

**Amtrak Downeaster
New Hampshire Rail Platform Survey
December 2006
Final Summary**



Completed with Volunteer and Student Efforts

**Oversight by UNH Campus Planning Office
University of New Hampshire, Durham**

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New Hampshire Station Community Amtrak Downeaster Passenger Survey

Executive Summary

To assist with ongoing efforts to improve passenger service and broaden financial support for the operating costs of rail/intercity bus stations located on the Amtrak Downeaster line in New Hampshire, a sample survey of passengers was conducted in early December 2006. A standardized survey instrument was administered at all three New Hampshire stations. The results are summarized and presented for station communities, policy makers and the Northern New England Passenger Rail Authority. The findings show high degrees of regional use and point to ongoing discussions to expand support of the Downeaster in New Hampshire beyond current host community and federal funding.

Overview

The Amtrak Downeaster provides daily service between Boston and Portland. New Hampshire stations include Dover, Durham-UNH and Exeter. The service is supported by State of Maine and federal funding administered by the Northern New England Passenger Rail Authority. In fall 2006, service increased to five roundtrips (bus and rail) per weekday.

The Downeaster is one of Amtrak's fastest growing and highest satisfaction services¹ and has provided over 1.4 million trips to Boston-Portland corridor travelers since December 2001. Approximately 38% of ridership is from the three New Hampshire communities (Dover, UNH-Durham and Exeter). The New Hampshire station communities bear the full cost of station/platform easements, operating costs and liability insurances required for service. As ridership grows these communities bear increased costs. In FY 07 costs are projected to exceed \$30,000 in both Exeter and Dover – representing a worthwhile, but significant local investment.

State funding has been very limited. The three host communities have always enthusiastically stepped forward to cover station operational costs. CMAQ and TE funding has provided federal assistance for station and lot construction. In 2006, with the support of the NHDOT, the Executive Council approved our state's first contribution to the service – \$1.6 million of federal funds for the addition of passing tracks within New Hampshire necessary for expanded frequency.

Findings

The survey findings reinforce awareness that the rail stations provide significant regional transportation benefit. The Downeaster provides corridor-wide mobility to passengers going to increasingly diverse destinations. Coordinated bus (C&J Trailways) and rail services have resulted in increased commuter traffic.

- Dover and Exeter, which provide free commuter parking, show over 50% non-resident use.
- At UNH, 71% of users walk or take our free shuttle to the station.

Next Steps

Station communities have begun a dialog with NHDOT, Strafford and Rockingham Counties and our state delegations to broaden New Hampshire investment in this regional transportation infrastructure. We are challenged by a NH constitutional prohibition on the use of gas tax funds for non-highway expenses. Expanded Amtrak Downeaster and intercity bus service means better transportation choices for our commuters and congestion and emissions reductions for all and will ensure that the New Hampshire seacoast is truly at the center of the Boston-Portland corridor.

- Repeat in Durham during summer 2007 to gauge non-academic year ridership patterns.
- Survey instrument will be provided to NNEPRA for use at other station communities.

¹ Amtrak FY 2006 Annual Statistics

New Hampshire Station Community Amtrak Downeaster Passenger Survey

Methodology

Beginning on December 2, 2006, volunteers, under the supervision of the New Hampshire community station managers, conducted brief platform interviews of passengers departing on (boarding) and arriving via the Downeaster in Durham, Dover and Exeter. A survey sample of all scheduled trains for at least one full weekday and one full weekend day was completed. At some stations, additional days and trains were surveyed to broaden the samples. These surveys were completed by December 10, 2006.

Surveys were anonymous and conducted by trained volunteers at each platform area. The data collected was used for statistical purposes only. Surveys were based on individual trips, so that frequent riders may have been surveyed multiple times over the course of the survey period. *All information presented in this report represents trip data – not user data.*

It proved difficult to solicit responses from arriving passengers. For that reason, the response rates on the arriving passenger questions are quite low. This data is useful to dictate trends, but it must be noted that the response rate is much lower than for departing passengers.

Significant Findings in the Corridor

Dover and Exeter stations have very different user profiles than Durham. Overall, the percentage of non-commuters (tourists and non-daily commute trips often referred to as ‘leisure trips’) was surprisingly high (approaching 40% at some stations). Dover and Exeter stations were used most regionally with travelers using these stations as connection points for longer journeys. For all stations, the use of commuter and multi-trip tickets is approximately 30%, Exeter being highest and Durham utilizing 6-trip tickets (6Tix).

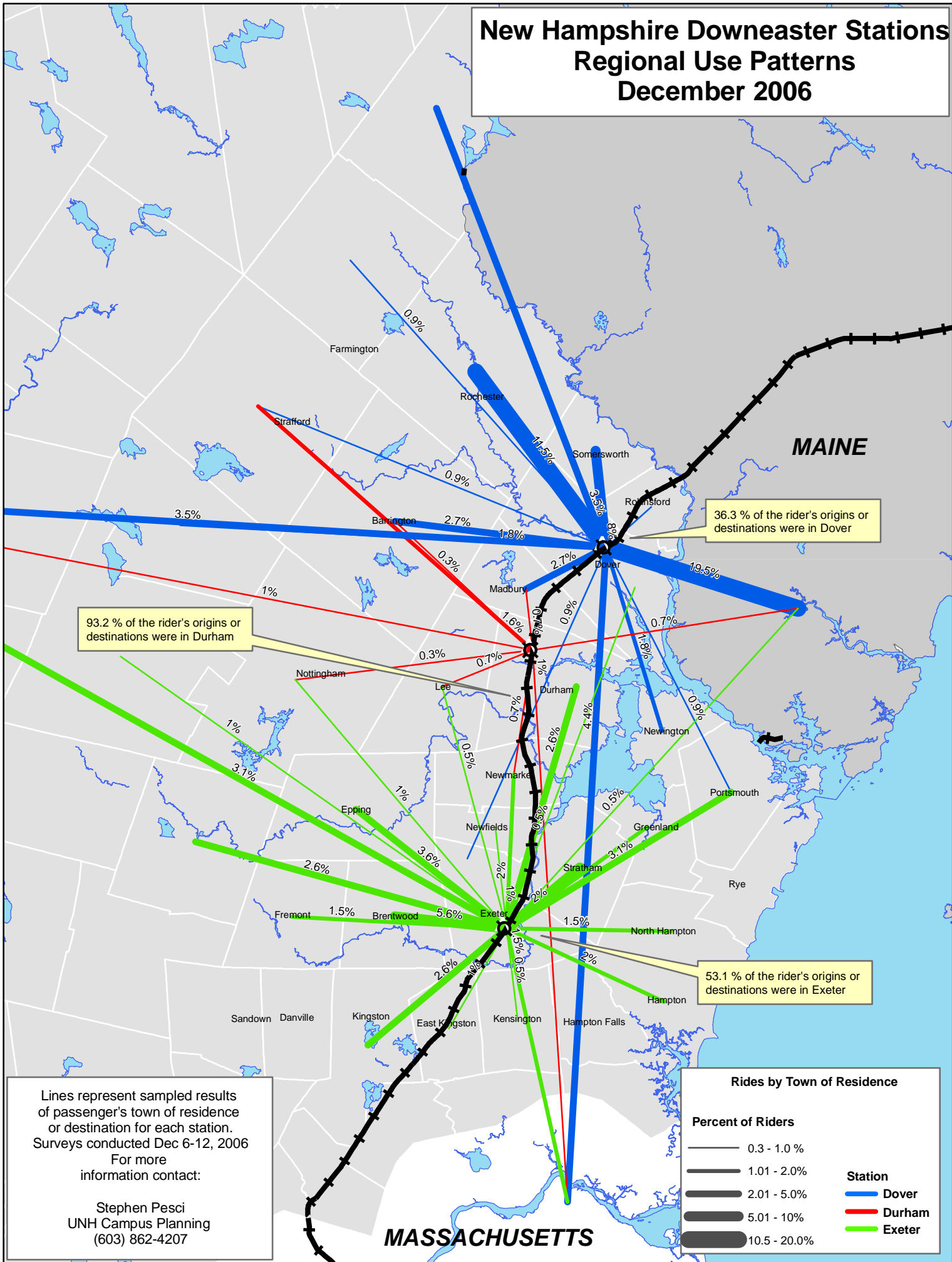
Durham-UNH

- Over 90% of all users begin or end their trip within the Town (University and Town origin/destinations) and over 70% of all passengers bike or walk to the station.
- Commuter rate is 25%.
- 50% of the trips are to/from Boston and 20% of the trips are to/from Portland. Other corridor stations have relatively high destination rates - likely from students going home or visiting friends in these communities.

Dover and Exeter

- Trips often extend to other towns, with 55% of the Dover station passengers from other towns - 40% for the Exeter station. A large number of Dover passengers are destined for or going to adjacent Maine communities.
- Due to the municipal lots available to the rail passengers at those stations, the rate of passengers parking at the station hovers around 60%. Also, the rate of walkers and bikers at these two stations is just over 10%.
- Exeter has the highest rate of daily commuters, over 40% - Dover was at 33%.
- For Exeter and Dover, trips to and from Boston account for 80% of trips. Portland trips accounts for another 10%.

New Hampshire Downeaster Stations Regional Use Patterns December 2006



New Hampshire Station Community Amtrak Downeaster Passenger Survey

NH Station Survey December 2006 - Amtrak Downeaster
Overview Summary Findings

Station	Station Town Resident	Other Town Resident	Prominent Other Towns:
Dover	45%	55%	Rochester (11%), Somersworth (9%) Milton (3%)
Durham	92%	8%	Madbury, Newmarket, Strafford all <1%
Exeter	60%	40%	Stratham (9%), Bentwood (8%), Epping (4%)

<i>Boarding Passenger (only) Mode of Station Access:</i>					
	Drove and Parked	Drop-Off	Walk or Bike	Transit	Taxi
Dover	64%	8%	12%	0%	2%
Durham	9%	18%	71%	1%	0%
Exeter	58%	27%	13%	0%	0%

<i>Arriving Passenger (only) Mode of Station Departure:</i>					
	Parked Car	Pick-Up	Walk/Bike	Transit	Taxi
Dover	64%	15%	10%	8%	2%
Durham	1%	27%	73%	1%	0%
Exeter	10%	60%	11%	0%	0%

<i>Is This Station Community Your Home Town? (Boarding Only)</i>		<i>Are You a Resident of the Area or Tourist?</i>		
	Yes	No	Resident	Visitor or Tourist
Dover	25%	75%	Dover 77%	22%
Durham	75%	25%	Durham 61%	39%
Exeter	43%	57%	Exeter* 56%	44%

<i>Trip Purpose</i>			<i>Ticket Type</i>	
	Work and School	Leisure	Commuter or Multi	Individual Ticket
Dover	33%	66%	34%	66%
Durham	24%	75%	32%	68%
Exeter	42%	58%	31%	69%

<i>Age Group</i>			<i>Gender</i>		
	Youth	Adult	Senior	M	F
Dover	Not Collected			Not Collected	
Durham	9%	89%	2%	40%	60%
Exeter	Not Collected			Not Collected	

<i>Boarding Passengers</i>			<i>Arriving Passengers</i>			
Durham	Passengers Bound for:			Passengers Arriving From:		
	BON	65%	Other 9%	BON	39%	Other 7%
	POR	10%		POR	31%	
	WOB	9%		Saco	15%	
	Haverhill	7%		Exeter	8%	

Dover	Passengers Bound for:			Passengers Arriving From:		
	BON	80%	Others 5%	BON	83%	Others 1%
	POR	10%		POR	12%	
	Haverhill	3%		Saco	2%	
	Exeter	2%		Wells	2%	

Exeter	Passengers Bound for:			Passengers Arriving From:		
	BON	84%	Others 4%	BON	69%	Others 2%
	POR	5%		POR	24%	
	DUR	4%		DUR	3%	
	WOB	3%		Saco	2%	

New Hampshire Station Community Amtrak Downeaster Passenger Survey



Dover Station (DOV)

The Dover station, with a large and free parking lot open to the public, has less than half of its users from Dover. Many commuters at the Dover station come from Rochester, Somersworth, and Maine communities. Most trips from the Dover station are to or from Boston, at over 80%. Over 60% of Dover station passengers park their cars in the lot, and transit used to and from the station is at about 10%. One third of the trips were commuters, and about a third of all passengers used commuter or multiple trip tickets.

Departing Passengers (N=61) representing approximately 155 traveler trips in samples

Community of Residence (Hometown):

<i>Dover</i>	25%	
<i>Other NH*</i>	42%	*(Rochester 12%, Somersworth 10%, Milton, Madbury 3%)
<i>Maine Community</i>	25%	
<i>Mass Community</i>	8%	

Community for Start of this Trip:

<i>Dover</i>	39%	
<i>Other NH*</i>	39%	*(Rochester 12%, Somersworth 10%, Milton, Madbury 3%)
<i>Maine Community</i>	20%	
<i>Mass Community</i>	2%	

Resident or Tourist/Visitor of area:

<i>Resident</i>	77%
<i>Tourist/Visitor</i>	22%

Mode of Arrival at DOV Station:

<i>Drove/Parked</i>	64%		
<i>Walked/Biked</i>	12%		
<i>Bus/Other</i>	12%		
<i>Dropped off</i>	8%	<i>Taxi</i>	2%

Destination Station for Trip:

<i>Boston</i>	80%		
<i>Portland</i>	10%	<i>Haverhill</i>	3%
<i>Exeter</i>	2%	<i>Durham</i>	2%
<i>Saco</i>	2%		

Purpose of Trip:

<i>Leisure and School</i>	66%
<i>Work Commute</i>	33%

Use Commuter or Multi-Trip Tickets/Passes:

<i>No</i>	67%
<i>Yes</i>	33%

**New Hampshire Station Community
Amtrak Downeaster Passenger Survey**



Dover Station (DOV) continued

Arriving Passengers (N=52) representing approximately 140 traveler trips in sample

Origination Station Trip:

<i>Boston</i>	83%		
<i>Portland</i>	12%	<i>Saco</i>	2%
<i>Wells</i>	2%	<i>Woburn</i>	2%

Mode of Arrival at Origin Station:

<i>Walked/Biked</i>	42%		
<i>Bus/Other</i>	27%	<i>Dropped off</i>	21%
<i>Drove/Parked</i>	10%	<i>Taxi</i>	0%

Final Destination Community:

<i>Dover</i>	50%		
<i>Other NH*</i>	36%	<i>*Rochester 12%, Somersworth 6%, Milton 4%, Madbury 2%</i>	
<i>Maine Community</i>	13%	<i>Mass Community 1%</i>	

Mode of Departure from DOV Station:

<i>My parked car</i>	64%		
<i>Picked up</i>	15%		
<i>Walk</i>	10%		
<i>Transit</i>	8%	<i>Taxi</i>	2%

Resident or Tourist/Visitor of area:

<i>Resident</i>	77%
<i>Tourist/Visitor</i>	22%

Purpose of Trip:

<i>Leisure and School</i>	66%
<i>Work Commute</i>	33%

Use Commuter or Multi-Trip Tickets/Passes:

<i>No</i>	64%
<i>Yes</i>	36%

New Hampshire Station Community Amtrak Downeaster Passenger Survey



Durham Station (DHM)

Until fall 2006, the Durham Station had no parking available for passengers. However, the Town of Durham constructed a parking lot which was made available to commuters and train passengers with the purchase of a commuter or daily pass. Still, only about 2% of the riders surveyed said they parked in the lot, most walked. Over 90% of trips involving the Durham station start or stop in Durham, without continuing on into surrounding towns. About half of the passengers from the Durham station were UNH faculty, staff, or students. For individuals arriving to the station, 40% came from Boston, and 30% from Portland. For departures, 65% of the individuals were headed to Boston, with all other stations at 10% or less. Only 25% of the trips made to or from the Durham station were work-related, but 38% of all passengers used commuter or multiple trip tickets. We would hypothesize that many students use 6Tix to visit other places, hence the high pass-to-commute ratio.

- Ridership growth > 25% annually. 06-07 academic year ridership projected > 52,000.
- Estimated 60-70% of users affiliated with university, the balance being commuters, area visitors – even Phillips Exeter Academy bound commuter students.
- In 2007, using federal and University funds, the station will be renovated and expanded.
- Survey will be repeated in summer to gauge non-academic year usage.

DHM Departing Passengers (N=227) representing approximately 250 traveler trips in sample

Community for Start of this Trip:

<i>Durham</i>	91%	
<i>Other NH*</i>	7%	<i>Strafford 2%, Lee, Madbury, Newmarket all <1% each</i>
<i>Other Maine</i>	1%	
<i>Other Mass</i>	1%	

Is this your Residence Community?*

<i>Yes</i>	75%	<i>* Data somewhat suspect due to student interpretation of 'permanent' versus campus residence</i>
<i>No</i>	24%	

Resident or Tourist/Visitor:

<i>Resident</i>	71%
<i>Tourist/Visitor</i>	27%

Mode of Arrival at DHM Station:

<i>Walked/Biked</i>	71%
<i>Dropped off</i>	18%
<i>Parked @ UNH</i>	6%
<i>Parked @ Craig Lot</i>	3%
<i>Bus</i>	1%

New Hampshire Station Community
Amtrak Downeaster Passenger Survey



Durham Station (DHM) Boarding continued

Destination Station for Trip:

<i>Boston</i>	65%
<i>Portland</i>	10%
<i>Woburn</i>	9%
<i>Haverhill</i>	7%
<i>Exeter</i>	4%
<i>Wells</i>	2%
<i>Saco</i>	2%

Purpose of Trip:

<i>Leisure and School</i>	76%
<i>Work Commute</i>	24%

Use Commuter or Multi-Trip Tickets/Passes:

<i>No</i>	74%
<i>Yes</i>	26%

Want to See More Bus Service?

<i>Yes</i>	26%
<i>No</i>	74%

UNH Affiliation:

<i>UNH student</i>	56%
<i>Not UNH affiliated</i>	42%
<i>Faculty/Staff</i>	3%

Age Group:

<i>Adult (appear 18-65)</i>	92%
<i>Youth (appear under 18)</i>	8%
<i>Senior (appear 65+)</i>	<1%

Gender:

<i>F</i>	60%
<i>M</i>	40%

**New Hampshire Station Community
Amtrak Downeaster Passenger Survey**



Durham Station (DHM) continued

Arriving Passengers (N=80) representing approximately 80 traveler trips in sample

Origination Station Trip:

<i>Boston</i>	39%		
<i>Portland</i>	31%		
<i>Saco</i>	15%	<i>Exeter</i>	8%
<i>Haverhill</i>	4%	<i>Woburn</i>	4%

Durham is final destination of trip?

<i>Yes</i>	93%
<i>No</i>	7%

Resident or Tourist/Visitor of area*

<i>Resident</i>	50%	
<i>Tourist/Visitor</i>	50%	<i>*Low Response Rate</i>

Mode of Arrival at Origin Station:

<i>Dropped off</i>	40%		
<i>Transit</i>	33%	<i>Drove/parked</i>	27%

Mode of Departure from DHM Station:

<i>Walked/Biked</i>	73%		
<i>Car pickup</i>	27%	<i>Parked Car</i>	<1%

Purpose of Trip:

<i>Leisure</i>	75%
<i>Work/School</i>	25%

Use Commuter or Multi-Trip Tickets/Passes:

<i>Yes</i>	38%
<i>No</i>	61%

Want to See More Bus Service?

<i>Yes</i>	53%		
<i>No</i>	23%	<i>Unsure</i>	23%

UNH Affiliation?

<i>Not UNH affiliated</i>	54%		
<i>Student</i>	42%	<i>Faculty/Staff</i>	4%

Age Group:

<i>Adult (appear 18-65)</i>	86%
<i>Youth (appear under 18)</i>	9%
<i>Senior (appear 65+)</i>	5%

Gender:

<i>Female</i>	60%
<i>Male</i>	40%

New Hampshire Station Community Amtrak Downeaster Passenger Survey



Exeter Station (EXR)

The Exeter station has a small municipal lot scheduled for expansion in 2008. The data for arriving and departing passengers seem to represent different groups. Perhaps this is attributable to which arriving and departing trains were surveyed. For arriving passengers, less than 20% used commuter or multiple trip tickets, 44% were tourists or visitors, three-quarters were picked up in a car, and only a quarter came from a work related trip. For departing passengers, nearly 60% were from places other than Exeter, 64% parked their cars at the lot, over 40% used commuter or multiple trip tickets, and 50% of the riders were commuting. Trips both to and from Boston were the most common, although for arriving passengers, nearly a quarter came from Portland.

Departing Passengers (N=131) representing approximately 160 traveler trips in sample
(excludes group trip of 119 from Dover)

Community of Residence:

<i>Exeter</i>	43%	<i>Non-Exeter</i>	57%
		<i>Stratham</i>	9%
		<i>Brentwood</i>	8%
		<i>Epping</i>	4%
		<i>Other</i>	8%

Mode of Arrival at EXR Station:

<i>Drove/Parked</i>	64%	<i>Bus/Other</i>	12%
<i>Walked/Biked</i>	12%	<i>Taxi</i>	2%
<i>Dropped off</i>	8%		

Destination Station for Trip:

<i>Boston</i>	84%	<i>Durham</i>	4%
<i>Portland</i>	5%		
<i>Woburn</i>	3%		

Mode of Arrival at EXR Station:

<i>Parked @ EXR Lot</i>	50%	<i>Bus/Other</i>	0%
<i>Dropped off</i>	28%		
<i>Walked/Biked</i>	13%		
<i>Parked Other loc</i>	8%		

Purpose of Trip:

<i>Work</i>	44%	<i>Medical**</i>	2%
<i>Leisure</i>	44%		
<i>School</i>	8%		

Use Commuter or Multi-Trip Tickets/Passes:

<i>No</i>	56%
<i>Yes</i>	44%

How Frequently Do You Ride?***

<i>Daily</i>	29%	<i>Few/<1x/month</i>	50%
<i>1-4x/week</i>	18%		

**unique to EXR survey

**New Hampshire Station Community
Amtrak Downeaster Passenger Survey**



Exeter Station (EXR)

Arriving Passengers (N=63) representing approximately 100 traveler trips in sample

Origination Station Trip:

<i>Boston</i>	69%	<i>Portland</i>	24%
<i>Durham</i>	3%	<i>Saco</i>	1%
<i>Dover</i>	1%		

Exeter is final destination of trip?

<i>Yes</i>	76%
<i>No</i>	24%

Resident or Tourist/Visitor:

<i>Resident</i>	56%
<i>Tourist/Visitor</i>	44%

Mode of Arrival at Origin Station:

<i>Dropped off</i>	19%
<i>Drove/parked</i>	24%
<i>Transit</i>	43%
<i>Walked</i>	11%

Mode of Departure from EXR Station:

<i>Walked/Biked</i>	14%		
<i>Car pickup</i>	74%		
<i>Parked Car</i>	12%	<i>Transit</i>	0%

Purpose of Trip:

<i>Leisure</i>	71%
<i>Work/School</i>	24%
<i>Medical</i>	4%

Use Commuter or Multi-Trip Tickets/Passes:

<i>Yes</i>	17%
<i>No</i>	83%

Age Group:

<i>Youth (appear under 18)</i>	10%		
<i>Adult (appear 18-65)</i>	67%		
<i>Senior (appear 65+)</i>	10%	<i>Not Noted</i>	14%

Gender:

<i>Female</i>	44%
<i>Male</i>	56%

How Frequently do you Ride?***

<i>Daily</i>	8%	<i>A few times/month</i>	11%
<i>1-4x/week</i>	5%	<i>< 1x/month</i>	76%

***unique to EXR survey

NH Rail-Transportation Center Ridership Survey BOARDING - DHM		Code
B1	What community did you start your travel from today?	
B2	Is that your town of residence?	(1) Yes (2) No
B3	If No: Are you a tourist or visitor to the region?	(1) Resident (2) Tourist or Visitor
B4	What is your destination station for this trip?	(1) Portland (6) Durham (2) Old Orchard (7) Exeter (3) Saco (8) Haverhill (4) Wells (9) Woburn (5) Dover (10) Boston
B5	How did you arrive at this station today?	(1) Drove/parked @ Craig Supply (3) Dropped off (2) Drove/parked @ Other (4) Walked (5) Biked (6) Bus
B6	What is the purpose of your trip?	(1) Work (2) Leisure
B7	How many one way trips have you ridden the Downeaster in the past six months ?	
B8	Do you buy or use commuter or multi-trip tickets?	(1) Yes (2) No
B9	Would you like to see more bus service blended with Downeaster runs?	(1) Yes (2) No (3) Unsure
B10	Are you currently a UNH Faculty, Staff or Student?	(1) Faculty (3) Student (2) Staff (4) N/A
OBSERVATIONAL		
B20	Gender	(1) Male (2) Female
B21	Age	(1) Youth (2) Adult (3) Senior
B22	How many riders did this interview represent?	
PRE-Completed		
B30	Date	/ / 2006
B31	Train #	6
B32	Boarding Station Code	DHM

NH Rail-Transportation Center Ridership Survey ARRIVING - DHM		Code
A1	What station did you board the Downeaster in for this trip?	(1) Portland (6) Durham (2) Old Orchard (7) Exeter (3) Saco (8) Haverhill (4) Wells (9) Woburn (5) Dover (10) Boston
A2	How did you get to that station?	(1) Drove/parked (3) Walked (2) Dropped off (4) Biked (5) Transit
A3	Is Durham your final destination for this trip?	(1) Yes (2) No
A4	If No: What is your final destination community ?	
A5	Are you a Tourist or Visitor to Durham?	(1) Yes (2) No
A6	How will you depart from this station today?	(1) My parked car (3) Walk (2) Car pickup (4) Bike (5) Transit
A7	What was the purpose of your trip?	(1) Work (2) Leisure
A8	How many one way trips have you ridden the Downeaster in the past six months ?	
A9	Do you buy or use commuter or multi-trip tickets?	(1) Yes (2) No
A10	Would you like to see more bus service blended with Downeaster trips?	(1) Yes (2) No (3) Unsure
A11	Are you currently a UNH Faculty, Staff or Student?	(1) Faculty (3) Student (2) Staff (4) N/A
OBSERVATIONAL		
A20	Gender	(1) Male (2) Female
A21	Age	(1) Youth (2) Adult (3) Senior
A22	How many riders did this interview represent?	
PRE-Completed		
A30	Date	/ / 2006
A31	Train #	6
A32	Arrival Station Code	DHM