SweetHART

OPERATIONAL ANALYSIS 2016

Prepared for HVMPO by: HARTransit

Eric C. Bergstraesser Chief Executive Officer

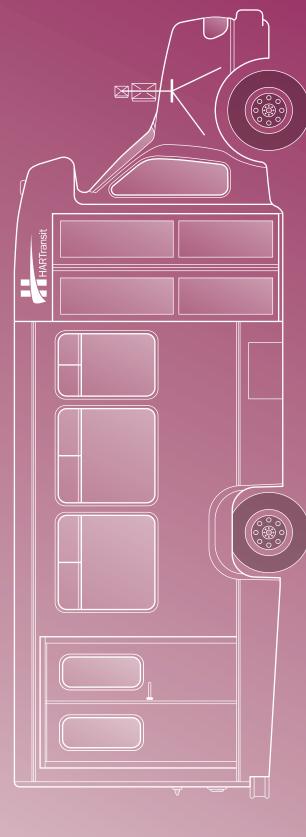
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SweetHART Operational Analysis

September 2016

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1. INTRODUCTION

1.1 Study Purpose

This study provides an overview and analysis of the SweetHART senior/disabled transportation service. SweetHART is an accessible demand responsive bus service operated by HARTransit since 1978. The report is of use to funding agencies and the public seeking to evaluate HARTransit services and their productivity.

The rider eligibility process, operating policies, operational history and performance measures are described. Comparisons to past performance and other similar operations are provided. An analysis of a customer satisfaction survey was completed. Recommendations for service improvement are detailed in chapter 5.

2. EXISTING CONDITIONS

2.1 Service Overview

Bus services like SweetHART do not have a predetermined schedule, but rather are built around rider requests. SweetHART provides accessible door-to-door demand responsive bus service through two distinct and coordinated programs:

- Dial-a-ride is provided for those age 65 and older, and persons with physical or cognitive mobility disabilities, regardless of age. The service provision varies by municipality, depending on the budgetary resources provided. Most of the demand response service provided by HARTransit falls into this category.
- ADA Paratransit is provided within a 0.75 mile radius of the HARTransit fixed route bus system, which is a Federal requirement. ADA Paratransit service is intended to provide equal access to mass transit for persons who cannot use it because of a qualifying disability. Those that qualify for ADA Paratransit also qualify for dial-a-ride.

Qualifying riders may use either service for any transportation need.

Seven municipalities in Greater Danbury receive SweetHART service including Bethel, Brookfield, Danbury, New Fairfield, New Milford, Newtown and Ridgefield. From 2007 through 2015, HARTransit provided limited service to the town of Roxbury under the state municipal grant program until this town acquired an accessible vehicle.

The operation of SweetHART dial-a-ride is supported through municipal grants, the state 13b-38bb municipal grant program and the Federal Section 5307 program. ADA Paratransit service is funded by the State of Connecticut.

2.2 Span of Service

Days and hours that SweetHART service is available vary significantly by municipality as shown below in Table 2.1.

Table 2.1 SweetHART Span of Service

Dial-a-ride

Municipality	Weekday	Saturday	Sunday
Bethel	7:15 a.m. – 4:15 p.m.	N/A	N/A
Brookfield	7:40 a.m. – 3:45 p.m.	N/A	N/A
Danbury	7:00 a.m. – 6:00 p.m.	N/A	N/A
New Fairfield	7:45 a.m. – 4:05 p.m.	10:25 AM – 3:50 PM	N/A
Newtown	7:00 a.m. – 4:45 p.m.	8:15 AM – 4:45 PM	N/A
Ridgefield	8:45 a.m. – 4:55 p.m.	N/A	N/A

ADA Paratransit

Municipality	Weekday	Saturday	Sunday
Bethel	6:05 a.m. – 10:30 p.m.	8:15 a.m. – 10:30 p.m.	9:00 a.m 7:00 p.m.
Brookfield	7:00 a.m. – 10:30 p.m.	8:15 a.m. – 10:30 p.m.	9:00 a.m 7:00 p.m.
Danbury	6:05 a.m. – 10:30 p.m.	8:15 a.m. – 10:30 p.m.	9:00 a.m 7:00 p.m.
New Milford	7:00 a.m. – 9:30 p.m.	8:15 a.m. – 9:30 p.m.	9:00 a.m 7:00 p.m.

Passengers who are ADA Paratransit eligible may access paratransit service on weeknights, Saturdays and Sundays within 3/4 mile of the fixed route service in Danbury, Bethel, Brookfield and New Milford. Saturday service is available in New Fairfield and Newtown to all registered passengers.

Span of service for dial-a-ride is related to the number of vehicles available in any one municipality during a given part of each day. Where demand is higher, local governments have made the decision to fund more than one vehicle in that town or city. In the municipalities that have more than one vehicle, the starting times of each vehicle are staggered to extend the span of service during the weekday or to provide extra coverage at times of peak demand.

At times of peak service, there are 14 vehicles in operation at the same time within the regional service area. The assignment of vehicles by program during the weekday is shown below.

5:55 9:10 8.22 10:52 ADA Paratransit & Interregional 5:55 8:47 10:10 Bethel 7:24 3:50 Brookfield 8:47 9:33 9:03 1:15 Danbury 11:20 6:03 6:13 6:55 7:37 New Fairfield 9:10 10:10 6:55 Newtown 12:06 12:35 4:58 Ridgefield 5.11 11 12 a.m. p.m.

Figure 2.1 Weekday SweetHART Runs

Note that the smaller segments illustrated in Figure 2.1 are typically linked together with other pieces of work to create a drivers schedule (most are full time). A single driver may thus serve several towns during the course of his workweek or even during his day. These small pieces are added when demand is particularly high over a short period but when a longer run is unnecessary or beyond the budget.

Weekend service is substantially reduced in comparison to the weekday period. Saturday service is limited to four runs with only three operating in the peak:

- One bus for Newtown residents from 8 a.m. to 4:30 p.m.
- One bus for New Fairfield residents from 10 a.m. to 4:30 p.m.
- Two regional ADA paratransit buses, the first operating between 8 a.m. and 5 p.m. with a second between 4:45 p.m. and 10:45 p,m.

Sunday and Holiday service is limited to ADA Paratransit service only, with a single bus operating between 9 a.m. and 7 p.m.

2.3 Ridership and Service History

Over the last five years ridership varied slightly between a high of 66,120 in FY2011 to a low of 59,914 in FY2014. Ridership year to year registered gains as high as 5.8 percent and losses as high as 6 percent. A reduction in usage in FY 2013 and 2014 is likely attributable to very harsh weather.

The proportion of riders that make ADA Paratransit trips is fairly constant on an annual basis, ranging between 18 to 20 percent of total demand response ridership.

Table 2.2 and Figure 2.2 illustrate the historical trend.

Table 2.2 5-Year SweetHART Ridership History

Fiscal Year	Dial-a-ride	ADA Paratransit	Total Ridership	Annual change
FY 2015	50954	12483	63,372	5.80%
FY 2014	49242	10672	59,914	-3.60%
FY2013	51080	11096	62,176	-6.00%
FY 2012	53962	12158	66,120	0.40%
FY 2011	53324	12520	65,844	

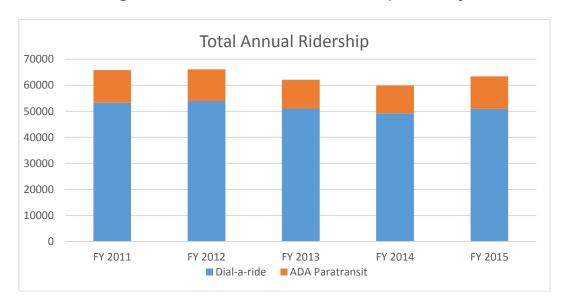


Figure 2.2 Total Annual Ridership History

Ridership over the period averaged 238 trips per weekday, 42 per Saturday and 12 per Sunday. Average Saturday ridership is particularly consistent with only slight variation over the five year period.

Table 2.3 Average Daily Ridership, FY 2011-2015

Fiscal Year	Weekday	Saturday	Sunday
FY 2015	240	41	11
FY 2014	224	43	9
FY 2013	234	42	13
FY 2012	249	41	14
FY 2011	244	42	15

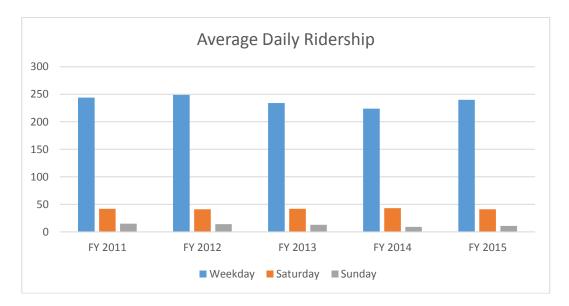


Figure 2.3 Average Daily Ridership History

Danbury has the largest pool of riders in the system and has the greatest number of buses, followed by Newtown. In FY 15, Roxbury and New Milford ridership numbers were the lowest. Roxbury service was limited to only a few hours per week and service to New Milford is provided for ADA Paratransit riders only.

Table 2.4 FY 2015 Demand Response Ridership by Municipality

Municipality	FY 2015 Ridership	Percent of Total
Danbury	36,863	58.00%
Newtown	5,549	8.80%
Brookfield	5,202	8.20%
Bethel	4,962	7.80%
Ridgefield	4,543	7.20%
New Fairfield	4,120	6.50%
New Milford	1,784	2.80%
Roxbury	349	0.60%
Total	63,372	100.00%



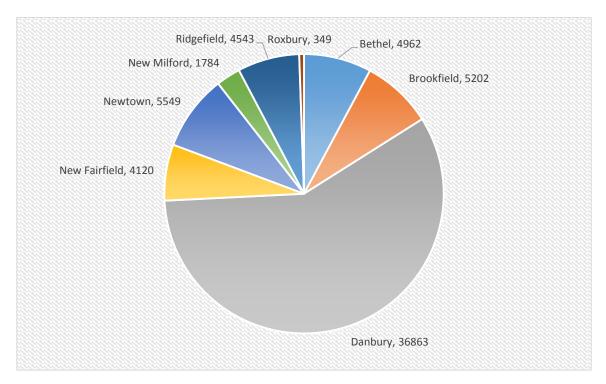


Table 2.5 Total Annual ADA Paratransit Ridership by Municipality

Municipality	FY 2015 Ridership	Percent of Total
Danbury	7,249	58.10%
Brookfield	2,280	18.30%
New Milford	1,784	14.30%
Bethel	1,032	8.30%
Ridgefield	138	1.10%
Total	12,483	100.00%

ADA Paratransit ridership usage in the region is dominated by Danbury residents. ADA paratransit eligible Brookfield residents use this service with the second greatest frequency.

Brookfield has the highest proportion of ADA Ridership to total demand response ridership (43%) among those towns that also have a SweetHART dial-a-ride program.

A few trips by Ridgefield residents (138) round out this subset of ridership. Table 2.5 and Figure 2.5 illustrate the ridership breakdown.

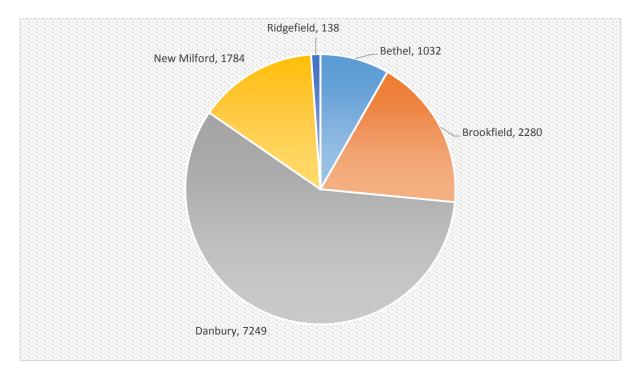


Figure 2.5 FY 15 ADA Paratransit Ridership by Residency

Rider Demographics

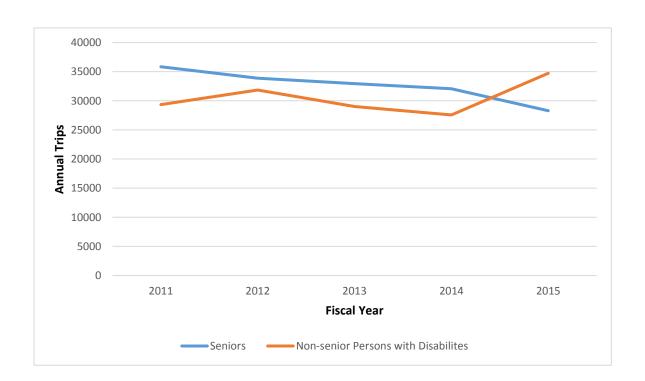
Throughout the history of the SweetHART program, a gradual demographic shift has occurred from a ridership based primarily on senior riders to a split demographic including non-senior disabled riders. While still close to a 50/50 split, this trend has continued to the point that in FY 15, more non-senior than senior trips took place for the first time.

The chart and graph on the following page depict total annual ridership over a five year period by Senior and non-senior Persons with Disabilities.

Table 2.6 Total Annual Demand Response Ridership by Seniors and Non-Senior Persons with Disabilities

Fiscal Year Annual Senio		Annual Non-Senior Person with Disabilities Ridership
2015	28,295	34,728
2014	32,067	27,574
2013	32,959	29,029
2012	33,891	31,860
2011	35,848	29,353

Figure 2.6 Total Annual Demand Response Ridership by Seniors and Non-Senior Persons with Disabilities



2.4 Prior SweetHART Studies

Studies of the SweetHART system over the years have led to efficiencies and improvements in service. Opportunities for actual expansion have, however, been limited based on availability of funding. These prior SweetHART analyses and their recommendations are briefly summarized below:

 In April 1987, Urbitran, a transportation planning and consulting company, prepared a Regional Needs Assessment and SweetHART Operations Review for HVCEO. This was the first study of SweetHART, then providing service in Danbury, Bethel, New Fairfield, Newtown, Redding and Ridgefield.

The study provided a summary and analysis of SweetHART operations at the time and was a precursor to **HVCEO Bulletin 52: Opportunities for Elderly and Disabled Coordination** of October 1987.

The study examined the SweetHART service in the context of other dialaride programs provided in the Housatonic Region, and possibilities for coordination. The study suggested opportunities to provide a longer service day, cost savings and other economies through consolidation of operations or maintenance.

- The 1994 SweetHART Operational Analysis provided an examination of the performance of the SweetHART system. Actions taken as a result of the study included reconfiguration of ADA Paratransit and dial-a-ride driver runs to better meet passenger demand, installation of trip scheduling software and institution of regular customer relations training.
- The 2000 SweetHART Comprehensive Operational Analysis expanded the 1994 study by including a customer satisfaction survey and peer analysis with similar dial-a-ride systems in Connecticut. Key results from this study included an overall plan for expansion of service, installation of telephone monitoring technology, telephone courtesy training and improved marketing materials.
- The 2008 Brookfield Mobile Seniors Onward mapped out a strategic plan for senior transportation in Brookfield. The report was prepared in cooperation with the Brookfield Commission on Aging and HARTransit.

- That same year the 2008 SweetHART Comprehensive Operation Analysis was completed. The 2008 study led to several significant changes to the provision of service including:
 - Installation of GPS tracking technology on all vehicles.
 - Improvements to scheduling policies including the use of scheduling pick-up windows as well as utilization of successful trip history as a tiebreaker for conflicting dial-a-ride trips.
 - o Limitation of unscheduled "will call" return trips to medical purposes
 - o Creation of a formal standing booking request subscription program.
 - o Provision of same day trips, schedule permitting.
 - Reduction of call waiting time by batch scheduling all trip requests on Monday mornings (the busiest day of the week) at 11a.m.

2.5 SweetHART Vehicle Roster

HARTransit operates a fleet of body on chassis buses with a variety of seating configurations in demand response service. Buses are purchased through the Federal Section 5307 program with CTDOT providing the 20% local match. Vehicles are replaced on a mileage-based schedule every 7-10 years.

The agency recently took delivery of 4 buses (not yet in service) with an additional 4 on order and expected by fall of 2016. The current average age of active vehicles is just over seven years.

All vehicles are equipped with wheelchair lifts, securement devices, fleet trackers and security cameras. Newer vehicles also feature rear back-up cameras. Vehicles purchased after the 2007 model year are gasoline powered. This major shift in operations is due to the current lack of a diesel-powered option in a Ford chassis. The current lack of diesel options is due to increased pollution control requirements for newer vehicles. There is not enough space for a diesel engine to fit within the chassis used on SweetHART buses due to the pollution control technologies taking up more room.

Seating capacities for ambulatory passengers vary between eight and fourteen; buses have two or three wheelchair positions.

Eighteen vehicles are assigned to SweetHART service. Table 2.7 provides more detailed information on the SweetHART fleet.

Table 2.7 SweetHART Vehicle Roster

Year	# Buses	Vehicle make	Model	Average Odometer	Seating Capacity
2014	1	Ford/Goshen	GC II	8587	8 seats/3 Wheelchairs
2014	1	Ford/Goshen	GC II	9782	12 seats/2 Wheelchairs
2013	2	Ford/Goshen	GC II	36387	8 seats/3 wheelchairs
2013	2	Ford/Goshen	GC II	37647	14 seats/2 wheelchairs
2007	4	Ford/Startrans	Senator	125105	8 seats/3 wheelchairs
2007	2	Ford/Startrans	Senator	142776	12 seats/2 wheelchairs
2007	2	Ford/Startrans	Senator	121893	14 seats/2 wheelchairs
2006	2	Ford/Startrans	Senator	155725	8 seats/3 wheelchairs
2006	2	Ford/Startrans	Senator	181987	12 seats/2 wheelchairs

2.6 Drivers

There are 20 full time and one part time drivers in the SweetHART program. All drivers hold a Commercial Driver's License (CDL) and are subject to FTA required drug and alcohol testing. Service is not subcontracted - all drivers are employees of HARTransit.

HARTransit drivers select their work assignments or "runs" by seniority as established by the current labor agreement (drivers and schedulers are members of ATU Local 1622). Driver runs are selected at least annually and also when a given run changes by more than two hours per week, when a run moves from full-time to part time, or when a driver leaves the SweetHART program.

HARTransit has other drivers that report daily for the purpose of filling open runs due to illness or vacation. This work is assigned as per the union contract.

Most SweetHART runs are full time, five days per week with a few set up over four days. There is currently one part time weekend run. Many assignments serve different communities over the course of the week. A given driver may, for example, serve Bethel, Ridgefield, or New Fairfield, depending on the day of the week.

Some SweetHART runs are combined with Harlem Line shuttle work. This allows for a more efficient coverage of the peak-period-only shuttle work, helps to create more full time positions and aids in the retention of employees.

2.7 Schedulers and Scheduling System

Daily driver schedules are generated by Tripspark, a scheduling and dispatching software program developed specifically to manage demand responsive transportation service. Tripspark integrates rider registration, trip booking, and trip coordination. It includes a GIS map feature that allows for geocoding of rider addresses and destinations for the development of accurate schedules.

All trip requests are by phone and scheduling calls are recorded for customer service purposes.

There are two full time and one part time persons employed as schedulers. They are responsible for call taking, assigning trips to vehicles, generation of driver manifests and dispatching vehicles. Schedulers also have access to GPS software with real-time display of vehicle locations. Like drivers, schedulers are HARTransit employees.

2.8 Fare Structure

Fare structure is locally determined by the HARTransit Board of Directors after public input. Cash fares for dial-a-ride trips are \$1. Under FTA rules, ADA Paratransit may be as much as double the fare for fixed route services, currently \$1.50. ADA Paratransit fares are currently \$2.50. The last fare increase covering the demand-response program took place in summer 2013.

In Ridgefield, the Commission on Disabled pays for SweetHART dial-a-ride fares (\$1.00 for each dial-a-ride trip made) for town residents. Ridgefield riders do not pay a fare for these kinds of trips as long as they are scheduled in advance, within the allocated reservation period (see section 2.10 or Appendix C for information regarding the trip scheduling process).

Discounted ten ride passes can be purchased by SweetHART users at the HARTransit administrative office. The ten ride pass offers a convenience factor and a small discount per trip. The SweetHART fare structure is shown on table 2.8 and 2.9 on the following page.

Table 2.8 SweetHART Cash Fares

Туре	Cash Fare Price		
ADA Paratransit	\$2.50		
Dial-a-ride	\$1.00		
Same Day trips	\$3.00		

Table 2.9 SweetHART Pass Prices

Type	10-trip Pass Price		
ADA Paratransit	\$22.50		
Dial-a-ride	\$9.00		

2.9 Passenger Eligibility

As noted in the beginning of the chapter, three distinct classes of passengers are eligible to use SweetHART. Those age 65 or older, and any person with a mobility-related disability is eligible for SweetHART dial a ride. Those with more profound mobility disabilities may qualify for ADA paratransit.

ADA Paratransit Eligibility Determinations

The benefit of a person with a disability applying for and becoming ADA-eligible is that ADA trips receive priority over non-ADA trips during the scheduling process, have greater service options and a longer reservation window for non-medical appointments. In the event of there being limited space on a vehicle, an ADA-eligible passenger can bump a non-ADA-eligible passenger from the schedule. However, trip bumping does not occur often (see Appendix B for ADA and non-ADA trip eligibility).

In order to access ADA paratransit service, individuals must first complete the Connecticut Statewide ADA Complementary Paratransit Service application. To be eligible for this service an individual must demonstrate that their disability prevents them from using the public fixed route bus service for one (or more) of the following three reasons:

- Inability to independently ride the public bus service.
- Inability to get on or off a transit bus.
- Inability to get to or from a bus stop.

Once the application is completed and submitted, the rider must attend a face to face functional assessment interview with a HARTransit staff member if they are under age 85. The eligibility process as described above is uniform among all transit agencies in Connecticut.

Dial-a-ride Eligibility Determinations

The bar for eligibility is lower for access to dial-a-ride services. Those with mobility disabilities complete the Connecticut Statewide ADA application as in the example above (but indicating on the application that they are interested in dial-a-ride transportation). An interview is not required.

Riders that apply based on age fill out a shorter application with basic contact information, and also submit a facsimile of an official document that shows they are at least 65.

Please refer to Appendix A: Passenger Eligibility Requirements for more detailed information on eligibility requirements.

2.10 Trip Reservation Process

As noted earlier, bus services like SweetHART do not have a predetermined schedule, but instead are built around rider requests. With only limited exceptions, riders must call at least the day before for a trip the following day.

- ADA Paratransit eligible riders as well as dial-a-ride passengers making trips for medical appointments may call as early as two weeks ahead to 4:30 p.m. the day before their trip
- Dial a-ride passengers may schedule trips for purposes other than medical as far as a week ahead and up to 4:30 p.m. the day before they travel.
- Booking a trip as early as possible is strongly recommended to have the
 best chance of securing a trip. Schedulers are on staff Monday through
 Friday, with ADA Paratransit trip reservations accepted through voicemail
 on Saturdays, Sundays and Holidays for trips the following day. The best
 time to reserve trips is Monday morning before 11 a.m. for trips the following
 week.

Riders making repeated trips, for work or therapy for example, may submit a standing booking request form. This isn't a guarantee that a trip will fit on the schedule but it eliminates the need to call every week to make a trip request.

Those that book trips are provided a 30 minute pick up range when they should expect the bus to arrive. This is the current industry standard for demand response.

Same day trips

If a rider is making a non-therapy medical appointment, they may leave their return trip unbooked and call when ready. These "will call" trips are dispatched to the next available bus after the call arrives.

HARTransit allows for booking same day trips for any purpose on a limited basis. Riders may make two same day trip reservations regardless of purpose in a given month, depending on availability in the schedule. The intent here is to provide an option for a non-emergency medical appointment with short notice or other similar situation.

Please refer to Appendix A: SweetHART Trip Reservation Policies for more detailed information on reservation policies.

2.11 Trip Cancellations and Missed Trips

Trips can be cancelled with at least two hours advance notice for trips with both an origin and destination within the ADA service area, or twelve hours advance notice for trips outside the ADA service area.

No-Show & Late Cancellation Policy

A no-show occurs when a passenger fails to show for a scheduled trip. A passenger cancelling at the door after a scheduled bus has arrived is also considered a no-show for the purpose of the policy.

HARTransit considers a late cancellation for an ADA Paratransit trip to be a trip in which the passenger fails to provide two hours advance cancellation notice, or twelve hours advance notice for a non-ADA dial-a-ride trip (see Appendix B for ADA and non-ADA trip eligibility).

No shows or late cancellations that are beyond the control of the passenger do not violate the policy. Passengers must explain the reasons for no shows or late cancellations to receive such consideration.

Should passengers claim that patterns of no-shows or late cancellations are beyond their control, HARTransit reserves the right to request documented verification, including professional verification of matters related to the passenger's health or disability that may contribute to the pattern.

Passenger no-shows and late cancellations violate HARTransit policy when:

- There are six or more late cancellations or three or more no-shows alone during the prior 60-day period.
- The violations amount to 15% or more of all trips scheduled for the period.

Passengers with excessive no-shows or short cancellations may have their rights to access the service suspended.



Above: SweetHART passenger boarding on a wheelchair lift. Riders may also stand and ride the lift.

3 PERFORMANCE INDICATORS

3.1 Introduction

This chapter examines the system performance of the SweetHART service. An explanation of each performance measure is accompanied by corresponding data and infographics. Service levels, trip length, travel time, wheelchair trips, passenger statistics, service costs, passenger revenue and peak travel times are analyzed.

When comparing the range of fiscal years for this operational report (2011 to 2015) and to the last operational report (2002 to 2007), it is important to note that the operating environment changes over time. The increase in development and resulting traffic congestion in urbanized and non-urbanized areas in the region has impacted travel routes, total travel times and distances especially in the Federal Road, Route 7 and Route 302 corridors.

Rider origins, trip destinations, volume of wheelchair riders and service levels also greatly influence system performance from year to year.

3.2 Service Levels

There were no significant changes in the provision of the SweetHART service from fiscal years 2011 to 2015.

Many of the performance indicators derived in this chapter use total annual revenue hours due to the Federal Transit Administration's National Transit Database using total revenue hours as a base for many service measures. The goal here was to report data consistent with industry standards.

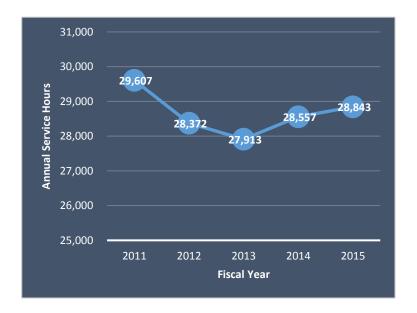
3.3 Service Hours and Miles

Service hours and miles per fiscal year are two of the most basic measures for data in demand response and describe the amount of time spent, and distance traveled, by vehicles when transporting passengers. Productivity, ridership and other measures are closely coupled to these metrics.

In 2011, total annual service hours were highest over the 5 year period, reaching 29,607 hours. Service hours decreased to 28,372 in 2012, but remained fairly consistent in the following years through 2015. Figure 3.1 details the trend in annual service hours between 2011 and 2015.

Figure 3.1 Service Hours, Fiscal Years 2011 to 2015

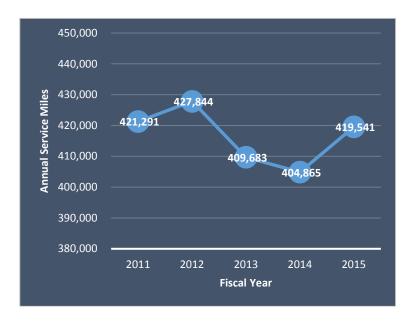
Fiscal Year	Service Hours
2015	28,843
2014	28,557
2013	27,913
2012	28,372
2011	29,607



Total annual service miles for fiscal years 2011 through 2015 fluctuated between a low of 404,865 in 2014 and a high of 427,844 in 2012. The trend in service miles over the previous five years reflects a corresponding variation in the distance traveled to complete requested trips. Figure 3.2 details the trend in annual service miles between 2011 and 2015.

Figure 3.2 Service Miles, Fiscal Years 2011 to 2015

Fiscal Year	Service Miles
2015	419,541
2014	404,865
2013	409,683
2012	427,844
2011	421,291



3.4 Trip Length

Factors that contribute to trip length include the service area's relative size, topography, development, traffic and population densities, time of day, and the average distance between trip origins and destinations. For the purpose of this analysis, local and intertown trips were examined separately.

For this study, ten separate trips were sampled for each municipality from October, 2015. Sample data for this FY 2015 report was compared with the FY 2008 sampling where available.

Trips were sampled from Tuesdays, Wednesdays, and Thursdays in October, 2015. Not all trips were direct from pickup to drop off destinations. Due to grouping of trips in the scheduling process, some riders remained on the bus for multiple stops prior to their own destinations.

Local Trip Travel by Municipality

Local trips are those where the pickup and drop off locations remain within the same municipality. All local travel times, except for Bethel, decreased from the 2008 sample to 2015. Travel distances followed the general trend seen in trip times per municipality.

Overall, average local trip time for each municipality varied within the range of 10 to 15 minutes. The system average for local trip times decreased by 31.2% from 2008 to 2015.

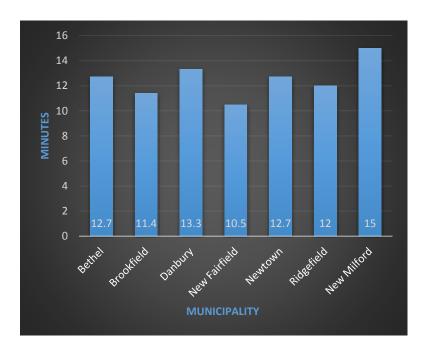
Local average trip distance per municipality varied between 1.92 miles (New Fairfield) and 3.63 miles (Newtown). The results of the FY 2015 local sampling are depicted on the following pages.

Table 3.1 Average Local Trip Travel Time by Municipality

Municipality	2008 Sample Travel Time (minutes)	2015 Sample Travel Time (minutes)	Difference from 2008 to 2015 (minutes)	
Bethel	12	12.7	0.7	
Brookfield	Brookfield 13.3 11.4		-1.9	
Danbury	15.8	13.3	-2.5	
New Fairfield	22.3	10.5	-11.8	
Newtown	22.7	12.7	-10	
Ridgefield	12.3	12	-0.3	
*New Milford	NA 15		NA	
System	16.4	12.5	-3.9	

^{*}Trip sampling was not performed for New Milford in the 2008 study and is not included in the 2008 system average.

Figure 3.3 Local Trip Travel Time by Municipality, FY 2015





A typical "cutaway" style SweetHART bus

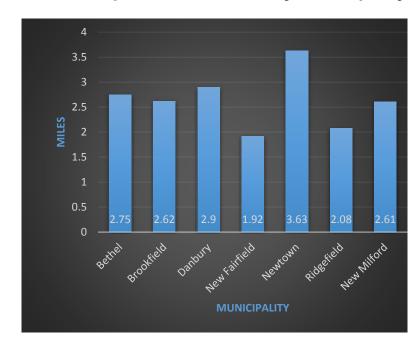


Figure 3.4 Local Trip Travel Distance by Municipality, FY 2015

Municipality	Avg. Local Trip Distance (Mi.)		
Bethel	2.75		
Brookfield	2.62		
Danbury	2.90		
New Fairfield	1.92		
New Milford	2.61		
Newtown	3.63		
Ridgefield	2.08		

Intertown Trip Travel by Municipality

Intertown travel time was assigned to the municipality that each trip originated from.

Many riders in outlying towns take SweetHART to Danbury for shopping, employment, and medical appointments. There were also a high volume of Brookfield and Danbury trips that crossed respective town lines, but remained on Federal Road.

The majority of average intertown trip times per municipality for 2015 decreased from their respective 2008 values. The intertown average trip distances for each

municipality ranged between 4.88 miles in Danbury and 12.26 miles in New Milford.

SweetHART trip distances in New Milford are longer due to the travel required on the northern parts of Route 7, which falls on the outskirts of the regional service coverage.

With regard to intertown trip times per municipality, Bethel was the only town that saw a significant increase from 22.3 minutes in the 2008 sampling to 31 minutes in 2015. This could relate to the increase in Bethel's local travel time: longer trip distances to leave the town, higher traffic volume both locally and in neighboring towns, or more localized retail development along CT Route 302 in the previous seven years. Excluding New Fairfield, all other municipalities saw a decrease in average intertown trip times, with Newtown being the most dramatic.

The overall system average for intertown trip time decreased by 15.6% from 2008 to 2015. Average trip time for each municipality varied within the range of 20.3 minutes in Danbury to 31 minutes in Bethel. The results of the FY 2015 intertown sampling are represented below.

Table 3.2 Average Intertown Trip Travel Time by Municipality

Municipality	2008 Sample Travel Time (minutes)	2015 Sample Travel Time (minutes)	Difference from 2008 to 2015 (minutes)	
Bethel	22.3	31	8.7	
Brookfield	26.6	26.6 25.5		
Danbury	26	20.3	-5.7	
New Fairfield	24.6	24.9	0.3	
Newtown	44.6	22.8	-21.8	
Ridgefield**	29	NA	NA	
New Milford*	NA	25.5	NA	
System	28.9	25	-3.9	

^{*}Trip sampling was not performed for New Milford in the 2008 study and is not included in the 2008 system average.

^{**}There were no Ridgefield intertown trips in 2015 due to the elimination of this option for town residents.

Figure 3.5 Intertown Trip Travel Time by Municipality, FY 2015

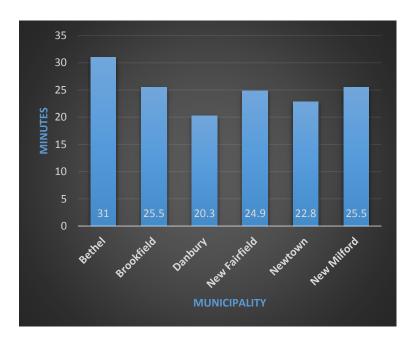
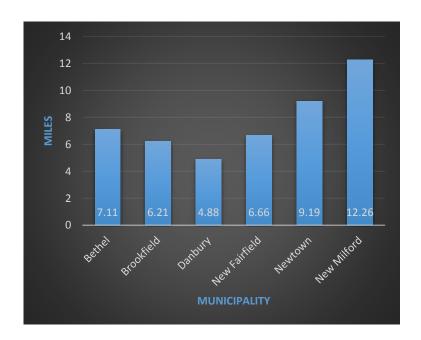


Figure 3.6 Intertown Trip Travel Distance By Municipality, FY 2015



Municipality	Avg. Intertown Trip Distance (Mi.)
Bethel	7.11
Brookfield	6.21
Danbury	4.88
New Fairfield	6.66
New Milford	12.26
Newtown	9.19

3.5 Wheelchair Trips

In fiscal year 2011 there were 8,076 total wheelchair trips, which grew to 10,116 total trips in fiscal year 2015. Overall, wheelchair trips increased by 25% from 2011 to 2015. Historically, this measure jumped by 49% from the previous operational report's highest recorded fiscal year total of 6.796 in 2006 to the FY 2015 figure of 10,116.

One of the primary drivers for the steady increase in wheelchair trips is the Americans with Disabilities Act of 1990, which effectively promoted more equal opportunities for people with disabilities, especially pertaining to employment, services, and mobility. Local social service providers such as Ability Beyond provide extensive support and encourage employment and housing opportunities for people with disabilities in the community.

Mobility devices must be secured properly using a four point tie down system, directly impacting travel time. The boarding and disembarking of passengers in wheelchairs via the wheelchair lift requires additional time as well. In total, a wheelchair trip may require between five and ten additional minutes per trip in comparison to a trip made by a fully ambulatory rider.

Although there has been an increase in the total annual wheelchair trips over the past five years, more efficient technology has allowed for a smoother, quicker wheelchair securement process, mitigating the amount of additional time per trip to some extent.

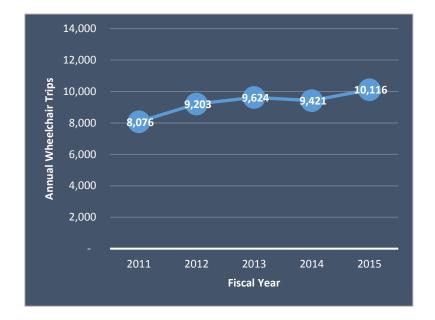
Figure 3.7 shows the total annual wheelchair trips per fiscal year between 2011 and 2015.



Left: Wheelchair securement training station at the HARTransit Operations Facility.

Figure 3.7 Total Wheelchair Trips, Fiscal Years 2011 to 2015

Fiscal Year	Wheelchair Trips
2015	10,116
2014	9,421
2013	9,624
2012	9,203
2011	8,076



3.6 System Performance Comparison

In order to compare HARTransit's paratransit service performance, seven other transit districts in the eastern New York - Connecticut area were selected for comparison purposes. The transit districts selected include Greater Bridgeport Transit Authority, Middletown Transit District, Milford Transit District, Norwalk Transit District, Putnam County Transit, Bee-Line and Valley Transit District.

Overall, HARTransit ranked in the middle of the eight transit districts for almost all of the performance categories. Table 3.3 below details the system measures for each district based on the National Transit Database 2014 Annual Agency Profiles, the most current available information at the time of this operational analysis.

The maximum number of vehicles available for service is an indicator of the district size for each system. HART has 20 vehicles available for maximum paratransit operation, which is the fourth highest total out of eight comparable transit systems.

In regards to annual ridership totals, HARTransit ranks fifth out of the eight districts. HARTransit had an annual paratransit ridership of 59,914 riders in the 2014 fiscal year. The annual ridership among the peer group ranged between 19,122 riders

(Putnam County Transit) and 269,063 riders (Westchester County Bee-Line System).

HARTransit's operating costs are \$2,017,553, which is in the middle among the eight districts. HARTransit also had the fourth most annual service hours at 28,557 total hours. With respect to financial efficiency, HARTransit was 1.6% more efficient than the mean cost per mile (\$5.06) at \$4.98 per mile. This is the fourth lowest value out of the eight chosen districts. HARTransit also ranks as the fourth lowest in terms of service cost per hour at \$70.65.

Table 3.3 Peer Comparison, Fiscal Year 2014

Source: National Transit Database FY 14 data

System	Max. Vehicles	Annual	Operating	Annual	Cost /	Cost /	Trips /
	for Service	Ridership	Cost	Hours	Mile	Hour	Hour
HARTransit	20	59,914	\$2,017,553	28,557	\$4.98	\$70.65	2.1
Greater Bridgeport Transit Authority	24	102,729	\$2,792,872	38,179	\$5.78	\$73.15	2.7
Middletown Transit District	10	28,314	\$765,648	14,392	\$5.05	\$53.20	2
Milford Transit District	15	56,670	\$1,066,329	20,524	\$3.56	\$51.96	2.8
Norwalk Transit District	60	107,204	\$4,298,033	52,618	\$8.17	\$81.68	2
Putnam County Transit	9	19,122	\$616,641	10,737	\$3.49	\$57.43	1.8
Valley Transit District	14	74,894	\$1,456,851	19,219	\$5.32	\$75.80	3.9
Westchester County Bee-Line	88	269,063	\$11,599,950	164,163	\$4.10	\$70.66	1.6
MEAN	30	89,739	\$3,076,735	43,549	\$5.06	\$66.82	2.36

Lastly, the number of trips per hour is an indicator of system productivity. Given the nature of demand response service, geographic locations of passenger pick up and drop off locations and the density of each municipality are key factors here. HARTransit ranks fourth out of eight transit districts for the number of trips per hour at 2.1.

Among all peers, productivity is in a narrow range of 1.6 - 3.9 trips per hour. According to National Transit Database statistics, this is consistent with the national average for this statistic at 2.27 trips per hour.

3.7 Passenger Revenue

There was a net increase in revenue per hour between fiscal year 2011 and 2015. During that time span, revenue per hour varied between a low of \$1.31 per hour in 2011 and a high of \$1.90 per hour in 2012.

A fare increase in 2013 raised fares for both ADA and non-ADA trips. The decrease in revenue per hour from 2013 to 2014 May be related to the fare increase. Figure 3.8 depicts the annual revenue per hour between 2011 and 2015.

Figure 3.8 Revenue per Hour, Fiscal Years 2011 to 2015

Fiscal Year	Revenue/ Hour
2015	\$1.62
2014	\$1.54
2013	\$1.81
2012	\$1.90
2011	\$1.31



3.8 Passenger Boarding by Time of Day

To illustrate passenger boarding by time of day, a complete sample of all SweetHART trips for Tuesdays, Wednesdays and Thursday during the month of October 2015 was conducted.

The *most frequented* time of travel for SweetHART passengers is between 8:00 a.m. and 9:00 a.m., with 28 passengers across the 13 day sample boarding at that time. A secondary peak occurred between 2:00 p.m. and 3:00 p.m. The morning peak in travel time is driven by people traveling to work, medical appointments and shopping trips. The afternoon peak in travel time is likely due to the return trips of many of the morning passengers.

The majority of boardings are between 8:00 a.m. and 3:59 p.m. The least active travel times occur in the beginning and the end of the service day, between 6:00 a.m. to 7:59 a.m. in the morning and 4:00 p.m. to 10:00 p.m. in the evening.

Service availability in Danbury has grown significantly. Over time, three different Danbury buses have expanded their service hours more than 45 minutes each in order to accommodate a growing demand for ridership towards the edges of the peak period depicted in Figure 3.9.

HARTransit now operates three buses in Danbury before 7:00 a.m. All three of those buses serve dialysis patients. Some of these patients consistently make the same trip at the same time, which therefore fills up the schedule consistently as well. The reallocation of service times to meet demand has consequently resulted in a decrease of midday operating hours within Danbury. The need for expansion of service is discussed in the recommendations chapter.

The distribution of passengers seen in Figure 3.9 shows the volume of SweetHART boardings throughout a typical weekday.

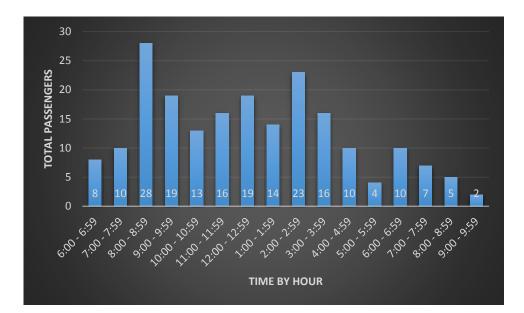


Figure 3.9 Passenger Boarding by Time of Day

3.9 Unsuccessful Trips

There are several outcomes that can occur when a SweetHART user calls to schedule a trip. The trip scheduling process can result in a successfully completed trip, a denial, refusal, cancellation or no show.

- A trip denial occurs if there is no room in the schedule and there is no alternate trip that can be offered. Trip denials only occur with any significance on dial-a-ride trips. The denial rates for ADA Paratransit trips only comprise 0.44% of all trip denials and no more than 0.01% of the total SweetHART trip reservation outcomes for each fiscal year.
- A trip refusal is when an alternate trip time is offered which will arrive by the appointment time and is within one hour of the callers requested pickup, but is refused by the caller.
- Cancellations are trips reserved, but then cancelled with at least two hours advance notice for trips with both an origin and destination within the ADA service area, or twelve hours advance notice for trips outside the ADA service area. Trip cancellations with shorter notice due to adverse weather conditions or rider illness are tracked separately.

- A no-show occurs when a passenger fails to show for a scheduled trip. A
 passenger cancelling at the door after a scheduled bus has arrived is also
 considered a no-show for the purpose of this policy.
- A late cancellation is defined as a cancellation in which HARTransit fails to receive two hours advance notice for trips with both an origin and destination within the ADA service area, or twelve hours advance notice for trips outside the ADA service area.

Between fiscal years 2011 and 2015, the rate of successful trip reservations varied from a low of 73.5% in 2011 to a high of 76.8% in 2012. Trip denials ranged between 1.9% in 2012 and 3.4% in 2015. Given the fairly flat provision of service, the net increase in trip denials may relate to the increase in total wheelchair trips and their requisite longer trip times noted in Figure 3.7 (Total Wheelchair Trips).

Each fiscal year experienced similar trends in the proportion of unsuccessful trips for each category. Table 3.4 details the distribution of percentages for unsuccessful trips for the range of fiscal years 2011 to 2015.

Table 3.4 SweetHART Reservation Outcomes, FY 2011 to 2015

Trip Category	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
Trip Made	73.5%	76.8%	74.6%	76.7%	76.2%
Denied	2.5%	1.9%	2.0%	2.7%	3.4%
Caller Refusal	0.5%	0.4%	0.5%	0.4%	0.4%
Cancelled in Advance	14.7%	15.0%	15.6%	13.4%	12.1%
Cancelled Sick	1.8%	1.5%	1.7%	1.9%	1.5%
Cancelled Weather	2.8%	0.6%	2.0%	2.9%	2.5%
No Show or Late Cancel	4.2%	3.8%	3.7%	2.0%	3.7%



SweetHART Scheduler booking trips at the HARTransit Operations Facility.

4. PASSENGER SURVEY RESULTS

4.1 Introduction

This chapter summarizes the results of a passenger survey conducted in March and April of 2016. Surveys were distributed to 831 individuals that used the service at least once in the past 12 months. Of the total sent, 357 were received back. This equates to a response rate of 43%.

The survey is very similar to one conducted by HARTransit in 2008, which allows for the comparison of many responses between the two surveys.

The results of the survey are broken down by municipality for Bethel, Brookfield, Danbury, New Fairfield, Newtown, Ridgefield, and New Milford. The results for each question are also summarized for the system as a whole.

A majority of the respondents were very satisfied with the SweetHART service and many favorable ratings and comments were provided. Other comments pointed out potential areas for improvement.

4.2 Methodology

The survey was a brief, anonymous, multiple choice questionnaire with sections that asked about different aspects of the service. Surveys were color-coded for each municipality upon distribution as an aid in tabulation. In addition to color-coding the surveys, the first question asked respondents to identify which municipality they live in.

General questions asked respondents where and how often they take the SweetHART bus.

The use of technology, specifically smartphones, continues to expand rapidly. The survey asked if people used a cell phone, how they used their cell phones (calls, texting, internet, applications, etc.) and if they would be interested in booking trips online.

The remaining nine questions on the survey asked respondents to rate different aspects of the service on a scale of one to five, with the final question asking for additional comments or service suggestions.

The survey instrument is included in Appendix D.

4.3 Sample Group

A mailing list of active riders was generated through the SweetHART scheduling software. An active rider was considered anyone who had taken one trip between March 2015 and March 2016.

The survey was sent to the list of passengers along with a postage paid return envelope to encourage response rates. Instructions explaining the survey's purpose and the date by which it should be returned were included.

4.4 Trip Purposes

It is important to note that most survey respondents use the SweetHART service for multiple reasons and therefore selected more than one option for this question.

System wide, 44.9% of SweetHART riders use the service to get to medical offices, many of which are located in Danbury. Shopping (18.6%) was the second most popular purpose for trips. The "other" category (15.1%) was primarily identified with trips to hair salons.

Work (10.7%) and senior center visits (10.5%) had nearly the same response rates among respondents. For the system as a whole, the purpose of trips as a percent has not changed significantly from the 2008 study.

By municipality, Danbury riders used the service most for medical appointments (51.6%), mirroring the system results. Danbury's relatively low percentage of senior center trips (5.9%) is likely due to the Elmwood Hall senior center operating its own bus.

New Fairfield riders used the service often for shopping trips (21.7%) and senior center visits (18.9%), whereas trips categorized as "other" were highly frequented

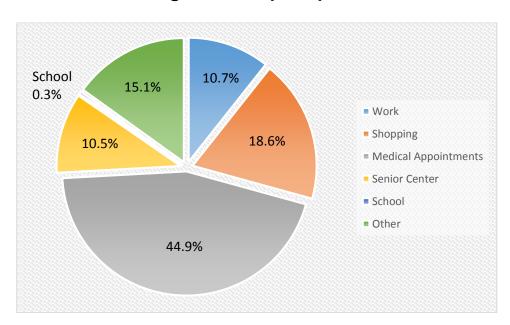
in both Ridgefield (23.6%) and New Milford (33.3%). Overall, each municipality's most frequent trip purpose was for medical appointments.

Table 4.1 and Figure 4.1 summarize trip purpose responses for each municipality and the system as a whole.

Table 4.1 Trip Purpose

Trip Purpose (%)	Bethel	Brookfield	Danbury	New Fairfield	Newtown	Ridgefield	New Milford	System
Medical Appointments	51.0	40.7	51.6	43.2	46.6	36.4	44.5	44.9
Shopping	14.3	18.5	20.5	21.7	16.7	16.4	22.2	18.6
Other	14.3	13.0	7.0	2.7	11.7	23.6	33.3	15.1
Work	14.3	13.0	14.6	13.5	8.3	10.9	0.0	10.7
Senior Center	6.1	13.0	5.9	18.9	16.7	12.7	0.0	10.5
School	0.0	1.8	0.4	0.0	0.0	0.0	0.0	0.3
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Figure 4.1 Trip Purpose



4.5 Ridership Frequency

For the region as a whole, 40.3% of respondents answered that they rode the bus between one and four times per week. The second largest categorical percentage, riders who rode the bus one to two times per month, garnered 23.8% of the total. On average, 16.5% of the system riders used the service less than one time per month.

The highest usage level, five to ten times per week, represents 11.3% of the system wide survey data, whereas 8.1% of respondents chose the "other" response option for a trip frequency that was not stated in the question.

Consistent with system wide percentages, the most common trip frequency was one to four times per week for all municipalities. The highest single frequency percentage was 54.2% in New Fairfield for riders that use the service one to four times per week. In New Milford, 40% of riders used the service one to two times per month. However, it should be noted that this percentage represents two out of the five total respondents among New Milford riders.

There was a more balanced distribution across each trip frequency category, per municipality, than in the 2008 study.

Table 4.2 and Figure 4.2 summarize trip frequency responses for each municipality and the system as a whole.

Table 4.2 Trip Frequency

Trip Frequency (%)	Bethel	Brookfield	Danbury	New Fairfield	Newtown	Ridgefield	New Milford	System
1-4 Times/Week	31.6	35.3	28.9	54.2	37.5	34.4	60	40.3
1-2 Times/Month	21	11.8	26	16.6	20	31.3	40	23.8
Less than 1 Time/Month	23.7	26.4	17.3	4.2	25	18.8	0	16.5
5-10 Times/Week	13.2	14.7	16.2	16.6	12.5	6.2	0	11.3
Other	10.5	11.8	11.6	8.4	5	9.3	0	8.1
Never	0	0	0	0	0	0	0	0.0
TOTAL	100	100	100	100	100	100	100	100.0

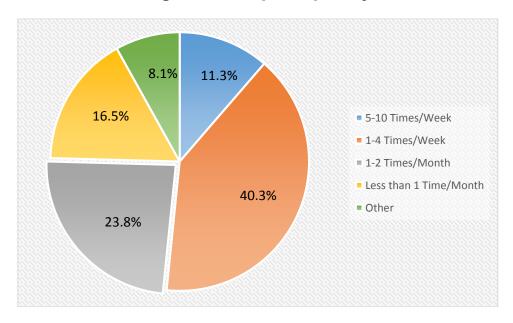


Figure 4.2 Trip Frequency

4.6 Rider Cell Phone Usage

The cell phone use question first asked respondents to identify if they used a mobile phone. If riders answered "yes," they were then asked to identify how they used their device. Possible answers for this part of the question included phone calls, texting, internet, applications, other uses, or a combination of choices.

The majority of riders for each municipality answered that they do in fact use a cell phone. However, there are still fairly large percentages of riders in each municipality who do not use them. System wide, 64.3% of riders indicated that they do use a cell phone and 35.7% of riders noted that they do not use a cell phone.

Results of this two-part question are detailed in Tables 4.3 and 4.4 below. Figure 4.3 shows the breakdown of types of cell phone usage.

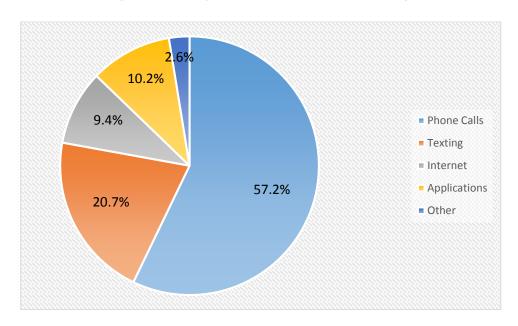
Table 4.3 Cell Phone Usage

Cell Phone Use (%)	Bethel	Brookfield	Danbury	New Fairfield	Newtown	Ridgefield	New Milford	System
Yes	73.7	61.8	64.2	72	57.5	60.6	60.0	64.3
No	26.3	38.2	35.8	28	42.5	39.4	40.0	35.7
TOTAL	100	100	100	100	100	100	100	100

Table 4.4 Type of Cell Phone Usage

Type of Cell Phone Usage (%)	Bethel	Brookfield	Danbury	New Fairfield	Newtown	Ridgefield	New Milford	System
Phone Calls	53.8	58.8	55.3	65.4	52.3	64.5	50.0	57.2
Texting	23.1	23.5	21.8	15.4	25.0	19.4	16.7	20.7
Applications	10.3	5.9	11.7	11.5	9.1	6.4	16.7	10.2
Internet	5.1	5.9	9.1	7.7	11.4	9.7	16.6	9.4
Other	7.7	5.9	2.1	0.0	2.2	0.0	0.0	2.6
TOTAL	100	100	100	100	100	100	100	100.0

Figure 4.3 Type of Cell Phone Usage



4.7 Internet Trip Booking

In reference to the previous two-part question regarding cell phone usage, a follow up question asked respondents if they would be likely to book and check their trips online if HARTransit were to offer such a service. The answers to this question were rated on a scale of one to five (one representing "not at all" and five representing "very likely").

Responses for the system as a whole and for each municipality indicated a bimodal distribution; riders were either very likely or not at all likely to use the internet to book and check trips, with low percentages of responses in between those ratings.

Regionally, 50.4% of respondents gave a rating of one, indicating that they are "not at all" likely to book and check trips via the internet. The results for almost every municipality, excluding New Milford, followed this trend of being "not at all" likely.

However, almost a quarter of all respondents (23.7%) answered with a rating of five, indicating that they would be "very likely" to book trips via the internet. Although this was not the most common response, there were over 80 SweetHART riders in this category.

Table 4.5 and Figure 4.4 summarize the interest of users in using the internet for booking and checking trips.

Table 4.5 Internet Trip Booking

Response (%)	Bethel	Brookfield	Danbury	New Fairfield	Newtown	Ridgefield	New Milford	System
5 Very Likely	17.1	25.0	20.9	4.2	25.6	13.3	60.0	23.7
4	5.7	6.3	3.6	8.3	2.6	0.0	0.0	3.8
3	14.3	12.5	10.2	8.3	5.1	3.3	0.0	7.7
2	5.7	6.3	9.0	4.2	7.7	0.0	20.0	7.6
1 Not At All	51.4	37.5	50.3	66.7	53.8	73.4	20.0	50.4
No Opinion	5.8	12.4	6.0	8.3	5.2	10.0	0.0	6.8
TOTAL	100	100	100	100	100	100	100	100

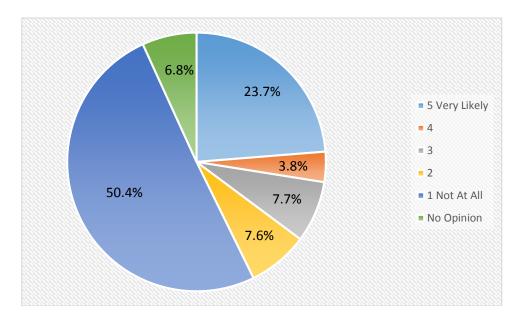


Figure 4.4 Internet Trip Booking

4.8 General Service Questions

SweetHART riders were asked to rate different aspects of the service on a scale of one to five (one being "poor" and five being "excellent"). The survey asked respondents to rate the general aspects of the service, the trip scheduling process and the SweetHART bus drivers. This section details those results.

For the first general service question (Table 4.6), a majority (79.4%) of respondents in the service area indicated that the availability of information about SweetHART was good or excellent. While positive, this is the lowest positive rating for criteria measured in the survey.

There was a wide variation among municipalities for this measure, with 94.2% of Bethel riders rating availability of information as good or excellent and Ridgefield being least satisfied at 63.3% good or excellent. Just two municipalities had any poor ratings, which combined to represent just 0.6% of regional responses.

Table 4.6 Availability of SweetHART Information

Response (%)	Bethel	Brookfield	Danbury	New Fairfield	Newtown	Ridgefield	New Milford	System
5 Excellent	67.6	64.7	56.1	54.5	55.6	53.3	40	56.0
4	17.7	29.5	22.2	22.7	22.2	10	40	23.5
3	11.8	2.9	16.4	18.2	19.4	23.3	20	16.0
2	0	2.9	2.3	0	0	3.3	0	1.2
1 Poor	0	0	1.2	0	0	3.3	0	0.6
No Opinion	2.9	0	1.8	4.6	2.8	6.8	0	2.7
TOTAL	100	100	100	100	100	100	100	100

The next general service question (Table 4.7) asked riders about their overall satisfaction with the SweetHART service. For the system as a whole, a majority (89.5%) of passengers rated their satisfaction with the service as good or excellent.

Average to poor ratings received minimal responses. Per municipality, New Milford riders provided the most good or excellent scores (100%), followed closely by New Fairfield (91.7%) and Brookfield (90.9%). Over 83% of riders in all municipalities rated their overall satisfaction with the service as good or excellent.

Table 4.7 Overall Satisfaction with Service

Response (%)	Bethel	Brookfield	Danbury	New Fairfield	Newtown	Ridgefield	New Milford	System
5 Excellent	64.7	60.6	58.6	50	63.2	66.7	60	60.5
4	23.5	30.3	24.7	41.7	26.2	16.7	40	29.0
3	8.9	3	12.7	8.3	5.3	13.3	0	7.4
2	2.9	6.1	1.1	0	5.3	0	0	2.2
1 Poor	0	0	2.3	0	0	3.3	0	0.8
No Opinion	0	0	0.6	0	0	0	0	0.1
TOTAL	100	100	100	100	100	100	100	100

4.9 Trip Scheduling

The survey asked about the courteousness and friendliness of the schedulers. There were 84.5% of riders across all municipalities who thought the schedulers were good or excellent in this category. When separated by municipality, New Milford (100%) and New Fairfield (92%) provided the highest positive ratings.

Table 4.8 Courteousness / Friendliness of Schedulers

Response (%)	Bethel	Brookfield	Danbury	New Fairfield	Newtown	Ridgefield	New Milford	System
5 Excellent	66.7	70.6	67.1	64.0	63.2	60.0	60.0	64.5
4	22.2	11.8	18.0	28.0	13.2	10.0	40.0	20.5
3	8.3	5.9	8.7	8.0	15.7	16.7	0.0	9.0
2	2.8	2.9	1.7	0.0	5.3	3.3	0.0	2.3
1 Poor	0.0	8.8	4.0	0.0	0.0	6.7	0.0	2.8
No Opinion	0.0	0.0	0.5	0.0	2.6	3.3	0.0	0.9
TOTAL	100	100	100	100	100	100	100	100

When rating the scheduler knowledge of the SweetHART service, 85.2% of regional riders felt it was good or excellent. Riders in New Fairfield and New Milford again were the most satisfied at 100% and 90.5%. Ridgefield (73.4%) and Newtown (79.5%) had the lowest positive ratings.

Table 4.9 Scheduler Knowledge of SweetHART Service

Response (%)	Bethel	Brookfield	Danbury	New Fairfield	Newtown	Ridgefield	New Milford	System
5 Excellent	65.7	64.7	58	66.7	56.4	60.0	60.0	61.6
4	20.0	20.7	23.9	23.8	23.1	13.4	40.0	23.6
3	8.6	2.9	9.6	9.5	20.5	20.0	0.0	10.2
2	0.0	8.8	3.4	0.0	0.0	3.3	0.0	2.2
1 Poor	0.0	0.0	1.7	0.0	0.0	3.3	0.0	1.1
No Opinion	5.7	0.0	3.4	0.0	0.0	0.0	0.0	1.3
TOTAL	100	100	100	100	100	100	100	100

With regard to the overall trip scheduling process, 79.9% of total respondents provided a good or excellent rating. The ratings for this question were more evenly distributed than the previous two questions regarding trip scheduling. New Fairfield was the most satisfied with schedulers and had the lowest ratings for the "excellent" category for this measure at 43.5%. New Milford (100%), Brookfield and Danbury (81.8% and 81.9% respectively) riders provided the most good or excellent ratings for the trip scheduling process.

Ridgefield (70%) and New Fairfield (73.9%) had the lowest good or excellent ratings for this measure.

New New Response (%) Bethel **Brookfield** Ridgefield Newtown **System** Danbury **Fairfield** Milford 5 Excellent 60.0 60.0 50.0 63.6 50.9 43.5 43.6 53.1 26.8 4 25.0 18.2 31.0 30.4 33.3 10.0 40.0 3 19.4 9.1 10.3 11.7 11.1 21.7 10.0 0.0 2 7.7 9.1 2.9 6.7 0.0 4.6 5.6 0.0 0.0 0.0 2.9 0.0 3.3 0.0 0.9 1 Poor 0.0 No Opinion 0.0 0.0 1.2 4.4 5.1 10.0 0.0 3.0 **TOTAL** 100 100 100 100 100 100 100 100

Table 4.10 Overall Trip Scheduling Process

4.10 SweetHART Bus Drivers

The last group of questions asked respondents to rate the SweetHART bus drivers' courtesy and friendliness, their knowledge of the service and their overall job performance. These questions regarding the SweetHART drivers received the three most favorable ratings out of all survey results.

There were 94.6% of respondents who rated the drivers' courtesy and friendliness as good or excellent. This was the single most positive result from the 2016 survey. Between 60% and 86.7% of riders from each municipality gave ratings of "excellent" (five out of five).

For the system as a whole, 87.4% of respondents rated the knowledge of drivers good or excellent. This response also received the highest overall "no opinion" rating (4.2%). Newtown, Bethel and Ridgefield were most satisfied in comparison to the other municipalities.

Overall driver job performance received a 72.7% rating of excellent across the region. There were 20.5% of riders who rated the drivers' overall job performance as a four out of five. Newtown, Ridgefield, and New Fairfield had the highest ratings among all of the municipalities.

Tables 4.11, 4.12, and 4.13 summarize the results for the bus drivers' performance measures for each municipality and the region as a whole.

Table 4.11 Driver Courteousness/Friendliness

Response (%)	Bethel	Brookfield	Danbury	New Fairfield	Newtown	Ridgefield	New Milford	System
5 Excellent	68.6	82.5	70.8	76.0	85.0	86.7	60.0	75.7
4	28.6	8.8	20.8	20.0	7.5	6.7	40.0	18.9
3	0.0	2.9	3.9	4.0	2.5	3.3	0.0.	2.4
2	2.8	2.9	1.7	0.0	0.0	0.0	0.0	1.1
1 Poor	0.0	2.9	0.6	0.0	2.5	3.3	0.0	1.3
No Opinion	0.0	0.0	2.2	0.0	2.5	0.0	0.0	0.7
TOTAL	100	100	100	100	100	100	100	100

Table 4.12 Driver Knowledge of SweetHART Service

Response (%)	Bethel	Brookfield	Danbury	New Fairfield	Newtown	Ridgefield	New Milford	System
5 Excellent	74.3	66.7	58.6	65.0	75.0	72.6	60.0	67.5
4	11.4	21.2	24.9	21.7	10.0	10.3	40.0	19.9
3	8.6	6.1	8.9	8.7	5.0	0.0	0.0	5.3
2	0.0	3.0	1.8	0.0	5.0	3.4	0.0	1.9
1 Poor	0.0	3.0	1.8	0.0	0.0	3.4	0.0	1.2
No Opinion	5.7	0.0	4.0	4.4	5.0	10.3	0.0	4.2
TOTAL	100	100	100	100	100	100	100	100

Table 4.13 Overall Driver Job Performance

Response (%)	Bethel	Brookfield	Danbury	New Fairfield	Newtown	Ridgefield	New Milford	System
5 Excellent	72.2	72.7	65.3	76	80	79.3	60	72.2
4	19.4	15.2	26.1	20	12.5	10.3	40	20.5
3	2.8	6.1	4.5	4	2.5	6.9	0	3.8
2	2.8	3	1.7	0	2.5	0	0	1.4
1 Poor	0	3	1.2	0	2.5	0	0	1.0
No Opinion	2.8	0	1.2	0	0	3.5	0	1.1
TOTAL	100	100	100	100	100	100	100	100

4.11 Change in Satisfaction Since 2008

Comparing the results from the 2008 survey to the 2016 survey should be approached carefully. In 2008 there was a 53% survey response rate, whereas in 2016 there was a 43% survey response rate. This decrease in total responses equates to 208 fewer respondents in 2016 than in 2008. Additionally, each municipality had no greater than 40 total survey responses, excluding Danbury, which received 182 total responses.

A small increase in positive ratings were seen with the overall satisfaction of the SweetHART service. Two other minor increases were seen within ratings of availability of SweetHART information and the courteousness and friendliness of drivers. Driver ratings remain the most positive among the survey criteria.

The largest decrease in positive ratings was seen with the courteousness and friendliness of schedulers. Note that the scheduling process was changed significantly after the completion of the last operational analysis including the introduction of scheduling ranges, limitation on will call trips and an automated phone system.

Overall, five out of eight performance measures remained within 2% of the values seen in 2008.

Table 4.14 details the change in the percent of total answers that were marked good or excellent. A good or excellent rating was considered to be a four out of five or five out of five, respectively.

Table 4.14 Rating Comparison, 2008 and 2016 Surveys

Measure	Percent Good or Excellent in 2008	Percent Good or Excellent in 2016	Change in Percent
Availability of SweetHART Information	79.2	79.5	0.3
Overall Satisfaction With Service	88.5	89.5	1.0
Courteousness/Friendliness of Scheduler	91.2	85.0	-6.2
Scheduler Knowledge of SweetHART	88.5	85.2	-3.3
Overall Trip Scheduling Process	83.2	79.9	-3.3
Courteousness/Friendliness of Driver	94.5	94.6	0.1
Driver Knowledge of SweetHART	89.4	87.4	-2.0
Overall Driver Job Performance	94.2	92.7	-1.5

4.12 Passenger Comments and Feedback

At the conclusion of the survey, respondents were asked to write in any comments or service suggestions they may have. There were a variety of comments, suggestions, critiques or a combination of the three. Some of the comments and suggestions helped shape the service recommendations detailed in chapter 5.

This section discusses the trends of comments and suggestions for each municipality. It is important to note that not all survey respondents provided comments about the SweetHART service. Percentages are derived from the total number of comments received for each municipality, which was fewer than the total number of survey respondents received.

Bethel Comments

Over a quarter of Bethel residents that responded with comments (26.1%) made positive comments about the drivers. Five people (21.7%) had positive comments regarding the SweetHART service. Five people (21.7%) also wrote neutral statements about a personal trip experience. Three people (13%) mentioned a need for additional service, coverage or buses.

Table 4.15 Bethel Comments

Comment Category - Bethel	No. of Responses	% of Total
Positive Comments About Drivers	6	26.1
Positive Comments Regarding Service	5	21.7
Neutral Comments About Personal Trip Experience	5	21.7
More Buses/Service Needed	3	13.0
Waiting on Return Trips is a Problem	2	8.7
Positive Comments About General Staff	1	4.4
Poor Experience With Service	1	4.4
TOTAL	23	100

Brookfield Comments

In Brookfield, more than half of the respondents (57.1%) who provided feedback relayed positive comments about the service. Several people (9.5%) mentioned the need for expanded service, coverage, or buses.

There was one person each who commented positively about the drivers, negatively about the drivers, negatively about the schedulers and requested better assistance from drivers.

Table 4.16 Brookfield Comments

Comment Category - Brookfield	No. of Responses	% of Total
Positive Comments Regarding Service	12	57.1
Neutral Comments About Personal Trip Experience	3	14.3
More Buses/Service Needed	2	9.5
Positive Comments About Drivers	1	4.8
Negative Comments About Drivers	1	4.8
Negative Comments About Schedulers	1	4.8
Requesting Better Assistance From Driver	1	4.8
TOTAL	21	100

Danbury Comments

A variety of comments were received from Danbury riders, most of which were positive regarding the service (35.6%). Twelve people (13.3%) suggested more buses or additional service coverage.

Out of the ninety total comments, ten SweetHART riders (11.1%) expressed concerns about scheduling trips. Most of the comments for this category regarded the scheduling window being too far in advance for the riders' personal needs.

Table 4.17 Danbury Comments

Comment Category - Danbury	No. of Responses	% of Total
Positive Comments Regarding Service	32	35.6
More Buses/Service Needed	12	13.3
Trip Scheduling is a Problem	10	11.1
Positive Comments About Drivers	7	7.8
Neutral Comments About Personal Trip Experience	7	7.8
Better Accommodation by Drivers and Schedulers	5	5.6
Waiting on Return Trips is a Problem	5	5.6
Negative Comments About Schedulers	4	4.4
Positive Comments About Schedulers	3	3.3
Negative Comments About Drivers	2	2.2
Request to Book Trips Online	2	2.2
Better Availability of Information	1	1.1
TOTAL	90	100

New Fairfield Comments

In New Fairfield, the majority of comments (57.1%) were positive statements about the service. One person noted an excessive length of a particular return trip and two people had positive comments about the drivers.

Table 4.18 New Fairfield Comments

Comment Category - New Fairfield	No. of Responses	% of Total
Positive Comments Regarding Service	8	57.1
Positive Comments About Drivers	2	14.3
More Buses/Service Needed	2	14.3
Waiting on Return Trips is a Problem	1	7.1
Neutral Comments About Personal Trip Experience	1	7.1
TOTAL	14	100

New Milford Comments

Only one respondent from New Milford provided a comment, which was a positive note about the service.

Table 4.19 New Milford Comments

Comment Category - New Milford	No. of Responses	% of Total
Positive Comment Regarding Service	1	100
TOTAL	1	100

Newtown Comments

A total of eight people (44.4%) in Newtown expressed satisfaction about the SweetHART service. There were two riders who made critical comments about the schedulers and two riders who had concerns about the scheduling process.

Table 4.20 Newtown Comments

Comment Category - Newtown	No. of Responses	% of Total
Positive Comments Regarding Service	8	44.4
Positive Comments About Drivers	3	16.7
Negative Comments About Schedulers	2	11.1
Trip Scheduling is a Problem	2	11.1
Negative Comments About Drivers	1	5.6
Waiting on Return Trips is a Problem	1	5.6
Neutral Comments About Personal Trip Experience	1	5.6
TOTAL	18	100

Ridgefield Comments

Regarding Ridgefield residents, 47.8% provided positive comments about the SweetHART service. There was one comment suggesting more service coverage was needed, a positive comment about drivers, a request to book trips online and a positive comment about the schedulers.

Table 4.21 Ridgefield Comments

Comment Category - Ridgefield	No. of Responses	% of Total
Positive Comments Regarding Service	11	47.8
Poor Experience With Service	3	13
Neutral Comments About Personal Trip Experience	2	8.7
Better Accommodation by Drivers and Schedulers	1	4.3
Positive Comments About Drivers	1	4.3
Positive Comments About Schedulers	1	4.3
Trip Scheduling is a Problem	1	4.3
More Buses/Service Needed	1	4.3
Request to Book Trips Online	1	4.3
Better Availability of Information	1	4.3
TOTAL	23	100

5. RECOMMENDATIONS

5.1 Introduction

This section describes recommended service improvements based on the performance measures, analyses and survey results developed for this report. The recommendations address both short-term and long-term future improvements to the SweetHART service.

These include:

- Intelligent Transportation applications for improved scheduling and operations
- 2. Explore alternative sources to fund the SweetHART service
- 3. Expand SweetHART service
- 4. Develop SweetHART application for non-ADA disabled persons
- 5. Use of smaller vehicles
- 6. Scheduler communication and sensitivity training
- 7. Grow HARTransit's social media presence for the SweetHART service
- 8. Increase the amount of service-related educational materials
- 9. Fully Integrated AVL-based dispatching

These recommendations are described in further detail on the following pages.

5.2 Intelligent Transportation Applications for Improved Scheduling and Performance

HARTransit uses sophisticated software for trip scheduling and reporting purposes. This software has expansion capabilities such as booking trips online, the option to send out pre-recorded messages upon a driver's arrival at a pick up destination or to send a confirmation text message for a trip that is successfully scheduled.

The inclusion of additional trip scheduling methods would be an obvious convenience for more tech-savvy riders. Online trip request scheduling could free up telephone lines during peak times so that riders who are unable to access the internet would also benefit.

HARTransit should also explore the use of automated phone calls to leave messages on a SweetHART rider's phone when their bus is nearing its arrival or for general service alerts. A pre-arrival text message is also an option to alert riders.

Pre-trip automated phone calls or text messages would help address concerns of users that provided survey feedback regarding the 30 minute arrival window of a SweetHART bus being too large.

With these potential new methods of trip scheduling and arrival notifications would come the need to ensure that trip scheduling priority remains equitable for all SweetHART riders. Therefore, rules such as validating the timestamp of each schedule request call and online booking request would need to be implemented to maintain the same standard of fairness for all SweetHART passengers. Timestamps would be prioritized by the schedulers in order to process the different trip requests in the order that they were submitted.

5.3 Explore Alternative Sources to Fund the SweetHART Service

Although funding has been consistent since the last SweetHART Operational Analysis report in 2008, there has been a small reduction in operating hours as a result of increased costs largely tied to union contract wage increases as well as medical and liability insurance costs.

The current local/federal/state funding formula has remained unchanged for over a decade and annual increases in funding have been minimal overall.

Other potential sources of funds include the Federal Section 5310 grant program and public – private partnerships and foundation grants. HARTransit recently was able to secure corporate funding as a partial match for a fixed route transit service and this could be expanded to the operation of dial-a-ride.

5.4 Expanded Weekend Dial-A-Ride Service

A significant service gap for dial-a-ride is lack of weekend service; only Newtown and New Fairfield have service availability on Saturday and no dial-a-ride is provided Sundays.

Riders in the core service area not eligible for ADA Paratransit had historically been able to access ADA paratransit vehicles on Saturday when there were gaps

in the schedule, but increased use by ADA eligible riders have significantly limited this option.

Several survey respondents noted that they desired extended service on weekdays and increased coverage on weekends.

- A regional Bethel-Danbury-Brookfield dial-a-ride could be provided Saturdays with two vehicles between 9 a.m. and 3 p.m.at an annual cost of \$980 per Saturday or \$50,960 per year.
- A third bus to include Ridgefield with service provided between 9 a.m. and 3 p.m. would require an additional \$24,480 annually.
- A similar program on Sunday would be comparable but require additional supervisory staff and additional costs.

There are sufficient vehicles available on the weekend so that service additions could be accomplished by utilizing the existing fleet.

5.5 Develop "Non-senior" Dial-A-Ride Application

As described in Chapter 2 of this study, HARTransit uses two applications for potential SweetHART riders. There is a senior application for those dial-a-ride applicants age 65 or older and a two-in-one application that is provided for persons with disabilities that apply for ADA paratransit or dial-a-ride.

The single application for riders with disabilities includes a cover sheet on which the prospective rider indicates their desire to apply for either dial-a-ride or ADA Paratransit. While there is an inherent efficiency in using a single application, this approach has created confusion on the part of applicants. The questions on the ADA application also go beyond what is necessary to certify a person with less significant disabilities for dial-a-ride.

The development of a separate application for non-senior dial-a-ride applicants is recommended.

5.6 Addition of Smaller Vehicles to the SweetHART Fleet

HARTransit should evaluate the feasibility of adding smaller vehicles to its fleet in order to more cost effectively handle the lesser ridership demand during off-peak

travel times. The addition of smaller vehicles such as Mobility Ventures' MV-1 or Ford's Transit Connect Van could carry less passengers at a lower cost than operating a full-size SweetHART bus.

- The capital cost of smaller equipment is less than a body on chassis bus; small buses recently purchased by the agency were in the range of \$66-\$68 thousand depending on configuration. Vehicles such as the MV-1 or conversion vans are about half the cost.
- The smaller vehicles also offer a significant advantage in ride comfort, which is especially important for the growing number of dialysis patients carried by the SweetHART system.
- Smaller vehicles could also double as supervisor vehicles when not in revenue service.

5.7 Improved Scheduler Sensitivity Training

While still significantly positive, the largest decrease in positive service ratings from the 2008 survey to the 2016 survey was the service measure that asked riders to rate the courteousness and friendliness of the schedulers.

In 2008, 91.2% of respondents thought the courteousness and friendliness of the schedulers was good or excellent compared to 85% of respondents in 2016, a decrease of 6.2%. There were a handful of survey respondents who commented about unfortunate experiences scheduling trips over the phone and thought there was room for improvement.

HARTransit will explore the implementation of expanded sensitivity training programs for its schedulers.

5.8 Grow HARTransit's Social Media Presence

The growth of HARTransit's social media presence would benefit both the fixed route and SweetHART services.

Some passengers commented that they would like better availability of information regarding the service. HARTransit operates its own Twitter page, embedded on the website at HARTransit.com, in order to make announcements regarding service changes. A Facebook page designated to the SweetHART service could

provide information to a wider range of riders than the Twitter page does for fixed route service.

Additional social media outlets such as Snapchat or Instagram could allow HARTransit to continually promote transportation opportunities and services in a low maintenance and cost effective manner.

The increase of social media use would complement the new HARTransit website launch, anticipated by the end of the 2016 calendar year. These outlets would be expected to help promote ridership frequency, the availability of easily accessible information and general service announcements for both SweetHART and fixed route services.

5.9 Expanded Educational Materials

There were several survey respondents across municipalities that expressed confusion about the SweetHART trip scheduling process, such as standing booking requests or how far in advance to call for a ride.

As a result of the 2008 SweetHART Operational Analysis report, the scheduling process was modified significantly including the scheduling of pick up ranges and batch scheduling of trips on Monday morning. Some long term riders, however, have been slow to adjust to this and make their calls as if the prior system was still in place.

To address this gap, HARTransit will increase the variety of educational materials that are available to riders. The goal of these materials will be to clarify the trip scheduling process.

An instructional video on how to use the SweetHART service, among other materials, should be developed. The video could include the difference between a dial-a-ride trip and an ADA paratransit trip, their corresponding fares, advance booking, trip scheduling priority, cancellation policies and how to ride the bus. An educational video could have a direct influence on the schedulers' satisfaction ratings as more riders would have proper clarification regarding the trip scheduling process and overall SweetHART service when reserving their trip. Potential sources of funds for this expanded education effort include the section 5310 grant program.

5.10 Fully Integrated AVL-based Dispatching

A more sophisticated Automatic Vehicle Location (AVL) system could integrate with scheduling and dispatching software. HARTransit currently uses a GPS-based system, US Fleet Tracker, to track the real-time locations of buses. However, other systems have additional AVL and Computer-Aided Dispatch (CAD) capabilities.

These more sophisticated AVL/CAD capabilities provide better on-time performance tracking than current methods and even identify vehicle maintenance issues.

Mobile data terminals or tablets installed on vehicles provide real time scheduling and communication with drivers and eliminate the need for paper schedules.

Real-time vehicle location data could also be to be monitored by system riders on their smartphones, for example, so they may be able to see where their ride is.

Most of HARTransit's larger peer systems have already implemented some form of AVL/CAD technologies. The capital cost for an upgrade of this magnitude is in the \$100 - \$150 thousand range and could be borne through the 5307 state/federal program. Ongoing system maintenance costs range between \$4,000 and \$20,000 annually depending on vendors and applications.

APPENDIX A

ADA POLICY COMPLIANCE

ADA Policy Compliance

Comparable paratransit service must meet the following service criteria:

- Operates in the same **service area** of the fixed route system.
- Have a *response time* that is comparable.
- Have comparable *fares*.
- Have comparable days and hours of service.
- Meet requests for any trip purpose.
- Not limit service availability due to capacity constraints.

HARTransit's ADA paratransit availability varies by municipality, as shown in Table 2.1 of Chapter 2. Compliance with the capacity constraints and response time requirement is presently accomplished through the "bumping" of non-ADA eligible trips on relatively short notice. "Bumping" means canceling the trip of a previously scheduled non-ADA eligible trip. However, "bumping" rarely occurs.

APPENDIX B

ADA AND NON-ADA PASSENGER ELIGIBILITY

ADA Paratransit Eligibility Criteria

- Any person with a disability who is unable, as a result of physical or mental impairment, to ride or disembark from an accessible public bus without the assistance of another person (except the operator of a wheelchair lift).
- Any individual with a disability who uses a wheelchair and wishes to travel on an accessible fixed route bus on which the wheelchair lift cannot be used safely at the desired bus stop; or if temporary conditions at the bus stop beyond HARTransit's control prevent the safe use of the bus stop by all passengers.
- Any person with a disability using a wheelchair and whose wheelchair cannot be accommodated on a regular fixed route bus because the vehicle's wheelchair lift does not meet ADA standards.
 - Any person with a disability who has a specific impairment related condition
 which prevents him or her from traveling to or from a bus stop. Architectural
 and environmental barriers such as distance, terrain, or weather alone do
 not form a basis for eligibility. However, a person may be eligible if the
 interaction of the disability and barriers prevent him or her from traveling to
 or from a bus stop.

ADA Paratransit eligibility is determined on a trip by trip basis; some trips may be eligible while others are not (referred to as conditional eligibility). In addition to the person's eligibility, their trip origin and destination must be within a 0.75 mile buffer of an existing fixed route bus route for the trip to be considered ADA Paratransit eligible. The requirement that trip origin and destination be within a 0.75 mile buffer of an existing fixed route bus route is a minimum requirement under federal ADA rules.

Persons whose trips are considered ADA eligible have a civil right to paratransit service. Because SweetHART is a service available to persons with disabilities and non-disabled senior citizens, priority must be given to those whose trips are ADA eligible.

Individual paratransit eligibility is determined using a certification application completed by each potential rider and an in person functional assessment. From this process, HARTransit determines whether or not an individual is ADA Paratransit eligible. Once an individual is certified as eligible to use SweetHART, they must make reservations to use the service. It is during the reservation call that final ADA Paratransit trip eligibility is determined.

Persons denied ADA Paratransit eligibility can obtain a review of the denial with HARTransit's CEO. HARTransit has established an appeal policy to allow the affected individuals to be heard and present arguments in their own defense. Such individuals may further appeal to the Connecticut Department of Transportation (CTDOT). CTDOT's decision is considered final.

Dial-a-ride Eligibility Process

A review process is also undertaken for those with mobility impairments not eligible for ADA Paratransit and those age 65 or older. This process examines whether passengers are eligible for demand response service based on a mobility disability or age.

Age based applications are straightforward, based on proof of age provided by the prospective rider. These include government IDs such as driver licenses or testament by town officials such as senior center directors.

For those applying based on a disability, HARTransit reviews the multi-page application (CT ADA Paratransit eligibility application) to determine the nature of the persons disability and how it impacts their mobility. An interview is not required.

In cases where additional information may be needed to make an eligibility determination, HARTransit requests the applicant have a physician or health care professional complete a verification form which provides more in-depth information regarding the person's disability.

A letter notifying the applicant of the eligibility determination and detailing the reasons for denial (if necessary) is sent upon completion of the review. The letter indicates eligibility status granted (either ADA eligible or non-ADA eligible). An identification card is included that indicates the eligibility status granted. Persons denied ADA eligibility can attempt to refute their eligibility denial to the HARTransit CEO within 60 days of the date of denial. The appeals process includes an opportunity for the person to present information and arguments. Final appeals can be made to CTDOT.

APPENDIX C

TRIP SCHEDULING POLICIES

Trip Reservations and Scheduling

In 1999 HARTransit first implemented an automated scheduling system, Trapeze Pass. The system has undergone periodic updates and upgrades in the intervening years. Trapeze, now known as Tripspark, integrates rider registration, trip booking and trip coordination. It is able to geocode rider addresses and destinations for the creation of accurate schedules via a GIS mapping feature.

Important trip characteristics for each SweetHART rider, such as origin and destination points, and any specific notes (i.e., needs door-to-door assistance) are input into the database. Common destinations like shopping centers or doctor's offices can also be saved. These points are then plotted onto a detailed street map of the region. Using the geographically referenced data, passenger trips can automatically be scheduled and assigned to vehicles, and passenger manifests can be printed from the scheduling files.

Booking requests are considered on a first-call/first-served basis, except during the peak calling period.

With limited space in the schedule, many riders book trips as soon as they can. The peak calling period for reservations is Monday from 7:00 to 11:00 a.m., when the earliest bookings can be made for the following week.

To accommodate the large volume of requests during the peak calling period, reservation requests coming in between 7 and 11 a.m. on Monday are considered equally. This means that there is no advantage to calling at 7 a.m. as opposed to any other time up to 11 a.m., and there is no need to rush to be the first to call.

If there is a conflict between dial-a-ride trip requests during the peak calling period, priority is given to the passenger with the more reliable riding history over the last 60 days.

Limiting trip cancellations improve chances to get preferred pick-up times. If there is a conflict between trip requests during the peak calling period, priority is given to the passenger with the more reliable riding history over the last 60 days. Limiting trip cancellations will improve a rider's chances to get preferred pick-up times.

Schedulers enter a passenger's requested trip time into the scheduling program. If the program determines that the trip cannot be accommodated at the requested time, it may be necessary to "negotiate" another pick up time with the passenger. ADA allows pickups to be negotiated up to an hour before or after a trip request.

If trip requests are available, the trip is confirmed by the scheduler. Passengers are given a 30 minute window in which to be prepared for their pickup. A passenger can call the day of the trip to get a more precise pickup time.

Some persons at medical appointments will schedule return pickup trips when ready, or "will call". To facilitate these pick-ups, HARTransit has several buses dedicated to will-call pickups during the weekday (although any driver with time in his or her schedule may respond to such requests) and a separate phone option for these calls.

Trip Cancellations and Missed Trips

Passengers are required to call in trip cancellations. Passengers must call with at least two hours advance notice for trips with both an origin and destination within the ADA service area, or twelve hours advance notice for trips outside the ADA service area. Cancellations are accepted around the clock using voice mail during evening hours and on weekends. Passengers who establish a pattern of excessive trip cancellations can have their riding privileges suspended. A late cancellation is defined as a cancellation in which HARTransit fails to receive two hours advance notice for trips with both an origin and destination within the ADA service area, or twelve hours advance notice for trips outside the ADA service area.

No shows or late cancellations that are beyond the control of the passenger do not violate the policy. Passengers must explain the reasons for no shows or late cancellations to receive such consideration.

Should passengers claim that patterns of no-shows or late cancellations are beyond their control, HARTransit reserves the right to request documented verification, including professional verification of matters related to the passenger's health or disability that may contribute to the pattern.

Passenger no-shows and late cancellations violate HARTransit policy when there are six or more late cancellations OR three or more no-shows alone during the prior 60-calendar-day period OR the violations amount to 15% or more of all trips scheduled for the period.

Warning Letters and Penalties

Passengers that meet the threshold for excessive no shows or short cancels will be notified according to the following schedule:

- First occasion: Written warning
- Second occasion: Second written warning
- Third occasion: One-week suspension
- Four or more occasions: Two-week suspension

Penalties will progress if repeated within 12 months of the last violation. If more than 12 months pass since the last action, the progression restarts at the first level.

In addition, after each step, violation tallies restart from zero over the next 60 days.

Letters notifying passengers of a suspension offer the passenger an opportunity to request a hearing with the Operations Manager to appeal the suspension before it is enforced. The hearing provides the passenger an opportunity to explain any mitigating circumstances that may prompt a reconsideration of the suspension. Passengers may request the hearing either verbally or in writing, and the suspension is delayed until the Operations Manager makes a final decision.

Companions, Attendants and Mobility Devices

HARTransit buses accommodate all wheelchairs, scooters or other mobility devices up to the maximum physical dimensions and constraints of the bus. HARTransit vehicles have lifts with an 800 pound capacity. Drivers are trained to safely operate wheelchair lifts and secure mobility devices on the bus.

Scooter users are asked to transfer to a seat after boarding. Most scooters cannot be tied down as securely as a standard wheelchair and are not designed for use on a moving vehicle.

Other mobility devices such as walkers and canes are accommodated. Passengers that have trouble with steps may ride the lift. Respirators and portable oxygen are also permitted. SweetHART buses do not carry stretchers.

A Personal Care Attendant (PCA) rides free of charge with any passenger with a disability. PCAs provide assistance to disabled riders beyond that which can be provided by the driver.

Any passenger may ride with a companion that is not SweetHART eligible. Companions are accepted on a space available basis, have the same origin and destination and pay the same fare as the registered passenger.

APPENDIX D

SWEETHART SURVEY INSTRUMENT

HARTransit is conducting a SweetHART survey to better serve our customers. Please respond by circling the answers to the following questions and return your survey to HARTransit by March 25, 2016.

A pre-addressed stamped envelope is included for your convenience.

 Where do you liva Bethel Brookfield Danbury New Fairfield 	e. Newtown	
a) Work b) Shopping	SweetHART bus take you? d. Senior Center e. School tments f. Other:	
a) 5 to 10 times a b) 1 to 4 times a w	u use the SweetHART bus? week d. Less than once a reek e. Never used Swe nonth f. Other:	a month eetHART
	Il phone? Yes	No
If yes, how do you a. phone calls b. texting c. internet d. apps e. Other	use your cell phone?	

5. On a scale of 1 to 5, with 5 being very likely and 1 being not at all likely, would you have an interest in booking or checking your trip status via a smartphone or computer if HARTransit were to offer this service?

Not Likel	у			Very	/ Likely	/		
1	2	3	4		5		١	lo Opinion
Please ra Excellent		etHART service on	the fo	ollowing	g (1 be	ing Po	or a	nd 5 being
Availabili	ty of Sweet	HART information	Poo 1	or 2	3	Exc 4	eller 5	it No Opinion
Overall s	atisfaction v	with service	1	2	3	4	5	No Opinion
Schedul	ers							
Courteou	usness/frien	dliness of schedule	r 1	2	3	4	5	No Opinion
Knowled	ge of Swee	tHART service	1	2	3	4	5	No Opinion
Overall tr	rip schedulii	ng process	1	2	3	4	5	No Opinion
Bus Driv	ers/							
Courteou	ısness/frien	dliness of driver	1	2	3	4	5	No Opinion
Knowled	ge of Sweet	tHART service	1	2	3	4	5	No Opinion
Overall d	lriver job pe	rformance	1	2	3	4	5	No Opinion
Please w	rite in any o	comments or servic	e sug	gestior	ns belo	w :		

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Thank you for your participation. Please return to HARTransit, 62 Federal

Road, Danbury, CT 06810, in the enclosed envelope.