

Cost Estimate- Bus Expansion

Link	Miles	Average Speed	Route Duration (minutes)	Roundtrip Time (minutes)	Buses in service during peak	Buses in service off peak	Daily		Annual	Cost of Service	Capital Cost
							Additional Hours of Service-Peak	Additional Hours of Service-Off peak	Total additional service hours		
New Haven/Meriden	23.00	18	77	153	6	3	24	33	14,820	\$607,620	\$ 2,400,000
Newington/Buckland Hills	18.60	15	74	149	5	3	20	33	13,780	\$564,980	\$ 2,000,000
Coastal Link	10.60	15	42	85	3	2	12	22	8,840	\$362,440	\$ 1,200,000
Hamden Spur	3.90	15	16	31	2	1	8	11	4,940	\$202,540	\$ 800,000
RH/Weth/Glastonbury	9.10	18	30	61	3	2	12	22	8,840	\$362,440	\$ 1,200,000
New Canaan/Merritt 7	5.70	15	23	46	2	1	8	11	4,940	\$202,540	\$ 800,000
Bradley/Windsor Locks	4.50	15	18	36	2	1	8	11	4,940	\$202,540	\$ 800,000
Ansonia/Orange	13.60	15	54	109	4	2	16	22	9,880	\$405,080	\$ 1,600,000
Meriden/Bristol	14.90	15	60	119	4	2	16	22	9,880	\$405,080	\$ 1,600,000
Plainville/Southington	5.60	15	22	45	2	1	8	11	4,940	\$202,540	\$ 800,000
Stonington/Foxwoods	11.60	15	46	93	4	2	16	22	9,880	\$405,080	\$ 1,600,000
New Britain/CCSU/WestFarms	7.90	15	32	63	3	2	12	22	8,840	\$362,440	\$ 1,200,000
GBTA 15/Shelton/Ansonia	6.30	15	25	50	2	1	8	11	4,940	\$202,540	\$ 800,000
Total										\$4,487,860	\$ 16,800,000

Methodology for Preliminary Cost Estimate:
Miles covered by each route were determined using GIS. Average speeds were estimated to be 15 mph unless the route travels on highways for a portion of the routes, in which case average speed was assumed to be 18 mph. Average speeds were estimated using routes times for existing routes in several regions within the state. The number of vehicles in service during peak and off peak hours was estimated considering the time necessary for each bus to complete its full round-trip route. Annual hours of service are for 4 hours of peak weekday service with 30 minute headways and 11 hours of off-peak weekday service with 60 minute headways and do not include limited weekend service. This estimate assumes that additional buses would need to be purchased to cover peak hour services. Estimates of per-service-hour cost and per-vehicle capital cost were taken from Urbitran's 2007 report for Transit for CT, "Bus Transit Needs Analysis-Connecticut 2007" which averaged per hour of service operating costs at approximately \$41 and bus purchases at \$400,000 each.