and 6:10 PM. Saturday service is offered between 6:00 AM and 8:00 PM. Springfield College service is run between 8:40:00 AM and 6:00 PM. Headways are typically 40 minutes with early and late services being offered with 30- to 85-minute headways. Sunday service does not serve Springfield College at all. Run between 9:00 AM and 7:00 PM, the route operates on 90 minute headways, with two exceptions. One bus works on a 30-minute headway and a second runs with a two-hour headway. Summer service is markedly different. Weekday service is operated at 40-minute headways between 6:00 AM and 6:00 PM, and then at 30-minute headways in the evening. Weekday service is provided between 6:00 AM and 10:40:00 PM. Saturday service runs the same as the usual service. Sunday service is operated between 9:00 AM and 7:00 PM with headways that vary from 30 minutes to two hours.

**Route 5 Dickinson-Jewish Home/ Springfield Bus Terminal** – This route provides service from the Springfield Bus Terminal to northern Longmeadow on weekdays and Saturdays. Service is provided hourly between 5:15 AM and 6:15 PM. Saturday service operates on hourly headways as well between 7:30 AM and 6:30 PM.

Route 6 Ludlow via Bay – This route provides service between Downtown Springfield and Ludlow seven days a week. Weekday service runs between 5:20 AM and 10:25 PM. Almost all of the buses run on 20-minute headways. Evening service is operated with headways as big as 90 minutes. Saturday service runs on 30-minute headways for most of the day, with 90-minute headways in the evening. Saturday service is offered between 7:00 AM and 10:20 PM. Sunday service is operated on 90-minute headways and is provided between 10:00 AM and 6:00 PM. Summer service alters the frequency of weekday service. The service day works from 5:15 AM to 10:25 PM. Between 9:00 AM



and 6:20 PM service is provided with 40-minute headways. Evening service has 90-minute headways, and morning service has headways that range from 20 to 40 minutes.

Route 7 State-Boston Road/Eastfield Mall – This bus route provides service in Springfield from the Bus Terminal to shopping areas in east Springfield, with limited service to the Eastfield Mall. Weekday service is provided between 5:00 AM and 12:30 AM. Headways are 15 minutes between 5:00 AM and 5:45 PM, then extend to 30minute headways until 8:15 PM and night service is provided with headways between 45 Service to Eastfield Mall is on half-hourly headways in the minutes and an hour. morning, with a service gap between 7:30 AM and 9:20 AM and is a part of all service between noon and nighttime operations. Saturday service operates between 5:00 AM and 12:25 AM. Service between 5 AM and 6:40 PM is run on 20-minute headways with evening and night buses provided with 30- to 70-minute headways. Eastfield Mall is served between 9:10 AM and 7:30 PM on the normal bus schedule, with an additional bus in the morning and two at night. Sunday service is provided between 9:00 AM and 6:30 PM. Headways are irregular, varying from 30 minutes to two hours. Eastfield mall is served by all eight round trips provided on Sunday. Summer service is very similar to the service provided during the rest of the year.

**Route 8 Orange-Plumtree/ Springfield Bus Terminal** – Route 8 bus service operates entirely in Springfield. Weekday and Saturday service is provided. Weekday service is provided hourly headways between 6:05 AM and 6:45 PM. Saturday service also operates on hourly headways between 7 AM and 6 PM.

Route 9/15 St. James Avenue/ Worthington Street – The 9/15 bus route has two variations. Both variations terminate at the Springfield Bus Terminal, but one service collects passengers at Oak Grove, while the second and more popular route serves East and Royalton. Weekday service is offered between 5:35 AM and 6:30 PM on the East and Royalton section and between 6:20 AM and 5:55 PM for the Oak Grove section. East and Royalton has service on hour headways and Oak Grove is served with 40-minute headways until 9:40 AM, and then with hourly headways once service resumes at 2:50 PM and a twenty minute headway for the last bus. Meanwhile the Springfield Bus Terminal has headways that vary from 10 minutes to one hour due to the overlapping that occurs. Saturday service only serves the East and Royalton section of the route between 7:30 AM and 5:30 PM and is served with hourly headways.

Route 10 Westfield State College/ West Springfield – This route is an approximately eight mile long route that connects Westfield Center and Westfield State College with Downtown Springfield. The majority of the route operates on Massachusetts Route 20. Weekday service is provided between 5:00 AM and 10:45 PM, typically with half hour headways. Headway variations at the beginning and end of the weekday provide headways of 20 minutes and as much as an hour in the night. Saturday service offers hour headways between 7:00 AM and 10:20 PM with one headway of 40 minutes and another headway of 100 minutes. Sunday service is provided every 90 minutes between 9:00 AM and 7:30 PM with a break in service between noon and 3 PM.



**Route 11 Holyoke Community College Express** – This express service links the Frost building on the Holyoke Community College campus with the Springfield Bus Terminal. This weekday only service runs between 7:30 AM and 5:05 PM with hourly headways, except the last bus that runs with a 105 minute headway.

**Route 12 Stonybrook Express** – This bus route runs between the Springfield Bus Terminal and Hampden County Correctional Facility at Stonybrook. Service is provided Monday through Saturday between noon and 6:40 PM on two-hour headways.

Route 13 Maple Street/ East Longmeadow – Route 13 provides service between the Springfield Bus Terminal and East Longmeadow. Most buses terminate at the Big Y supermarket, but a few serve some residential areas south of the Big Y. Service is operated from 5:30 AM to 7:20 PM usually served with 30-minute headways. Some weekday headways are an hour during the midday hours of 10 AM to 1 PM. Saturday service runs hourly from 8 AM to 7:25 PM. Summer service reduces the weekday service to hourly headways between 5:40 AM and 7:45 PM. Summer Saturday service remains the same.

**Route 14 Feeding Hills/ Springfield** — Route 14 primarily serves shopping areas between Downtown Springfield and the Feeding Hills Center. Service operates on hourly headways between 6:30 AM and 6:50 PM and one last bus finishes the service day at 7:20 PM. Saturday service is also run on hourly headways and operates between 8:30 AM and 6:30 PM with an early bus that runs at 6:30 AM. Sunday service provides six roundtrips between 10:30 AM and 5:20 PM. Headways vary from an hour to 90 minutes. Summer service is provided with a similar schedule.

**Route 16 Longmeadow**/ **Enfield** – The Route 16 bus serves Enfield Center and Enfield Square from Springfield, MA on weekdays and Saturdays with connections to Route 5 at the Freshwater Commuter Lot in Enfield. Service is offered between 6:20 AM and 7:05 PM with headways ranging from 70 minutes to 3 hours. Only seven trips are offered between Springfield and Enfield.

**Route 17 Eastfield Mall via Parker-Wilbraham Road** – Route 17 bus route provides service between the Springfield Bus Terminal and the Eastfield Mall. Service is provided Monday through Saturday with a weekday schedule and a Saturday schedule. Weekday service operates from 6:00 AM to 9:45 PM with half-hourly headways in the peak, and 45-minute headways in the midday. Night service is provided with hourly headways. Saturday service runs between 7:30 AM and 9:45 PM. Headways for the bulk of the service are 45 minutes, with headways as long as 90 minutes in the evening and between the first and second bus of the day.

Route 20 Holyoke/ Springfield via Holyoke Mall- Riverdale —Route 20 provides service between Springfield Bus Terminal and Veterans Park in Holyoke. Weekday service runs from 4:40 AM to 12:25 AM. Headways of 30 minutes are typical to this route, but variations can generate headways of 15 to 85 minutes. Saturday service operates from 7:00 AM to 12:30 AM. This service is provided on half-hour headways,



with some express service between the Springfield Bus Terminal and the Holyoke Mall with 30- to 50-minute headways between 9:55 AM and 6:05 PM. Sunday service provides hourly service between 9 AM and 6:55 PM.

**Route 21 Holyoke/ Springfield via Chicopee** – Route 21 provides service between Springfield Bus Terminal and Veterans Park. Weekday service runs with 30-minute headways between 5:00 AM and 7:45 PM. Saturday service is operated on 45-minute headways between 8:00 AM and 7:00 PM. Sunday service offers service between 10:00 AM and 6:30 PM with 90-minute headways.

Table 4.4-12 presents the monthly ridership of the PVTA routes that serve the Springfield Bus terminal.

Table 4.4-12 Springfield Local Bus Route Monthly Ridership June 2002

		Weekday	Monthly
Route	Route Name	Headways	Riders
1	Fairfield Mall/ Sumner - Allen	10 to 85 minutes	68,425
2	Carew-East Springfield/ Belmont-Dwight Rd.	10 to 105 minutes	77,360
3	Springfield Plaza via Liberty/ King- Westford	20 to 90 minutes	40,525
4	Plainfield/ Walnut Street- Springfield College	20 to 40 minutes	20,030
5	Dickinson-Jewish Home/ Springfield Bus	20 to 90 minutes	10,010
	Terminal		
6	Ludlow via Bay	20 to 90 minutes	34,315
7	State-Boston Road/ Eastfield Mall	15 to 60 minutes	89,845
8	Orange-Plumtree/ Springfield Bus Terminal	60 minutes	9,225
9/15	St. James Avenue/ Worthington Street	10 to 60 minutes	7,140
10	Westfield State College/ West Springfield	20 to 60 minutes	27,920
11	Holyoke Community College Express	60 to 105 minutes	0*
12	Stonybrook Express	120 minutes	2,150
13	Maple Street/ East Longmeadow	30 to 60 minutes	14,830
14	Feeding Hills/ Springfield	30 to 60 minutes	8,770
16	Longmeadow/ Enfield	70 to 180 minutes	1,835
17	Eastfield Mall via Parker-Wilbraham Road	30 to 60 minutes	23,100
20	Holyoke/ Springfield via Holyoke Mall	15 to 85 minutes	64,420
21	Holyoke/ Springfield via Chicopee	30 minutes	35,435
Total			

<sup>\*</sup>With school out of session in June, the bus' demand pool is significantly decreased. Over the first five months of the year the service attracted 24,175 riders.

Source: Sandra Sheehan of the PVTA. Ridership data collected by First Transit in June 2002



#### 4.5 ADA Paratransit Services

Several agencies offer ADA (Americans with Disabilities Act) paratransit services for the mobility impaired and aged<sup>4</sup> in the study corridor.

- The Greater New Haven Transit District provides ADA and dial-a-ride service for people within CTTransit's New Haven service area. The service area includes New Haven, Hamden, North Haven and parts of Wallingford (any location within a quarter mile of CTTransit's New Haven service). Enrolled service recipients are able to call and book a ride up to a week in advance, on a first-come-first-served policy. The service charges \$2 per trip fare with a limit of three trips a day. The service day is based on CTTransit's New Haven service.
- NET provides ADA service within Wallingford and Meriden. Trips may be booked up to two weeks in advance. Service is offered on weekdays between 6:00 AM and 6:00 PM at a cost of \$2 per trip.
- The Greater Hartford Transit District provides paratransit service to the elderly and the disabled. To get service, one calls the transit district and requests service. For \$2 a disabled person may board the vehicle and travel to any point within three-quarters of a mile of a CTTransit bus in the Hartford service area. This service is available 7 days a week, normally between 6 AM and 10 PM. The elderly can use the dial a bus service for free, but are asked to make a \$20 annual donation for the service
- The PVTA also provides paratransit service. Like the New Haven and Hartford services, ADA trips can be made to any points within three-quarters of a mile of regular bus service. This service is allowed to charge as much as twice the regular PVTA fare and is provided during PVTA hours. This service provides door-to-door van rides and trips can be for any purpose.

The 2000 National Transit Database (NTD) data defines these ADA services as "demand response."

# 4.6 Ridesharing

There are several different ride share agencies serving the New Haven - Springfield corridor.

**New Haven** - Rideworks is a Connecticut rideshare organization based in New Haven. The company is dedicated to finding people transportation options for their commute to work by either car or van pool, or by public transportation. Rideworks guarantees a ride

<sup>&</sup>lt;sup>4</sup> People wishing to use ADA paratransit services must file an application with the service provider to be eligible to receive service. Not all that apply are granted eligibility.



home in cases of family emergencies, working late, or in the event that the driver leaves early.

**Hartford** - In greater Hartford, the Rideshare Company provides commuter alternatives to driving alone. In addition to supplying information on how to find rides to work, The Rideshare Company offers low interest financing on van purchases for people willing to start vanpools. Easy Street is a subsidiary organization of The Rideshare Company. Easy Street provides commuter van service all over Connecticut. Drivers are recruited by incentives that make their commute a zero cost operation. Roundtrip mileages vary from 20 to 200 miles a day.

Other incentives and opportunities are offered in Connecticut to encourage multi-person trips. Web pages including <a href="www.commutersregister.com/ct">www.commutersregister.com/ct</a> and <a href="www.carpoolconnect.com">www.carpoolconnect.com</a> provide carpool ride matching services.

According to NTD data collected in 2000, the Rideshare Company has 228 vans that offer service 260 days a year. Operating costs are very low at four cents per passenger mile, and 33 cents per vehicle mile. The Rideshare Company received over \$1.7 million in federal capital funds and over \$1.6 million in operating funds. Approximately seveneighths of Rideshare's operating funds are from "van fare" revenues. The "van fare" is based on the roundtrip route mileage of the commuting trip and are paid by the passengers.

**Springfield** - Massachusetts ridesharing programs are more focused on Boston than they are for Springfield area service. The PVTA is the primary transportation provider in the Springfield region, and all other carpool/vanpool options have to be found using nationwide carpool websites. Some of the Hartford ridesharing options include connections to Springfield.

# 4.7 Connecting Rail Service

In addition to the existing Amtrak service between stations in the corridor (discussed in Section 3.1 above), connections to other Amtrak rail service ares available at the two ends in New Haven and Springfield. From Springfield Union Station, service is available westward to Albany, eastward to Boston, and northward to Vermont.

From New Haven Union Station, intercity rail service is available southbound to New York City (and ultimately Washington DC), and northbound to Rhode Island and Boston.

Existing commuter rail connections are also available from New Haven's Union Station and State Street Station to MetroNorth's New Haven Line and the Shore Line East.

### Amtrak

Effective October 28, 2002, southbound Northeast Corridor service on Amtrak stopping at New Haven includes eight Acela Express and nine other trains during Monday through



Thursday (ten on Fridays). On weekends, there are six southbound Acela Express trains and eight other trains on Saturdays (nine on Sunday). Northbound Acela Express service includes seven trains on weekdays with nine other trains Monday through Thursday (ten on Friday). Weekend southbound service includes five Acela Express along with 10 other trains.

Springfield and Hartford are both served by five southbound Amtrak trains on weekdays, five southbound trains on Saturdays, and six southbound trains on Sundays. Northbound, both cities are served by six trains on weekdays, five trains on Saturdays, and six trains on Sundays. Most of these trains also serve intermediate Amtrak stations in Wallingford, Meriden, Berlin, Windsor and Windsor Locks, although several bypass those towns.

Springfield is also served by east-west Amtrak trains between Albany and Boston (Lake Shore Limited service). Two eastbound trains to Boston are offered daily, (at 4:00 PM, 6:55 PM weekdays and 7:55 weekends) and one westbound train is offered daily to Albany (at 12:10 PM).

### Metro North

For Metro North Service, from Union Station, there are 34 weekday trains heading towards Stamford or New York and 38 weekday trains arriving from New York or Stamford. From the State Street Station, weekday service towards New York is limited to two morning trains ending at Stamford (shared with Shore Line East), and four trains arriving at New York's Grand Central Station. Weekday service from points west is limited to two morning trains arriving at State Street, (one from Bridgeport and one from Grand Central) and two evening trains (one from Bridgeport and one from Stamford). The Bridgeport and Stamford trains are shared with Shore Line East Service.

On Saturdays, New Haven Metro North service includes 23 trains, only from Union Station, heading into New York, and 24 trains returning from Union Station. On Sundays, 21 trains serve Union Station into New York, and 22 trains return from New York.

### Shore Line East

Shore Line East service connects New Haven and New London, with several additional trains per day serving Bridgeport and Stamford directly in express service from New Haven (and allowing shared service with Metro North passengers on those trains). There is no Shore Line East service on weekends. The following schedule was effective October 28, 2002.

Weekday westbound Shore Line East Service includes seven morning trains between Old Saybrook and New Haven. (Two of those trains also serve New London). Those trains arrive in New Haven between 6:15 AM and 10:00 AM. Service does not resume until the afternoon. Westbound evening trains include five express trains from Old Saybrook directly to New Haven (three of which also serve New London). The non-express trains



all serve State Street Station in addition to Union Station. One additional special train is run on Friday afternoons in the summer to Old Saybrook.

For eastbound Shore Line East Service, three trains express in the morning from Union Station in New Haven (between 5:05 AM and 8:19 AM) directly to Old Saybrook (one continuing on to New London). Eight trains are provided in the afternoon and evening to Old Saybrook, three of which continue on to New London. One special train to Old Saybrook is provided on Friday afternoons in the summer. After the last eastbound train has left New Haven at 7:48 PM, Shore Line East passengers can also use a CTTransit bus that stops at Shore Line East stations through Old Saybrook, leaving New Haven at 8:42 PM.

### 4.8 Corridor Utilities

Throughout the entire length of the corridor, there are various utilities that cross the corridor both above the rail line (electric, telephone, cable TV) and below the rail line (water, sewer).

As noted in Section 3.7 above, Amtrak also has its own utilities in the corridor and fiber-optic cable is installed (or planned for installation) in some sections of the Springfield Line but is/will be owned and maintained by communications service providers (AT&T, MCI, Sprint, Williams Communications) and not by Amtrak. These fiber-optic lines are usually located within a utility easement on Amtrak-owned property, and are generally sited such that they are beyond the limits of existing rail beds and would not pose an impediment to the future laying of new track.

It is known that the alignment of fiber-optic cable within the limits of the New Britain – Hartford Busway was planned to run between the busway and the Amtrak rails to preclude the need to relocate any of that cable for the busway.