



# MAGIC Suburban Mobility Transit Study - Phase II

## Council on Aging Research and Recommendations

*July 2012*



*Minuteman Advisory Group on Interlocal Coordination*



## Acknowledgments

### Principal Author

Eric Halvorsen, AICP, Transit Planner MAPC

### Contributing Staff

Eric Bourassa, Transportation Manager MAPC

Julie Conroy, AICP, Senior Regional Planner and MAGIC Subregional Coordinator MAPC

This report was produced by the Metropolitan Area Planning Council for the Minuteman Advisory Group on Inter-local Coordination (MAGIC).

To request additional copies of this document or copies in an accessible format, contact:

Eric Halvorsen, AICP

Metropolitan Area Planning Council

60 Temple Place

Boston, MA 02111

(61) 451-2770

[ehalvorsen@mapc.org](mailto:ehalvorsen@mapc.org)

[www.mapc.org](http://www.mapc.org)

### Acknowledgements

We wish to thank the Minuteman Advisory Group on Inter-local Coordination and the towns of Acton, Bedford, Bolton, Boxborough, Carlisle, Concord, Hudson, Lexington, Lincoln, Littleton, Maynard, Stow, Sudbury for participating in the project's working group and supplying us with data and information.

We also wish to thank the Council on Aging Directors from each of the above mentioned towns for participating in this study and providing much of the data in this report.

Cover Page Photo Credits:

128 Business Council

Bourne Council on Aging

Mass EOE

[SalemMassBlog.blogspot.com](http://SalemMassBlog.blogspot.com)

## Table of Contents

Executive Summary.....	5
Chapter One: Introduction.....	6
StudyParticipants.....	6
Chapter Two: Council on Aging Services.....	8
Existing vs. Shared-Service Models.....	8
Council on Aging Data Collection Effort.....	10
Chapter Three: Shared-Service Model.....	16
Steering Committee Structure.....	16
Start Small - Breaking Down the Subregion.....	16
Create an Intergovernmental Agreement.....	18
Create a Regional Dispatch Center.....	19
Introduce New Routes, Destinations, Operating Hours.....	19
Monitor and Adjust.....	19
Short-Term Ideas for Regionalizing.....	19
Conclusion.....	20
Appendix.....	20

## List of Figures

MAGIC Sub-Region Location Map.....	7
Vehicle Availability.....	11
Dispatcher Information.....	11
Dispatcher Pay Range.....	11
Advance Notice.....	12
Hourly Pay for Drivers.....	12
Driver Communication.....	13
GPS Information.....	13
Busy Times.....	13
Travel Restrictions.....	14
Popular Destinations Served by MAGIC COAs.....	15
Example of Smaller Subdistricts for Shared-Services.....	17

## List of Tables

Working Group Representatives.....	6
COA Directors by Town.....	8
Dispatch Personnel.....	11
Destinations List.....	14
Bolton Services Inventory.....	11
Boxborough Services Inventory.....	11
Carlisle Services Inventory.....	12

## Executive Summary

The Minuteman Advisory Group on Inter-local Coordination (MAGIC), a subregion of the 101 cities and towns in the Metropolitan Area Planning Council (MAPC) region, requested this study to explore the feasibility of creating a shared-services model for Council on Aging transportation services in the subregion.

The main objectives of the study were to:

- Host a discussion forum with Council on Aging Directors to discuss the benefits and challenges of two service models: the existing COA transportation model and a shared-service model.
- Collect data on the existing COA services and identify where overlap and/or inconsistency in policies exist.
- Develop a set of recommendations for how the subregion could implement a shared-services model for COA transportation services.

The discussion forum with COA Directors revealed a number of benefits and challenges with COA transportation services such as:

- COA services are often the only transportation service available to seniors and disabled individuals. The service helps to reduce social isolation in these groups.
- Current COA dispatchers and drivers have local knowledge of clients, roadways, traffic patterns, etc. This could be lost initially by moving toward a shared-service model.
- Costs for providing the service are rising while funding remains level.
- Towns have difficulty making longer distance trips because it occupies their vehicle and driver for the entire day.

As part of the data collection effort, MAPC noted the following issues that could be addressed through a shared-service model as a benefit to COAs and their clients:

- Hours for dispatchers and drivers vary across COAs and create varying levels of service for clients. A shared-service system could result in more consistent hours and in some cases longer hours for operation.

- Many COAs are serving the same destinations creating redundancy in services across the subregion. Sharing rides and vehicles could help reduce redundancies, and open up vehicles to serve more locations.
- A shared pool of vans and drivers could help smaller COAs serve longer distance destinations while leaving other vehicles available for shorter in-town trips.

Through the study's working group, MAPC identified six steps to creating a system of shared-services for Councils on Aging. If implemented, these steps would help create a coordinated system of shared dispatch, drivers and vehicles which would be able to serve more people, destinations and have longer operating hours than are currently available to many of the towns. The six steps identified are:

1. Create a Steering Committee responsible for implementation of the shared-service model. The Committee would be comprised of decision makers and be responsible for developing the agreements and governing structure of the new transportation system.
2. Break the subregion down into smaller subdistricts to help manage the large thirteen town area. Smaller subdistricts will help manage vehicles and keep some travel distances shorter for clients. The subdistricts will also be easier to manage than a larger thirteen town subregion.
3. Create an Intergovernmental Agreement that lays out common policies and addresses any issues raised by the Steering Committee.
4. Implement a regional dispatch system for the thirteen town subregion which will act as the central scheduling center for all COA rides. Market the new dispatch service heavily.
5. Introduce new routes, destinations and operating hours for the new shared-service. Market the new service heavily.
6. Monitor the new system and adjust as necessary to ensure continued efficiency and effectiveness.

The results of the discussion forum and data collection effort are explained in more detail in the body of this report, as are the recommendations for creating a shared-service model for the subregion.

## Chapter 1: Introduction

As a continuation of the work completed under the MAGIC Suburban Mobility Transit Study, the Minuteman Advisory Group on Interlocal Coordination (MAGIC), a sub-region of the 101 cities and towns in the Metropolitan Area Planning Council (MAPC) region, requested and funded a Phase II study. Phase II is a follow-on to the recommendations made under the first Transit Study and provides additional research and analysis in the following topic areas:

1. *Inventory of Ridership and Costs for Public Transportation* - MAPC will inventory the number of rides provided on public transit and human service transportation systems in each community. MAPC will also inventory the costs by community for receiving and providing these services.
2. **Council on Aging Research and Recommendations - MAPC will collect and analyze data from each town's Council on Aging office to determine the levels of service provided, costs of service, and trip origins and destinations. Recommendations will be made about the opportunities and challenges of moving toward a shared-service model which could reduce costs, provide more trips, and increase service areas.**
3. *Transportation Management Association Assessment* - MAPC will analyze the potential for creating a TMA in the MAGIC subregion and beyond to connect employers to transportation alternatives.
4. *School Buses as Public Transit* - MAPC will research the successes and lessons learned of implementing policies allowing public school buses to be used for public transportation. MAPC will research Massachusetts policies to determine if sharing uses is possible under state or local law.

### Study Participants

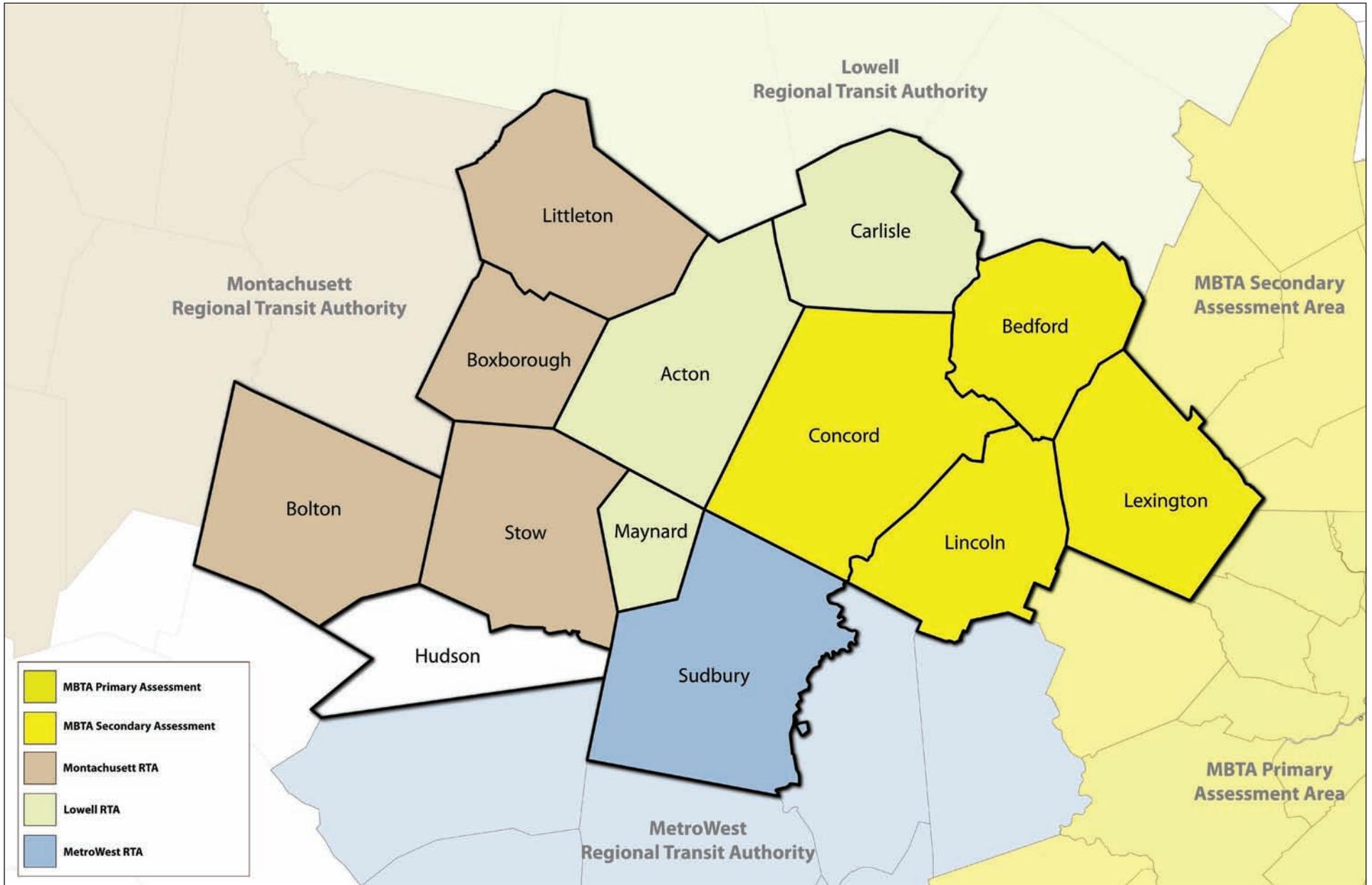
The study area consists of thirteen municipalities stretching from the Route 128/I-95 corridor west to the I-495 corridor, and involves four Regional Transit Authorities (shown in Figure 1.1). Each municipality participated in this mobility study through a working group. The Working Group included at

least one municipal representative (i.e. town planner, town administrator) who provided a working knowledge of municipal transit services and needs. A list of municipalities and the corresponding representatives are shown in Table 1.1.

Table 1.1: Working Group Representatives

Municipality	Working Group Member	Title
Acton	Fran Osman	Acton Transportation Advisory Committee
	Doug Halley	Public Health Director
Bedford	Glenn Garber	Planning Director
Bolton	Jennifer Atwood Burney	Town Planner
Boxborough	Elizabeth Hughes	Town Planner
Carlisle	George Mansfield	Planning Administrator
Concord	Marcia Rasmussen	Director of Planning and Land Management
	Jennifer Burke	Planning Director
Hudson	Michelle Ciccolo	Director of Community Development
	Jeanette Rebecchi	Transportation Services Coordinator
Lexington	David Kucharsky	Town Planner
	Chris Reilly	Town Planner
Lincoln	Chris Reilly	Town Planner
Littleton	Keith Bergman	Town Administrator and Current MAGIC Chair
Maynard	Michael Sullivan	Town Administrator
Stow	Karen Kelleher	Town Planner
Sudbury	Jody Kablack	Director of Planning and Community Development

Figure 1.1: Study Area Towns and Regional Transit Authority Affiliations



## Chapter 2: Council on Aging Services

When looking at existing transportation services across all thirteen study area communities one thing remains consistent: each community operates a Council on Aging department and provides some form of transportation for seniors and the disabled. The level of service provided by each community varies based on town budgets, the number of vehicles available, the number of staff, the hours of operation, and the destinations served. The creation of a shared-service model, where Council on Aging transportation services and resources are shared across multiple municipalities, could provide better transportation services to those populations that most need it.

MAPC worked closely with Council on Aging (COA) Directors from each of the thirteen municipalities to identify opportunities and challenges with the current parochial model of COA services compared to opportunities and challenges of a shared-service model. MAPC also worked with COA Directors to compile a comprehensive set of data to inventory the current resources available to each COA, the costs, number of rides provided, and the destinations each COA serves.

The following sections of the report highlight key points noted by COA Directors regarding current and future service models, results of the data collection effort, and provide a potential series of next steps and decision points for creating a shared-service model for COAs in the study area.

### Existing vs. Shared-Service Models

In April 2012, MAPC hosted a discussion forum in Concord, Massachusetts and invited the Council on Aging Directors from the study area towns to share information about the benefits and challenges with existing service models for senior transportation compared to those of a shared-service model. Ten COA Directors attended the forum and MAPC staff followed up with the others who were unable to attend the meeting. Table 2.1 shows the study area municipalities and their COA Directors that MAPC worked with during this portion of the study.

The current COA transportation service model revolves around the local COA office providing all services related to transportation which includes coordination, scheduling, dispatching, driving, maintenance, program development, etc. These tasks are occurring at varying degrees across all thirteen municipalities and in many cases the level of service varies greatly depending on the size and budget of the municipal COA. As town residents continue to strive to age in place, the need for quality transportation options is growing and will continue to grow significantly as baby boomers retire and eventually lose the ability to drive. Seniors will be looking for alternative ways to remain mobile such as walking, biking, and public transportation. In our discussions with COA Directors, a number of themes emerged under four discussion areas. The following information is a summary of the key themes. More detailed notes from the April meeting can be found in the report's appendix.

Table 2.1: COA Directors by Town

Municipality	COA Director
Acton	Sharon Mercurio
Bedford	Lori Wittner
Bolton	Sheila Chmielowski
Boxborough	Laura Arsenault
Carlisle	Debbie Farrell
Concord	Ginger Quarles
Hudson	Janice Long
Lexington	Charlotte Rodgers
Lincoln	Carolyn Bottum
Littleton	Janice Nowicki
Maynard	Marcia Curren
Stow	Alyson Toole
Sudbury	Deborah Galloway

### Benefits of the Current COA Service Model

The first topic area of discussion was the benefits provided to riders under the current COA transportation service model. Several themes emerged as directors discussed the benefits of their systems:

- **High-Quality Local Service** - The current local service provides direct door-to-door access for seniors and the disabled which is easier for them to navigate compared to traditional public transportation. Current services provide riders with short wait times and a flexible travel schedule at a relatively low-cost to the rider.

- Social Service - COA transportation services not only act as a mobility option for seniors, but it is also a way for dispatchers and drivers to check in on regular customers. Seniors can be isolated in their homes without connection to friends and family. COA staff use the transportation service as a way to check in on their clients and report health issues or a loss of faculties to family members. The transportation service also provides seniors with social interaction, either through attending a COA program or event or just talking with the driver/dispatcher.
- Lack of Options - In many communities in the study area, the COA service is the only available option for seniors who can no longer drive.

#### Challenges of the Current COA Service Model

The second topic area of discussion was the challenges of providing the senior transportation services. Several themes emerged as directors discussed these challenges:

- Costs and Funding - As was mentioned earlier in this chapter, the aging population in many communities is growing significantly creating a larger need for senior services. This growing need is putting a strain on COA budgets that have to do more with level, or sometimes shrinking funding sources. The growing demand for senior transportation services is a continuing challenge that will become increasingly more difficult in the future.

In addition to more people requesting transportation through the COAs, costs of providing the service are also rising. Fuel prices have increased significantly over the last few years and are not projected to decrease in the future. These increased fuel prices take money from the COA budget that was being used for other line items. While costs are increasing, town funding is not meeting demand.

- Trips and Dispatching - Many of the Directors noted the difficulty in scheduling long trips for medical appointments, shopping or entertainment (*in particular trips to Boston*) because it reduces their ability to make shorter in-town trips. Some COAs only have access

to one vehicle, and if that vehicle makes a longer trip to Boston it is not available for the shorter trips in-town or to surrounding towns.

Another issue noted with the current system is the limited operating and dispatching hours supportable by current COA budgets. Some communities can only afford to dispatch for a few hours a day because the staff handling dispatching are also responsible for other tasks. In some cases, the drivers are doing the dispatching in the early morning and driving during the day. The lack of sufficient dispatching hours causes trips to be turned down which impacts resident's quality of life and potential revenues.

#### Benefits of a Shared-Service Model

The third topic area focused on the potential benefits that could result from moving away from the traditional model of COA transportation services and toward a shared-service model. Several themes emerged as directors discussed the potential benefits:

- Added Service - The shared-service model would enable multiple COAs across the study area to share a pool of vans, drivers, and dispatchers which could help balance the demand for the in-town trips and the longer out-of-town trips to places like Burlington and Boston. Currently, many COAs are unable to make longer trips due to limited van availability and limited driver availability. By pooling resources, more vans and drivers would be available for a broader range of trips. Communities with limited dispatching would be able to pool dispatchers to cover more hours than are currently available to most towns.

The sharing of dispatchers and vans could also result in a more consistent schedule with regular destinations served on a set schedule during the week and "floater" vans available for longer trips and/or emergency medical trips. The sharing of services could also help alleviate some of the pressure on The RIDE by serving more seniors and disabled individuals in the study area towns receiving RIDE service.

- Reduced Isolation - With the possible added destinations and

availability of vans, there would be more transportation options for seniors thereby reducing isolation. As mentioned earlier, this was one of the benefits of the current COA service model and it could be further enhanced through a shared-service model.

#### Challenges of a Shared-Service Model

The final topic area was a discussion of the potential challenges of a shared-service model. The following challenges were discussed:

- Costs and Funding - It could be challenging to create an agreement among the participating towns with respect to cost and revenue sharing. Towns with higher quality service would not want to see a degradation in service at the expense of raising service for other towns. It could be a challenge balancing the needs of large and small towns.
- Local Knowledge - Directors noted that the current drivers and dispatchers have local knowledge of travel routes and schedules in their town and under a shared-service model the drivers and dispatchers may not have intimate knowledge of the local transportation network. It was also noted that the drivers and dispatchers know their clients and are able to keep tabs on their health and faculties over time, something that could also be lost under a shared-services model.

Overall, the discussion with COA Directors throughout the study area resulted in an identification of some very important benefits and challenges with both types of transportation models. Directors voiced the current and future challenges with providing both social and mobility services for a growing population on a limited budget, and at the same time recognize that potential benefits do exist if towns changed course and switched to a regional model for delivering this critical service.

#### **Council on Aging Data Collection Effort**

As a follow-on activity to the broader COA Director discussion, MAPC also undertook a data collection effort to better understand the variability of COA transportation services among the thirteen communities. Data was collected on the following topic areas:

- Vehicles
- Dispatching
- Drivers
- Ridership and Trip Information
- Costs for Service

One of the challenges of moving to a shared-service model is creating agreements on levels of service, cost and revenue sharing, vehicle sharing and maintenance, pay levels, etc. This data collection effort looks at the variety of policies, costs, and levels of service across the study area COAs to try to better understand how diverse are the differences and how could communities benefit by sharing transportation services.

#### COA Vehicle Inventory

MAPC collected data from each COA on the number of vehicles available, the type of vehicle, mileage, fuel efficiency, and whether they were ADA accessible or not. At the time of the survey there were 24 vehicles available for service across the 13 towns. Most towns have access to one or two vehicles for transport, but some have access to three to four vehicles allowing for higher service delivery. The average age of the vehicles is around 6-7 years, with an average mileage of 88,421. The current vehicles also average around 9 miles per gallon for fuel efficiency.

The COA Directors were also asked a question in the data collection survey about the adequacy of their current vehicle fleet. Seven Directors noted they would like to have more vehicles or vehicles of a different size, while six noted they were satisfied with their current vehicles and did not need any additional vehicles. The Directors who noted they would like access to additional vehicles were mostly interested in obtaining smaller vehicles that would accommodate between 6 - 9 passengers. The smaller vehicles tend to be more fuel efficient when compared to the larger 12 - 20 passenger vans and could be used for shorter single trips to nearby locations or for longer trips that may have fewer passengers to locations in Boston, Burlington, etc.

COA Dispatching Inventory

Dispatchers serve two very important functions as part of the overall COA transportation service. First, dispatchers are at the front lines of communication with seniors and the disabled providing them with information about how the system works and how to go about scheduling a ride. Secondly, dispatchers are the ones who actually schedule the rides during the course of a day or a week and align trips to reduce redundancy and overlap as much as possible. Dispatchers also serve in a social role by interacting with clients and forming relationships which can be used as a way to check in on the health of clients.

Looking across the survey results for the thirteen towns, there was quite a bit of variability with how dispatching was handled and the policies for hours, pay rates, who actually does the dispatching, and the ride reservation policy. Among the thirteen towns surveyed, there were 18 dispatchers working in both full-time and part-time roles with 12 being paid and 6 being volunteer. The volunteer dispatchers were typically used as back-ups to the full-time dispatchers, but in some towns the volunteers filled as much as half of the dispatching hours for the week. Variability also exists among what staff member actually handles the dispatching for the COA. Towns are finding ways to use both dedicated COA dispatchers, as well as other staff to handle dispatching duties. Table 2.2 shows the various ways towns are dealing with staffing dispatch.

Hourly pay for COA dispatching was spread across a number of ranges. Four towns paid between \$10-\$15 an hour, another four towns paid between \$15-\$20, and three towns paid between \$20-\$25 an hour for their dispatchers.

Some of the higher pay rates are linked to the person who is doing the dispatching. In cases where a director, assistant director, or administrative staff are dispatching, the pay rates tended to be higher. The towns who used dedicated dispatch staff, hourly rates tended to be lower. These differences are important to understand if towns begin discussing a move to shared resources. A common pay rate would likely need to be established for dispatchers.

Table 2.2 - Dispatch Personnel

Who Dispatches	No. of Responses
Director/Asst. Director	2
Driver	2
Separate Dispatcher	5
Secretary/Admin Assistant	2
Third Party ( <i>Taxi Company</i> )	1
Office Staff	2

Figure 2.2: Vehicle Availability



Figure 2.3: Dispatcher Information

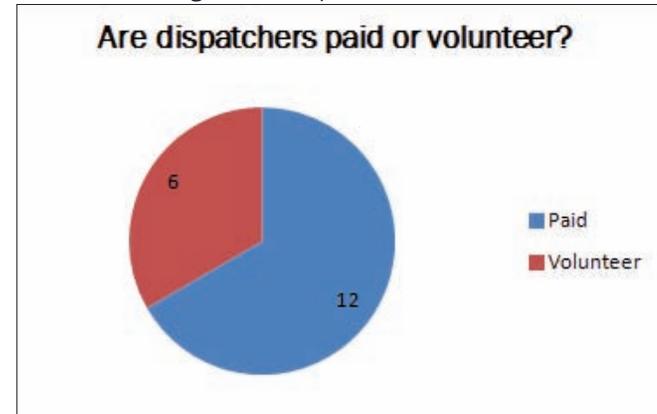
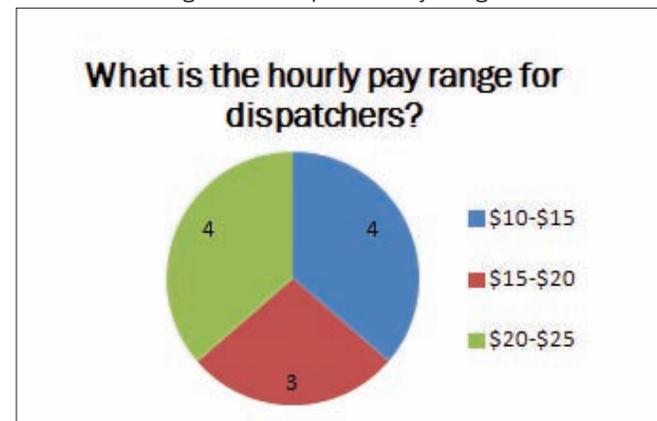
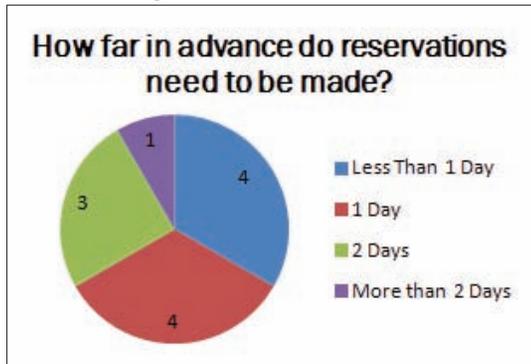


Figure 2.4: Dispatcher Pay Range



The varying degree of both vehicle availability and dispatching hours/staffing create situations in some towns where COA clients must call at least 24-48 hours in advance to schedule a ride. Due to demand, length of trip, vehicle size, etc., some clients are turned away for rides if they do not call ahead. This is limiting to the clients who rely on this transportation service and limiting to the COA who is losing out on potential fare revenue. Of the thirteen towns in the study area, four require less than 24 hours notice, four require 24 hours notice, 3 require 48 hours notice, and one requires more than 48 hours notice. During our discussions with COA Directors, many noted that they try to accommodate ride requests even if the client calls with shorter notice than what is required.

Figure 2.5: Advance Notice



Dispatching hours also vary across the study area towns. Most towns begin dispatching services at either 8AM or 9AM and operate until 3PM or 4PM. Some COAs with smaller staff and budgets only dispatch from 9AM to 1PM or 2PM. The inability of towns to staff dispatchers during the entire course of a day limits opportunities to schedule rides on shorter notice and leads to requirements of 24 or 48 hours notice for scheduling rides.

COA Driver Inventory

Similar to dispatchers, drivers also play a dual role for the COA services. Drivers are responsible for picking up and dropping off clients during operating hours, but also check in with clients during the ride and can report back to the COA Director if there noticeable changes in health or faculties of clients. This can be an important, and often overlooked benefit of the COA transportation service especially for seniors who are isolated and not in close proximity to friends or family members.

Among the thirteen municipalities there are 73 drivers available to be scheduled for COA transportation services. In most towns, there are one or two full-time permanent drivers who handle most of the hours during a typical work week. In the event the normal drivers are sick or on vacation, each town has back up part-time paid or volunteer drivers that can step in to fill the void in the schedule.

Figure 2.6: Hourly Pay for Drivers



Of the thirteen towns, eleven only have paid drivers. The two exceptions are Lincoln and Littleton. In Lincoln, COA services are handled through a combination of a taxi program and a volunteer driver program which currently has 30

drivers on call. Littleton uses volunteer drivers and has three part time volunteers who fill in as needed.

Pay ranges for drivers across the towns vary similar to dispatcher pay ranges. Six towns noted they pay drivers at an hourly rate of between \$10 and \$15 dollars/hour and eight towns noted they pay drivers between \$15 and \$25 dollars/hour. Some towns selected more than one pay range because their full-time drivers make more per hour than their part-time drivers.

Operating hours for drivers are similar to dispatching hours in most towns. Many towns begin their routes between 8AM and 9AM and conclude their final rides of the day between 3:30PM and 4:30PM. The hours for drivers seem to be less of a limiting factor for providing rides than dispatch hours and the number of vehicles available. Towns seem to have enough drivers to make trips during the day, but run into capacity issues when they have to dedicate their vehicles to longer trips at the expense of shorter in-town trips.

MAPC also asked two follow-up questions about driver/dispatcher communication. The first question asked specifically how drivers were communicated with during the day to receive information about ride scheduling and pick-up/drop-off locations. Eleven towns responded that they communicate with drivers through cell phones, two towns communicate using a two-way radio, and one town (Bedford) uses both cell phones and two-way radios to communicate with drivers. Some towns also noted that they communicate face to face in the office and some use e-mail.

The second question MAPC asked about communication was: Would a GPS unit in your vehicles be helpful for drivers? This question was answered almost 50/50 yes and no by the eleven towns who chose to answer. Six towns noted they would find a GPS unit helpful for drivers, and five towns noted they would not find it helpful. The towns that answered no also added reasons such as: drivers know the local roads, shortcuts and detours; the GPS unit could be a distraction to the driver; and our local routing system works well. The towns who answered yes to this question noted reasons like: the GPS units can be helpful for drivers who are new to the area and part-time drivers who are not as familiar with the roadway network; GPS units could be used as part of a flexed-route system or could be programmed to help drivers deviate from their routes to pick up other passengers along the way; units could help drivers become more efficient and help identify shortcuts.

COA Ridership

MAPC requested ridership data and asked the COA Directors about the busiest times of service during a typical weekday. Eleven of the thirteen towns provided us with ridership data. Two of the eleven (Lexington and Bedford) provide COA services through their suburban carrier programs which are not restricted to seniors or the disabled, but Lexington does break out senior trips from all other trips. Bedford’s trips were not broken out and were not counted in the ridership totals. The remaining ten towns have a combined average monthly ridership of about 4,800 single trips. If Bedford were included the combined monthly average would increase to about 5,500 single trips, but it is not possible to tell which trips were made by seniors or the disabled as part of their transit program.

COA Directors also noted in the survey the busiest times of the day for trips by their riders. Most noted that the hours of 9AM - 11AM are busiest, followed by 1PM - 3PM and then 11AM - 1PM. These results correspond with trips occurring at the beginning and end of the COA service hours.

Figure 2.7: Driver Communication

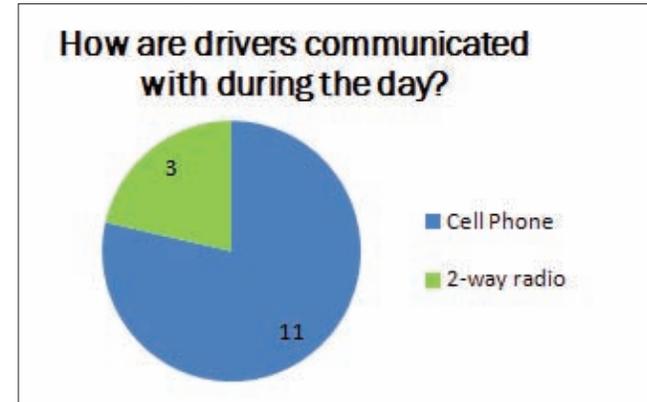


Figure 2.8: GPS Information

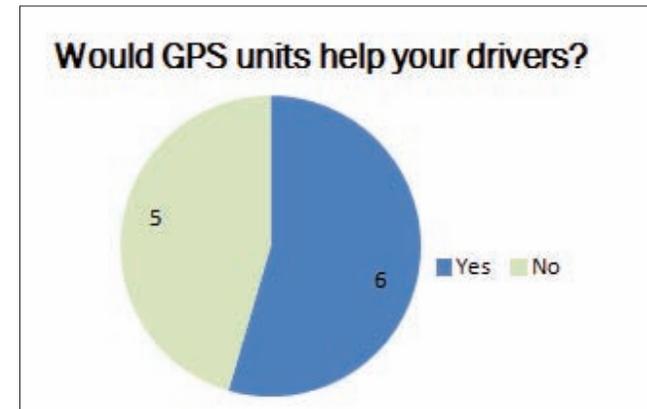
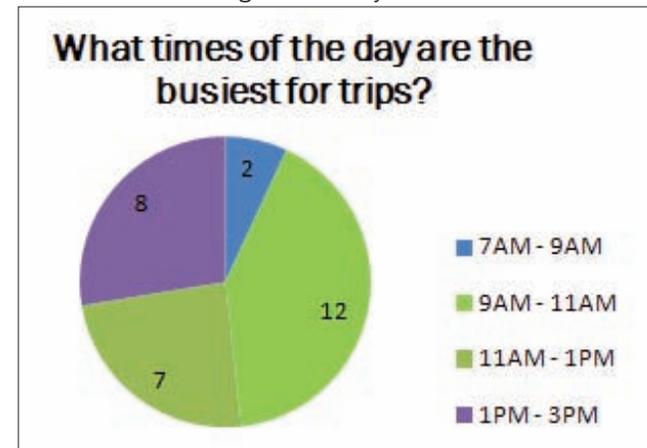


Figure 2.9: Busy Times



Along with ridership and busy times of the day, MAPC also asked about travel restrictions on COA vehicles. Policies for who can ride these vehicles vary slightly from agency to agency, but overall use was restricted to seniors over the age of 60 and disabled individuals. Most of the vehicles are ADA accessible and can accommodate wheelchairs and other apparatus. Lexington and Bedford do not have any travel restrictions on their service because their COA transportation is provided through their suburban carrier program and is open to all. Littleton is the only strictly COA service that does not have any travel restrictions.

Trip Origins and Travel Destinations

The existing Council on Aging transportation services are able to serve a wide variety of origins and destinations both within their own town boundaries, within the MAGIC subregion, and to destinations outside the subregion. Even though COAs are making many trips available to their clients, there are still some destinations that can't be served based on distance, time and cost. MAPC asked each COA Director to list the top destinations they currently serve and any destinations they wish they could serve but are currently unable to do so. Table 2.3 shows destinations listed by COA Directors for those they serve and those they wish they could serve for their clients.

MAPC created a matrix for each COA showing the top ten most common destinations served, and destinations noted by COAs as ones they wish they could serve given more resources. The left side of the table shows the destinations with the most overlap across all 13 COAs. The right side of the table lists destinations that some COAs cannot currently serve, but would if resources were available. Not surprisingly, there are destinations currently being served by some COAs that are on the wish list of other COAs showing that a shared-service model could help COAs serve more common destinations. This also corresponds to what MAPC heard from Directors during the discussion forum in April, where it was noted one of the potential benefits of a shared-service model would be the ability to serve more destinations if vehicles and drivers were shared among towns.

Figure 2.1 shows the location of the destinations currently served by

MAGIC Councils on Aging. The size of the dot indicates the number of times that destination was mentioned as being served by the COAs. The larger the dot, the more COAs that serve that destination. A majority of the destinations served by COAs are centrally located within the subregion, namely in the towns of Acton and Concord. This corresponds to many of the popular medical offices and Emerson Hospital, and also shows that there is significant overlap in the number of COA trips coming in and out of this area.

Figure 2.10: Travel Restrictions



Table 2.3 - Destinations List

Destinations Served by the Highest Number of COAs	Destinations Not Currently Served by Many COAs
57 ORNAC Medical Offices	Beth Israel Hospital
Emerson Hospital	Brigham and Women's Hospital
Acton Medical Associates Offices	Other Boston Hospitals
Beth Israel Hospital	Lahey Clinic
Brigham and Women's Hospital	Framingham Hospital
Concord Hillside Medical Associates	Framingham Shopping Destinations
Acton CVS	Bedford VA Hospital
Lahey Clinic	
Mass General Hospital	



## Chapter 3: Shared-Services Model

In addition to the data collection effort, MAPC was asked to develop a preliminary set of recommendations for how a shared-service model for Councils on Aging could be implemented in the MAGIC subregion. Shared-service models have been coordinated in other parts of the United States and also in some communities in Massachusetts. These models are often implemented in more rural areas where populations are small, vehicle availability is limited and destinations for clients have significant overlap. Sharing services can be accomplished by using several different methods of coordination such as (but not limited to):

- Hiring a third-party transportation contractor to run the transportation service (dispatching and driving).
- Having one town provide the transportation services for a number of towns. This could work in the case where one town or city has the capacity to provide services and contract with other towns.
- Creating a consortium of towns that share services through a common municipal agreement. This could include sharing dispatch, drivers and vehicles.

Currently, the towns of Acton, Boxborough, Littleton, Maynard, and Stow are working on the creation of a 5-town shared-service model that organizes Council on Aging, private business shuttles, and town-funded shuttles under a common municipal agreement for sharing vehicles, drivers and creating a common dispatch. This chapter will outline some preliminary recommendations for the remaining eight towns and how they can be organized under a similar system.

### Steering Committee Structure

The first step in creating a shared-service system and agreement is to create a steering committee made up of town managers/administrators and possibly the Chair of the Board of Selectmen. The Steering Committee would act as the implementation body for the new system and each individual would be representing their town and be able to serve on the committee with some level of authority and decision making ability. The Steering Committee would be responsible for the following initial tasks:

- Determine the initial groupings of towns that would work together on regionalizing their services
- Create a time line, work plan and phasing plan for implementation
- Hold discussions with COA Directors, local transportation staff and Boards of Selectmen to get buy-in and assistance with implementation
- Identify and discuss the potential challenges and solutions for regionalizing these services

### Start Small - Breaking Down the Subregion

The thirteen town subregion spans from Route 128 to Interstate 495 creating a large distance for shared vehicles to have to travel if all thirteen towns are part of the same shared-service agreement. There is a desire to keep COA van trips to between 20-30 minutes based on the clients using the service and their ability to handle trips longer than 30 minutes. Considering the limitations of time and distance, breaking down the subregion into three smaller parts for service provision is a potential solution to these issues. Creating smaller subdistricts for service may also make it easier to come to agreement on issues and final decisions.

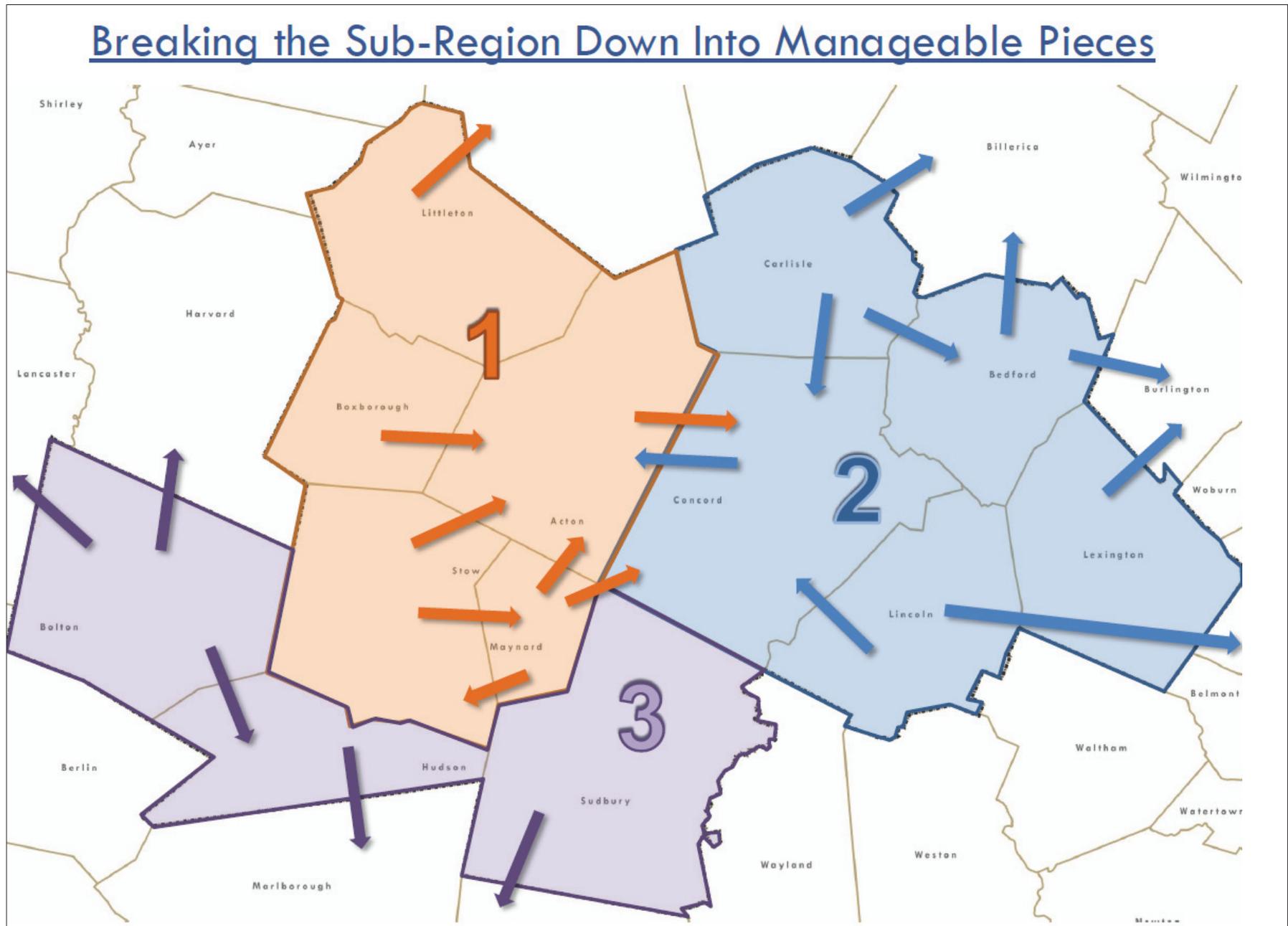
Figure 3.1 shows an example of how the 13 town subregion could be broken down into three subdistricts for sharing services. The colored arrows show the direction many trips are taking from each town to adjacent towns. These subdistricts are based on the fact that many trips in the subregion are being made to and from adjacent towns and many redundant trips are being made to common destinations in neighboring towns. For instance, the towns of Acton and Maynard have common trip destinations in Concord therefore these adjacent towns could be sharing rides and vehicles. If Acton and Maynard are sharing a vehicle to cover shared trips into Concord, it frees up other vehicles in town to make other trips inside and outside the subregion.

In order to determine if these subdistrict groupings of towns are the right ones, additional data collection and analysis needs to be completed.

These steps include:

- Discuss initial groupings of towns with COA Directors to see if town groupings match trips patterns

Figure 3.1: Example of Smaller Subdistricts for Shared-Services



- Utilize GPS technology on board vehicles to collect information on origins, destinations and travel routes for trips
- Determine what redundancies exist among the trip origins, destinations and travel routes to make recommendations on how to best regionalize services within each subdistrict
- Use GPS data to look across all thirteen towns to determine if the groupings for subdistricts are correct
- Develop a common schedule and routes for short and long distance trips to be rolled out with the new shared-service model

### Create an Intergovernmental Agreement

After the data collection and subdistrict groupings are determined, an intergovernmental agreement (IGA) will need to be drafted and signed by each town to govern the shared-service within each subdistrict. The Steering Committee will be responsible for outlining the content in the IGA and determining the best format for regionalizing services. The IGA could establish something as loose as a basic association for transportation or something as formal as a regional transit authority. MAPC would recommend an association that has looser restrictions and can be flexible so it can be adjusted over time as the configuration of routes, times, and services becomes more well defined.

As towns begin to organize and form subdistricts for coordination, there is the potential for creating two IGAs for governing the sharing of these transportation services. The first IGA would cover the subdistrict sharing of vehicles, drivers, costs, etc. while a second IGA could cover a regional dispatch service that all towns could tap into. Subdistricts will be necessary to keep trip lengths and coordination manageable, but a regional dispatch could easily be coordinated across all thirteen towns. A larger regional dispatch would also help keep consistent dispatch hours and protocols for clients calling in for rides.

As IGAs are being worked out among the towns, the following issues need to be considered while creating the agreements:

- Costs - Several issues exist with the cost structure of sharing services which include how revenues vs. costs will be shared

among participating towns, how the varying pay scales will be handled as drivers and dispatchers become part of a regional system, and how RTA reimbursements will be handled as part of a regional system.

- Quality of Service - Service is likely to improve for some towns under a regional system and could be reduced for other towns. The IGA will need to address this in some form.
- RTA Boundaries - Subdistrict boundaries for the shared-service model may span across RTAs. Towns will have to work with their RTAs to determine whether passengers can be picked up and dropped off within another RTA's boundaries.
- Vehicle Storage - The IGA should outline where the shared vehicles are stored, where they are refueled, and where they are taken for maintenance. The IGA should also outline how those costs are shared.
- Dispatch and Operations - The IGA should create policy for common dispatching hours and hours of operation for the drivers since these hours currently vary across towns.
- Dispatch Office and Staff - The shared dispatch office will need to be housed in a single location and staffed by a single dispatching staff. The IGA should describe where the office will be located and how it will be staffed.
- Purchases - The IGA should outline the process for making purchases such as new equipment, supplies and software and how those costs are shared.
- Service Restrictions - The IGA needs to explain what travel restrictions (if any) will be placed on the shared-service vehicles. Currently most are limited to those over 60 years of age and the disabled. The IGA should determine if these restrictions will be used or if there will be looser or stricter regulations.

## Create the Regional Dispatch Center

After the development and signing of the intergovernmental agreement, the next step should be the establishment of the regional dispatch center. The dispatch center will begin to create consistency for dispatch protocol and hours which clients can begin getting used to before major changes occur with the driving services. Along with the establishment of the regional dispatch center, staff will need to be hired on and trained. Some full-time dispatchers will be needed to cover the regular weekday work hours, and some back-up dispatchers will also be needed to cover sick days or vacation days of the full-time employees. It may also be beneficial to have a full-time mobility manager/coordinator to oversee the dispatch center and to handle any issues that may come up with clients or the municipalities. To aid with dispatching, computerized software is available to help dispatchers coordinate rides across all thirteen municipalities.

This new dispatching service will need to be marketed heavily to existing and new clients to ensure they are calling the correct number and also understand the change in dispatching hours/policies. It would also be beneficial to create some overlap between existing dispatch centers going offline and the new regional dispatch center coming online. This would allow for some transition time between the new and old systems.

## Introduce New Routes, Destinations, Operating Hours

Near or at the same time as the implementation of regional dispatch, heavy marketing should occur to phase in the new routes, destinations and operating hours for the shared vehicles and services. A website should be created outlining the changes in service and promoting the new shared-service model. Paper maps and schedules should be developed and placed at locations where clients are likely to access them. If possible, the new routes and service model should also have some overlap with the existing system so that clients can slowly transition to the new services. It may be possible to create a phasing plan that allows for some existing service trips to be maintained in the short-term while bringing on some of the new services on set days of the week.

## Monitor and Adjust

Service providers and the Steering Committee should meet regularly during the initial phases of the new service to monitor and potentially make adjustments. It is likely that some routes and destinations will need to be adjusted with times of the day or days of the week. If changes do take place, it is critical that they are phased in over a period of time to give the clients appropriate time to adjust.

## Short-Term Ideas for Regionalizing

If the initial idea of regionalizing transportation services is too big of an idea for towns to undertake, there are smaller regionalization efforts that can begin to form the basis of inter-municipal cooperation. Two ideas related to shared resources and purchasing that could be implemented quickly are:

- All thirteen municipalities are purchasing fuel for their transportation vehicles. Some get fuel through their town fuel depot and some get fuel at gas stations. Under Massachusetts law, towns can jointly procure fuel at bulk rates which tend to be cheaper than purchasing fuel from a gas station. This could save MAGIC municipalities money if a purchasing group was created for this purpose.
- Ten of the thirteen COAs use cell phones to communicate with drivers during the day. Under Massachusetts law, joint procurement of cell phone contracts is also allowed. MAGIC towns could come together and cooperatively purchase cell phone contracts to potentially save money.

Finally, one interim step in creating a regional transportation entity (outside of a shared-service model) would be the creation of a Transportation Management Association (TMA). TMAs are usually marketed to private sector companies to transport employees to and from transit or park-and-ride lots. TMAs are typically privately funded by the employers utilizing their services, but are also open to towns becoming members extending benefits to town employees. The TMA would provide transportation services at a reasonable annual cost to members and could help establish the first step in regional coordination in the subregion.

## Conclusion

The results of both the Council on Aging Director's discussion forum and MAPC's data collection effort show preliminarily that there are clear opportunities for creating a shared-service model in the MAGIC subregion. There are varying degrees of service (both dispatching and operating hours) that could be improved by providing more vehicles and a dedicated dispatching staff to clients five days a week. The ability to access more vehicles on a daily basis would also allow COAs to serve more clients and a larger variety of locations compared to their current service area.

The sharing of these transportation services will not come about without addressing some of the key challenges such as costs and revenue sharing, pay rates, hours of operation, vehicle sharing and maintenance, and creating common policies for service restrictions. These issues however should not be seen as a major deterrent to setting up a Steering Committee and beginning to explore the feasibility of creating subdistricts where shared services could become a reality.

The Council on Aging offices across these thirteen towns provide a very important social service to seniors and disabled individuals. In many cases, the COA transportation service is the only service available to these populations to get to medical appointments, social gatherings and shopping centers. Many people rely on this service and finding ways to improve the service area, destinations served and the efficiency of the service would help to improve the quality of life of many people across the subregion.

## Appendix

### Council on Aging Director's Meeting Notes - April 27, 2012

#### Benefits of Current COA Transportation Services

- Provides the ability to check in and check on elderly clients who use the service regularly, also allows COA staff to contact family members if health or faculties are degenerating
- COA transportation services are the only transportation service available in many communities to elderly citizens without a license or those who can no longer drive
- Provides door to door service, seniors don't have to wait at a bus stop or train station
- Provides services for families who are caregivers to seniors and might not be home during the day to drive their parents or grandparents to appointments
- Provides social contact for seniors who may otherwise have none, drivers and dispatchers are able to interact with the users of the service
- Provides a short ride structure, typically users are on the van or bus for less than 30 minutes. This is good for older users who may not be able to sit on a bus for more than 20-30 minutes at a time.
- Provides a short wait time and a flexible schedule
- Service is economical and efficient for seniors, it's a lower cost option compared to taxis, car service, MBTA, The RIDE
- Dispatchers have local knowledge of the roadway systems in the area, what construction is going on, what times of day or routes have traffic, best ways to get around the town
- Provides an easy and inexpensive way to get to medical appointments, social functions, recreation, entertainment, shopping, etc.
- Provides a way to connect seniors to resources in other towns (Carlisle has very few destinations inside the town for seniors, most trips go out of town)
- Service reduces isolation of seniors in some parts of town
- Service is also used to get seniors out to civic opportunities (i.e., town meeting, voting, town boards, committees, etc.)

#### Challenges of Current COA Transportation Services

- Insufficient town funding to run the transportation services
- Growing demand for the services
- Elderly population is increasing, more people are in need of these services
  - Seniors are not driving as much (inability to drive, can't afford it, or don't have a license)
  - Some towns utilize paid drivers and some use volunteers, there is also inconsistencies among what the paid drivers are paid across towns
- It's challenging to get into Boston from the MAGIC sub-region for medical and cultural trips
  - Long travel time for seniors, parking is very expensive, difficult to find parking/height of the van prohibits parking in many of the downtown garages.
- Gas prices are increasing putting strain on the COA budget
- Among the municipalities, some are served by RTAs and some are not. The ones that are served by RTAs are often served by different RTAs than their neighboring municipality.
- Some communities could use smaller vans instead of running larger vehicles for only one or two people. This could help cut fuel costs.
- Some communities also serve disabled populations with their vans, and in some cases COA transportation is the only transportation available to this population. In these cases, this adds more trips and demand to an already thinly-stretched service provider.
- Maintenance costs and consistency across municipalities is an issue, some use DPWs, some have the RTAs take care of maintenance, others use local auto body shops.
- COAs that only have one vehicle do not have a back-up option if it breaks down, especially if it happens en route to a destination with seniors on board.
- The current lengths of trips on The Ride are too long for seniors to sit for. The RIDE serves multiple people and multiple destinations and can take a long time for riders.
- Oftentimes, when the COA van is picking someone up or dropping someone off seniors who haven't scheduled a ride try to get on the van to go to a destination or back home. This can

- impact the schedule of the van, and sometimes drivers have to turn down the request.
- Dispatchers/drivers try to avoid unplanned trips (i.e., a rider going home after a medical appointment and needs to stop at the pharmacy to pick up a prescription). COA dispatchers try to ask ahead of time if an additional stop is requested, but sometimes the rider doesn't know or isn't aware the stop is needed. Need to find a way to build in these types of trips.
- Issue of having someone call up at the last minute in need of an emergency trip (dentist, doctor, etc.) How to fill those trip requests?
  - New users of the service can take time to get used to it, is there a way to speed this process up or make it easier for both the user and service provider?

#### Benefits of Potential Shared-Service Model for COA Transportation Services

- Could have the ability to provide regular routes and scheduled pick-up times along routes that people can depend on instead of the call-in and schedule system (this is still needed, but regular routes could be beneficial). Regular trips could include trips to the pharmacy, grocery store, commercial areas, parks/recreation, etc.
- Could have the ability to schedule regular trips to specific destinations every week if more vehicles were available to make said trips. There could be regular trips to medical facilities (Emerson or Lahey), and regular trips to grocery stores/commercial areas.
- Shared-services could provide "floater" vans which would be available in case a van breaks down, if there's an emergency trip, or just spare vans to make longer trips that some municipalities can't currently make.
- In many communities, there wouldn't be a qualification to use the service like there is with The RIDE. This is a benefit to many seniors and the disabled in the MAGIC area.
- More trips could mean more opportunities to reduce the isolation of seniors and bring more socialization to their day.
- The potential for cost savings by sharing vans, maintenance, and rides.

- Some communities feel that a shared dispatcher would be helpful, there could be more staff availability for other COA tasks and the dispatch office could be open more hours to schedule more rides.
- Shared dispatching could provide continuity to the service.
  - Currently, some municipalities have many different part time dispatchers and it can be difficult to manage the scheduling. Some municipalities only have one or two dispatchers and if they are sick or have an emergency it's difficult to fill that spot on short notice.
- Opportunity for inter-generational travel – seniors who are caregivers to children/grandchildren often can't use the COA van service. This could be an opportunity to serve more people under a different direction.

#### Challenges of Potential Shared-Services Model for COA Transportation Services

- Local dispatchers and drivers have strong local knowledge of the roadways, construction areas and traffic patterns in their town. This could be lost or take time to gain with a shared-service system.
- Local drivers know their riders and have established a rapport with them. Riders feel comfortable with the drivers that they know, they like to talk to them, and they know their intricacies.
  - This rapport also allows drivers to report back to COA staff about the health and faculties of the riders, if they are declining, families/friends can be contacted.
- Could be difficult to create a common policies among so many different municipalities
  - Dispatch hours, cut-off times for making appointments, driving hours, volunteer vs. paid drivers, creation of a cost-sharing model, consistent maintenance, RTA vs. Non-RTA communities etc.
- The service should prioritize medical, social, recreational, and grocery trips over others
- If the service serves destinations across the sub-region, the trip times could exceed what COA's think is a comfortable travel time for seniors (over 30 min.).
- Concerned about the potential loss of jobs/drivers with

consolidating COA services

- There could be an unbalanced share of rides put on some COAs based on their location (Carlisle may not have as many trips as Concord), and how is that handled under a shared agreement?
- The cost of current services differs greatly among municipalities, some pay very little for the service and some pay a lot. How would that be balanced in a shared system?
- How would billing and reimbursements for services be handled in a shared system?
- Could be a challenge to balance the needs of small and large communities with a shared system.