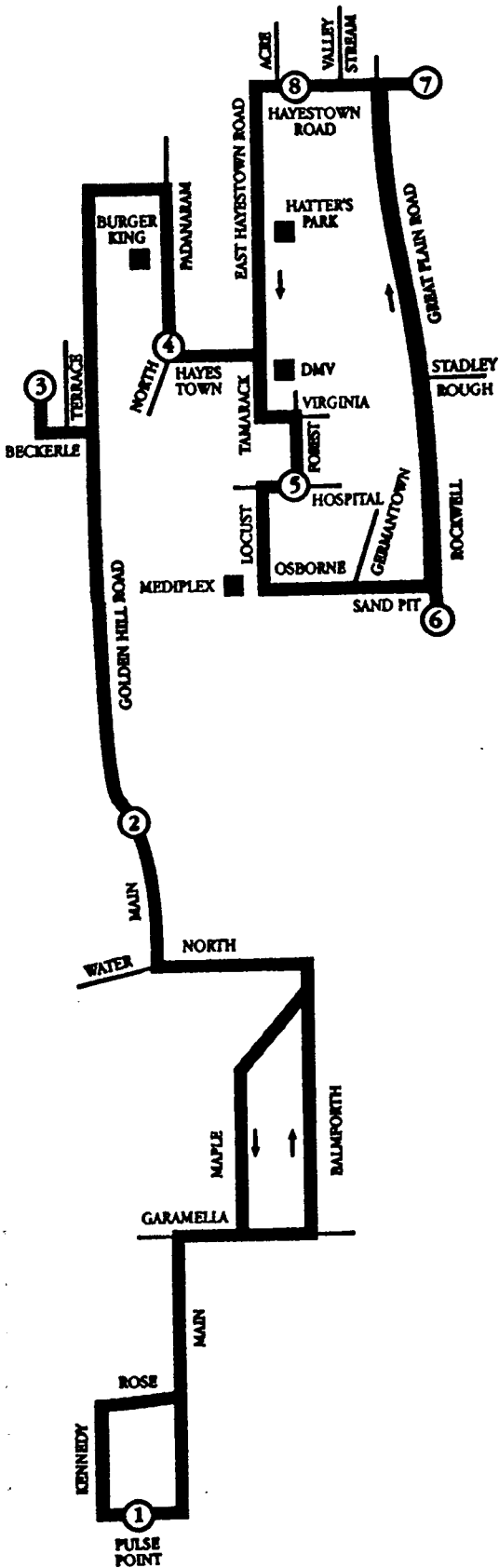


# FIXED ROUTE COMPREHENSIVE OPERATIONAL ANALYSIS 1994 OPERATING YEAR

FIRST INSTALLMENT

Route 1:

Medical Center/Golden Hill Analysis  
JULY 1994



PREPARED BY:

HOUSATONIC AREA REGIONAL TRANSIT  
SERVICE DEVELOPMENT DEPARTMENT

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# INTRODUCTION

In October, of 1992, the Housatonic Area Regional Transit District published a planning study providing an in-depth analysis of its fixed route bus transit service. This comprehensive operational analysis (COA) was the first detailed analysis of the service following HART's Fiscal Year 1991 service upgrade and Fiscal Year 1992 fare increase. The study evaluated the performance of the service, analyzed possible alternatives, and recommended several service changes, which took effect in August of 1993.

By use of ongoing data collection, HART intends to provide continual analysis of the service. A separate analysis, of which this chapter serves as the first installment, will be provided for each route. Each route analysis will evaluate current operations relative to those of the 1991 data collection effort for the 1992 COA report and will provide a summary of current route performance. At the completion of the analysis of all seven fixed routes, a system COA report for 1994 will be published. The system COA will include the data analysis and findings within each chapter and provide additional analysis as current routes are compared to each other and system averages.

**System History** After rapid growth throughout the 1980's, HART system ridership has fallen from 660,000 unlinked passenger trips in 1990 to 584,000 in 1994. Like many other fixed route systems nationally, HART has had to withstand the recessionary climate particularly damaging in the urban Northeast and, in response to more frugal state and local funding policies, raise fares. Through two fare increases since 1991, the base fare has risen from 75 cents to \$1.00, a 33 percent increase. Historically, such an increase likely results in a 10 to 15 percent ridership loss, which is consistent with HART's decrease.

The service continues to operate at the levels established for the 1990 service upgrade, by which peak headways decreased, midday and Saturday headways increased, and the service area expanded. The only significant change has been a division of the New Milford Route on midday and Saturday into two separate routes: the 7 New Milford Route operating at a two hour cycle time and providing express service to between the Pulse Point and New Milford, and the 4 Brookfield Route operating with a one hour cycle time between the Pulse Point and the Regional YMCA in Brookfield. Peak period express trips using Super 7 have also been scheduled on the 7 New Milford Route. These have reduced some one-way travel times between Danbury and New Milford to as little as 35 minutes.

Inbound service to the Danbury Hospital has been added to several Medical Center/Golden Hill Route trips since the 1992 COA, and deviations on several routes have changed slightly. All other scheduling and routing is essentially the same.

# PART 1 - ROUTE AND OPERATION DESCRIPTION

## Service Area

The 1 Medical Center/Golden Hill Route serves the northern area of Downtown Danbury, the Danbury Hospital and Sand Pit Medical Center, and several neighborhoods north of Interstate 84. Like all other HART fixed routes, the 1 Route begins and ends at the Pulse Point, located at Kennedy Avenue in Downtown Danbury, where transfers are facilitated as all routes arrive and depart simultaneously in a "pulse" mode.

For the purposes of this study, the route will be segmented, excluding the Pulse Point, into the following seven service blocks, each with its own operational, demographic, or land use characteristics:

- 1) Northern Downtown Danbury. The residential Balmforth, Maple, and Garamella Avenues and the mixed residential and commercial Main, North, and Rose Streets comprise the service route through Northern Downtown Danbury. On or within a short walking distance of these streets are Deep's market on North Street, Laurel Gardens, a Main Street housing project, and Hatters Yard Apartments on Garamella Avenue.
- 2) Golden Hill/Padanaram This segment is comprised of the entirely residential Golden Hill Road and the more densely-developed southern block of Padanaram Road, which includes several small shopping centers and two large condominium complexes. Although differently-developed, the two streets are linked in service whereby any change in service frequencies to one of the streets would equally affect the other. For this reason they are considered within the same segment. The part-time and seasonal Danbury High School deviation is also included in this segment.
- 3) Hayestown/Tamarack Avenues The congested and commercial Hayestown and Tamarack Avenues include the North Street Shopping Center, Abbott Technical School, and the Department of Motor Vehicles.
- 4) Hospital This segment includes the Danbury Hospital and the offices and homes that surround it. The 1 Route serves Virginia, Forest, Hospital, and Locust Avenues, the former two streets' being residential and the latter two consisting of the hospital, Broadview Junior High School, and numerous medical offices and facilities.
- 5) Osborne/Germantown/Sand Pit Mixed land use is a characteristic of the route segment including Osborne Street from its intersection with Locust Avenue and its continuation into Germantown and Sand Pit Roads. The roads are lined with middle-income homes, small shops and offices, and Germantown Plaza, a small shopping center. The segment is anchored by the Sand Pit Medical Center, a three building complex of medical clinics and

offices. This segment is served on a part-time basis by the 4 Brookfield Route.

6) Rockwell/Great Plain/Hayestown Roads Upon departing Sand Pit Medical Center, the route enters middle to upper-middle class neighborhoods along Rockwell, Great Plain, and Hayestown Roads (not to be confused with Hayestown Avenue). These roads are completely residential, and none have sidewalks. Saint Gregory the Great Church and School, located at the intersection of Great Plain and Hayestown, has historically been the only significant traffic generator.

7) Town Park/E. Hayestown Road Beginning at Danbury Town Park and continuing south on East Hayestown Road, this segment completes a counterclockwise loop which begins and ends at the intersection of East Hayestown Road and Hayestown and Tamarack Avenues. Primary traffic generators on this route segment have been the town park and the lower-income Lake Candlewood Apartments.

Exhibit 1 illustrates the entire routing.

### Frequency of Service

The 1 Medical Center/Golden Hill Route operates from 6:05 a.m. to 6:27 p.m. on weekdays and 8:00 a.m. to 5:27 p.m. on Saturdays. On weekdays, the first outbound trip departs the Pulse Point at 6:05 a.m., and departures continue thereafter with 30 minute headways during the early-morning and late-afternoon peak periods and 60 minute headways from 9:00 a.m. to 3:00 p.m. On Saturdays, headways remain at 60 minutes throughout the service day.

The first three route segments receive both outbound and inbound service at the stated service frequencies. The Hospital segment is served at these frequencies for all outbound trips, but inbound service is limited to 60 minute frequencies from 8:39 to 1:39 with a final trip added at 3:09 on weekdays. Inbound hospital service operates at 60 minute headways throughout the service day on Saturday. Inbound service to the hospital was added during the August, 1993, schedule changes.

The last three segments comprise a large loop and receive only single-direction service according to the above headways.

A timetable is included in Exhibit 2.

# ROUTE 1 MEDICAL CENTER/GOLDEN HILL

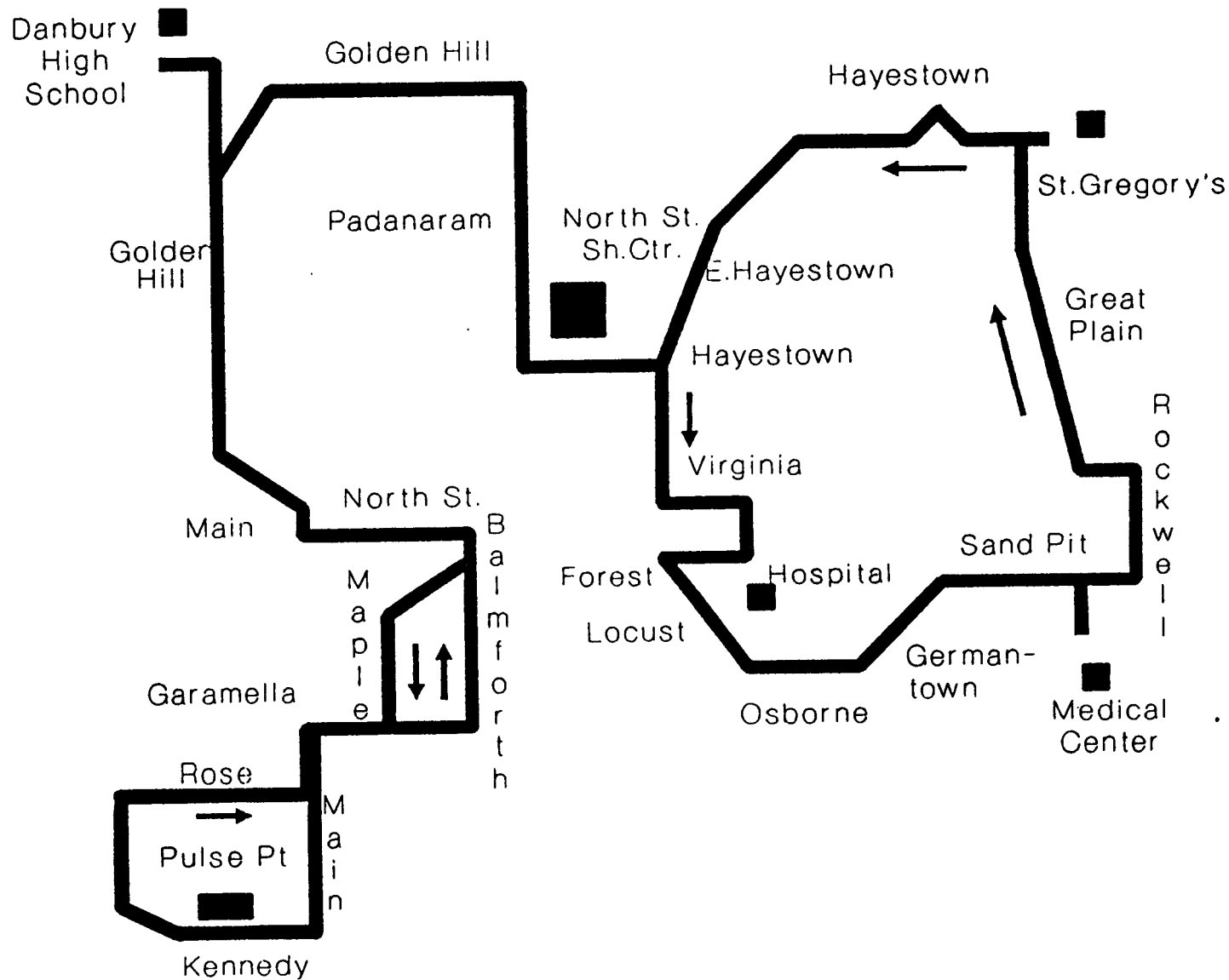


Exhibit 2

1 MEDICAL CENTER/GOLDEN HILL ROUTE TIMETABLE

	Pulse Point ①	Golden Hill/ Main Street ②	Danbury High School ③	North St. Shopping Center ④	Danbury Hospital ⑤	Sand Pt. Medical Center ⑥	St. Gregory Church ⑦	Town Park ⑧
OUTBOUND WEEKDAYS	6:05	6:10	—	6:15	6:20	—	6:28	6:31
	6:30	6:36	—	6:44	6:49	6:55	7:00	7:03
	7:00	7:06	6:40	7:14	7:19	7:25	7:30	7:33
	7:30	7:36	7:40	7:44	7:49	7:55	8:00	8:03
	8:00	8:06	—	8:11	8:15	8:21	8:26	8:29
	8:30	8:36	—	8:41	8:45	8:51	8:56	8:59
	9:00	9:06	—	9:11	9:15	9:21	9:26	9:29
	10:00	10:06	—	10:11	10:15	10:21	10:26	10:29
	11:00	11:06	—	11:11	11:15	11:21	11:26	11:29
	12:00	12:06	—	12:11	12:15	12:21	12:26	12:29
	1:00	1:06	—	1:11	1:15	1:21	1:26	1:29
	2:00	2:06	—	2:11	2:15	2:21	2:26	2:29
	3:00	3:06	—	3:11	3:15	3:21	3:26	3:29
	3:30	3:36	—	3:41	3:45	3:51	3:56	3:59
	4:00	4:06	—	4:11	4:15	4:21	4:26	4:29
	4:30	4:36	—	4:41	4:45	4:51	4:56	4:59
	5:00	5:06	—	5:11	5:15	5:21	5:26	5:29
	5:30	5:36	—	5:41	5:45	5:51	5:56	5:59
	6:00	6:06	—	6:11	6:15	6:21	6:26	6:29
OUTBOUND SATURDAYS	8:00	8:06	—	8:11	8:15	8:21	8:26	8:29
	9:00	9:06	—	9:11	9:15	9:21	9:26	9:29
	10:00	10:06	—	10:11	10:15	10:21	10:26	10:29
	11:00	11:06	—	11:11	11:15	11:21	11:26	11:29
	12:00	12:06	—	12:11	12:15	12:21	12:26	12:29
	1:00	1:06	—	1:11	1:15	1:21	1:26	1:29
	2:00	2:06	—	2:11	2:15	2:21	2:26	2:29
	3:00	3:06	—	3:11	3:15	3:21	3:26	3:29
	4:00	4:06	—	4:11	4:15	4:21	4:26	4:29
5:00	5:06	—	5:11	5:15	5:21	5:26	5:29	

	Town Park	Danbury Hospital	North St. Shopping Center	Danbury High School	Main Street / Golden Hill	Pulse Point
	8	5	4	3	2	1
INBOUND WEEKDAYS	6:10	—	6:13	—	6:18	6:25
	6:30	—	6:43	—	6:48	6:55
	7:10	—	7:13	—	7:18	7:25
	7:40	—	7:43	—	7:48	7:55
	8:10	—	8:13	—	8:18	8:25
	8:34	8:39	8:43	—	8:48	8:55
	9:34	9:39	9:43	—	9:48	9:55
	10:34	10:39	10:43	—	10:48	10:55
	11:34	11:39	11:43	—	11:48	11:55
	12:34	12:39	12:43	—	12:48	12:55
	1:34	1:39	1:43	—	1:48	1:55
	2:37	—	2:40	2:44	2:48	2:55
	3:04	3:09	3:13	—	3:18	3:25
	3:37	—	3:40	3:44	3:48	3:55
	4:07	—	4:10	4:14	4:18	4:25
	4:37	—	4:40	4:44	4:48	4:55
	5:07	—	5:10	5:14	5:18	5:25
	5:37	—	5:40	5:44	5:48	5:55
INBOUND SATURDAYS	8:34	8:39	8:43	—	8:48	8:55
	9:34	9:39	9:43	—	9:48	9:55
	10:34	10:39	10:43	—	10:48	10:55
	11:34	11:39	11:43	—	11:48	11:55
	12:34	12:39	12:43	—	12:48	12:55
	1:34	1:39	1:43	—	1:48	1:55
	2:34	2:39	2:43	—	2:48	2:55
	3:34	3:39	3:43	—	3:48	3:55
	4:34	4:39	4:43	—	4:48	4:55



## Running Time

All trips, regardless of deviation, of the Medical Center/Golden Hill Route are scheduled to complete a round trip in 55 minutes. This running time allows two layovers to enable an efficient timed-transfer system; one is at the Pulse Point and lasts five minutes, and the other is at the town park and lasts the balance of 55 minutes after revenue time.

On weekdays, running times for outbound trips beginning at the Pulse Point and ending at the town park are consistently 29 minutes. Four minutes are added to this one-way running time for three early-morning trips deviating to the Danbury High School. Inbound trips vary more regularly by deviation. Inbound running time from the town park to the Pulse Point is 15 minutes with 6 minutes added for trips providing inbound service to the hospital and 3 minutes added for deviations to the high school.

On Saturday, all trips have an outbound running time of 31 minutes and an inbound running time of 21 minutes. Exhibit 3 illustrates the various running time combinations.

## Run Cutting

Run cutting involves the creation of driver run assignments to operate a service as scheduled. Service frequencies and running times most directly dictate the number of drivers needed to provide service, but personnel, contract, safety, cost, and logistical considerations can impact how runs are developed and combined to form assignments.

Because transferring between routes is an inconvenience for passengers yet an integral facet of operating its fixed route service, HART interlines routes into route pairs to maximize the number of passengers who need only one bus to complete their trip. Past operational studies have consistently identified the 5 Bethel Center bus as the best "match" for the 1 Route.

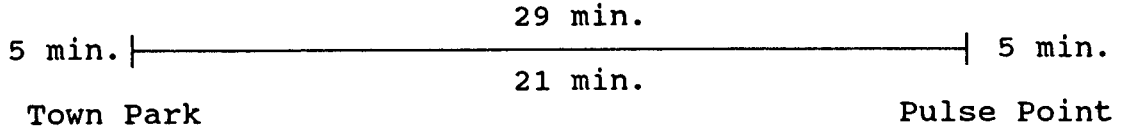
HART uses ten individual operator runs combined into six run assignments to provide service on the 1 Medical Center/Golden Hill Route and its interlining 5 Bethel Center Route. On weekdays, the 1 and 5 Routes together require four runs to cover the trips departing the Pulse Point on the hour and four runs to cover early-morning and late-afternoon trips departing the Pulse Point on the half-hour. On Saturday, the routes require two runs which together cover all trips. The former four runs are cut to create two straight runs operating five days per week and two shorter runs, each combining with a Saturday run for a six-day work schedule. The four runs covering pulses on the half-hour are combined into two split-run assignments for weekdays.

Without interlining, operation of the 1 Route at current levels of service would require five operator runs combined into three run assignments: one weekday-straight-run, one weekday/Saturday

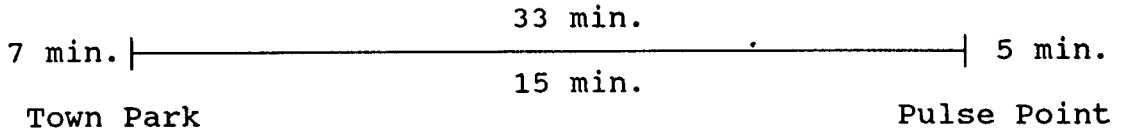
Exhibit 3

Route 1 Medical Center/Golden Hill  
Route Running Time by Deviation

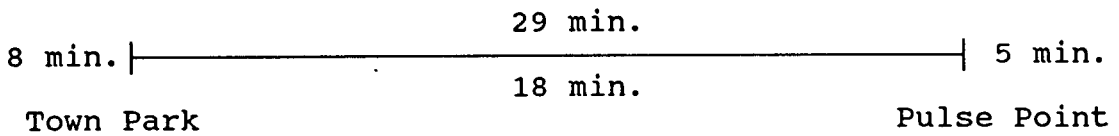
**Inbound Hospital Service  
Weekdays**



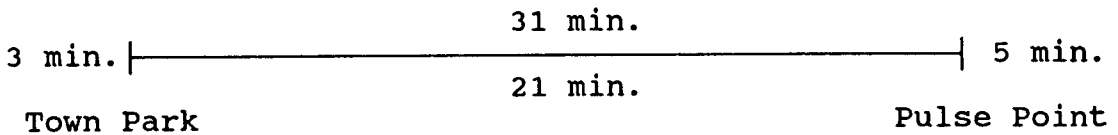
**Outbound High School Service  
Weekdays**



**Inbound High School Service  
Weekdays**



**All Saturday Trips**



straight run, and one weekday split run.

Weekday straight runs either originate from or return to the garage at 62 Federal Road. Split runs and Saturday runs travel both to and from the garage. The time needed to travel between the garage and either the starting point of the first trip or the end point of the last trip is called the "deadhead" time. This time must be added to running time (or revenue time) in creating a run. Revenue plus deadhead time is referred to as platform time.

In addition to platform time, all runs which originate at the garage include 15 minutes of daily report time. Because of their long duration, the weekday straight runs require a driver change at the Pulse Point. This driver change adds 15 minutes of travel time to the run of all affected drivers. Currently, the driver change for the 1 and 5 Routes occurs at 12:55 p.m.

Drivers' pay is earned at a time-and-one-half rate for each weekly hour over a total of 40. Effective, spring of 1992, HART's run cutting procedures have attempted to minimize scheduled overtime.

Exhibit 4 illustrates current run combinations used to cover 1 Route trips.

Exhibit 4

Medical Center/Golden Hill - Bethel Center Route Run Assignments

Run	Days	Report Time	End Time	Daily Platform Hours	Daily Pay Hours	Wkly Run Hours	Wkly Pay Hours	Relief Point
102	M-F	5:40	1:10	7:00	7:30	37:30	37:30	Pulse
502	M-F	5:40	1:10	7:00	7:30	37:30	37:30	Pulse
102p	M-F	12:40	6:40	5:45	6:00	30:00	40:00	Pulse
111	S	7:35	5:35	9:45	10:00	10:00		---
202p	M-F	12:40	6:40	5:45	6:00	30:00	40:00	Pulse
211	S	7:35	5:35	9:32	10:00	10:00		---
101	M-F	5:42	9:10	3:13	3:28	17:20	35:15	---
103	M-F	2:35	6:10	3:20	3:35	17:55		---
501	M-F	5:40	9:10	3:15	3:30	17:30	35:50	---
503	M-F	2:30	6:10	3:25	3:40	18:20		---

## Mileage

The 1 Route's outbound distance from the Kennedy Avenue Pulse Point to the town park is 8.2 miles. The inbound trip, which includes a much smaller portion of the route's large loop, is 3.6 miles. A deviation to the Danbury High School from either

direction adds 0.6 miles to the length of a trip. The inbound deviation to the Danbury Hospital adds 2.0 miles to the inbound trip distance. This amounts to 241.6 scheduled revenue service miles per weekday and 132.4 scheduled revenue service mile per Saturday. The weekday speed is 13.2 m.p.h. and the Saturday speed is and 13.9 m.p.h. These speeds are significantly greater to the 1991 average of 10.7 m.p.h. due to the addition of inbound service to the hospital.

## Fare Structure

The base fare for all HART fixed route services is \$1.00 per passenger trip within one of the three zones by which the service area is segmented. Seniors (age 60 or over) and persons with disabilities pay a half-fare of 50 cents. Students grades K thru 12 pay 75 cents.

Trips between the central zone (comprised of the Towns of Danbury, Bethel, and Brookfield) and either the north zone (New Milford) or the south zone (Ridgefield) have a base \$1.50 fare. Seniors and persons with disabilities are charge 75 cents, students are charged \$1.15. Three-zone fares between New Milford and Ridgefield do not affect the 1 Route.

Transfers between routes are free. Discount passes are available as 10-ride punch tickets which provide a five-cent discount per single-zone trip and a ten-cent discount per multiple zone trip. Monthly passes offer unlimited rides within a particular month. Fares and all pass prices are listed in Exhibit 5.

### Exhibit 5

#### HART Fixed Route Fare Structure

<b>Cash Fare</b>	<b>1 Zone</b>	<b>2 Zone</b>	<b>3 Zone</b>
<i>Adult Base Fare</i>	\$1.00	\$1.50	\$2.00
<i>Student (K-12)</i>	0.75	1.10	1.45
<i>Seniors and Persons with Disabilities</i>	0.50	0.75	1.00
<b>Bye-Pass (10-Ride Ticket)</b>	<b>1 Zone</b>	<b>2 Zone</b>	<b>3 Zone</b>
<i>Adult</i>	\$9.50	\$14.00	\$19.00
<i>Student (K-12)</i>	7.00	10.00	13.50
<i>Seniors and Persons with Disabilities</i>	4.50	7.00	9.00
<b>Fast Pass (Monthly Unlimited pass)</b>	<b>1 Zone</b>	<b>2 or 3 Zone</b>	
<i>Adult</i>	\$39.00	\$58.50	
<i>Seniors and Persons with Disabilities</i>	19.50	29.00	

## Vehicles

HART fixed Route vehicle fleet consists of ten 1989 Orions and ten 1982 TMC Citycruisers. The Orions are 35 feet in length, seat 37 passengers, and have rear-door wheelchair lifts, "kneeling" ability, air-conditioning, and electronic destination signs and fareboxes. The TMC's are 30 feet in length, seat 30 passengers, and have roll-curtain destinations signs and electronic fareboxes.

Current runcutting requires four buses for the operation of the 1 and 5 Routes. Unlinked with the 5 Route, the 1 Route would require two buses to operate its current schedule.

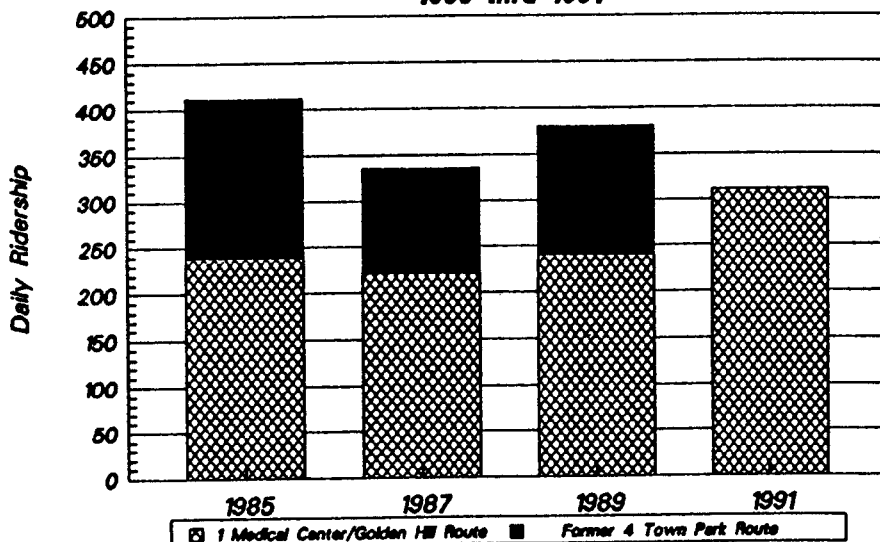
## Ridership History

Through the 1980's, the Medical Center/Golden Hill Route had the sixth highest ridership of the seven fixed routes, and average daily ridership never exceeded 240 passenger trips per weekday. The 1990 service upgrade combined the 1 Route with the 4 Town Park Route, which had the lowest system ridership but, like the 1 Route, served northern Danbury. The combining of the two routes into one larger single route created a large loop which worsened single-directional travel times to some time-points, most notably the Danbury Hospital.

The 1991 COA report indicated that average daily ridership on the 1 Route increased to 313 passengers per weekday, but total ridership decreased after the combination of the 1 and 4 Routes (see Exhibit 6). The tradeoff was increased operating efficiency from the elimination of the runs assigned to the 4 Route. The only routing changes made since 1991 are the addition of inbound trips to the Danbury Hospital during middays and Saturdays and three outbound trips to Danbury High School weekday mornings.

Exhibit 6

### ROUTE 1 MEDICAL CENTER/GOLDEN HILL Ridership History 1985 thru 1991



## **PART 2 - ROUTE ANALYSIS**

### **Measures and Standards**

HART does not have formal service standards adopted to provide decisive triggers for service evaluations. However, HART has consistently used various measures for monthly statistical summaries, planning reports, and operational analyses. Past comprehensive operational analyses of HART's fixed route service have used the following measures: passengers per route segment/deviation, passengers per platform hour, and loading. This analysis will use these standards and add a fourth, passengers per revenue hour per segment.

#### **Passengers per Route/Segment/Deviation**

Total ridership is the most understood and therefore most commonly used measure of a service's performance. However unless service levels are stable over evaluation periods, a single passenger count alone can be misleading for comparative evaluation. The 1 Route has experienced minimal change since its current schedule was constructed in 1990, and, through Fiscal Year 1994, changes to no other route are likely to have had any significant effect on its ridership. Therefore, ridership defined as total boarding and alighting activity on the 1 Route as a whole and within segments is a reliable measure for its performance.

General ridership counts will be used to compare current to past use of the service and identify strengthening or weakening segments of the route. It will also determine the effectiveness of the scheduling of route deviations, which lengthen some passenger trips and create inconsistencies in scheduling but maintain a schedule which best matches particular traffic generators' more sporadic demand for service.

**Passengers per Platform Hour** is a more accurate measure of service performance. This measure more directly reflects correlations between supply and demand and therefore represents the productivity of the service. This measure proved to be particularly informative in evaluating HART routes; the 1991 COA report proved that the route with the greatest ridership, because of greater running times, was also the least productive.

**Maximum Loads** measure a trip's capacity. Ridership on many routes is not even for all trips. Certain trips can carry particularly heavy loads which can present uncomfortable conditions for passengers and slow-down operations. At the other extreme, loads which are significantly lower than capacity can create a poor public perception of the necessity of services.

**Passenger Activity per Segment Hour** is a fourth standard introduced to evaluate productivity of each route segment. For this study, each route is segmented into areas of common

demography, density, land use, or operational characteristics. Because of differences in distance or traffic conditions, segments may widely vary in the scheduled operating or revenue time needed for their service. Therefore, straight passenger counts per segment will not often indicate the productivity of service to that area. This measure will indicate the amount of passenger activity, whether boarding or alighting, in an area and consider the amount of time required to provide the service. This measure of productivity will contribute to any alternatives analysis for possible route changes.

The statistic can also help provide a calculation for the true cost of providing service to a route segment. There are limitations, however. HART's pulse system mandates fixed cycle times. In many cases, cutting service to a non-productive route can only increase layover time, which is of course less productive.

## Data Analysis

The data for this section was collected on various days throughout a six month period of 1994. An on-board checker recorded all boarding and alighting locations, passenger counts and fares paid for all scheduled trips. Boarding and alighting counts for all locations are included in a table in the Appendix. Current analysis will include comparisons of current route data with that of the 1991 operation analysis to determine operating changes which have occurred over the three year period. The data will be further evaluated relative to current data for other routes and system averages in a system summary which will be published upon the completion of all individual route analyses.

The 1991 data collection consisted of 100% trip sample performed on-board over three weekdays and two Saturdays in October, 1991. This data will be presented both in a daily average and Hi-Lo range.

**Weekday Route and Segment Ridership.** Weekday ridership, defined as the number of boardings, on the Golden Hill/Medical Center Route is 316 passengers. AM Peak, midday, and PM Peak ridership totaled 81, 139, and 96 passengers respectively.

Compared to 1991 data, weekday ridership has maintained steady. The 1991 sample recorded an average of 311 passengers per day with a high of 318 and a low of 296. Ridership within the A.M. Peak and Midday Periods for 1994 also fell within and at the higher end of the 1991 Hi-Lo range: 70 to 82 for the AM Peak and 124 to 145 for the midday. The 1994 P.M. peak total fell slightly below the 1991 range of 100 to 107. Exhibit 7 illustrates 1994 totals compared with the 1991 averages.

Exhibit 8 shows an even greater similarity between 1991 and 1994 ridership when analyzed by route segment. The only segment which has experienced a significant ridership change is an increase of

# ***Route 1 MEDICAL CENTER/GOLDEN HILL Weekday Ridership Comparisons 1991 and 1994***

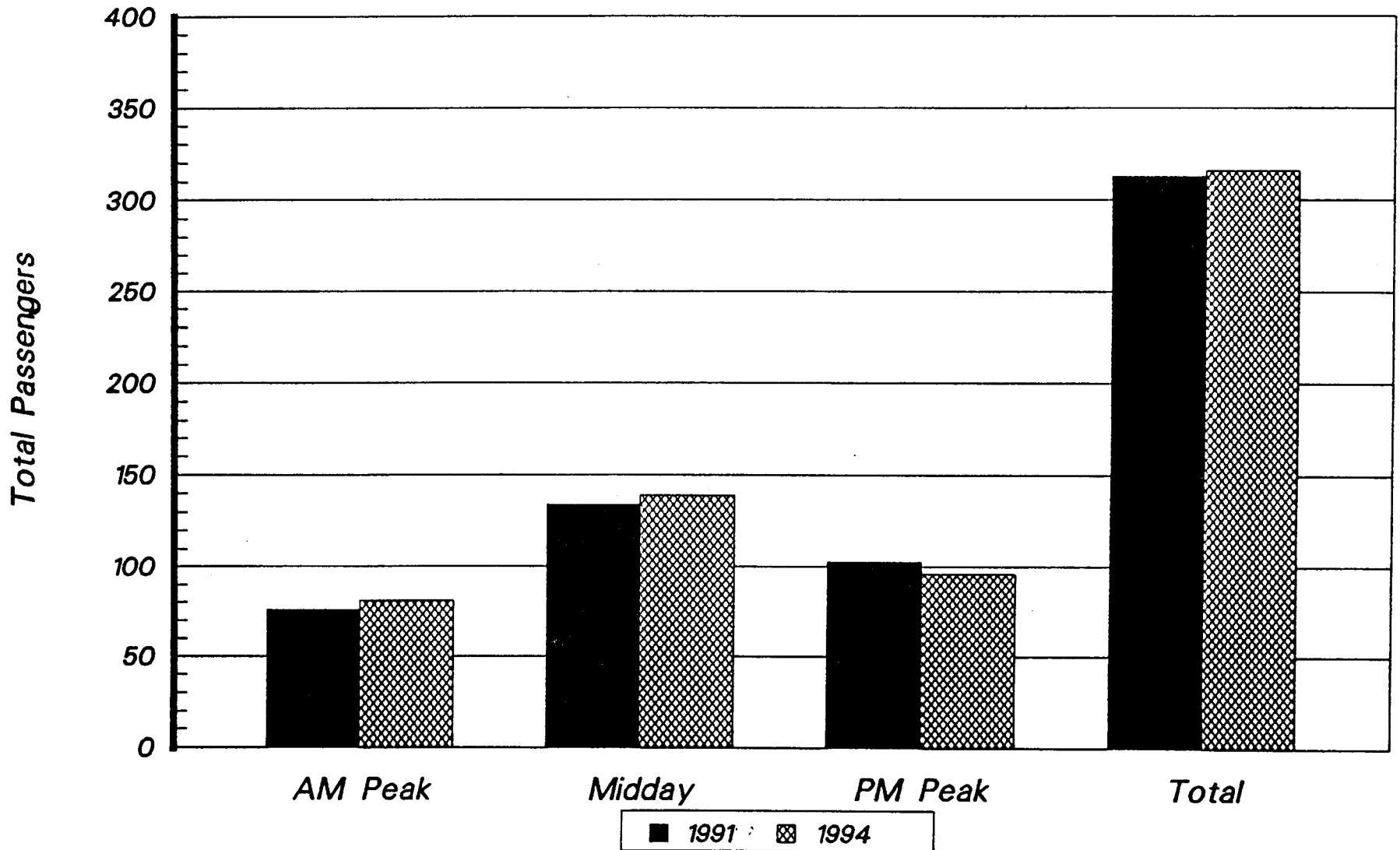




Exhibit 8

HOUSATONIC AREA REGIONAL TRANSIT DISTRICT  
Recorded Boarding and Alighting Activity per Route Segment  
Route 1 Medical Center/Golden Hill  
1994 Weekday Trip Sampling

Route Segment	AM Peak		Midday		PM Peak		Total	
	Ons	Offs	Ons	Offs	Ons	Offs	Ons	Offs
Pulse Point*	39	38	70	55	53	34	162	127
Northern Downtown	12	5	9	14	6	27	27	46
Golden Hill/Padanaram	17	5	8	9	6	13	31	27
Hayestown/Tamarack Ave	4	7	17	15	8	8	29	30
Hospital	3	22	23	34	20	5	46	61
Osbourne/G'town/Sand Pit	1	4	7	9	1	2	9	15
Rockwell/Grt Plain/Hayestown Rds	1	0	2	3	0	2	3	5
Town Park/E.Hayestown	4	0	3	0	2	5	9	5
Totals	81	81	139	139	96	96	316	316

\* Includes ride-thru transfers

HOUSATONIC AREA REGIONAL TRANSIT DISTRICT  
Recorded Boarding and Alighting Activity per Route Segment  
Route 1 Medical Center/Golden Hill  
1991 Weekday Trip Sampling\*\*

Route Segment	AM Peak		Midday		PM Peak		Total	
	Ons	Offs	Ons	Offs	Ons	Offs	Ons	Offs
Pulse Point*	38	29	63	53	53	36	154	118
Northern Downtown	15	2	11	17	5	25	31	44
Golden Hill/Padanaram	8	10	11	10	6	8	25	28
Hayestown/Tamarack Ave	6	4	13	16	12	13	31	33
Hospital	2	23	25	27	20	13	47	63
Osbourne/G'town/Sand Pit	2	6	7	8	4	5	13	19
Rockwell/Grt Plain/Hayestown Rds	3	1	2	2	2	3	7	6
Town Park/E.Hayestown	2	1	2	1	1	0	5	2
Totals	76	76	134	134	103	103	313	313

\* Includes ride-thru transfers

\*\* Average of three sampled weekdays

boardings on Padanaram Road during the A.M. Peak Period. Slight changes include a shifting of some alighting activity from the P.M. Peak to the midday period in the area of the Danbury Hospital and a general reduction of passengers to and from the area of the North Street Shopping Center during the P.M. Peak.

The scheduled deviations to the Danbury High School served no one in the morning and only two passengers in the afternoon. The newly-added inbound deviation to the hospital served 22 people over its seven weekday trips. Every sampled inbound trip to the hospital experienced boarding activity. Thus, the service change implemented as a result of the 1991 COA has been a notable success.

**Weekday Passengers Per Hour.** Weekday passengers per hour rose only slightly from 16.02 in 1991 to 16.30 in 1994. The rate of passengers per hour during the A.M. Peak rose from 11.72 to 12.68, and the Midday rate rose from 22.28 to 23.17. The rate for the P.M. peak decreased from 14.57 to 13.71 passengers per hour. These figures are illustrated in Exhibit 9.

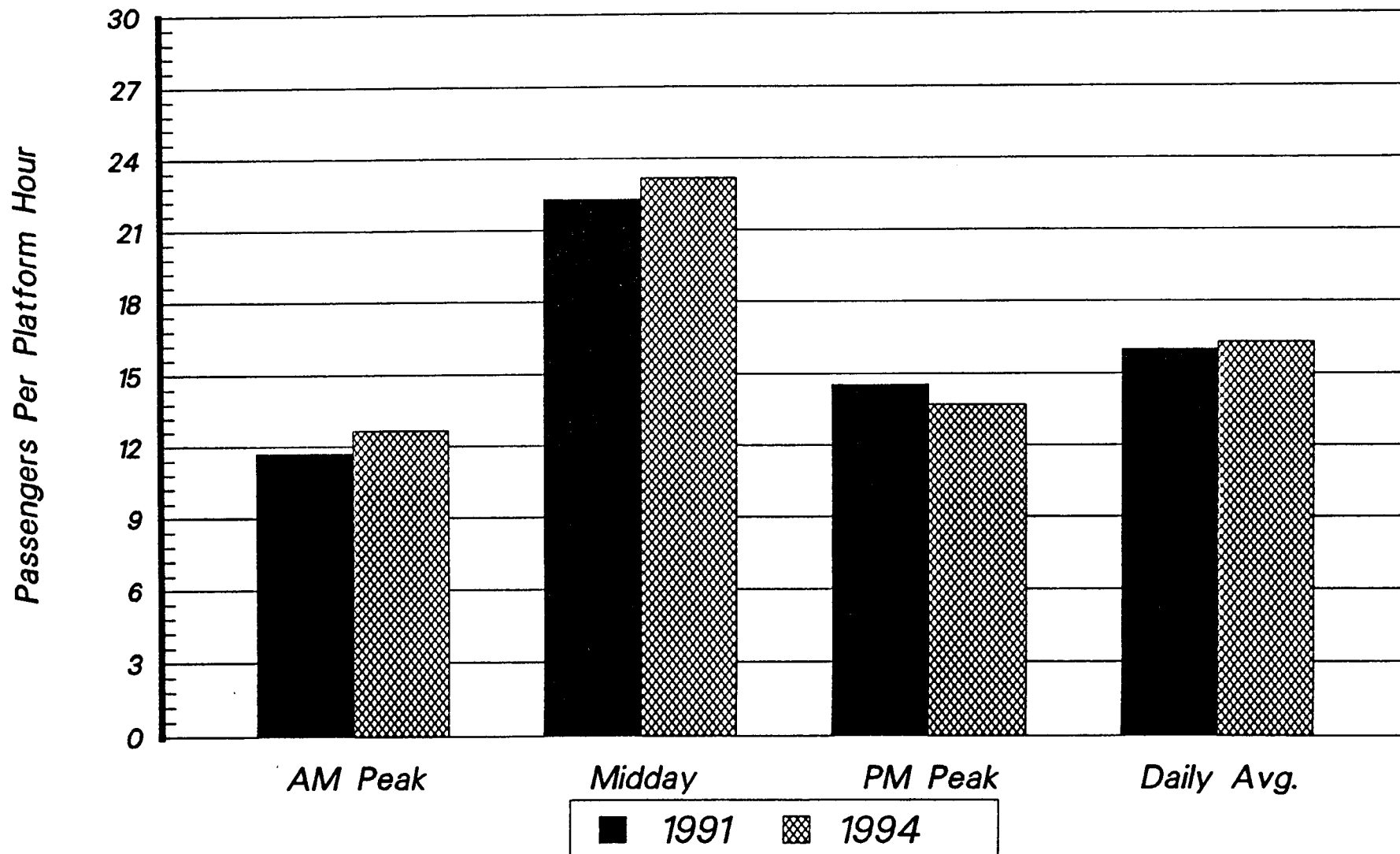
**Weekday Loading.** The maximum weekday outbound load was 20 passengers, and the maximum inbound load was 14 passengers. No sampled trip required standees. During the summer, student programs at Broadview Junior High School can generate up to 40 passengers for one outbound trip in the early morning and one inbound trip during the mid-afternoon. In such cases, standees are inevitable, but no consistent instance requires a tripper or a larger-capacity vehicle. Exhibit 10 illustrates the highest-recorded load per trip.

Light loads are frequent as all outbound trips leave the hospital. Loads do not begin to rise until inbound buses return to either the hospital or the North Street Shopping Center. One outbound trip, the first at 6:05 a.m. carried no one.

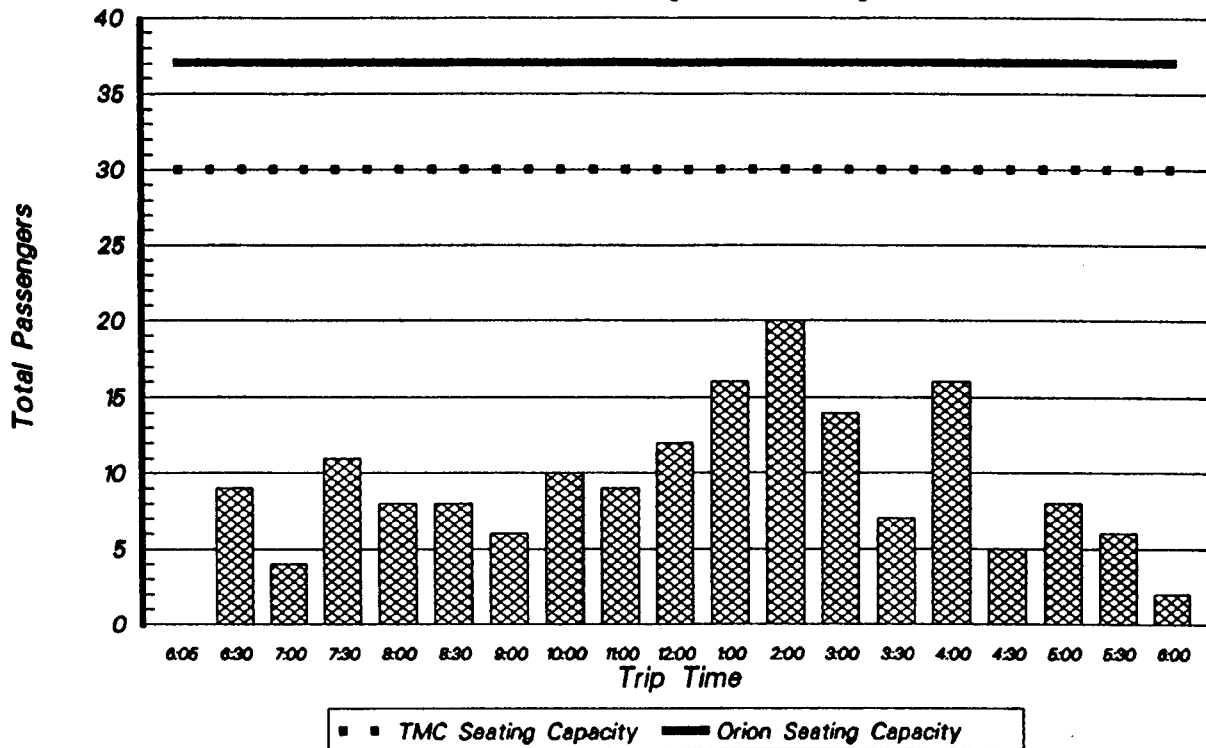
**Weekday Passenger Activity per Segment Hour.** Exhibit 11 illustrates the number of boardings and alightings within each segment for each hour of scheduled running service to that segment. The results provide a clearer idea of the productivity of service to a segment using the most direct factor of operating expense, that is, operating hours. For example, the Town Park/East Hayestown segment experiences little more activity than the Rockwell/Great Plain/Hayestown segment. However, the much shorter amount of time needed to serve it results in its much greater productivity.

The Hospital segment is by far the most productive at 49.38 boardings or alightings per hour followed by the Hayestown/Tamarack Avenue segment at 31.89.

# ***Route 1 MEDICAL CENTER/GOLDEN HILL Weekday Passengers Per Hour Comparisons 1991 and 1994***



**Route 1 MEDICAL CENTER/GOLDEN HILL  
Maximum Load per Outbound Trip  
1994 Sampled Trips**



**Route 1 MEDICAL CENTER/GOLDEN HILL  
Maximum Load per Inbound Trip  
1994 Sampled Trips**

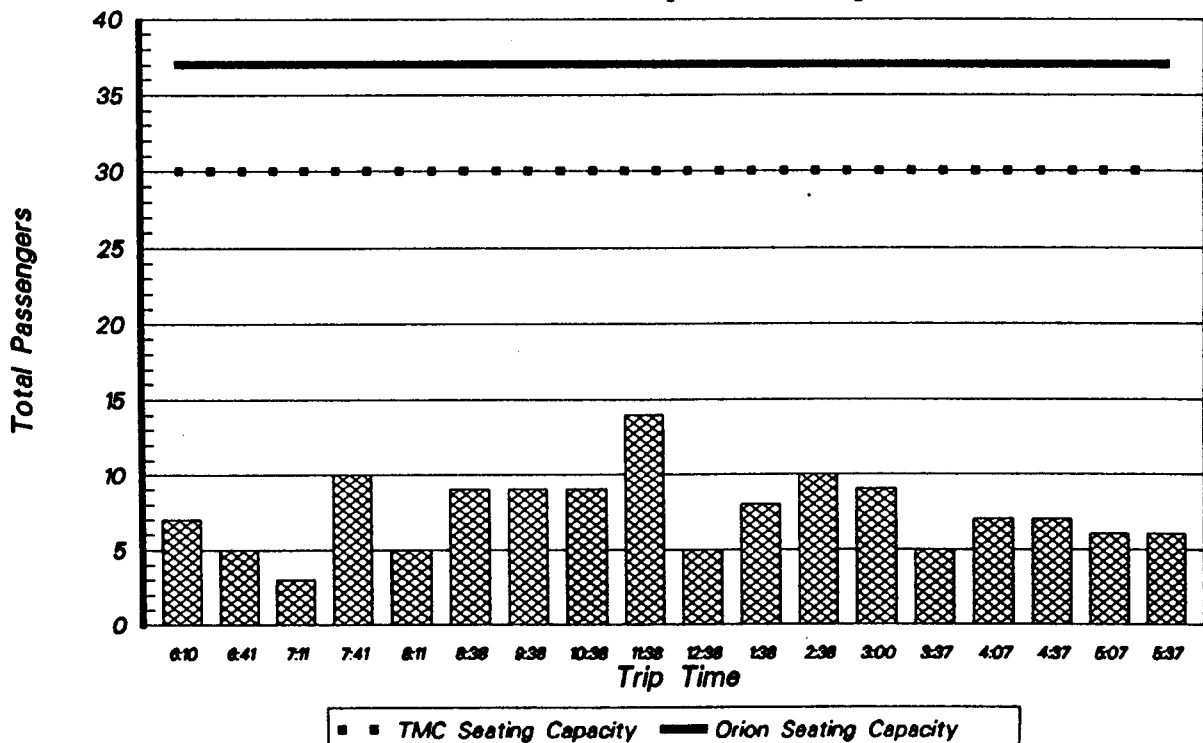


Exhibit 11

HOUSATONIC AREA REGIONAL TRANSIT DISTRICT  
 Passenger Activity Per Segment Hour  
 Route 1 Medical Center/Golden Hill  
 1994 Weekday Trip Sampling

Route Segment	Running Hours Served per Weekday	Total Boardings & Alightings	Hourly Activity (Bdg-Altg/Hr)
Northern Downtown	3.98	73	18.33
Golden Hill/Padanaram	2.92	58	19.89
Hayestown/Tamarack Ave	1.85	59	31.89
Hospital	2.17	107	49.38
Osbourne/G'town/Sand Pit	1.20	24	20.00
Rockwell/Grt Plain/Hayestown Rds	2.28	8	3.50
Town Park/E.Hayestown	.60	14	23.33
Totals	15.00	343	22.87

**Saturday Route and Segment Ridership.** Saturday ridership totaled 143 in 1994. This is a significant increase over the 1991 range of 106 to 123. As Exhibit 12 illustrates, Saturday ridership is up over all segments except northern downtown, where it is virtually even with the 1991 numbers. The dramatic increase in ridership in the Town Park segment can be explained by summer sampling, which reflects much higher passenger access to the park as recreational activities draw more people there in the summer. If the sample excluded this seasonal ridership, the Town Park segment would show 3 ons and 2 offs, virtually identical to the 1991 figure.

Exhibit 12

HOUSATONIC AREA REGIONAL TRANSIT DISTRICT  
 Recorded Boarding and Alighting Activity per Route Segment  
 Route 1 Medical Center/Golden Hill  
 1994 Saturday Trip Sampling

Route Segment	1991*		1994	
	Ons	Offs	Ons	Offs
Pulse Point*	69	35	77	55
Northern Downtown	11	26	10	24
Golden Hill/Padanaram	4	16	9	13
Hayestown/Tamarack Ave	16	18	13	13
Hospital	10	13	16	18
Osbourne/G'town/Sand Pit	3	4	10	6
Rockwell/Grt Plain/Hayestown Rds	1	2	3	1
Town Park/E.Hayestown	2	2	5	13
Totals	116	116	143	143

\* Includes ride-thru transfers

\*\* Average of two sampled Saturdays

**Saturday Passengers Per Hour.** Saturday passengers per platform hour rose 11.69 to 14.67, a nearly three passenger per hour increase.

**Saturday Loading.** The highest recorded load was 12 passengers for one outbound and one inbound trip. Saturday afternoon outbound trips typically had loads greater or equal to 10. The lowest recorded load for an extended portion of any trip was one passenger carried from the Pulse point to Saint Gregory Church. Drivers note that Saturday ridership is more variable than that on weekdays, and typical loads upon departing the Pulse Point can halve or double from week to week.

**Saturday Passenger Activity per Segment Hour.** In Exhibit 13, the Hayestown/Tamarack Avenue should be considered the most productive segment on year-round Saturday. The Town Park segment, as indicated is skewed during summer service, but, as indicated, is highly productive during this season.

Exhibit 13

HOUSATONIC AREA REGIONAL TRANSIT DISTRICT  
Passenger Activity Per Segment Hour  
Route 1 Medical Center/Golden Hill  
1994 Saturday Trip Sampling

Route Segment	Running Hours Served per Saturday	Total Boardings & Alightings	Hourly Activity (Bdg-Altg/Hr)
Northern Downtown	2.05	34	16.59
Golden Hill/Padanaram	1.27	22	17.37
Hayestown/Tamarack Ave	.95	26	27.37
Hospital	1.73	34	19.62
Osbourne/G'town/Sand Pit	.83	16	19.20
Rockwell/Grt Plain/Hayestown Rds	1.00	4	4.00
Town Park/E.Hayestown	.30	18	60.00
Totals	8.13	154	18.93

## Alternatives Analysis and Recommendations

In light of the overall system ridership reductions, the Medical Center Golden Hill Route has done well in maintaining its weekday ridership and increasing its Saturday totals. The ridership activity per segment hour illustrates little use of the service along the routing connecting the Sand Pit Medical Center with Town Park. However, elimination of this route segment would create one of the odd-operating configurations rejected in the 1991 analysis. Further, without a change in the one-hour cycle time, the time saved would only convert to extended layover time.

Ridership will be potentially negatively affected by the new routing for the midday and Saturday 4 Brookfield Route, which now provides inbound service as well as considerably more direct outbound service to Osborne Street and Germantown and Sand Pit Roads. However, no alternative routing is available to effectively serve new areas rather than doubling over the 4 Route.

Of the two deviations, inbound hospital service has been by far the more productive. This deviation served to remove slack from the schedule and vastly reduce inbound trip times from the hospital. Although trip sampling has not shown a notable ridership increase from the new service, the deviation is being used by current riders for the reduced trip times.

Use of service to the Danbury High School has fallen considerably. All sampling of these trips occurred when school was in session. However, only two passengers, both riding inbound, used the service. In 1991, ridership from the high-school was extremely variable, ranging from 1 to 20 trips per day. Drivers indicate that greater passenger counts are occurring less frequently.

A possible reason is the addition of the inbound hospital deviation for the 3:00 p.m. inbound. This was formerly the second trip into the high school after the close of the school. The reduced frequency may be a deterrent to using transit. Service resumes after this trip at half-hour frequencies, but later trips generate no ridership. It would be preferable that some of these inbound trips, ideally the 4:07, 5:07 and the 5:37, provide inbound service to the Danbury Hospital to shorten the return trips of about ten daily passengers. However, increased traffic congestion during the afternoon rush may require reducing outbound service to the Sand Pit Medical Center to "on-request" status for the three noted trips to accommodate the additional running time needed to serve the hospital. No boardings and only two alightings were recorded at the Medical Center during the entire P.M. Peak period.

The three outbound trips in the morning were not used when sampled. These trips were added to the schedule one year ago after numerous requests for outbound service to the high school before classes begin. Interviews of drivers indicate that sampling missed two regular passengers using this deviation.

Unless service frequencies or cycle times change across the fixed route system, it is recommended the route continue to operate according to its current schedule with only slight adjustments to the scheduling of deviations.

The sample tables located in the Appendix indicate only one location with 10 or more boarding passengers per day and no overhead shelter for their convenience. The Brookside Condominium complex on Padanaram Road recorded 10 boarding passengers, generally the minimum daily number a location should generate before HART considers providing a shelter. The condominium management has installed a bench and wastebasket at the bus stop for its residents, but waiting passengers have no access to overhead protection from inclement weather. The final report installment, the system analysis, will evaluate which areas are most in need of a passenger shelter.



## **APPENDIX**

### **Ridership Sampling Summaries**

HOUSATONIC AREA REGIONAL TRANSIT DISTRICT  
Comprehensive Operational Analysis Trip Summary  
Route 1 - Golden Hill/Medical Center  
Outbound Trip Summary

Stop No.	Street Location	Location Description	A.M. Peak		Midday		P.M. Peak		Totals	
			On	Off	On	Off	On	Off	On	Off
000	Kennedy Avenue	Pulse Point *	34	0	57	0	43	0	134	0
001	Rose Street	Opposite Danbury Furniture	0	0	1	0	0	1	1	1
002	Garamella Ave.	100 feet east of Main Street	1	1	2	3	0	6	3	10
003	Balmforth Ave.	Front of 35 Balmforth	1	2	0	0	0	2	1	4
005	Balmforth Ave.	25 feet north of park entrance	0	0	1	1	0	9	1	10
006	North Street	Front of 27 North Street	0	0	0	6	1	3	1	9
007	North Street	40 feet west of Thorp Street	0	1	0	3	0	1	0	5
008	Main Street	Front of Dairy Mart	1	0	1	0	0	1	2	1
009	Golden Hill Road	Front of 13 Golden Hill Road	0	0	0	0	0	3	0	3
010	Golden Hill Road	Front of 37 Golden Hill Road	0	0	0	0	0	1	0	1
011	Golden Hill Road	75 feet south of Ezra Road	0	2	0	0	0	0	0	2
012	Golden Hill Road	Front of 65 Golden Hill Road	0	1	0	3	0	0	0	4
057	None	Danbury High School	0	0	---	---	---	---	0	0
013	Golden Hill Road	Front of 97 Golden Hill Road	0	0	0	0	2	1	2	1
014	Padanaram Road	Front of Padanaram Court	0	2	0	4	0	2	0	8
015	Padanaram Road	South of Earnie's Roadhouse	0	0	0	2	0	5	0	7
016	Padanaram Road	25 feet north of Burger King	0	1	1	2	0	0	1	3
017	Hayestown Road	North Street Shopping Center	0	5	3	2	1	7	4	14
018	Hayestown Road	150 feet west of Tamarack	0	0	0	5	0	1	0	6
019	Tamarack Road	Opposite DMV	0	1	1	0	0	0	1	1
020	Tamarack Road	25 feet north of Virginia Ave.	0	0	0	0	0	0	0	0
021	Virginia Ave.	30 feet west of Forest Ave.	0	0	1	1	0	1	1	2
022	Forest Ave	25 feet north of Hospital Ave.	0	4	0	1	2	0	2	5
025	Hospital Ave.	Front of 27 Hospital Ave.	0	0	0	2	0	0	0	2
023	None	Danbury Hospital	2	13	5	28	10	2	17	43
024	East access road	At Hospital Ave. Exit	0	0	0	0	0	0	0	0
025	Hospital Ave.	Front of 27 Hospital Ave.	0	0	0	0	0	0	0	0
026	Locust Ave.	Lot entrance for 84-90 Locust	0	3	2	1	0	1	2	5
027	Locust Ave.	150 feet north of Osbourne St.	0	2	1	1	0	1	1	4
028	Osbourne Street	Front of 118 Osbourne St.	0	1	0	4	0	0	0	5
029	Osbourne Street	30 feet east of Somers Street	0	0	1	0	0	0	1	0
030	Osbourne Street	15 feet south of Springside Ave.	0	0	1	0	0	0	1	0
031	Germantown Ave.	Front of 5 Germantown Road	0	0	0	0	0	0	0	0
032	Germantown Ave.	Front of 39 Germantown Road	1	2	2	0	1	0	4	2
033	Sand Pit Road	Across from 54 Sand Pit Road	0	0	0	0	0	0	0	0
034	None	Sand Pit Medical Center	0	1	3	5	0	2	3	8
037	Rockwell Road	100 feet north of Sand Pit Rd.	0	0	0	0	0	0	0	0
038	Rockwell Road	Corner of Rubson Street	0	0	0	0	0	0	0	0
039	Rockwell Road	15 feet south of Stadley Rough	0	0	0	0	0	0	0	0
040	Great Plain Road	Front of 27 Great Plain	0	0	0	0	0	0	0	0
041	Great Plain Road	50 feet north of Albers Road	1	0	0	2	0	1	1	3
042	Great Plain Road	Opposite Diamond Ave.	0	0	1	0	0	1	1	1
043	None	St. Gregory the Great Church	0	0	0	0	0	0	0	0
044	Hayestown Road	15 feet east of Valleystream	0	0	0	1	0	0	0	1
045	Hayestown Road	15 feet East of Acre Dr.	0	0	1	0	0	0	1	0
046	Hayestown Road	Town Park	0	0	0	0	0	0	0	0
Totals			41	42	85	77	60	52	186	171

\* 28 additional passengers on board as ride-thru transfers from the 5 Bethel Center Route.

HOUSATONIC AREA REGIONAL TRANSIT DISTRICT  
Comprehensive Operational Analysis Trip Summary  
Route 1 - Golden Hill/Medical Center  
Inbound Trip Summary

Stop No.	Street Location	Location Description	A.M. Peak		Midday		P.M. Peak		Totals	
			On	Off	On	Off	On	Off	On	Off
046	Hayestown Road	Town Park	1	0	1	0	2	1	4	1
047	E. Hayestown Rd.	Front of Lake Candlewood Apts.	1	0	0	0	0	2	1	2
048	E. Hayestown Rd.	Front of 4 East Hayestown Road	1	0	0	0	0	2	1	2
049	E. Hayestown Rd.	20 feet south of Oak St.	1	0	2	0	0	0	3	0
036	Tamarack Road	Front of Tamarack Plaza	0	0	0	0	0	0	0	0
038	Tamarack Road	25 feet north of Virginia Ave.	0	0	0	0	0	0	0	0
040	Virginia Ave.	30 feet west of Forest Ave.	1	0	0	0	0	0	1	0
042	Forest Ave	25 feet north of Hospital Ave.	0	0	1	0	1	0	2	0
044	None	Danbury Hospital	0	0	13	0	7	0	20	0
046	East access road	At Hospital Ave. Exit	0	0	0	0	0	0	0	0
050	Virginia Avenue	50 feet west of Forest Ave.	0	0	0	0	0	0	0	0
051	Tamarack Road	Front of DMV	0	0	0	0	0	0	0	0
052	Hayestown Road	130 feet west of E. Hayestown	0	0	0	2	0	0	0	2
053	Hayestown Road	North Street Shopping Center	4	0	12	4	7	0	23	4
054	Padanaram Road	Front of Brookside Condos	7	0	3	0	0	0	10	0
055	Padanaram Road	Front of Northville Condos	4	0	2	0	0	0	6	0
056	Golden Hill Road	Front of 98 Golden Hill Road	0	0	0	0	3	0	3	0
057	None	Danbury High School	---	---	1	0	1	0	2	0
058	Golden Hill Road	Front of 74 Golden Hill	5	0	1	0	0	1	6	1
059	Golden Hill Road	Front of 46 Golden Hill	1	0	0	0	0	0	1	0
060	Golden Hill Road	100 feet north of Aiken Ave.	0	0	0	0	0	0	0	0
061	Main Street	Front of Texaco station	0	0	0	0	0	0	0	0
062	North Street	Front of 26 North Street	2	0	2	1	3	0	7	1
063	Maple Street	50 feet north of Patch St.	5	0	2	0	1	3	8	3
064	Maple Street	40 feet south of Franklin St.	0	0	0	0	0	0	0	0
065	Garamella Road	200 feet west of Maple	2	1	0	0	1	1	3	2
000	Kennedy Avenue	Pulse Point *	0	34	0	45	0	22	0	101
Totals			34	35	39	52	24	31	97	118

\* 26 passengers remained on board for ride-thru transfers to the 5 Bethel Center Route.

HOUSATONIC AREA REGIONAL TRANSIT DISTRICT  
Comprehensive Operational Analysis Trip Summary  
Route 1 - Golden Hill/Medical Center  
A.M. Peak Period Outbound Trips

Stop No.	Street Location	Location Description	6:05			6:30			7:00			7:30			8:00			8:30			Total	
			On	Off	Load	On	Off	Load	On	Off	Load	On	Off	Load	On	Off	Load	On	Off	Load	On	Off
000	Kennedy Avenue	Pulse Point	0	0	0	9	0	9	1	0	4	9	0	10	7	0	8	8	0	8	34	0
001	Rose Street	Opposite Danbury Furniture	0	0	0	0	0	9	0	0	4	0	0	10	0	0	8	0	0	8	0	0
002	Garamella Ave.	100 feet east of Main Street	0	0	0	0	0	9	0	0	4	1	0	11	0	1	7	0	0	8	1	1
003	Balmforth Ave.	Front of 35 Balmforth	0	0	0	0	0	9	0	0	4	0	0	11	1	2	6	0	0	8	1	2
005	Balmforth Ave.	25 feet north of park entrance	0	0	0	0	0	9	0	0	4	0	0	11	0	0	6	0	0	8	0	0
006	North Street	Front of 27 North Street	0	0	0	0	0	9	0	0	4	0	0	11	0	0	6	0	0	8	0	0
007	North Street	40 feet west of Thorp Street	0	0	0	0	0	9	0	1	3	0	0	11	0	0	6	0	0	8	0	1
008	Main Street	Front of Dairy Mart	0	0	0	0	0	9	1	0	4	0	0	11	0	0	6	0	0	8	1	0
009	Golden Hill Road	Front of 13 Golden Hill Road	0	0	0	0	0	9	0	0	4	0	0	11	0	0	6	0	0	8	0	0
010	Golden Hill Road	Front of 37 Golden Hill Road	0	0	0	0	0	9	0	0	4	0	0	11	0	0	6	0	0	8	0	0
011	Golden Hill Road	75 feet south of Ezra Road	0	0	0	0	2	7	0	0	4	0	0	11	0	0	6	0	0	8	0	2
012	Golden Hill Road	Front of 65 Golden Hill Road	0	0	0	0	0	7	0	0	4	0	0	11	0	1	5	0	0	8	0	1
057	None	Danbury High School	0	0	0	0	0	7	0	0	4	---	---	---	---	---	---	---	---	---	0	0
013	Golden Hill Road	Front of 97 Golden Hill Road	0	0	0	0	0	7	0	0	4	0	0	11	0	0	5	0	0	8	0	0
014	Padanaram Road	Front of Padanaram Court	0	0	0	0	0	7	0	0	4	0	2	9	0	0	5	0	0	8	0	2
015	Padanaram Road	South of Earnie's Roadhouse	0	0	0	0	0	7	0	0	4	0	0	9	0	0	5	0	0	8	0	0
016	Padanaram Road	25 feet north of Burger King	0	0	0	0	0	7	0	0	4	0	0	9	0	0	5	0	1	7	0	1
017	Hayestown Road	North Street Shopping Center	0	0	0	0	0	7	0	1	3	0	2	7	0	1	4	0	1	6	0	5
018	Hayestown Road	150 feet west of Tamarack	0	0	0	0	0	7	0	0	3	0	0	7	0	0	4	0	0	6	0	0
019	Tamarack Road	Opposite DMV	0	0	0	0	0	7	0	0	3	0	1	6	0	0	4	0	0	6	0	1
020	Tamarack Road	25 feet north of Virginia Ave.	0	0	0	0	0	7	0	0	3	0	0	6	0	0	4	0	0	6	0	0
021	Virginia Ave.	30 feet west of Forest Ave.	0	0	0	0	0	7	0	0	3	0	0	6	0	0	4	0	0	6	0	0
022	Forest Ave	25 feet north of Hospital Ave.	0	0	0	0	0	7	0	0	3	0	4	2	0	0	4	0	0	6	0	4
023	None	Danbury Hospital	0	0	0	0	5	2	1	1	3	1	1	2	0	2	2	0	4	2	2	13
024	East access road	At Hospital Ave. Exit	0	0	0	0	0	2	0	0	3	0	0	2	0	0	2	0	0	2	0	0
025	Hospital Ave.	Front of 27 Hospital Ave.	0	0	0	0	0	2	0	0	3	0	0	2	0	0	2	0	0	2	0	0
026	Locust Ave.	Lot entrance for 84-90 Locust	0	0	0	0	2	0	0	0	3	0	0	2	0	1	1	0	0	2	0	3
027	Locust Ave.	150 feet north of Osbourne St.	0	0	0	0	0	0	0	1	2	0	1	1	0	0	1	0	0	2	0	2
028	Osbourne Street	Front of 118 Osbourne St.	0	0	0	0	0	0	0	0	2	0	0	1	0	0	1	0	1	1	0	1
029	Osbourne Street	30 feet east of Somers Street	0	0	0	0	0	0	0	0	2	0	0	1	0	0	1	0	0	1	0	0
030	Osbourne Street	15 feet south of Springside Ave.	0	0	0	0	0	0	0	0	2	0	0	1	0	0	1	0	0	1	0	0
031	Germantown Ave.	Front of 5 Germantown Road	0	0	0	0	0	0	0	0	2	0	0	1	0	0	1	0	0	1	0	0
032	Germantown Ave.	Front of 39 Germantown Road	0	0	0	0	0	0	1	1	2	0	0	1	0	1	0	0	0	1	1	2
033	Sand Pit Road	Across from 54 Sand Pit Road	0	0	0	0	0	0	0	0	2	0	0	1	0	0	0	0	0	1	0	0
034	None	Sand Pit Medical Center	0	0	0	0	0	0	0	0	2	0	0	1	0	0	0	0	1	0	0	1
037	Rockwell Road	100 feet north of Sand Pit Rd.	0	0	0	0	0	0	0	0	2	0	0	1	0	0	0	0	0	0	0	0
038	Rockwell Road	Corner of Rubson Street	0	0	0	0	0	0	0	0	2	0	0	1	0	0	0	0	0	0	0	0
039	Rockwell Road	15 feet south of Stadley Rough	0	0	0	0	0	0	0	0	2	0	0	1	0	0	0	0	0	0	0	0
040	Great Plain Road	Front of 27 Great Plain	0	0	0	0	0	0	0	0	2	0	0	1	0	0	0	0	0	0	0	0
041	Great Plain Road	50 feet north of Albers Road	0	0	0	0	0	0	1	0	3	0	0	1	0	0	0	0	0	0	1	0
042	Great Plain Road	Opposite Diamond Ave.	0	0	0	0	0	0	0	0	3	0	0	1	0	0	0	0	0	0	0	0
043	None	St. Gregory the Great Church	0	0	0	0	0	0	0	0	3	0	0	1	0	0	0	0	0	0	0	0
044	Hayestown Road	15 feet east of Valleystream	0	0	0	0	0	0	0	0	3	0	0	1	0	0	0	0	0	0	0	0
045	Hayestown Road	15 feet East of Acre Dr.	0	0	0	0	0	0	0	0	3	0	0	1	0	0	0	0	0	0	0	0
046	Hayestown Road	Town Park	0	0	0	0	0	0	0	0	3	0	0	1	0	0	0	0	0	0	0	0
Totals			0	0		9	9		5	5		11	11		8	9		8	8		41	42

HOUSATONIC AREA REGIONAL TRANSIT DISTRICT  
Comprehensive Operational Analysis Trip Summary  
Route 1 - Golden Hill/Medical Center  
A.M. Peak Period Inbound Trips

Stop No.	Street Location	Location Description	6:10			6:41			7:11			7:41			8:11			8:38			Total	
			On	Off	Load	On	Off	Load	On	Off	Load	On	Off	Load	On	Off	Load	On	Off	Load	On	Off
046	Hayestown Road	Town Park	0	0	0	0	0	0	1	0	1	0	0	3	0	0	1	0	0	0	1	0
047	E. Hayestown Rd.	Front of Lake Candlewood Apts.	1	0	1	0	0	0	0	0	1	0	0	3	0	0	1	0	0	0	1	0
048	E. Hayestown Rd.	Front of 4 East Hayestown Road	0	0	1	0	0	0	0	0	1	0	0	3	1	0	2	0	0	0	1	0
049	E. Hayestown Rd.	20 feet south of Oak St.	0	0	1	0	0	0	1	0	2	0	0	3	0	0	2	0	0	0	1	0
036	Tamarack Road	Front of Tamarack Plaza	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0	0	0	0	0
038	Tamarack Road	25 feet north of Virginia Ave.	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0	0	0	0	0
040	Virginia Ave.	30 feet west of Forest Ave.	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1	0	1	1	0
042	Forest Ave	25 feet north of Hospital Ave.	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0	0	1	0	0
044	None	Danbury Hospital	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0	0	1	0	0
046	East access road	At Hospital Ave. Exit	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0	0	1	0	0
050	Virginia Avenue	50 feet west of Forest Ave.	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0	0	1	0	0
051	Tamarack Road	Front of DMV	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0	0	1	0	0
052	Hayestown Road	130 feet west of E. Hayestown	0	0	2	0	0	0	0	0	2	0	0	3	0	0	2	0	0	1	0	0
053	Hayestown Road	North Street Shopping Center	0	0	2	0	0	0	0	0	2	1	0	4	0	0	2	3	0	4	4	0
054	Padanaram Road	Front of Brookside Condos	1	0	2	0	0	0	1	0	3	2	0	6	3	0	5	0	0	4	7	0
055	Padanaram Road	Front of Northville Condos	1	0	3	1	0	1	0	0	3	0	0	6	0	0	5	2	0	6	4	0
056	Golden Hill Road	Front of 98 Golden Hill Road	0	0	3	0	0	1	0	0	3	0	0	6	0	0	5	0	0	6	0	0
057	None	Danbury High School	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0	0
058	Golden Hill Road	Front of 74 Golden Hill	0	0	3	0	0	1	0	0	3	4	0	10	0	0	5	1	0	7	5	0
059	Golden Hill Road	Front of 46 Golden Hill	0	0	3	1	0	2	0	0	3	0	0	10	0	0	5	0	0	7	1	0
060	Golden Hill Road	100 feet north of Aiken Ave.	0	0	3	0	0	2	0	0	3	0	0	10	0	0	5	0	0	7	0	0
061	Main Street	Front of Texaco station	0	0	3	0	0	2	0	0	3	0	0	10	0	0	5	0	0	7	0	0
062	North Street	Front of 26 North Street	0	0	3	1	0	3	0	0	3	0	0	10	0	0	5	1	0	8	2	0
063	Maple Street	50 feet north of Patch St.	4	0	7	0	0	3	0	0	3	0	0	10	0	0	5	1	0	9	5	0
064	Maple Street	40 feet south of Franklin St.	0	0	7	0	0	3	0	0	3	0	0	10	0	0	5	0	0	9	0	0
065	Garamella Road	200 feet west of Maple	0	0	7	2	0	5	0	0	3	0	0	10	0	0	5	0	1	8	2	1
000	Kennedy Avenue	Pulse Point	0	7	0	0	3	2	0	3	0	0	10	0	5	0	0	6	2	0	34	
Totals			7	7		5	3		2	3		7	10		4	5		9	7		34	35

HOUSATONIC AREA REGIONAL TRANSIT DISTRICT  
Comprehensive Operational Analysis Trip Summary  
Route 1 - Golden Hill/Medical Center  
Midday Period Outbound Trips

Stop No.	Street Location	Location Description	9:00			10:00			11:00			12:00			1:00			2:00			Total	
			On	Off	Load	On	Off	Load	On	Off	Load	On	Off	Load	On	Off	Load	On	Off	Load	On	Off
000	Kennedy Avenue	Pulse Point	6	0	6	10	0	10	5	0	8	10	0	12	11	0	15	15	0	19	57	0
001	Rose Street	Opposite Danbury Furniture	0	0	6	0	0	10	0	0	8	0	0	12	0	0	15	1	0	20	1	0
002	Garamella Ave.	100 feet east of Main Street	1	1	6	0	0	10	1	0	9	0	0	12	0	0	15	0	2	18	2	3
003	Balmforth Ave.	Front of 35 Balmforth	0	0	6	0	0	10	0	0	9	0	0	12	0	0	15	0	0	18	0	0
005	Balmforth Ave.	25 feet north of park entrance	0	0	6	0	0	10	0	0	8	0	0	12	1	0	16	0	1	17	1	1
006	North Street	Front of 27 North Street	0	1	5	0	2	8	0	2	7	0	1	11	0	0	16	0	0	17	0	6
007	North Street	40 feet west of Thorp Street	0	0	5	0	1	7	0	0	7	0	0	12	0	1	15	0	1	16	0	3
008	Main Street	Front of Dairy Mart	0	0	5	0	0	7	0	0	7	0	0	12	1	0	16	0	0	16	1	0
009	Golden Hill Road	Front of 13 Golden Hill Road	0	0	5	0	0	7	0	0	7	0	0	12	0	0	16	0	0	16	0	0
010	Golden Hill Road	Front of 37 Golden Hill Road	0	0	5	0	0	7	0	0	7	0	0	12	0	0	16	0	0	16	0	0
011	Golden Hill Road	75 feet south of Ezra Road	0	0	5	0	0	7	0	0	7	0	0	12	0	0	16	0	0	16	0	0
012	Golden Hill Road	Front of 65 Golden Hill Road	0	0	5	0	1	6	0	0	7	0	0	12	0	2	14	0	0	16	0	3
013	Golden Hill Road	Front of 97 Golden Hill Road	0	0	5	0	0	6	0	0	7	0	0	12	0	0	14	0	0	16	0	0
014	Padanaram Road	Front of Padanaram Court	0	1	4	0	1	5	0	0	7	0	2	9	0	0	14	0	0	16	0	4
015	Padanaram Road	South of Earnie's Roadhouse	0	0	4	0	1	4	0	0	7	0	0	9	0	1	13	0	0	16	0	2
016	Padanaram Road	25 feet north of Burger King	0	1	3	1	0	5	0	0	7	0	0	9	0	0	13	0	1	15	1	2
017	Hayestown Road	North Street Shopping Center	0	0	3	0	0	5	0	0	7	0	0	9	0	0	13	3	2	16	3	2
018	Hayestown Road	150 feet west of Tamarack	0	0	3	0	0	5	0	1	6	0	2	7	0	0	13	0	2	14	0	5
019	Tamarack Road	Opposite DMV	0	0	3	0	0	5	1	0	7	0	0	7	0	0	13	0	0	14	1	0
020	Tamarack Road	25 feet north of Virginia Ave.	0	0	3	0	0	5	0	0	7	0	0	7	0	0	13	0	0	14	0	0
021	Virginia Ave.	30 feet west of Forest Ave.	0	0	3	0	0	5	0	0	7	0	0	7	1	1	13	0	0	14	1	1
022	Forest Ave	25 feet north of Hospital Ave.	0	0	3	0	0	5	0	0	7	0	0	7	0	0	13	0	1	13	0	1
025	Hospital Ave.	Front of 27 Hospital Ave.	0	0	3	0	0	5	0	0	7	0	0	7	0	0	13	0	2	11	0	2
023	None	Danbury Hospital	0	2	1	0	4	1	0	4	3	0	4	3	0	9	4	5	5	11	5	28
024	East access road	At Hospital Ave. Exit	0	0	1	0	0	1	0	0	3	0	0	3	0	0	4	0	0	11	0	0
025	Hospital Ave.	Front of 27 Hospital Ave.	0	0	1	0	0	1	0	0	3	0	0	3	0	0	4	0	0	11	0	0
026	Locust Ave.	Lot entrance for 84-90 Locust	0	0	1	0	0	1	2	0	5	0	0	3	0	1	3	0	0	11	2	1
027	Locust Ave.	150 feet north of Osbourne St.	0	0	1	0	0	1	0	1	4	0	0	3	1	0	4	0	0	11	1	1
028	Osbourne Street	Front of 118 Osbourne St.	0	0	1	0	0	1	0	0	4	0	2	1	0	0	4	0	2	9	0	4
029	Osbourne Street	30 feet east of Somers Street	0	0	1	1	0	2	0	0	4	0	0	1	0	0	4	0	0	9	1	0
030	Osbourne Street	15 feet south of Springside Ave.	0	0	1	1	0	3	0	0	4	0	0	1	0	0	4	0	0	9	1	0
031	Germantown Ave.	Front of 5 Germantown Road	0	0	1	0	0	3	0	0	4	0	0	1	0	0	4	0	0	9	0	0
032	Germantown Ave.	Front of 39 Germantown Road	0	0	1	0	0	3	1	0	5	1	0	2	0	0	4	0	0	9	2	0
033	Sand Pit Road	Across from 54 Sand Pit Road	0	0	1	0	0	3	0	0	5	0	0	2	0	0	4	0	0	9	0	0
034	None	Sand Pit Medical Center	1	0	2	0	1	2	1	1	5	0	1	1	0	1	3	1	1	9	3	5
037	Rockwell Road	100 feet north of Sand Pit Rd.	0	0	2	0	0	2	0	0	5	0	0	1	0	0	3	0	0	9	0	0
038	Rockwell Road	Corner of Rubson Street	0	0	2	0	0	2	0	0	5	0	0	1	0	0	3	0	0	9	0	0
039	Rockwell Road	15 feet south of Stadley Rough	0	0	2	0	0	2	0	0	5	0	0	1	0	0	3	0	0	9	0	0
040	Great Plain Road	Front of 27 Great Plain	0	0	2	0	0	2	0	0	5	0	0	1	0	0	3	0	0	9	0	0
041	Great Plain Road	50 feet north of Albers Road	0	0	2	0	0	2	0	0	5	0	0	1	0	0	3	0	2	7	0	2
042	Great Plain Road	Opposite Diamond Ave.	0	0	2	0	0	2	0	0	5	0	0	1	0	0	3	1	0	8	1	0
043	None	St. Gregory the Great Church	0	0	2	0	0	2	0	0	5	0	0	1	0	0	3	0	0	8	0	0
044	Hayestown Road	15 feet east of Valleystream	0	1	1	0	0	2	0	0	5	0	0	1	0	0	3	0	0	8	0	1
045	Hayestown Road	15 feet East of Acre Dr.	0	0	1	0	0	2	0	0	5	1	0	2	0	0	3	0	0	8	1	0
046	Hayestown Road	Town Park	0	0	1	0	0	2	0	0	5	0	0	2	0	0	3	0	0	8	0	0
Totals			8	7		13	11		11	9		12	12		15	16		26	22		85	77

HOUSATONIC AREA REGIONAL TRANSIT DISTRICT  
Comprehensive Operational Analysis Trip Summary  
Route 1 - Golden Hill/Medical Center  
Midday Period Inbound Trips

Stop No.	Street Location	Location Description	9:38			10:38			11:38			12:38			1:38			2:38			Total	
			On	Off	Load	On	Off	Load	On	Off	Load	On	Off	Load	On	Off	Load	On	Off	Load	On	Off
046	Hayestown Road	Town Park	0	0	1	0	0	2	1	0	6	0	0	2	0	0	3	0	0	8	1	0
047	E. Hayestown Rd.	Front of Lake Candlewood Apts.	0	0	1	0	0	2	0	0	6	0	0	2	0	0	3	0	0	8	0	0
048	E. Hayestown Rd.	Front of 4 East Hayestown Road	0	0	1	0	0	2	0	0	6	0	0	2	0	0	3	0	0	8	0	0
049	E. Hayestown Rd.	20 feet south of Oak St.	0	0	1	0	0	2	1	0	7	0	0	2	0	0	3	1	0	9	2	0
036	Tamarack Road	Front of Tamarack Plaza	0	0	1	0	0	2	0	0	7	0	0	2	0	0	3	---	---	---	0	0
038	Tamarack Road	25 feet north of Virginia Ave.	0	0	1	0	0	2	0	0	7	0	0	2	0	0	3	---	---	---	0	0
040	Virginia Ave.	30 feet west of Forest Ave.	0	0	1	0	0	2	0	0	7	0	0	2	0	0	3	---	---	---	0	0
042	Forest Ave	25 feet north of Hospital Ave.	1	0	2	0	0	2	0	0	7	0	0	2	0	0	3	---	---	---	1	0
044	None	Danbury Hospital	3	0	5	3	0	5	2	0	9	3	0	5	2	0	5	---	---	---	13	0
046	East access road	At Hospital Ave. Exit	0	0	5	0	0	5	0	0	9	0	0	5	0	0	5	---	---	---	0	0
050	Virginia Avenue	50 feet west of Forest Ave.	0	0	5	0	0	5	0	0	9	0	0	5	0	0	5	---	---	---	0	0
051	Tamarack Road	Front of DMV	0	0	5	0	0	5	0	0	9	0	0	5	0	0	5	---	---	---	0	0
052	Hayestown Road	130 feet west of E. Hayestown	0	0	5	0	1	4	0	1	8	0	0	5	0	0	5	0	0	9	0	2
053	Hayestown Road	North Street Shopping Center	3	0	8	2	0	6	4	0	12	0	3	2	2	0	7	1	1	9	12	4
054	Padanaram Road	Front of Brookside Condos	1	0	9	1	0	7	0	0	12	0	0	2	1	0	8	0	0	9	3	0
055	Padanaram Road	Front of Northville Condos	0	0	9	1	0	8	0	0	12	1	0	3	0	0	8	0	0	9	2	0
056	Golden Hill Road	Front of 98 Golden Hill Road	0	0	9	0	0	8	0	0	12	0	0	3	0	0	8	0	0	9	0	0
057	None	Danbury High School	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1	0	10	1	0
058	Golden Hill Road	Front of 74 Golden Hill	0	0	9	0	0	8	0	0	12	1	0	4	0	0	8	0	0	10	1	0
059	Golden Hill Road	Front of 46 Golden Hill	0	0	9	0	0	8	0	0	12	0	0	4	0	0	8	0	0	10	0	0
060	Golden Hill Road	100 feet north of Aiken Ave.	0	0	9	0	0	8	0	0	12	0	0	4	0	0	8	0	0	10	0	0
061	Main Street	Front of Texaco station	0	0	9	0	0	8	0	0	12	0	0	4	0	0	8	0	0	10	0	0
062	North Street	Front of 26 North Street	0	1	8	0	0	8	1	0	13	1	0	5	0	0	8	0	0	10	2	1
063	Maple Street	50 feet north of Patch St.	0	0	8	1	0	9	1	0	14	0	0	5	0	0	8	0	0	10	2	0
064	Maple Street	40 feet south of Franklin St.	0	0	8	0	0	9	0	0	14	0	0	5	0	0	8	0	0	10	0	0
065	Garamella Road	200 feet west of Maple	0	0	8	0	0	9	0	0	14	0	0	5	0	0	8	0	0	10	0	0
000	Kennedy Avenue	Pulse Point	0	7	1	0	9	1	0	13	1	0	3	2	0	7	1	0	6	4	0	45
Totals			8	8		8	10		9	14		6	6		5	7		3	7		39	52

HOUSATONIC AREA REGIONAL TRANSIT DISTRICT  
Comprehensive Operational Analysis Trip Summary  
Route 1 - Golden Hill/Medical Center  
P.M. Peak Period Outbound Trips

Stop No.	Street Location	Location Description	3:00			3:30			4:00			4:30			5:00			5:30			6:00			Total	
			On	Off	Load	On	Off	Load	On	Off	Load	On	Off	Load	On	Off	Load	On	Off	Load	On	Off	Load	On	Off
000	Kennedy Avenue	Pulse Point	10	0	14	1	0	2	13	0	16	4	0	5	8	0	8	5	0	6	2	0	2	43	0
001	Rose Street	Opposite Danbury Furniture	0	1	13	0	0	2	0	0	16	0	0	5	0	0	8	0	0	6	0	0	2	0	1
002	Garamella Ave.	100 feet east of Main Street	0	0	13	0	0	2	0	0	10	0	0	5	0	0	8	0	0	6	0	0	2	0	6
003	Balmforth Ave.	Front of 35 Balmforth	0	0	13	0	0	2	0	0	10	0	1	4	0	0	8	0	1	5	0	0	2	0	2
005	Balmforth Ave.	25 feet north of park entrance	0	1	12	0	0	2	0	3	7	0	1	3	0	0	8	0	3	2	0	1	1	0	9
006	North Street	Front of 27 North Street	0	1	11	1	0	3	0	0	7	0	1	2	0	1	7	0	0	2	0	0	1	1	3
007	North Street	40 feet west of Thorp Street	0	0	11	0	0	3	0	0	7	0	0	2	0	0	7	0	1	1	0	0	1	0	1
008	Main Street	Front of Dairy Mart	0	1	10	0	0	3	0	0	7	0	0	2	0	0	7	0	0	1	0	0	1	0	1
009	Golden Hill Road	Front of 13 Golden Hill Road	0	1	9	0	0	3	0	1	6	0	0	2	0	1	6	0	0	1	0	0	1	0	3
010	Golden Hill Road	Front of 37 Golden Hill Road	0	0	9	0	1	2	0	0	6	0	0	2	0	0	6	0	0	1	0	0	1	0	1
011	Golden Hill Road	75 feet south of Ezra Road	0	0	9	0	0	2	0	0	6	0	0	2	0	0	6	0	0	1	0	0	1	0	0
012	Golden Hill Road	Front of 65 Golden Hill Road	0	0	9	0	0	2	0	0	6	0	0	2	0	0	6	0	0	1	0	0	1	0	0
013	Golden Hill Road	Front of 97 Golden Hill Road	0	0	9	2	0	4	0	0	6	0	0	2	0	0	6	0	0	1	0	1	0	2	1
057	None	Danbury High School	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0	0
014	Padanaram Road	Front of Padanaram Court	0	0	9	0	1	3	0	1	5	0	0	2	0	0	6	0	0	1	0	0	0	0	2
015	Padanaram Road	South of Earnie's Roadhouse	0	2	7	0	0	3	0	2	3	0	0	2	0	1	5	0	0	1	0	0	0	0	5
016	Padanaram Road	25 feet north of Burger King	0	0	7	0	0	3	0	0	3	0	0	2	0	0	5	0	0	1	0	0	0	0	0
017	Hayestown Road	North Street Shopping Center	0	4	3	0	0	3	1	1	3	0	0	2	0	2	3	0	0	1	0	0	0	1	7
018	Hayestown Road	150 feet west of Tamarack	0	0	3	0	0	3	0	0	3	0	0	2	0	0	3	0	1	0	0	0	0	0	1
019	Tamarack Road	Opposite DMV	0	0	3	0	0	3	0	0	3	0	0	2	0	0	3	0	0	0	0	0	0	0	0
020	Tamarack Road	25 feet north of Virginia Ave.	0	0	3	0	0	3	0	0	3	0	0	2	0	0	3	0	0	0	0	0	0	0	0
021	Virginia Ave.	30 feet west of Forest Ave.	0	0	3	0	0	3	0	1	2	0	0	2	0	0	3	0	0	0	0	0	0	0	1
022	Forest Ave	25 feet north of Hospital Ave.	0	0	3	0	0	3	2	0	4	0	0	2	0	0	3	0	0	0	0	0	0	2	0
023	None	Danbury Hospital	1	0	4	5	1	7	2	1	5	1	0	3	1	0	4	0	0	0	0	0	0	10	2
024	East access road	At Hospital Ave. Exit	0	0	4	0	0	7	0	0	5	0	0	2	0	0	4	0	0	0	0	0	0	0	0
025	Hospital Ave.	Front of 27 Hospital Ave.	0	0	4	0	0	7	0	0	5	0	0	2	0	0	4	0	0	0	0	0	0	0	0
026	Locust Ave.	Lot entrance for 84-90 Locust	0	1	3	0	0	7	0	0	5	0	0	2	0	0	4	0	0	0	0	0	0	0	1
027	Locust Ave.	150 feet north of Osbourne St.	0	1	2	0	0	7	0	0	5	0	0	2	0	0	4	0	0	0	0	0	0	0	1
028	Osbourne Street	Front of 118 Osbourne St.	0	0	2	0	0	7	0	0	5	0	0	2	0	0	4	0	0	0	0	0	0	0	0
029	Osbourne Street	30 feet east of Somers Street	0	0	2	0	0	7	0	0	5	0	0	2	0	0	4	0	0	0	0	0	0	0	0
030	Osbourne Street	15 feet south of Springside Ave	0	0	2	0	0	7	0	0	5	0	0	2	0	0	4	0	0	0	0	0	0	0	0
031	Germantown Ave.	Front of 5 Germantown Road	0	0	2	0	0	7	0	0	5	0	0	2	0	0	4	0	0	0	0	0	0	0	0
032	Germantown Ave.	Front of 39 Germantown Road	0	0	2	0	0	7	0	0	5	0	0	2	1	0	5	0	0	0	0	0	0	1	0
033	Sand Pit Road	Across from 54 Sand Pit Road	0	0	2	0	0	7	0	0	5	0	0	2	0	0	5	0	0	0	0	0	0	0	0
034	None	Sand Pit Medical Center	0	0	2	0	0	7	0	0	5	0	2	1	0	0	5	0	0	0	0	0	0	0	2
037	Rockwell Road	100 feet north of Sand Pit Rd.	0	0	2	0	0	7	0	0	5	0	0	1	0	0	5	0	0	0	0	0	0	0	0
038	Rockwell Road	Corner of Rubson Street	0	0	2	0	0	7	0	0	5	0	0	1	0	0	5	0	0	0	0	0	0	0	0
039	Rockwell Road	15 feet south of Stadley Rough	0	0	2	0	0	7	0	0	5	0	0	1	0	0	5	0	0	0	0	0	0	0	0
040	Great Plain Road	Front of 27 Great Plain	0	0	2	0	0	7	0	0	5	0	0	1	0	0	5	0	0	0	0	0	0	0	0
041	Great Plain Road	50 feet north of Albers Road	0	0	2	0	0	7	0	0	5	0	0	1	0	1	4	0	0	0	0	0	0	0	1
042	Great Plain Road	Opposite Diamond Ave.	0	1	1	0	0	7	0	0	5	0	0	1	0	0	4	0	0	0	0	0	0	0	1
043	None	St. Gregory the Great Church	0	0	1	0	0	7	0	0	5	0	0	1	0	0	4	0	0	0	0	0	0	0	0
044	Hayestown Road	15 feet east of Valleystream	0	0	1	0	0	7	0	0	5	0	0	1	0	0	4	0	0	0	0	0	0	0	0
045	Hayestown Road	15 feet East of Acre Dr.	0	0	1	0	0	7	0	0	5	0	0	1	0	0	4	0	0	0	0	0	0	0	0
046	Hayestown Road	Town Park	0	0	1	0	0	7	0	0	5	0	0	1	0	0	4	0	0	0	0	0	0	0	0
Totals			11	14		9	3		18	16		5	5		10	6		5	6		2	2		60	52



**HOUSATONIC AREA REGIONAL TRANSIT DISTRICT**  
**Comprehensive Operational Analysis Trip Summary**  
**Route 1 - Golden Hill/Medical Center**  
**P.M. Peak Period Inbound Trips**

Stop No.	Street Location	Location Description	3:00			3:37			4:07			4:37			5:07			5:37			Total	
			On	Off	Load	On	Off	Load	On	Off	Load	On	Off	Load	On	Off	Load	On	Off	Load	On	Off
046	Hayestown Road	Town Park	0	0	0	0	0	1	0	0	7	0	0	5	0	0	1	2	1	5	2	1
047	E. Hayestown Rd.	Front of Lake Candlewood Apts.	0	0	0	0	0	1	0	2	5	0	0	5	0	0	1	0	0	5	0	2
048	E. Hayestown Rd.	Front of 4 East Hayestown Road	0	0	0	0	0	1	0	0	5	0	1	4	0	0	1	0	1	4	0	2
049	E. Hayestown Rd.	20 feet south of Oak St.	0	0	0	0	0	1	0	0	5	0	0	4	0	0	1	0	0	4	0	0
036	Tamarack Road	Front of Tamarack Plaza	0	0	0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0	0
038	Tamarack Road	25 feet north of Virginia Ave.	0	0	0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0	0
040	Virginia Ave.	30 feet west of Forest Ave.	0	0	0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0	0
042	Forest Ave	25 feet north of Hospital Ave.	1	0	1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1	0
044	None	Danbury Hospital	7	0	8	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	7	0
046	East access road	At Hospital Ave. Exit	0	0	8	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0	0
050	Virginia Avenue	50 feet west of Forest Ave.	0	0	8	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0	0
051	Tamarack Road	Front of DMV	0	0	8	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0	0
052	Hayestown Road	130 feet west of E. Hayestown	0	0	8	0	0	1	0	0	5	0	0	4	0	0	3	0	0	5	0	0
053	Hayestown Road	North Street Shopping Center	1	0	9	3	0	4	0	0	5	0	0	4	2	0	3	1	0	5	7	0
054	Padenaram Road	Front of Brookside Condos	0	0	9	0	0	4	0	0	5	0	0	4	0	0	3	0	0	5	0	0
055	Padenaram Road	Front of Northville Condos	0	0	9	0	0	4	0	0	5	0	0	4	0	0	3	0	0	5	0	0
056	Golden Hill Road	Front of 98 Golden Hill Road	0	0	9	1	0	5	0	0	5	0	0	4	1	0	4	1	0	6	3	0
057	None	Danbury High School	---	---	---	0	0	5	0	0	5	1	0	5	0	0	4	0	0	6	1	0
058	Golden Hill Road	Front of 74 Golden Hill	0	1	8	0	0	5	0	0	5	0	0	5	0	0	4	0	0	6	0	1
059	Golden Hill Road	Front of 46 Golden Hill	0	0	8	0	0	5	0	0	5	0	0	5	0	0	4	0	0	6	0	0
060	Golden Hill Road	100 feet north of Aiken Ave.	0	0	8	0	0	5	0	0	5	0	0	5	0	0	4	0	0	6	0	0
061	Main Street	Front of Texaco station	0	0	8	0	0	5	0	0	5	0	0	5	0	0	4	0	0	6	0	0
062	North Street	Front of 26 North Street	0	0	8	0	0	5	0	0	5	1	0	6	2	0	6	0	0	6	3	0
063	Maple Street	50 feet north of Patch St.	0	2	6	0	0	5	0	0	5	0	0	6	1	1	6	0	0	6	1	3
064	Maple Street	40 feet south of Franklin St.	0	0	6	0	0	5	0	0	5	0	0	6	0	0	6	0	0	6	0	0
065	Garamella Road	200 feet west of Maple	0	0	6	0	1	4	0	0	5	1	0	7	0	0	6	0	0	6	1	1
000	Kennedy Avenue	Pulse Point	0	3	3	0	4	0	0	4	1	0	4	3	0	3	3	0	4	2	0	22
<b>Totals</b>			<b>9</b>	<b>6</b>		<b>4</b>	<b>5</b>		<b>0</b>	<b>6</b>		<b>3</b>	<b>5</b>		<b>6</b>	<b>4</b>		<b>2</b>	<b>5</b>		<b>24</b>	<b>31</b>

**HOUSATONIC AREA REGIONAL TRANSIT DISTRICT**  
**Comprehensive Operational Analysis Trip Summary**  
**Route 1 - Golden Hill/Medical Center**  
**Saturday Outbound Trips**

Stop No.	Street Location	Location Description	8:00			9:00			10:00			11:00			12:00			1:00			2:00			3:00			4:00			5:00			Total	
			On	Off	Load	On	Off	Load	On	Off	Load	On	Off	Load	On	Off	Load	On	Off	Load	On	Off	Load	On	Off	Load	On	Off	Load	On	Off	Load	On	Off
000	Kennedy Avenue	Pulse Point	4	0	4	1	0	1	7	0	11	11	0	11	8	0	12	4	0	6	4	0	4	7	0	7	11	0	11	10	0	10	67	0
001	Rose Street	Opposite Danbury Furniture	0	0	4	0	0	1	0	1	10	0	0	11	0	0	12	0	0	6	0	0	4	0	0	7	0	0	11	0	0	10	0	1
002	Garamella Ave.	100 feet east of Main Street	0	0	4	0	0	1	0	0	10	0	1	10	0	1	11	0	0	6	0	0	4	0	1	6	0	1	10	0	0	10	0	4
003	Balaforth Ave.	Front of 35 Balaforth	0	0	4	0	0	1	0	2	8	0	0	10	0	1	10	0	1	5	0	1	3	0	0	6	0	0	10	0	0	10	0	5
005	Balaforth Ave.	25 feet north of park entrance	0	0	4	0	0	1	0	0	8	0	2	8	0	0	10	0	0	5	0	0	3	0	2	4	1	0	11	0	0	10	1	4
006	North Street	Front of 27 North Street	0	0	4	0	0	1	0	0	8	0	0	4	2	0	12	0	0	5	0	0	3	0	0	4	0	0	11	0	0	10	2	4
007	North Street	40 feet west of Thorp Street	0	0	4	0	0	1	0	0	8	0	0	4	0	0	12	0	0	5	0	0	3	0	1	3	0	0	11	0	0	10	0	1
008	Main Street	Front of Dairy Mart	0	0	4	0	0	1	0	0	8	0	0	4	0	0	12	0	0	5	0	0	3	0	3	0	0	0	11	0	0	10	0	3
009	Golden Hill Road	Front of 13 Golden Hill Road	0	0	4	0	0	1	0	0	8	0	0	4	0	1	11	0	0	5	0	0	3	0	0	0	0	0	11	0	0	10	0	1
010	Golden Hill Road	Front of 37 Golden Hill Road	0	0	4	0	0	1	0	1	7	0	0	4	0	0	11	0	0	5	0	0	3	0	0	0	0	0	11	0	0	10	0	1
011	Golden Hill Road	75 feet south of Ezra Road	0	0	4	0	0	1	0	0	7	0	0	4	0	0	11	0	0	5	0	0	3	0	0	0	0	0	11	0	0	10	0	0
012	Golden Hill Road	Front of 65 Golden Hill Road	0	0	4	0	0	1	0	1	6	0	0	4	0	0	11	0	0	5	0	0	3	0	0	0	0	0	11	0	0	10	0	1
013	Golden Hill Road	Front of 97 Golden Hill Road	0	0	4	0	0	1	0	0	6	0	0	4	0	0	11	0	0	5	0	0	3	0	0	0	0	0	11	0	0	10	0	1
014	Padanaram Road	Front of Padanaram Court	0	0	4	0	0	1	0	0	6	0	0	4	0	1	10	0	0	5	0	1	2	2	0	2	0	7	4	0	0	10	2	9
015	Padanaram Road	South of Earnie's Roadhouse	0	0	4	0	0	1	0	0	6	0	0	4	0	1	9	0	0	5	0	0	2	0	0	2	0	0	4	0	0	10	0	1
016	Padanaram Road	25 feet north of Burger King	0	0	4	0	0	1	0	0	6	0	0	4	0	0	9	0	0	5	0	0	2	0	0	2	0	0	4	0	0	10	0	0
017	Hayestown Road	North Street Shopping Center	0	0	4	0	0	1	0	2	4	0	2	2	1	2	8	0	1	4	0	0	2	0	0	2	1	0	5	0	6	4	2	13
018	Hayestown Road	150 feet west of Tamarack	0	0	4	0	0	1	0	0	4	0	0	2	0	0	8	0	0	4	0	0	2	0	0	2	0	0	5	0	0	4	0	0
019	Tamarack Road	Opposite DMV	0	0	4	0	0	1	0	0	4	0	0	2	0	0	8	0	0	4	0	0	2	0	0	2	0	0	5	0	0	4	0	0
020	Tamarack Road	25 feet north of Virginia Ave.	0	0	4	0	0	1	0	0	4	0	0	2	0	0	8	0	0	4	0	0	2	0	0	2	0	0	5	0	0	4	0	0
021	Virginia Ave.	30 feet west of Forest Ave.	0	0	4	0	0	1	0	0	4	0	0	2	0	0	8	0	0	4	0	0	2	0	0	2	0	1	4	0	0	4	0	1
022	Forest Ave	25 feet north of Hospital Ave.	0	0	4	0	0	1	0	0	4	0	0	2	0	0	8	0	0	4	0	0	2	0	0	2	0	0	4	0	0	4	0	0
025	Hospital Ave.	Front of 27 Hospital Ave.	0	0	4	0	0	1	0	1	3	0	0	2	0	0	8	0	0	4	0	0	2	0	0	2	0	0	4	0	0	4	0	1
023	None	Danbury Hospital	0	4	0	0	0	1	1	0	4	0	1	1	0	1	7	0	1	3	0	2	0	0	0	2	1	0	5	0	3	1	2	12
024	East access road	At Hospital Ave. Exit	0	0	0	0	0	1	0	0	4	0	0	1	0	0	7	0	0	3	0	0	0	0	0	2	0	0	5	0	0	1	0	0
025	Hospital Ave.	Front of 27 Hospital Ave.	0	0	0	0	0	1	0	0	4	0	0	1	0	0	7	0	0	3	0	0	0	0	0	2	0	0	5	0	0	1	0	0
026	Locust Ave.	Lot entrance for 84-90 Locust	0	0	0	0	0	1	0	0	4	0	0	1	0	0	7	1	0	4	0	0	0	2	0	4	0	0	5	0	0	1	3	0
027	Locust Ave.	150 feet north of Osbourne St.	0	0	0	0	0	1	0	1	3	0	1	0	0	0	7	0	0	4	0	0	0	0	0	4	0	0	5	0	0	1	0	2
028	Osbourne Street	Front of 118 Osbourne St.	0	0	0	1	0	2	2	0	5	0	0	0	1	0	8	0	0	4	0	0	0	0	0	4	0	2	3	0	1	0	4	3
029	Osbourne Street	30 feet east of Somers Street	0	0	0	0	0	2	0	0	5	0	0	0	0	0	8	0	0	4	0	0	0	0	0	4	0	0	3	0	0	0	0	0
030	Osbourne Street	15 feet south of Springdale Ave.	0	0	0	0	0	2	0	0	5	0	0	0	0	0	8	0	0	4	0	0	0	0	0	4	0	0	3	0	0	0	0	0
031	Germantown Ave.	Front of 5 Germantown Road	0	0	0	0	1	1	0	0	5	0	0	0	0	0	8	0	0	4	0	0	0	0	0	4	0	0	3	0	0	0	0	1
032	Germantown Ave.	Front of 39 Germantown Road	0	0	0	0	0	1	0	0	5	1	0	1	0	0	8	0	0	4	0	0	0	0	0	4	0	0	3	0	0	0	1	0
033	Sand Pit Road	Across from 54 Sand Pit Road	0	0	0	0	0	1	0	0	5	0	0	1	0	0	8	0	0	4	0	0	0	0	0	4	0	0	3	0	0	0	0	0
034	None	Sand Pit Medical Center	0	0	0	0	0	1	1	0	6	0	0	1	0	0	8	0	0	4	0	0	0	4	2	6	0	0	3	0	0	0	5	2
037	Rockwell Road	100 feet north of Sand Pit Rd.	0	0	0	0	0	1	0	0	6	0	0	1	0	0	8	0	0	4	0	0	0	0	0	6	0	0	3	0	0	0	0	0
038	Rockwell Road	Corner of Rubson Street	0	0	0	0	0	1	0	0	6	0	0	1	0	0	8	0	0	4	0	0	0	0	0	6	0	0	3	0	0	0	0	0
039	Rockwell Road	15 feet south of Stadley Road	0	0	0	0	0	1	0	0	6	0	0	1	0	0	8	0	0	4	0	0	0	0	0	6	0	0	3	0	0	0	0	0
040	Great Plain Road	Front of 27 Great Plain	0	0	0	0	0	1	0	0	6	0	0	1	0	0	8	0	0	4	0	0	0	0	0	6	0	0	3	0	0	0	0	0
041	Great Plain Road	50 feet north of Albers Road	0	0	0	0	0	1	0	0	6	0	0	1	0	0	8	0	0	4	0	0	0	0	0	6	0	0	3	0	0	0	0	0
042	Great Plain Road	Opposite Diamond Ave.	0	0	0	0	0	1	0	0	6	0	0	1	0	0	8	0	0	4	0	0	0	0	0	6	0	0	3	0	0	0	0	0
043	None	St. Gregory the Great Church	0	0	0	2	0	3	0	0	6	0	0	1	0	0	8	0	0	4	1	0	1	0	0	6	0	1	2	0	0	0	3	1
044	Hayestown Road	15 feet east of Valleystream	0	0	0	0	0	3	0	0	6	0	0	1	0	0	8	0	0	4	0	0	1	0	0	6	0	0	2	0	0	0	0	0
045	Hayestown Road	15 feet East of Acre Dr.	0	0	0	0	0	3	0	0	6	0	0	1	0	0	8	0	0	4	0	0	1	0	0	6	0	0	2	0	0	0	0	0
046	Hayestown Road	Town Park	0	0	0	0	0	3	0	1	5	0	0	1	0	7	1	0	2	2	0	0	1	0	0	6	0	1	1	0	0	0	0	11
Totals			4	4		4	1		11	10		12	11		12	15		5	5		5	4		15	9		14	13		10	10		92	82

HOUSATONIC AREA REGIONAL TRANSIT DISTRICT  
Comprehensive Operational Analysis Trip Summary  
Route 1 - Golden Hill/Medical Center  
Saturday Inbound Trips

Stop No.	Street Location	Location Description	8:38			9:38			10:38			11:38			12:38			1:38			2:38			3:38			4:38			Total	
			On	Off	Load	On	Off	Load	On	Off	Load	On	Off	Load	On	Off	Load	On	Off	Load	On	Off	Load	On	Off	Load	On	Off	On	Off	
046	Hayestown Road	Town Park	2	0	2	0	0	3	0	0	5	0	0	1	2	0	3	0	0	2	0	0	1	0	0	6	0	0	1	4	0
047	E. Hayestown Rd.	Front of Lake Candlewood Apts.	0	0	2	0	0	3	0	1	4	0	0	1	0	0	3	0	1	1	2	0	3	0	0	6	0	0	1	2	2
048	E. Hayestown Rd.	Front of 4 East Hayestown Road	0	0	2	0	0	3	0	0	4	0	0	1	0	0	3	0	0	1	0	0	3	0	0	6	0	0	1	0	0
049	E. Hayestown Rd.	20 feet south of Oak St.	0	0	2	0	0	3	0	0	4	0	0	1	0	0	3	0	0	1	0	0	3	0	0	6	0	0	1	0	0
036	Tamarack Road	Front of Tamarack Plaza	0	0	2	0	0	3	0	0	4	0	0	1	0	0	3	0	0	1	0	0	3	0	0	6	0	0	1	0	0
038	Tamarack Road	25 feet north of Virginia Ave.	0	0	2	0	0	3	0	0	4	0	0	1	0	0	3	0	0	1	0	0	3	0	0	6	0	0	1	0	0
040	Virginia Ave.	30 feet west of Forest Ave.	0	0	2	0	0	3	0	0	4	0	0	1	0	0	3	0	0	1	0	0	3	0	0	6	0	0	1	0	0
042	Forest Ave	25 feet north of Hospital Ave.	0	0	2	1	0	4	0	0	4	0	0	1	0	0	3	0	0	1	2	1	4	0	0	6	0	0	1	3	1
044	None	Danbury Hospital	0	0	2	2	0	6	0	0	4	2	0	3	1	0	4	3	0	4	0	0	4	0	0	6	0	0	1	8	0
046	East access road	At Hospital Ave. Exit	0	0	2	0	0	6	0	0	4	0	0	3	0	0	4	0	0	4	0	0	4	0	0	6	0	0	1	0	0
050	Virginia Avenue	50 feet west of Forest Ave.	0	0	2	0	0	6	0	0	4	0	0	3	0	0	4	0	0	4	0	0	4	0	0	6	0	0	1	0	0
051	Tamarack Road	Front of DMV	0	0	2	0	0	6	0	0	4	0	0	3	0	0	4	0	0	4	0	0	4	0	0	6	0	0	1	0	0
052	Hayestown Road	130 feet west of E. Hayestown	0	0	2	0	0	6	0	0	4	0	0	3	0	0	4	0	0	4	0	0	4	0	0	6	0	0	1	0	0
053	Hayestown Road	North Street Shopping Center	0	0	2	0	0	6	0	0	4	0	0	3	1	0	5	2	0	6	2	0	6	1	0	7	2	0	3	8	0
054	Padanaram Road	Front of Brookside Condos	1	0	3	0	0	6	0	0	4	1	0	4	0	0	5	0	0	6	0	0	6	1	0	8	0	0	3	3	0
055	Padanaram Road	Front of Northville Condos	0	0	3	0	0	6	0	0	4	0	0	4	0	0	5	3	0	9	2	0	8	0	0	8	0	0	3	5	0
056	Golden Hill Road	Front of 98 Golden Hill Road	0	0	3	0	0	6	0	0	4	0	0	4	0	0	5	0	0	9	0	0	8	0	0	8	0	0	3	0	0
057	None	Danbury High School																													
058	Golden Hill Road	Front of 74 Golden Hill	0	0	3	0	0	6	0	0	4	0	0	4	0	0	5	0	0	9	0	0	8	0	0	8	0	0	3	0	0
059	Golden Hill Road	Front of 46 Golden Hill	0	0	3	0	0	6	0	0	4	0	0	4	0	0	5	0	0	9	0	0	8	0	0	8	0	0	3	0	0
060	Golden Hill Road	100 feet north of Aiken Ave.	0	0	3	0	0	6	0	0	4	0	0	4	0	0	5	0	0	9	0	0	8	0	0	8	0	0	3	0	0
061	Main Street	Front of Texaco station	1	0	4	0	1	5	0	0	4	0	0	4	0	0	5	0	0	9	0	0	8	0	0	8	0	0	3	1	1
062	North Street	Front of 26 North Street	0	0	4	0	0	5	0	0	4	0	0	4	0	0	5	0	0	9	0	0	8	3	1	10	0	1	2	3	2
063	Maple Street	50 feet north of Patch St.	0	0	4	0	0	5	0	0	4	0	0	4	2	0	7	0	0	9	0	0	8	1	0	11	0	0	2	3	0
064	Maple Street	40 feet south of Franklin St.	0	0	4	0	0	5	0	0	4	0	0	4	0	0	7	0	0	9	0	0	8	1	0	12	0	0	2	1	0
065	Garamella Road	200 feet west of Maple	0	0	4	0	0	5	0	0	4	0	0	4	0	0	7	0	0	9	0	0	8	0	0	12	0	0	2	0	0
000	Kennedy Avenue	Pulse Point	0	4	0	0	4	1	0	4	0	0	4	0	0	5	2	0	8	1	0	6	2	0	9	3	0	1	1	0	45
Totals			4	4		3	5		0	5		3	4		6	5		8	9		8	7		7	10		2	2		37	51