



# MIDCOAST MAINE TRANSIT STUDY



In Association with:  
**MORRIS COMMUNICATIONS**



Public Meetings  
June, 2013

# Project Background

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- Four coastal towns of Knox County have agreed on the importance of a transit study to identify/validate:
  - Transit Markets
  - Transit Modes
  - Preferred Alignments
  - Funding Sources
  - Marketing Strategies
- Culmination of several previous efforts
  - Gateway 1 Project
  - Stakeholder Workshops
  - Transit Committee Formation
  - Municipal Plans



# Study Approach

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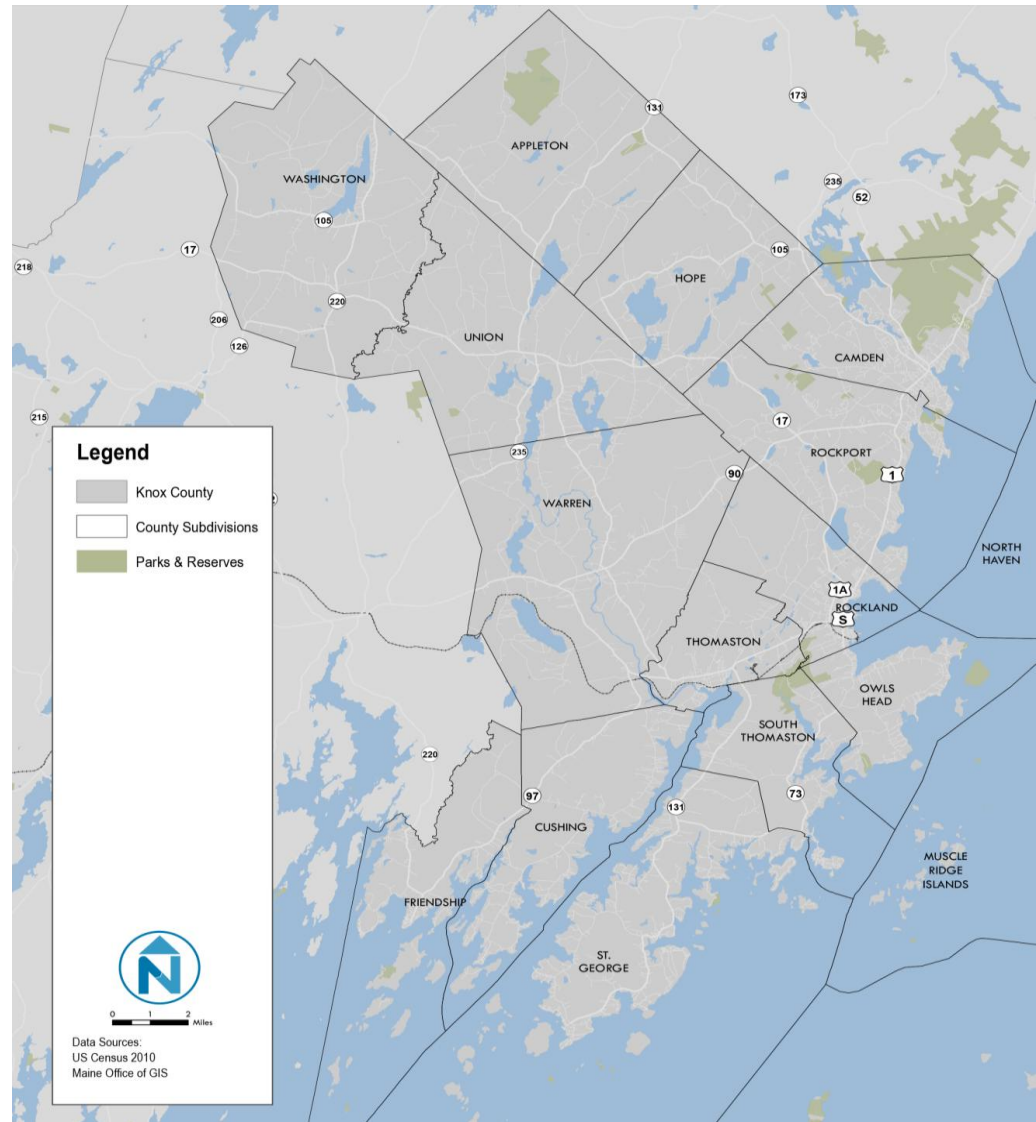
- Three main focus areas:
  1. What does the market say?
    - Population density
    - Population characteristics
    - Employment base
    - Land-use and the built environment
  2. What do the numbers say?
    - Existing transit/taxi use
    - Existing travel patterns
  3. What do the people say?
    - Riders
    - Non-riders
    - Stakeholders





- Route 1

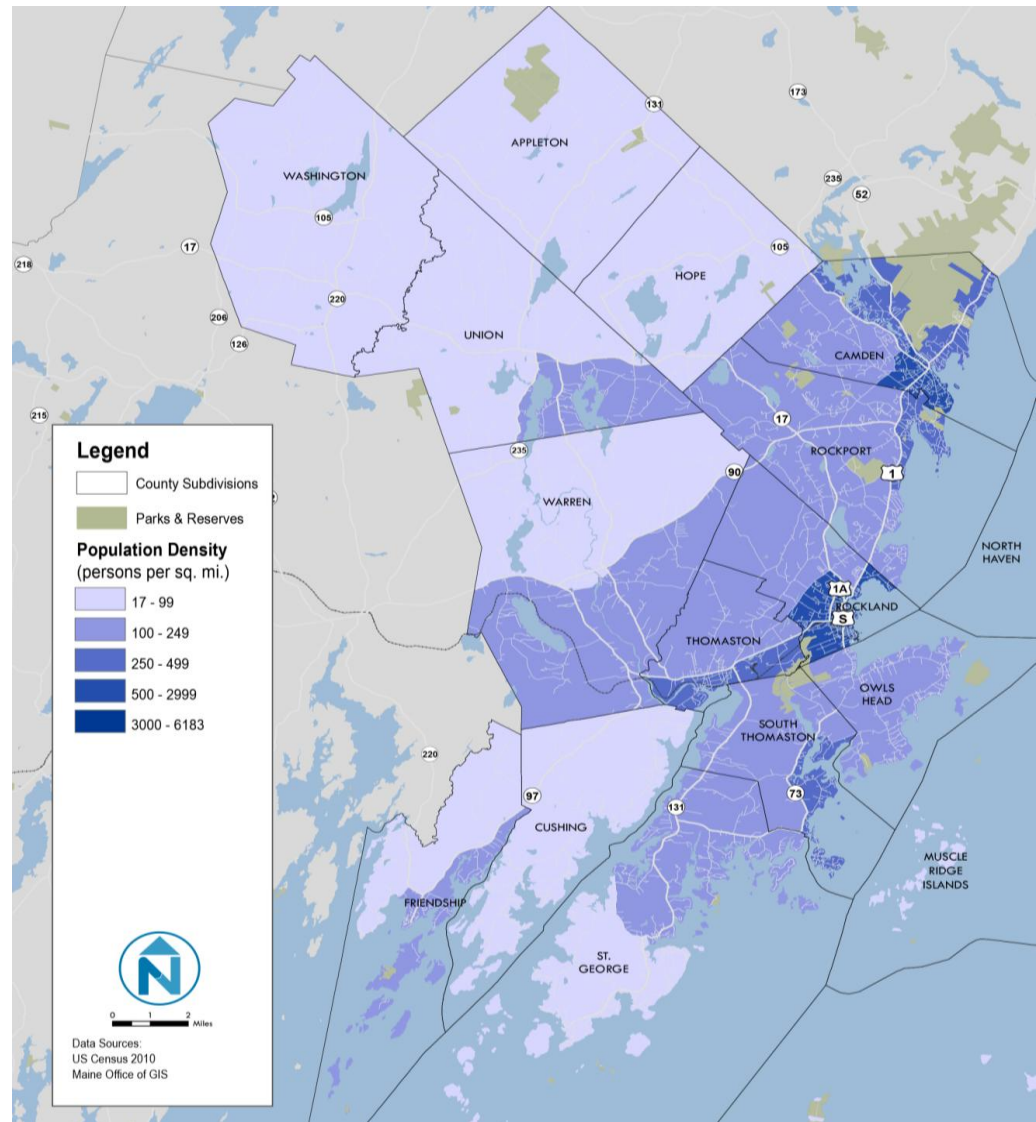
- Camden
  - Rockport
  - Rockland
  - Thomaston
- ## Route 1
- Primary thoroughfare through the study area
  - Two-lane arterial in most places





# Market

- Population Density
  - Much of Knox County is very low-density (average of 114 residents per square mile)
  - Population density increases in study area
  - Highest population density is in Camden and Rockland
  - Seasonal population up to 3x higher
  - Rule of thumb for traditional fixed-route transit is 3,000 residents per square mile



# Market

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## ■ Transit Users

### – Two key markets for public transportation:

- "Transit Dependent" riders - do not always have access to an alternative transportation mode.
  - Includes individuals who may not be physically (or legally) able to operate a vehicle, or those who may not be able to afford to own a vehicle.
- "Choice" riders - usually or always have an alternate means of transportation but choose to take transit because it offers them more or comparable convenience.
  - For example, a choice rider might choose to add 10 minutes to their overall trip via bus in order to save a \$10 all-day parking charge.
  - A commuter might choose to take a bus if they can work along the way rather than focusing on driving.

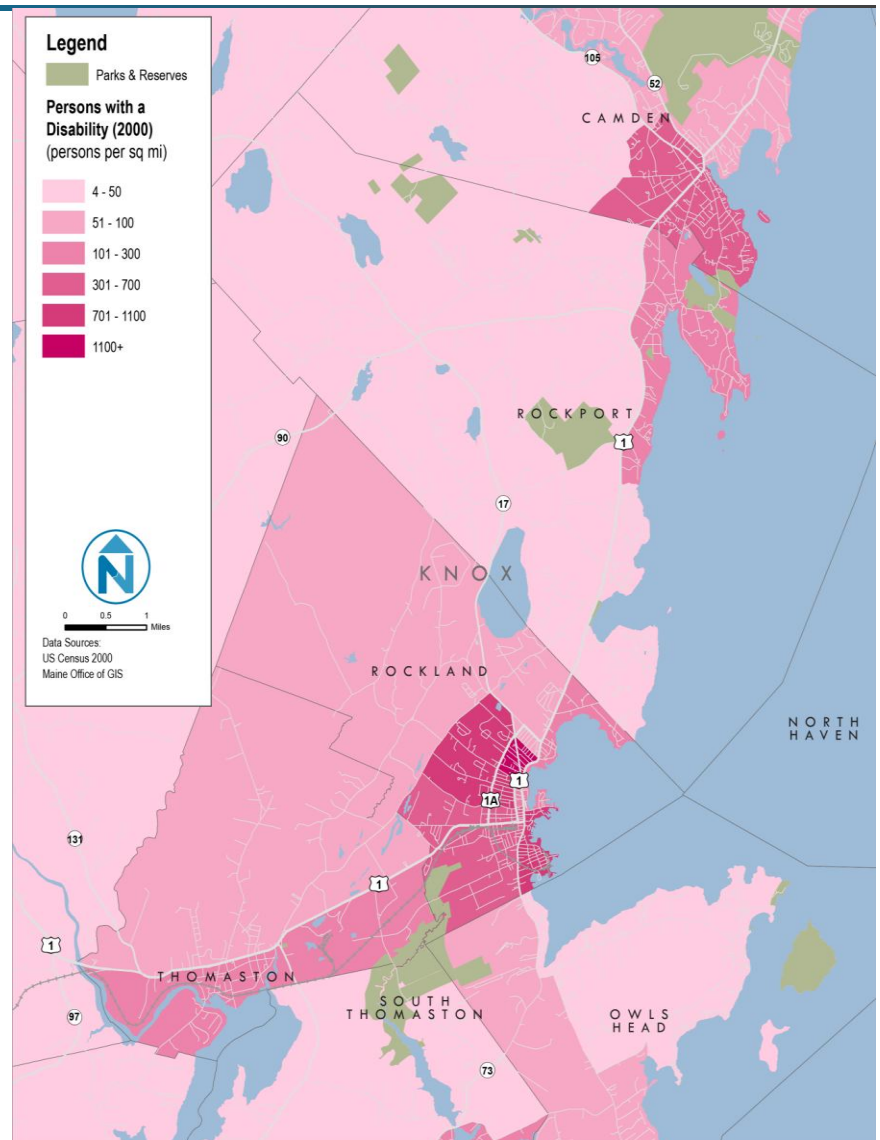
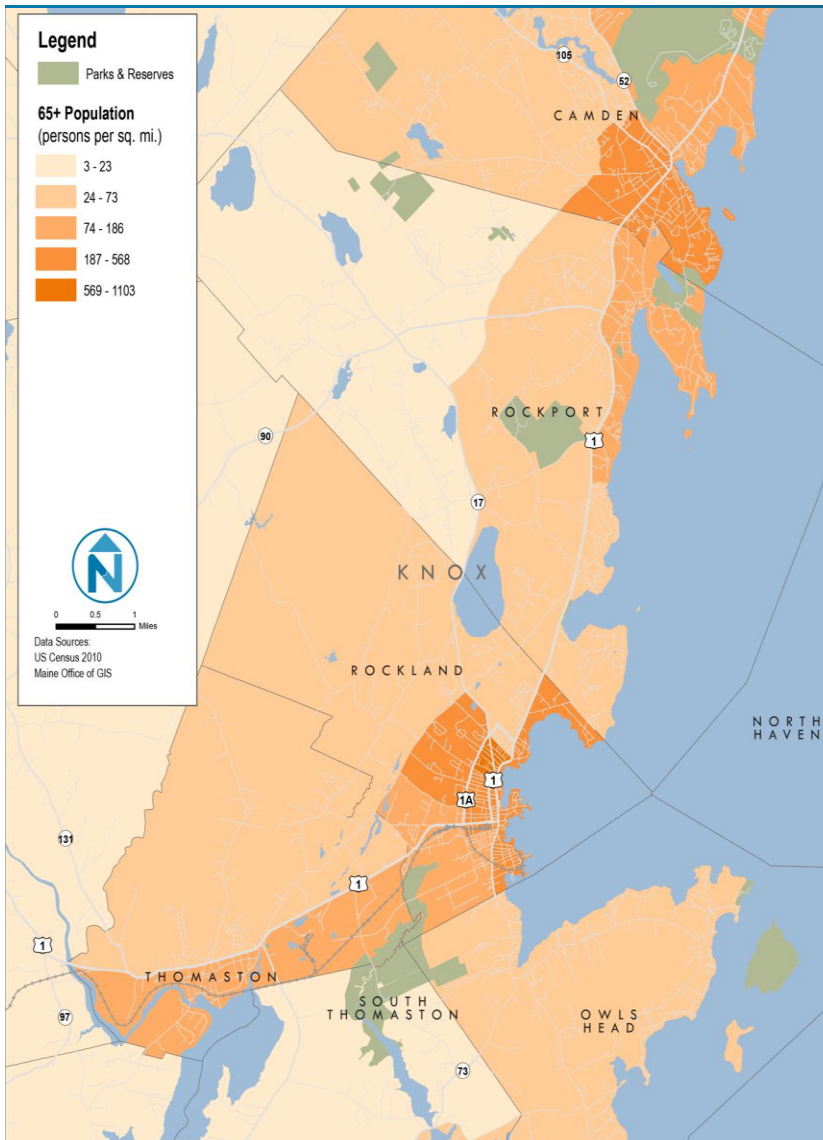
# Market

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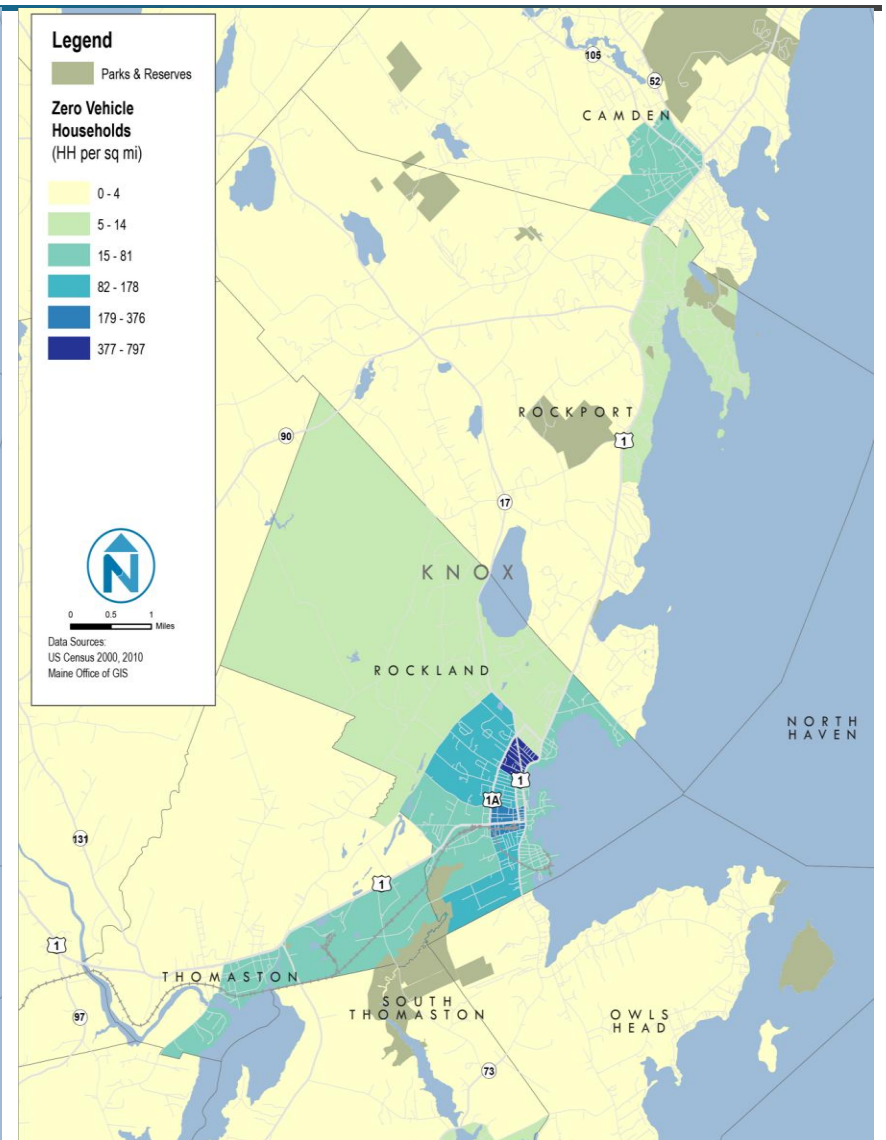
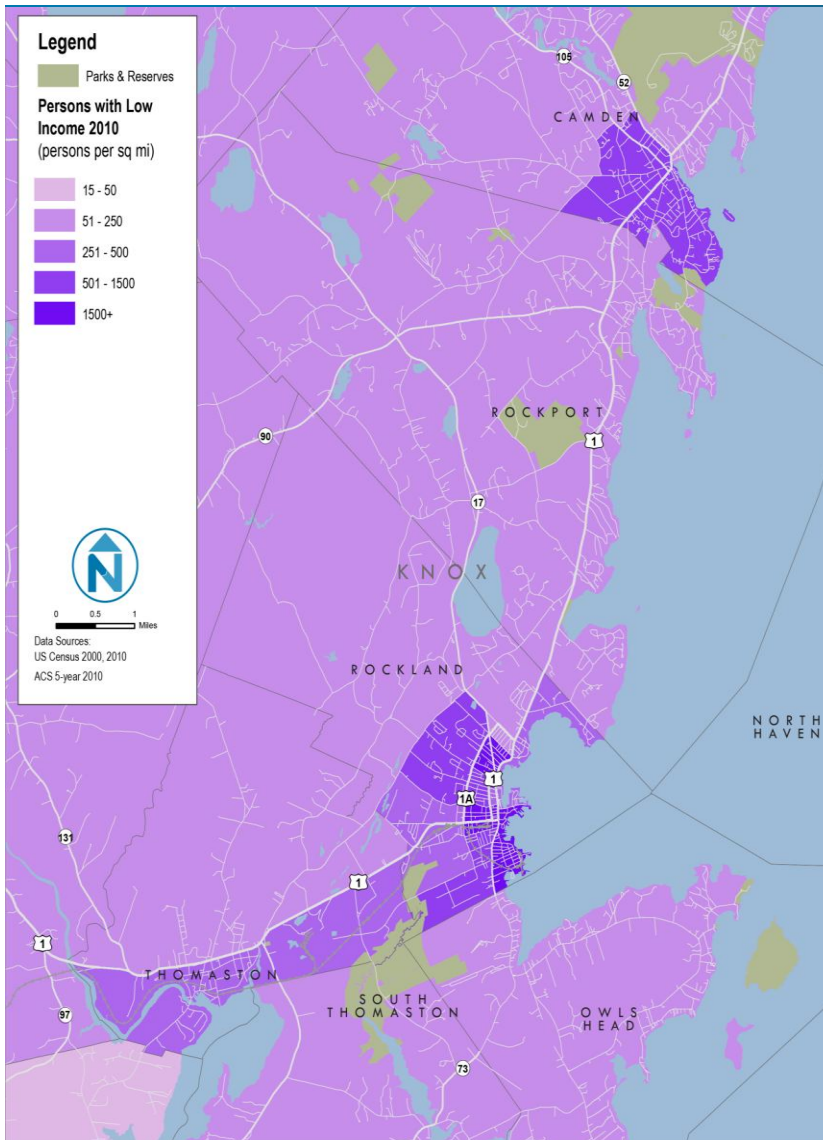
- Transit Propensity
  - Certain population sub-groups use transit to a greater extent than other groups:
    - Older Adults - Over age 65
    - Persons with Disabilities - Any person over the age of 5 with a disability as determined by the US Census
    - Persons with Low Income - Defined as a 150% of the poverty line based on household size
    - Households without a vehicle - Households reporting zero vehicles available according to the US Census
  - Determining the size a distribution of these groups can help predict where demand for transit will be high



# Market

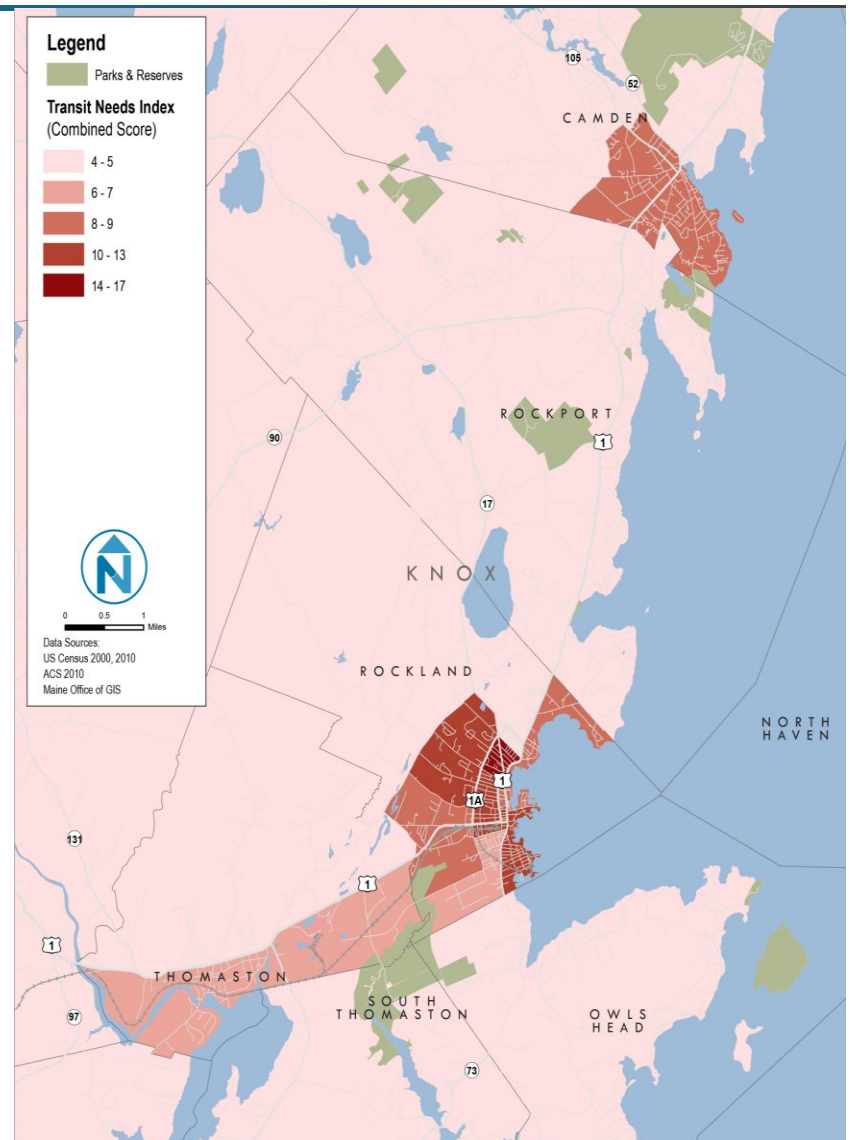
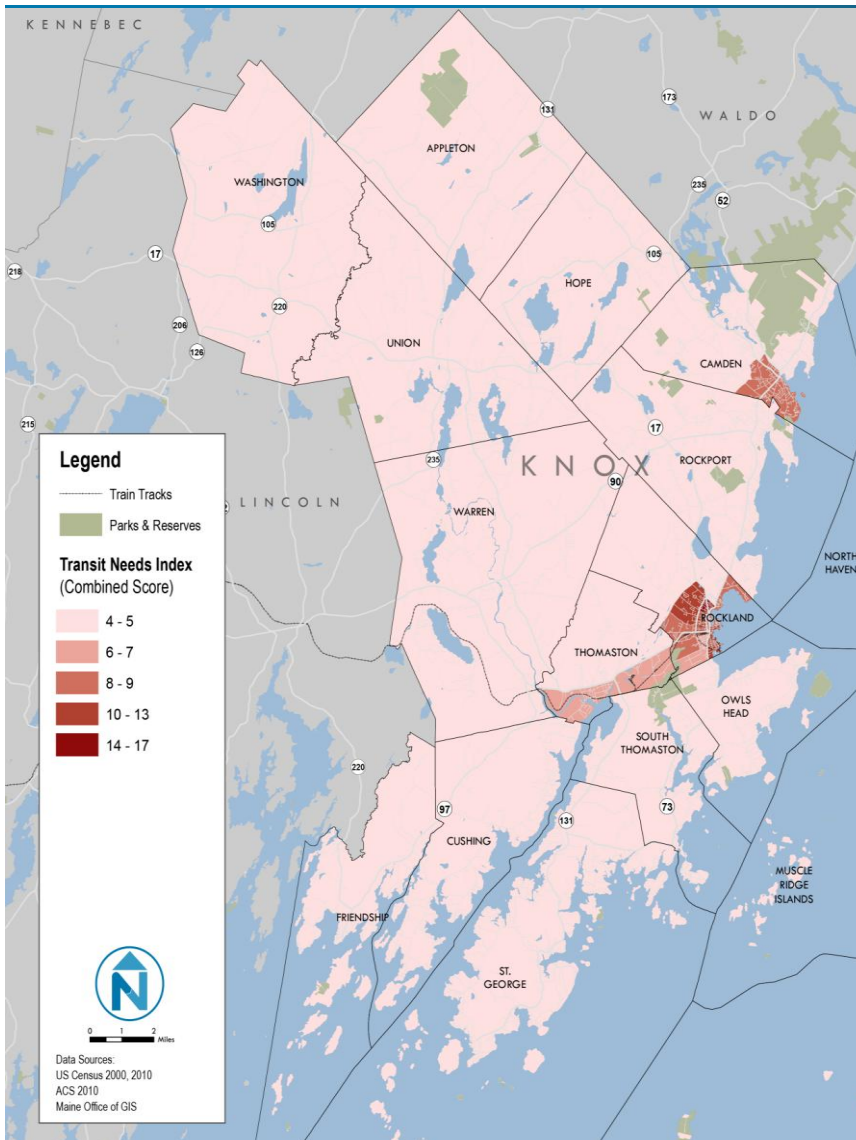


# Market





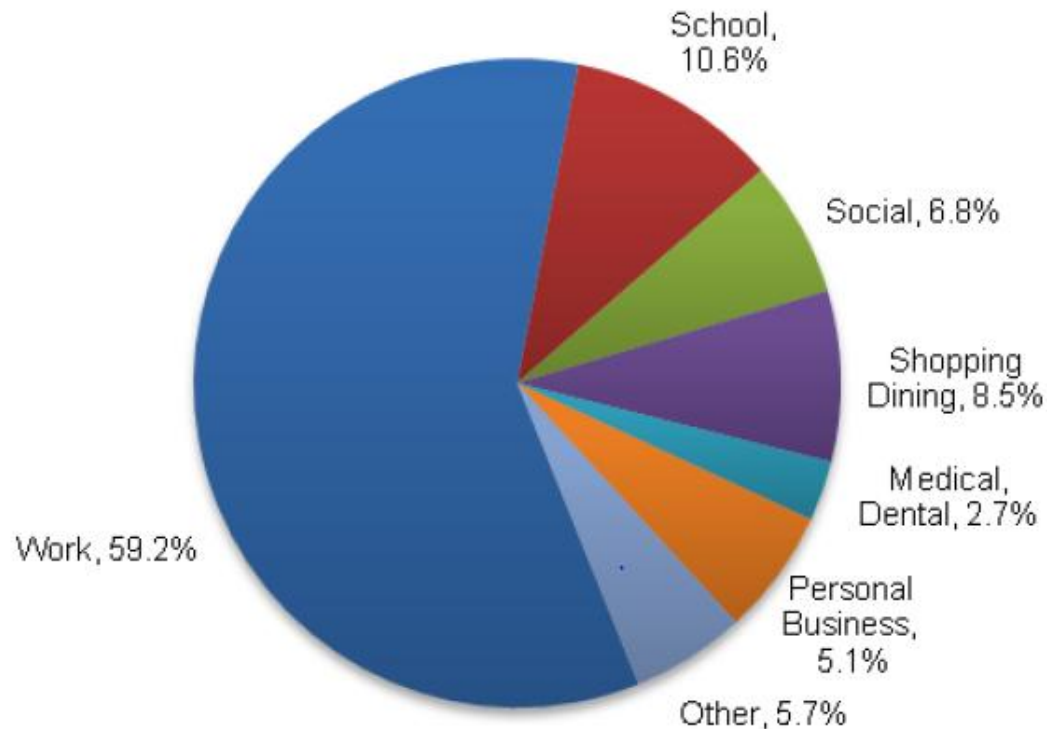
# Market



# Market

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- Employment Base
  - Nationally, work trips make up the largest share of all transit trips

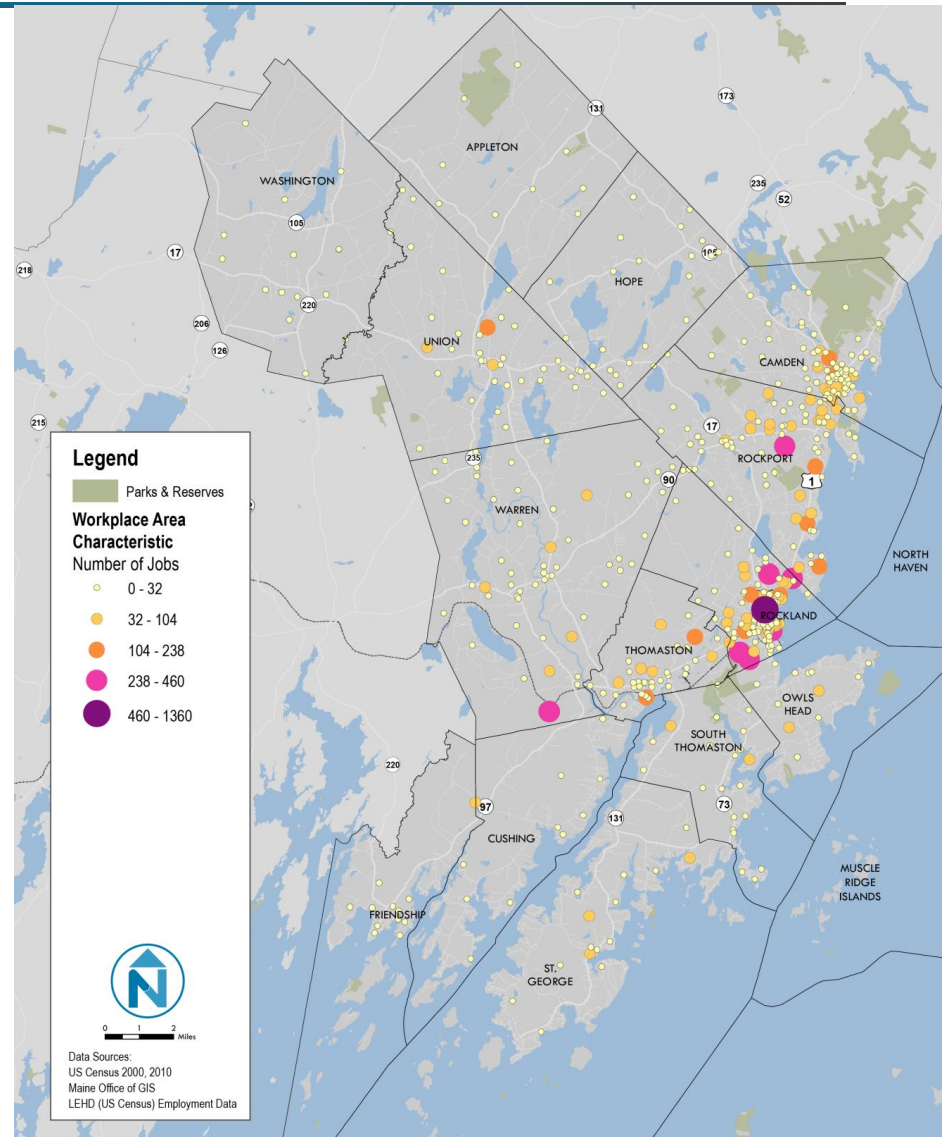


Source: APTA, *Profile of Public Transportation Passengers*, 2007.



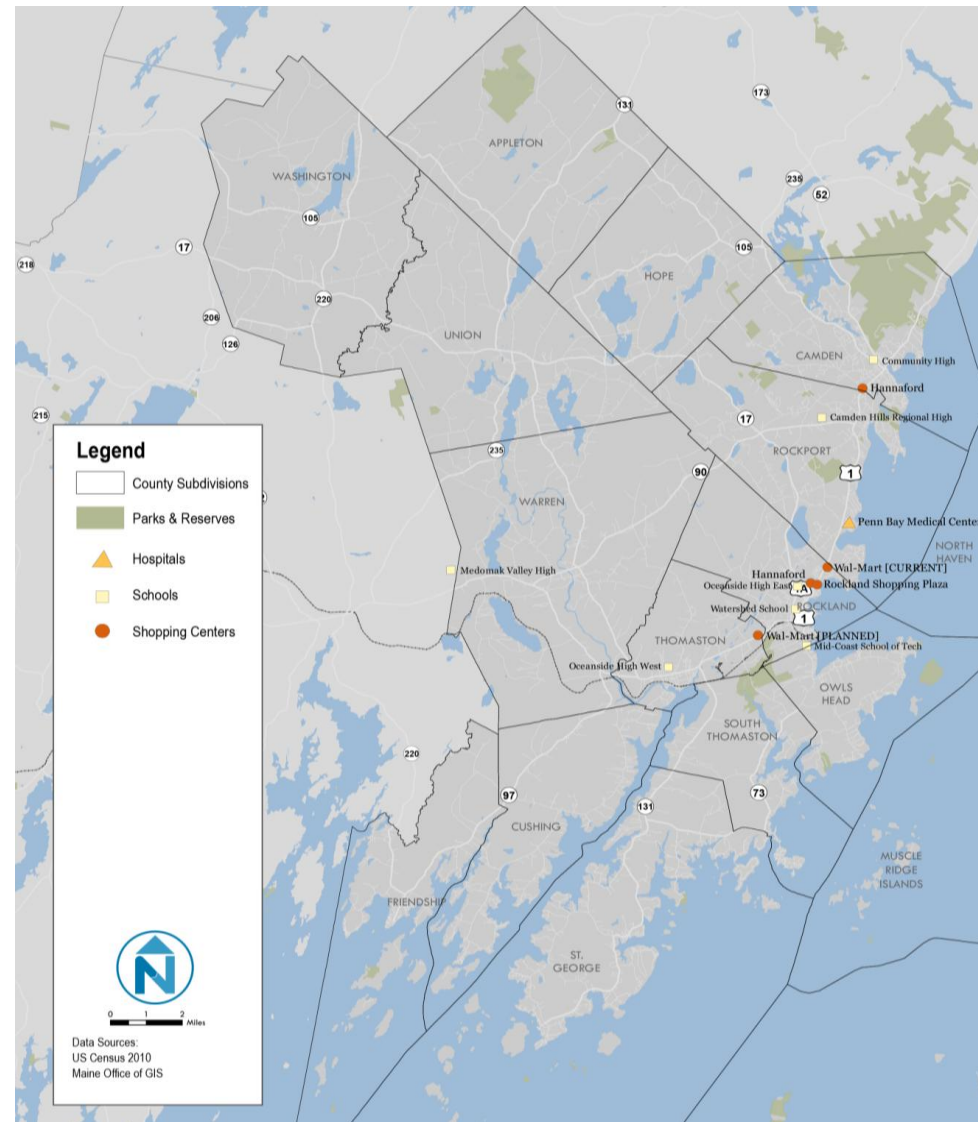
# Market

Rank	Name	Employment Range	Business Description
1	Penobscot Bay Medical Center	1,000 – 1,500	General medical and surgical hospitals
2	Samorock LLC	1 – 500	Hotels and motels, except casino hotels
3	Hannaford Bros Co	1 – 500	Supermarkets and other grocery stores
4	O'Hara Corporation	1 – 500	Finfish fishing
5	Fischer Engineering	1 – 500	Construction machinery manufacturing
6	Boston Financial Data Services Inc	1 – 500	Telemarketing and other contact centers
7	Quarry Hill	1 – 500	Nursing care facilities, skilled nursing
8	Camden National Corporation	1 – 500	Commercial banking
9	Wal-Mart/Sam's Club	1 – 500	Discount department stores
10	F M C Corporation	1 – 500	All other miscellaneous food manufacturing



# Market

- All-Day Trip Generators
  - Just as there are demographic predictors of transit use, there are also land-uses that tend to generate ridership
    - Hospitals
    - Schools (especially high schools and up)
    - Shopping Centers (especially grocery stores and Wal Marts)







# EXISTING RIDERSHIP AND TRAVEL PATTERNS

# Existing Ridership and Travel Patterns

- Several modes of public transportation operate in Knox County
  - Mostly specialized and/or demand responsive services
  - Ridership can help provide clues about the potential use of general purpose transit





# Existing Ridership and Travel Patterns

- Concord Coach
  - Midcoast schedule only accommodates southbound day trips

Southbound	Bus 1	Bus 2	Northbound	Bus 1	Bus 2
Bangor	7:00 am		Boston – Logan Airport	11:35 am	3:35 pm
Searsport	7:45 am		Boston – South Station	12:01 pm	4:15 pm
Belfast	7:55 am		Portland	2:00 pm	6:10 pm
Lincolnville	8:10 am		Brunswick	2:35 pm	6:15 pm
Camden/Rockport	8:30 am		Bath	2:50 pm	6:50 pm
Rockland	8:50 am		Wiscasset	3:10	
Waldoboro	9:20 am		Damariscotta	3:30 pm	
Damariscotta	9:35 am		Waldoboro	3:45 pm	
Wiscasset	9:50 am		Rockland	4:15 pm	
Bath	10:10 am		Camden/Rockport	4:35 pm	
Brunswick	10:25 am	1:45 pm	Lincolnville	4:45 pm	
Portland	11:00-11:30 am	2:30 pm	Belfast	5:00 pm	
Boston – South Station	1:25 pm	4:25 pm	Searsport	5:10 pm	
Boston - Logan Airport	1:25 pm	4:25 pm	Bangor	6:00 pm	
			Orono	6:50 pm	

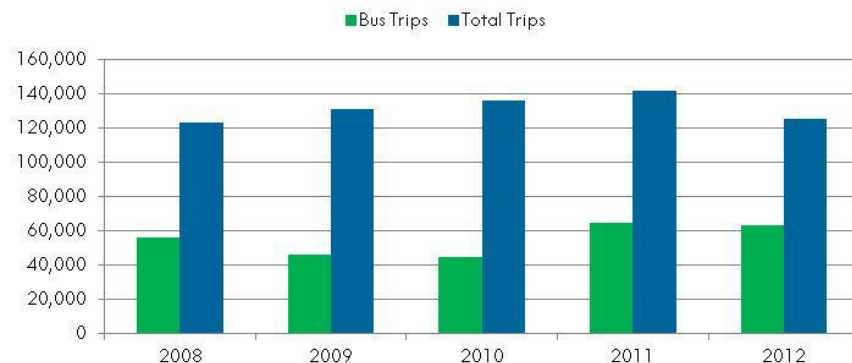
# Existing Ridership and Travel Patterns

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- Coastal Trans
  - Service in Knox County is demand-response only
  - Priority given to medical and social service trips
  - Service must be requested in advance (preferably at least a day in advance)
  - “Service Days” incentivize trip sharing to service hub (Rockland)
    - The is one step away from scheduled transportation

# Existing Ridership and Travel Patterns

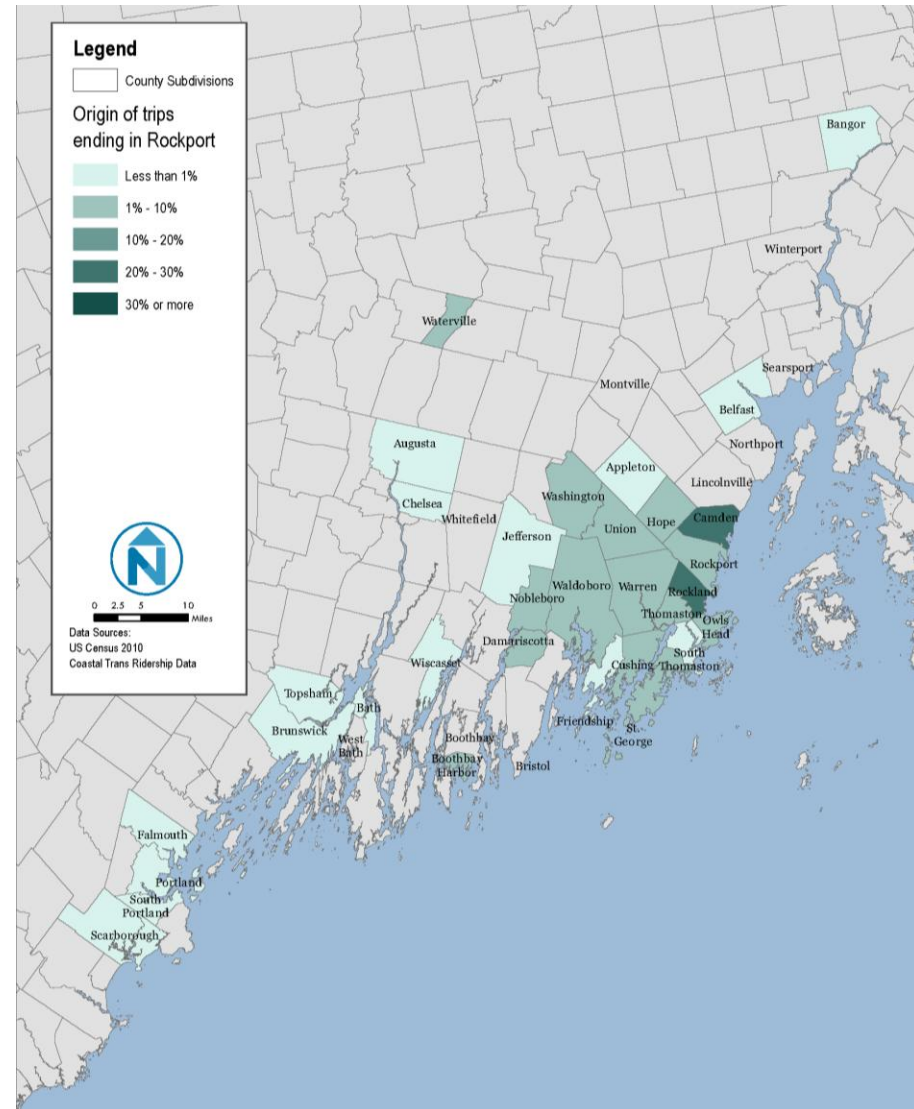
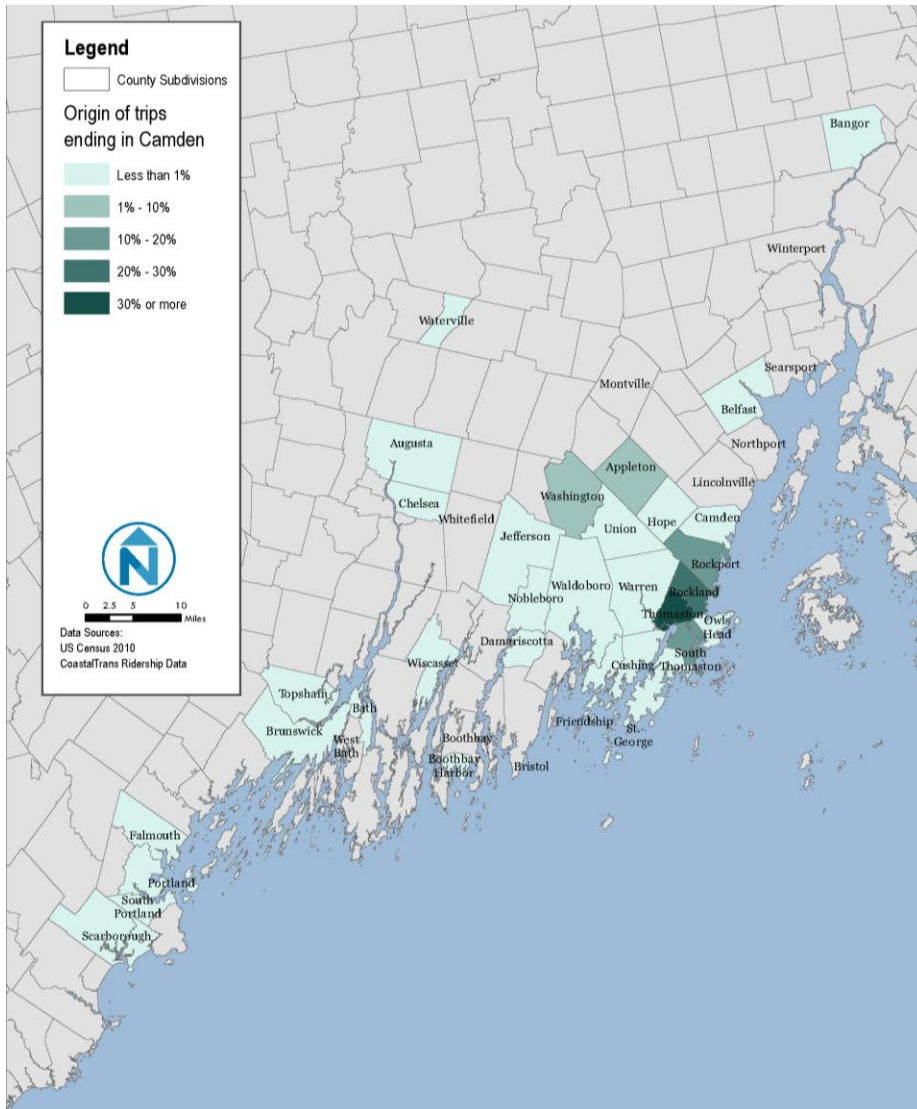
- Coastal Trans
  - Bus ridership growing
    - But fewer CT-sponsored trips of other kinds
  - Ridership fluctuates seasonally



Name	Address	Town	Trips
<b>June 2012 Destinations</b>			
Discovery House	21 Airport Rd	Waterville	480
Coastal Opportunities	35 Limerock St	Camden	323
Elmhurst	400 Center St	Bath	156
Cap Quality Care	1 Delta Dr	Portland	134
Mobius	319 Main St	Damariscotta	121
Center for Teaching and Learning	119 Cross Point Rd	Edgecomb	121
McDonalds	2 Chandler Dr	Bath	102
Spindleworks	7 Lincoln St	Brunswick	94
Merrimack Meth Clinic	2300 Congress St	Portland	92
Community Works	1056 Commercial Street	Brunswick	54
<b>October 2012 Destinations</b>			
Center for Teaching and Learning	119 Cross Point Rd	Edgecomb	155
McDonalds	2 Chandler Dr	Bath	155
Merrimack Meth Clinic	18 Mollison Way	Lewiston	64
Coastal Opportunities	35 Limerock St	Camden	55
Spindleworks	7 Lincoln Street	Brunswick	54
Mobius	319 Main St	Damariscotta	48
Damariscotta Dialysis	4 Edward Dr	Damariscotta	34
307 Main Street	307 Main Street	Thomaston	26
Maine Voc	1056 Commercial St	Glen Cove	24
Physician's Building, Pen Bay	4 Glen Cove Dr	Rockport	21

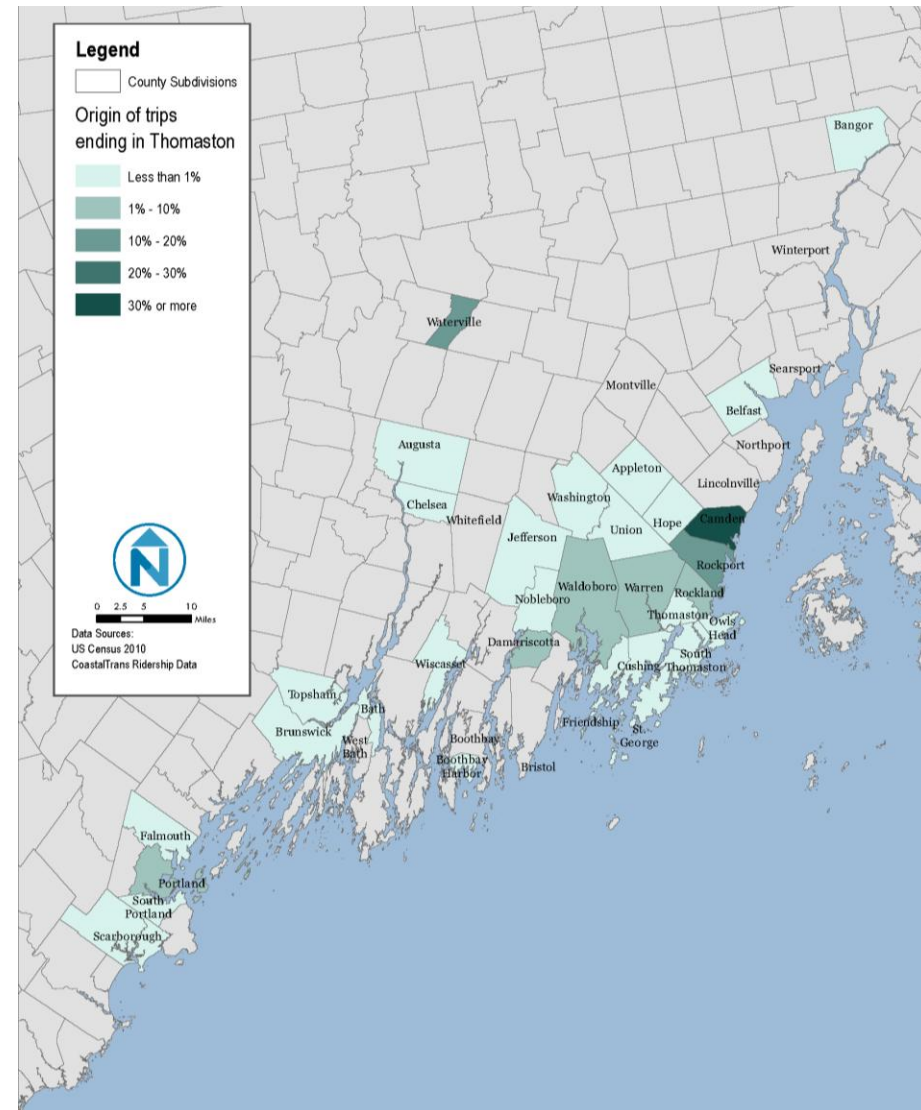
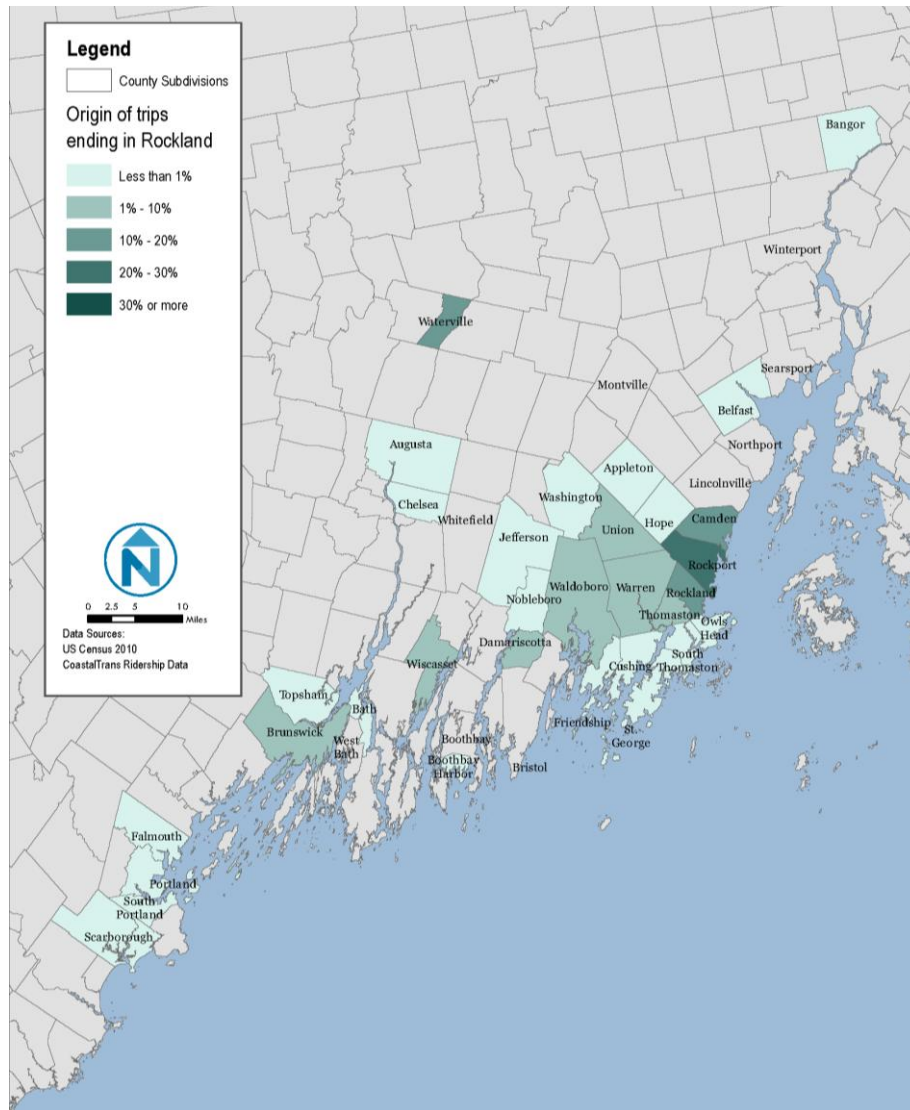
\*Data for two consecutive weeks in June. October data is for 10 days.

# Existing Ridership and Travel Patterns





# Existing Ridership and Travel Patterns



# Existing Ridership and Travel Patterns

- Schooner Bay
  - Largest taxi operator in Midcoast region
  - Some top destinations change by season, but overall ridership does not see huge fluctuations (surprisingly)

Name	Address	Town	Trips
<b>June 2012 Destinations</b>			
Wal-Mart	265 Camden Street	Rockland	82
Penn Bay Medical Center	6 Glen Cove Drive	Rockport	65
Ferry Terminal	527 Main Street	Rockland	56
Cape Air	23 Terminal Lane	Owls Head	40
Hannaford	75 Maverick Street	Rockland	36
Shaws	235 Camden Street	Rockland	35
Stella Maris	148 Broadway	Rockland	26
Circle K	3 Camden Street	Rockland	26
Bartlett Woods	20 Bartlett Drive	Rockland	23
Merrymeeting School	2 Davenport Circle	Bath	21
<b>October 2012 Destinations</b>			
Wal-Mart	265 Camden Street	Rockland	85
Penn Bay Medical Center	6 Glen Cove Drive	Rockport	60
Shaws	235 Camden Street	Rockland	47
Hannaford	75 Maverick Street	Rockland	46
Ferry Terminal	527 Main Street	Rockland	44
Samoset Inn	Samoset Inn Road	Rockland	35
Cruise Terminal	Harbor Park	Rockland	34
Cape Air	23 Terminal Lane	Owls Head	32
Point Lookout	67 Atlantic Highway	Northport	29
Circle K	3 Camden Street	Rockland	27
*Data from two consecutive weeks in June and October.			



# PUBLIC AND STAKEHOLDER INPUT



# Public and Stakeholder Input

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## ■ Employer Interviews

- 16 of the largest employers in the study area were interviewed regarding transportation needs and attitudes toward transit

- Boston Financial Data Services
- Camden National
- Dragon Products
- Fisher Plow
- Hannaford Supermarkets
- Home Depot
- Lie Nielsen
- Lyman Morse
- North End Composites / Back Cove Yachts
- O'Hara Corporation
- Pen Bay Health Care
- Pen Bay YMCA
- Quarry Hill
- Samoset Resort
- Shaw's Supermarkets
- Wayfarer Marine



# Public and Stakeholder Input

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## ■ Employer Interviews

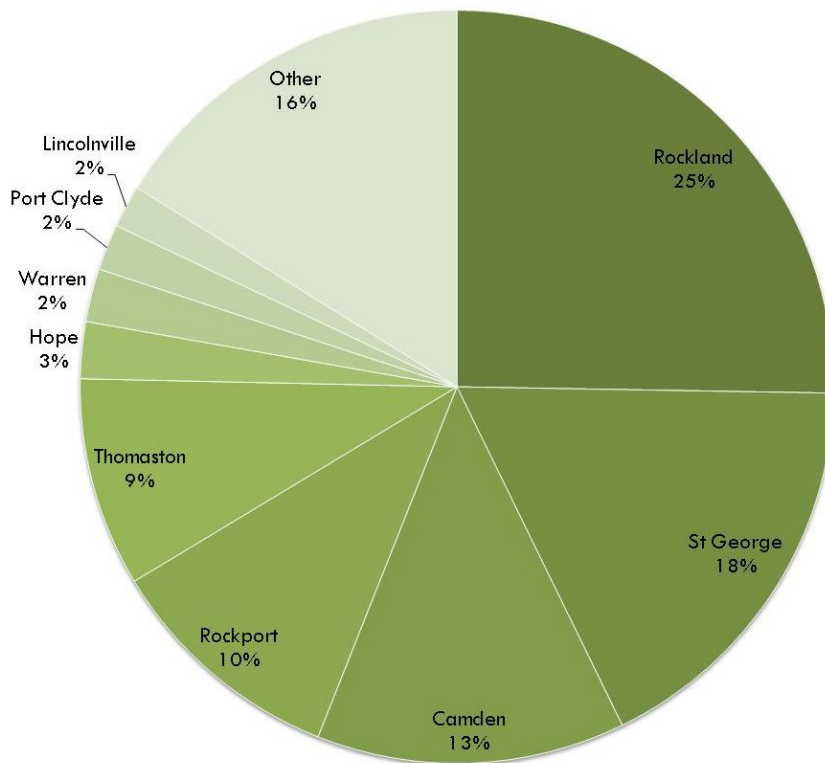
- Interviewed employers employ approximately 3,800 employees
- Majority of employers supported the transit study, but most were also skeptical about the viability of general-purpose transit in the region
  - Only 5 major employers in the region have traditional work shifts (8-hours, five days a week)
  - Only 2 employers could recall cases when transportation had been an issue in hiring or retaining employees
  - 6 employers have employees who sometimes use taxis to get to work
  - 6 employers have employees who regularly carpool
  - 1 employer has an employee who uses Coastal Trans to get to work
  - 4 employers believe that transportation issues restrict some customers or clients from accessing their goods or service

# Public and Stakeholder Input

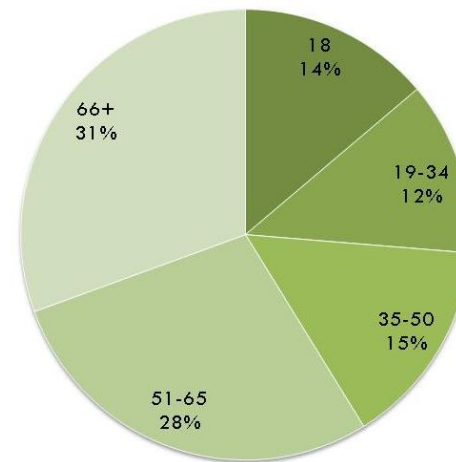
## ■ Public Survey

- More than 650 responses (so far!) through online survey

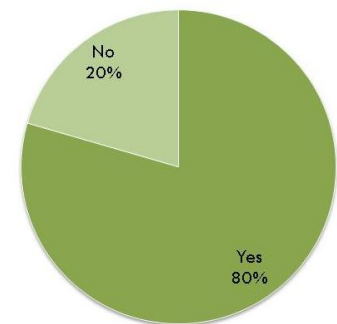
**Respondent Count**



**Age of Respondent**



**Do you have access to a car on a daily basis?**

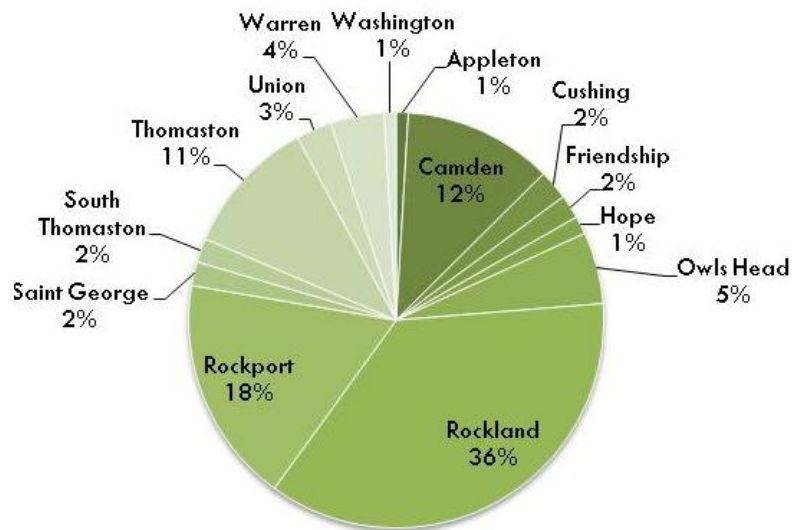


# Public and Stakeholder Input

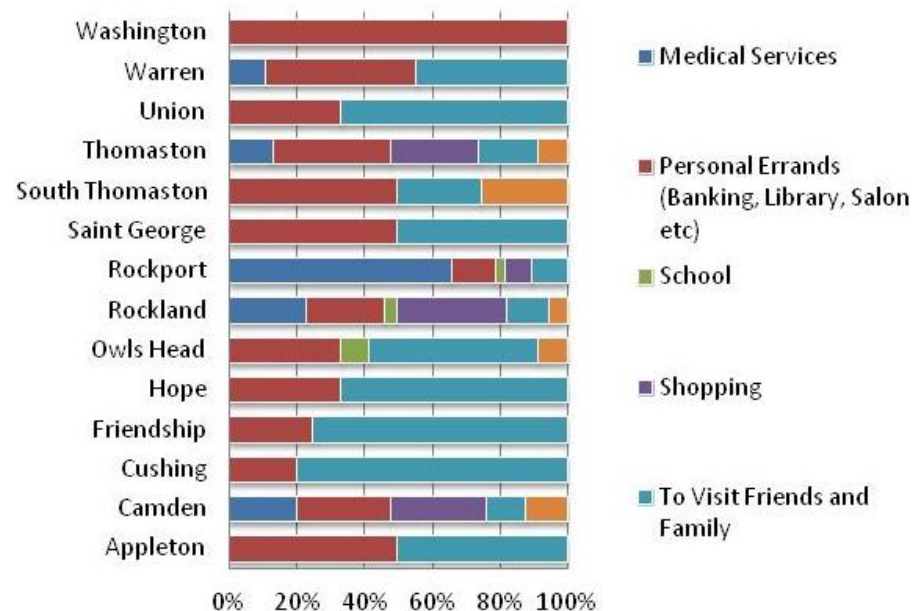
## ■ Public Survey

- 71% of survey takers have heard of Coastal Trans, 9% have used it

### Coastal Trans Destinations



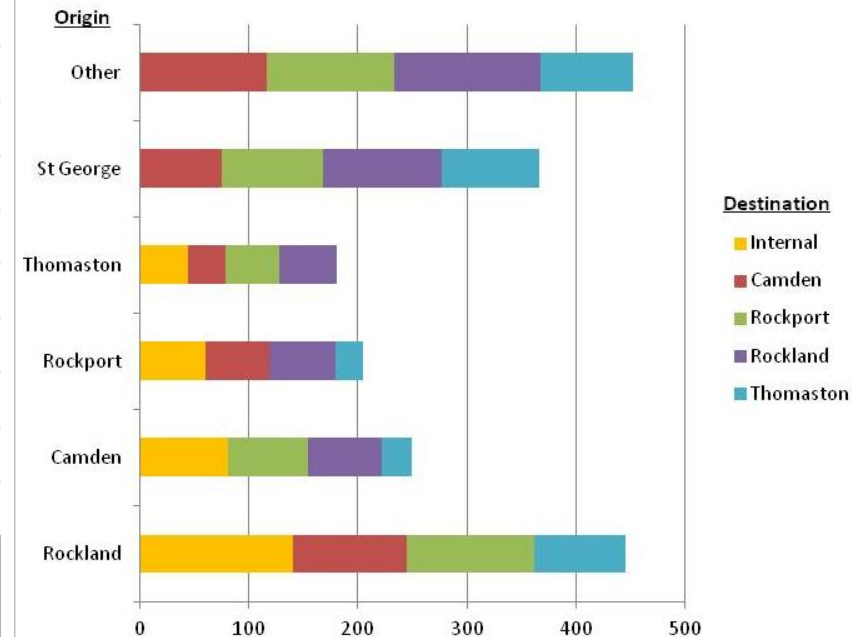
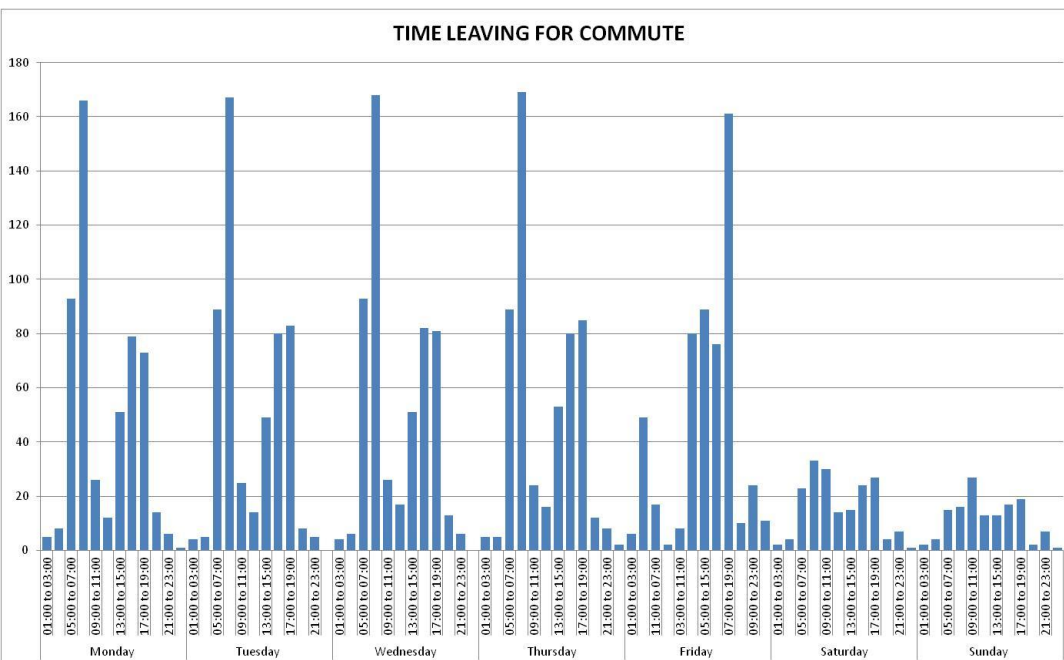
### Coastal Trans Trip Types



# Public and Stakeholder Input

## ■ Public Survey

- 90% of survey takers think the time is right to consider expanded transit in the region, 60% say they would use it







# SERVICE APPROACHES



# Service Approaches

- There are MANY varieties of transit service
  - Each has it's own characteristics, and ideal operating environment
  - Service can be designed for a specific user group...



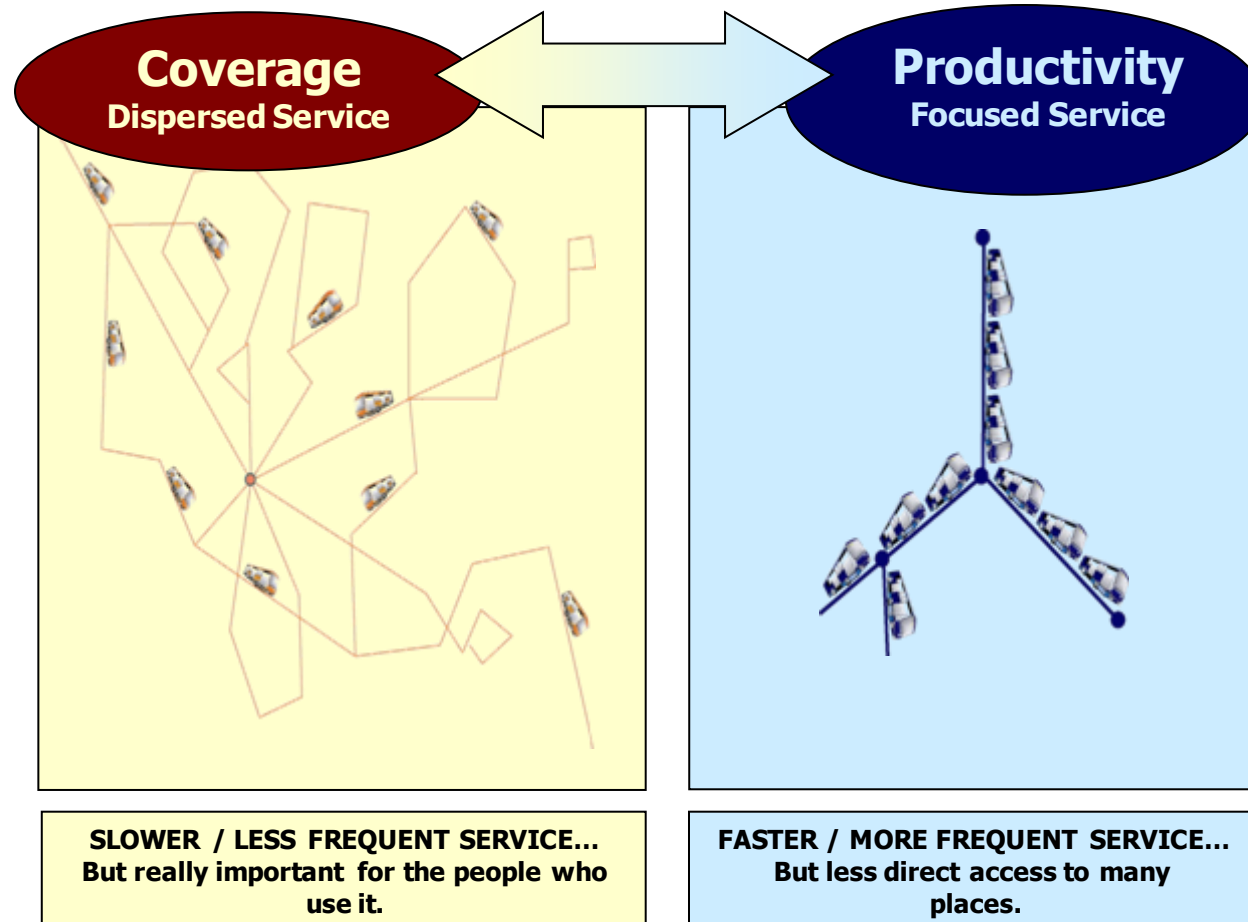
- ...or for the general public





# Service Approaches

- Productivity-oriented services:
  - Designed to operate like a business by maximizing ridership and farebox return
  - Highly competitive with the automobile in specific corridors.
- Coverage-oriented services:
  - Designed to reach transit dependent customers wherever they are.
  - Provide a safety net over a broad geographic area.





# Service Approaches

## Local Fixed-Route

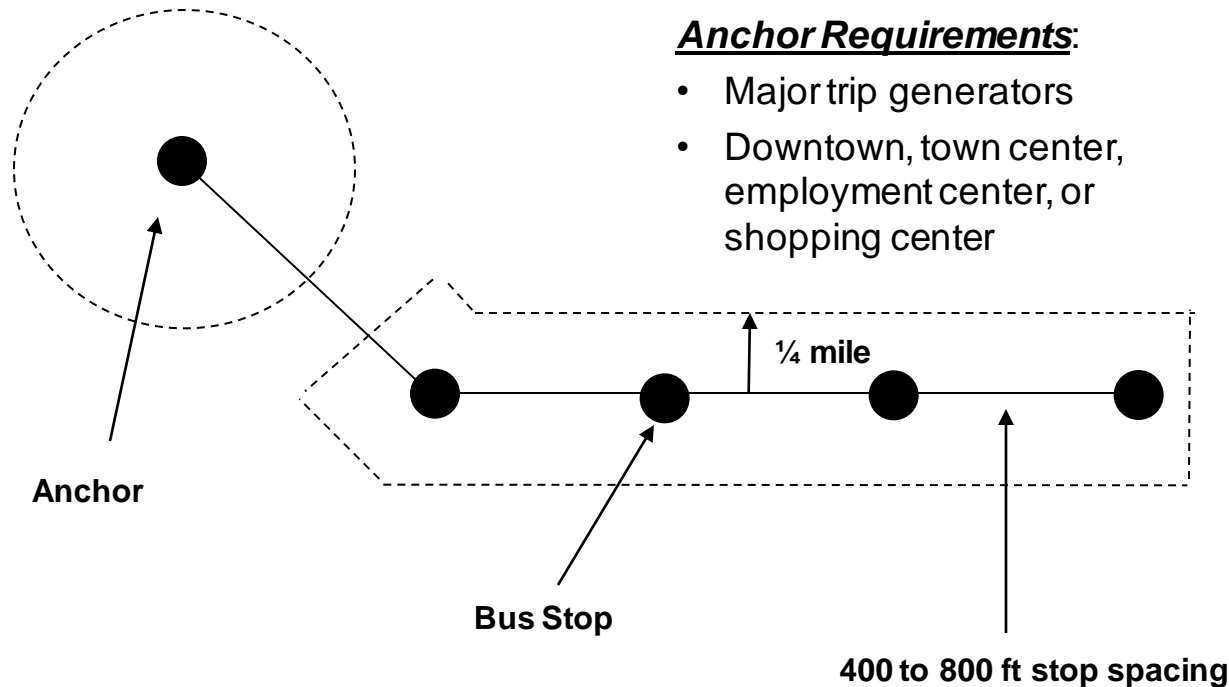
- Bus

### Land-Use Requirements:

- 3,000 persons/sq mile within  $\frac{1}{4}$  mile of corridors served

### Anchor Requirements:

- Major trip generators
- Downtown, town center, employment center, or shopping center

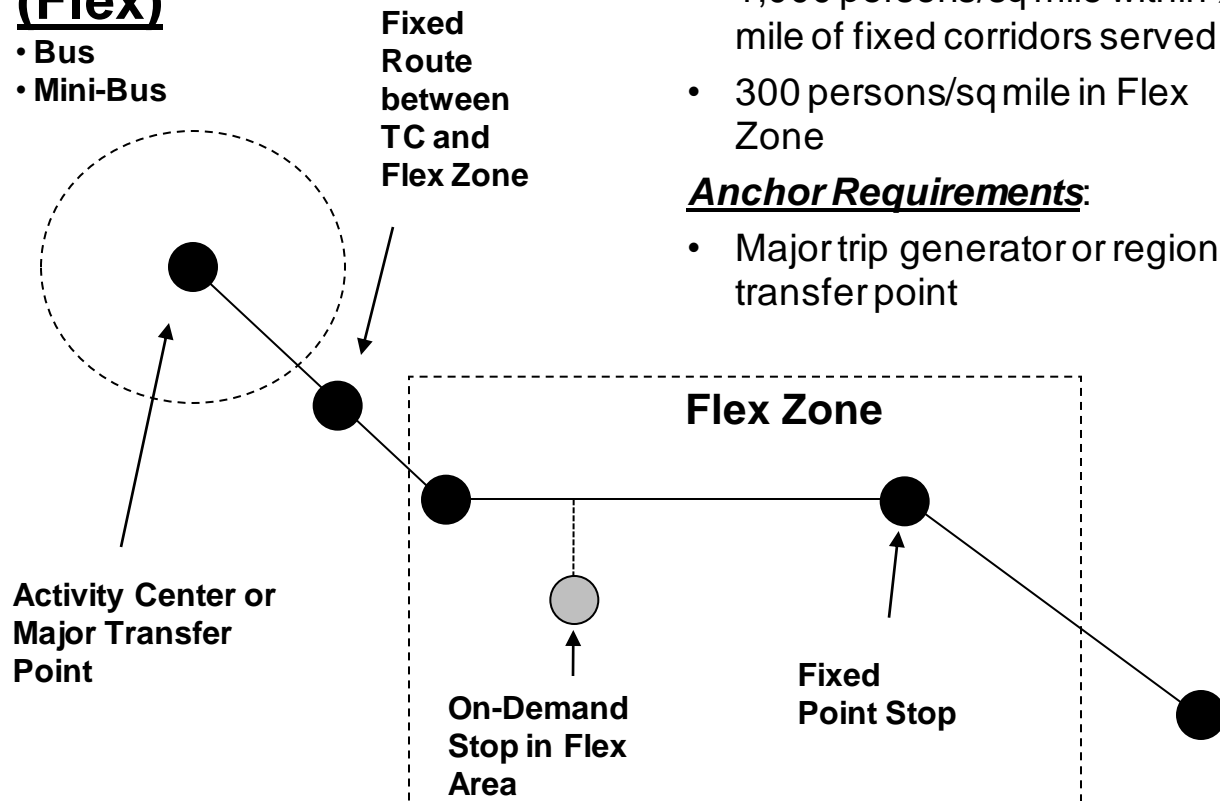


*Service every 60 minutes or better*

# Service Approaches

## Deviated Fixed-Route (Flex)

- Bus
- Mini-Bus



### Land-Use Requirements:

- 1,000 persons/sq mile within  $\frac{1}{4}$  mile of fixed corridors served
- 300 persons/sq mile in Flex Zone

### Anchor Requirements:

- Major trip generator or regional transfer point

# Service Approaches

## On-Demand

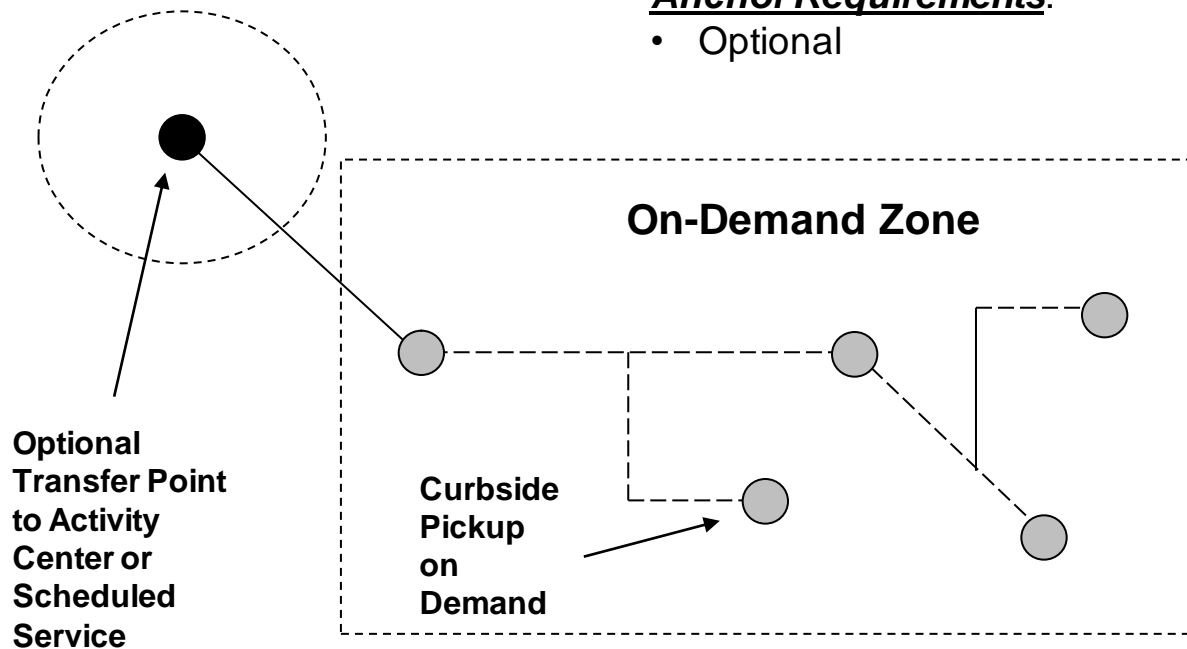
- Mini-Bus
- Van

### Land-Use Requirements:

- Areas with low density
- Areas with special needs populations

### Anchor Requirements:

- Optional





# Service Approaches

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## **Community Shuttle**

- Mini-Bus
- Van

**Fixed-Route, Deviated Fixed-Route or On-Demand service that operates on designated days in designated communities**

# Service Approaches

## Limited-Stop Service

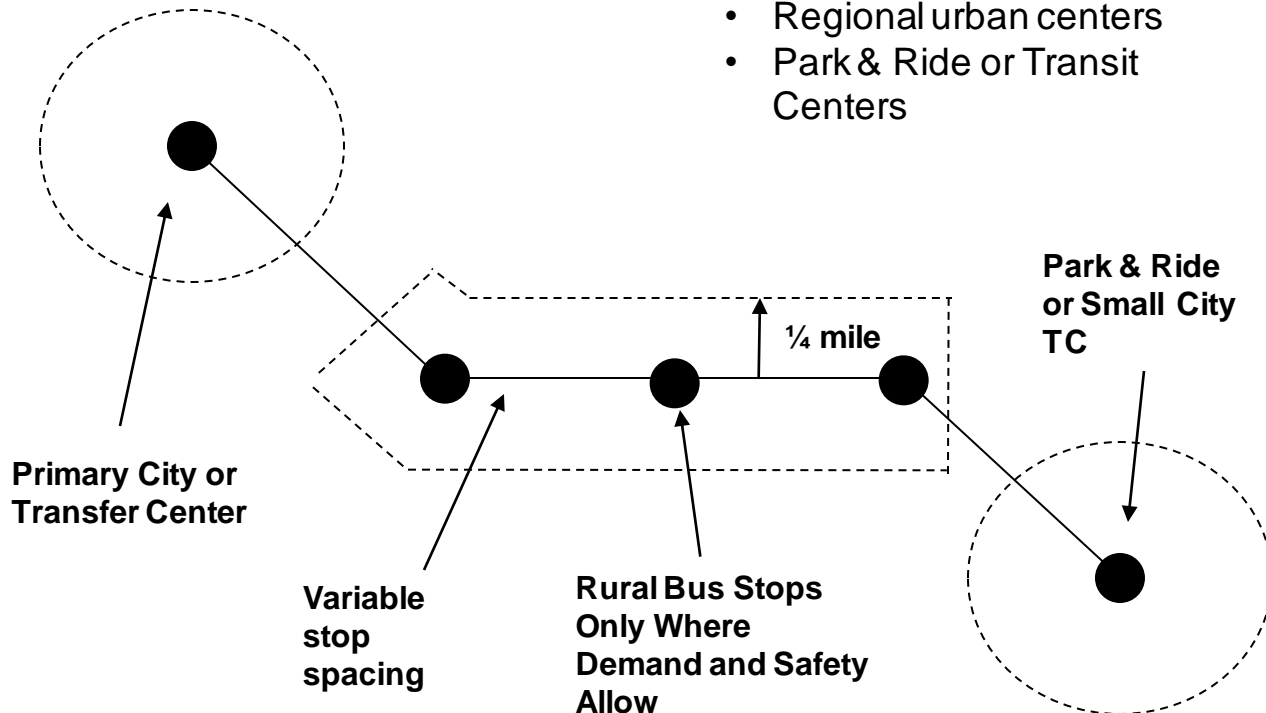
- Bus

### Land-Use Requirements:

- Corridor with multiple major destinations

### Anchor Requirements:

- Regional urban centers
- Park & Ride or Transit Centers



# Service Approaches

## Express Service

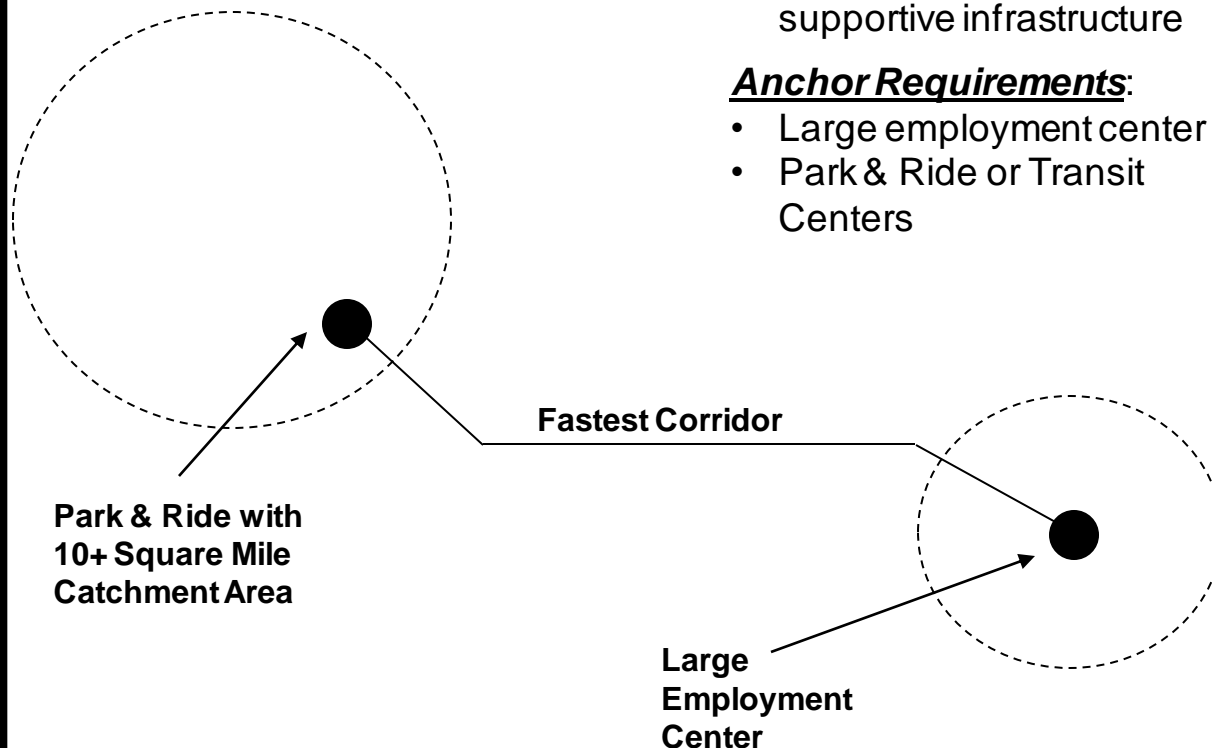
- Bus
- Commuter Coach

### Land-Use Requirements:

- Major employment center with transit and pedestrian supportive infrastructure

### Anchor Requirements:

- Large employment center
- Park & Ride or Transit Centers



# Service Approaches

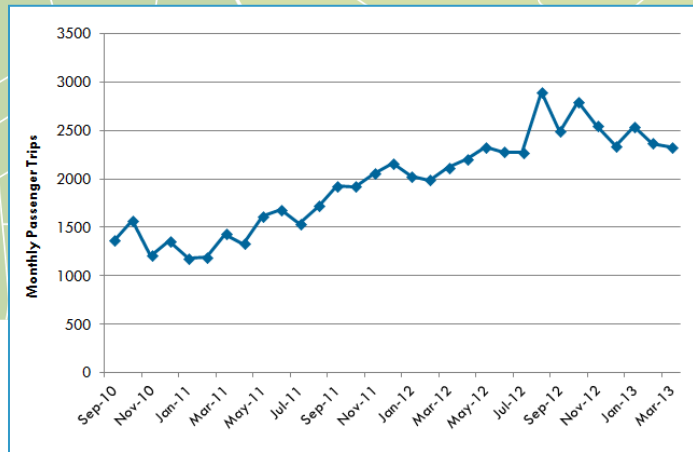
Operator	Coastal Trans	Tri-County Community Action Program, Inc.	Deerfield Valley Transit Authority (DVTA)	Addison County Transit Resources (ACTR)	KVCAP Transportation Services
<b>Systems</b>	Brunswick Explorer Coastal Trans	North Country Transit Carrol County Transit	MOOver	ACTR	KVCAP Transportation Services
<b>Communities Served</b>	Midcoast Maine, including Knox, Lincoln and Sagadahoc Counties, Brunswick and Harpswell	Located in Northern New Hampshire. Serves two counties, including the larger cities of Berlin, Lancaster and Gorham	Located in Southern Vermont. Windham County, including 8 towns and seasonal service at Mount Snow	Located in Midwest Vermont. Addison County, Middlebury town center, and commuter routes	Kennebec and Somerset County, centered on Augusta
<b>Service Area Population 2010 (approximate)</b>	110,000	80,000	44,000	37,000	175,000
<b>Number of Routes and Service Type</b>	1 deviated fixed route Demand response with service days	3 deviated fixed route Demand response Long-distance medical transportation	14 fixed route in winter 5 fixed route in summer Demand response	8 shuttle buses 3 commuter routes, including joint operation of Burlington LINK with CCTA Demand response	7 flex routes for shopping and commuting Door-to-door Special shuttle
<b>FY2012 Ridership</b>	<b>152,011</b>	<b>55,776</b>	<b>290,867</b>	<b>172,401</b>	<b>552,573</b>
<i>Demand Response</i>	125,289	27,081	7,158	49,609	485,336
<i>Fixed Route</i>	26,722	28,050	283,709	122,792	64,329
<b>FY2012 Operating Costs</b>	<b>\$2,149,836</b>	<b>\$936,282</b>	<b>\$1,732,085</b>	<b>\$2,064,670</b>	<b>\$5,971,783</b>
<i>Demand Response</i>	\$1,871,562	\$586,841	\$71,564	\$1,140,450	\$5,438,313
<i>Fixed Route</i>	\$278,274	\$314,011	\$1,660,521	\$924,220	\$542,425
<b>Average Cost/Passenger</b>	<b>\$14.14</b>	<b>\$16.79</b>	<b>\$5.95</b>	<b>\$11.97</b>	<b>\$10.81</b>
<i>Demand Response</i>	\$14.94	\$21.67	\$9.99	\$22.99	\$11.21
<i>Fixed/Flex Route</i>	\$10.41	\$11.19	\$5.50	\$7.52	\$8.43



# Service Approaches



**Catch the bus wherever you see this sign.**  
We also offer curbside pickup for persons with disabilities. See details inside.



# Break-Out Groups Discussions

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- What surprised you most about the information you have seen tonight?
- What are the key destinations in your community or in the region that you feel must be included in any transit system?
  - Do these differ by time of year?
- People often turn to transit as a solution to a specific “pain point.” What are the pain points in this region?
- Which of the service approaches do you think would benefit your community most?
  - If different approaches would benefit different groups, please explain.

