

**THE COMMONWEALTH OF MASSACHUSETTS**

**SPECIAL COMMISSION ON RURAL ACCESS AND IMPROVING  
STATE-SPONSORED SERVICES IN MASSACHUSETTS RURAL  
COMMUNITIES**

**REPORT TO THE GREAT AND GENERAL COURT AND  
EXECUTIVE OFFICE OF THE GOVERNOR**

**AUGUST 2013**

**EXECUTIVE OFFICE OF HEALTH AND HUMAN SERVICES**



Rural  
Access  
Commission





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## SECTION 1: EXECUTIVE SUMMARY

### BACKGROUND

The Patrick Administration and the legislature, under Section 203 of FY13 GAA, commissioned the Rural Access Commission to address the distinct needs of rural communities and to uphold the Commonwealth's commitment to supporting the success of every individual and family in the state.

Massachusetts has a substantial number of rural communities located mainly in the central, western and the coastal areas of the southeastern part of the state. Residents living in rural areas contend with many of the same issues as do individuals and families living in non-rural areas of the state, however, there are several issues unique to rural residents, especially those living in poverty, that require a very different response from local, state, and federal governments than non-rural residents. Rural isolation has significant impacts on the quality of life of rural residents. Social and geographic isolation of rural areas present a variety of challenges to their residents, especially as it relates to accessing state-sponsored services and the overall deliver of social services. For example, broadband services and public transportation are particularly limited in geographically isolated areas impacting the accessibility of services. The effectiveness of service delivery is often measured by client volume and as a result non-rural areas tend to receive more focus because of their higher population density. The higher per person costs of infrastructure development due to low population density within rural communities also plays a role in policymaking and economic growth in rural areas. Addressing issues and leveraging opportunities related to workforce planning, infrastructure development, and access to

state agencies, will greatly improve the quality of life for rural residents.

### GOALS FOR "RURAL" MASSACHUSETTS

The Rural Access Commission has identified and constructed goals for the commission to guide its study and the recommendations set forth in this report. The goals of the commission's recommendations intend to:

- Strengthen the overall infrastructure of the service delivery system in rural areas;
- Engage and support rural service providers through improved policy and planning on rural services delivery;
- Align access policies across state agencies;
- Support workforce planning;
- Improve access to services and improve service coordination;
- Support improvements to information availability;
- Strengthen the state's options for responding to housing issues and homelessness; and
- Leverage best practices from other jurisdictions regarding servicing rural communities.

### RECOMMENDATIONS FOR IMPROVEMENT

Recommendations for improvement were centered on five priority areas: Access, Policy, Workforce Planning, Technology, and Service Delivery. Key Recommendations are as follows:

### Access

- Expand transportation options for rural residents
- Strengthen Information and Referral services available
- Increase access to subsidized child care

### Policy

- Review agency policies that require clients to travel to agencies
- Review DTA car asset limit policy
- Support Categorical eligibility for services
- Increase reimbursement rate for child transportation
- Review rate models for rural providers
- Support rural appropriate models of health care
- Establish ongoing Commission on Rural Services
- Review policies of Low Income Home Energy Assistance Program (LIHEAP)
- Develop a system-wide response to Rural Domestic and Sexual Violence
- Improve the ability of state agencies to reach and serve those in rural communities

### Workforce Planning

- Develop an enhanced and coordinated state infrastructure that identify and address rural workforce needs
- Implement data-driven and evidenced based strategies to address health care worker shortage in rural communities
- Address Family Child Care Provider shortage for children in state funded slots

### Technology

- Expand broadband access to rural communities and service providers
- Strengthen communications options
- Improve outreach and service delivery through use of smart phone technology
- Support data-sharing
- Expand the use of telemedicine and health information technology

### Service Delivery

- Integrate eligibility processes
- Support service availability and a more comprehensive service experience in rural areas
- Establish service access centers

### **IMPLEMENTATION CONSIDERATIONS**

To ensure the implementation of the recommendations set forth in this report, the Commission has proposed the establishment of a committee on rural services and access. The committee would provide ongoing feedback on key activities associated with implementing the recommendations through regularly scheduled committee forums. The committee will support implementation by communicating and advocating for proposed recommendations as well as identifying other needs and challenges related to rural communities, and developing and proposing recommendations.

## SECTION 2: BACKGROUND

### BACKGROUND

Massachusetts covers approximately 7,800 square miles, with 65% of state's landmass classified as rural (Census Bureau). The U.S. Census Bureau estimates Massachusetts' 2012 population at 6,646,144 people – over 700,000 of which live in rural areas. For the purposes of this report, the commission defines “rural,” as a municipality in which there are fewer than 500 people per square mile (MacDougall and Campbell, 1995). Rural communities are located in central and western Massachusetts except for the immediate areas of Worcester and Springfield and in the coastal areas of the southeastern part of the state. There are 70 acute care hospitals in Massachusetts, 11 of which are located in rural areas. The state has three hospitals located in rural areas that are identified as Critical Access Hospitals.

The root causes of poverty are wide-reaching and very complex. Between 703,672 and 746,614 people in Massachusetts lived in households that fell below the federal poverty threshold in 2010. The estimated poverty rate in Massachusetts was 11.4 percent, compared to 10.3 percent in 2009 and 9.9 percent in 2007, the year in which the recent recession began. The increase is considered statistically significant, meaning that there was a real increase in poverty in Massachusetts (Massachusetts Budget and Policy Center, 2011). Although much of the deliberation on welfare reform and responding to the challenges of poverty has focused on low-income urban residents, many recipient families reside outside of central cities and metropolitan areas.

The challenges to social service delivery in rural areas are different than those faced in central cities and metropolitan areas. Social service delivery challenges are oftentimes more formidable in rural areas due to factors unique to rural

communities. For example, ensuring access to affordable and sufficient child care and convenient and reliable transportation is particularly difficult in geographically isolated areas. Encouraging economic development in these areas is also a challenge. Rural communities often lack the infrastructure needed to attract businesses, and the expenses associated with development can be high; both factors limit job opportunities. The costs per capita associated with service delivery tend to be higher in rural areas because of their lower population density. As a result, state divestment in social services tends to have a disproportionately adverse impact on social service delivered in rural areas. Further, in each year between 1994 and 2001, the federal government spent two to five times more money per capita on urban than rural community development and rural areas also received only one third as much federal money for community resources as did urban areas (Johnson, 2006).

### What is Rural?

*“Rural” can be defined as a municipality in which there are fewer than 500 people per square mile.*

*There are about 172 rural communities in the state.*

The demographics of rural working families differ significantly from those of urban families, and these demographics influence their attitudes about accessing social services as well as their need for support (Johnson, 2006). Rural-specific social service policies could address such local needs as job creation and economic development, access to support services, infrastructure support, and a greater emphasis on responding to individuals and families needs in a more integrated and holistic manner.

Given the unique needs of rural communities and the state's commitment to supporting the success of ALL individuals and families throughout the Commonwealth, the Patrick Administration and the legislature, under Section 203 of FY13 GAA, commissioned the Rural Access Commission.

Details of Section 203 are as follows:

*There shall be a special commission to study access to public assistance and state-sponsored services in rural areas. The commission shall consist of 13 members including: the secretary of health and human services or a designee, who shall serve as the chair; the commissioner of transitional assistance or a designee; the child advocate or a designee; the secretary of elder affairs or a designee; the undersecretary of housing and community development or a designee; the commissioner of early education and care or a designee; a representative from the Massachusetts League of Community Health Centers; a representative from Children's Trust Fund; a representative from the Massachusetts Association of Community Action Centers; a representative from the*

*Massachusetts Model of Community Coalitions; a representative of Mass Home Care; a representative from a food bank or food pantry located in the commonwealth, appointed by the governor; and a representative of the Citizens' Housing and Planning Association.*

*The commission shall examine the barriers faced by low-to moderate-income individuals living in rural areas to obtain public assistance and state-sponsored services including, but not limited to, fuel assistance, child care subsidies, direct cash assistance, emergency housing services and health and human service programs which provide services to children, families, persons with disabilities and elders. The commission's analysis shall include, but not be limited to, the cost of traveling to and from regional offices, the cost of delivering services in rural areas and the success of outreach efforts in rural communities. The commission shall investigate the feasibility of coordinating delivery of services between local and state agencies, expanding the use of technology to increase access to services and eliminating application requirements for in-person visits to state agencies.*

*The commission shall file the results of its study, together with drafts of legislation, if any, necessary to carry its recommendations into effect, with the house and senate committees on ways and means, the joint committee on children, families and persons with disabilities and the joint committee on elder affairs not later than April 1, 2013.*

### SECTION 3: KEY INPUTS TO RECOMMENDATIONS

This report was developed and informed by members of Rural Access Commission. The commission includes subject matter experts in the social services delivery, agency leaders, and other policy experts. In addition, the commission conducted a literature review and other research of rural services delivery to identify best practices in other jurisdictions around the country.

#### RURAL ACCESS COMMISSION

Convened in January 2013, the commission is made up of 15 members, representing the State's service agencies and rural communities. It includes providers, advocates, practitioners, as well as state executives and agency staff. Members are as follows:

Sandra Albright, Executive Office of Elder Affairs  
Suzin Bartley, Children's Trust Fund  
Rebecca Bialecki, North Quabbin Community Coalition  
Brenda Clement, Citizens' Housing and Planning Association  
Erin Craft, Department of Early Education and Care  
Clare Higgins, Community Action of Franklin, Hampshire and North Quabbin Regions  
Tom Weber, Department of Early Education and Care  
Roseann Martoccia, Franklin County Home Care  
Stacey Monahan, Department of Transitional Assistance

Andrew Morehouse, The Food Bank of Western Massachusetts, Inc.  
Alana Murphy, Department of Housing and Community Development  
Yasmin Otero, Department of Transitional Assistance  
Christine Palladino-Downs, Office of the Child Advocate  
Edward Sayer, Hilltown Community Health Center  
Greg Wilmot - Chair, Executive Office of Health and Human Services

### ***Role of the Commission***

- Core entity charged with examining the challenges of low- to moderate-income individuals living in rural areas
- Developing recommendations for strengthening services and service delivery to rural residents.
- Met weekly to:
  - Identify the key issues in rural areas
  - Share experiences
  - Gather input from other states' experiences
  - Discuss the changes needed to strengthen services in Massachusetts

### ***How the Committee Worked Together***

- Established goals for the commission
- Defined “rural” communities
- Sought participation from state agencies and others that were not formal members of the commission
- Met regularly outside the commission meetings to further analyze and discuss root causes, issues, goals, guiding principles, and recommendations

### **NATIONAL PERSPECTIVE**

To inform the study and recommendations, members of the commission reviewed research and profiles of other states and jurisdictions across the country.





## SECTION 4: GOALS OF THE COMMISSION

In organizing its study and developing recommendations, the Commission outlined several goals. In general, the Commission's recommendations intend to achieve or advance the goals outlined below. Please note that while some of the opportunities identified by the Commission have the potential to improve service delivery across the state, recommendations were developed specifically to enhance services and services delivery in the states rural areas.

### GOALS OF RECOMMENDATIONS

1. Support the development of the infrastructure needed to deliver services to rural communities and support system sustainability in order to continually ensure the needs of rural communities are considered.  
This includes infrastructure related to:
  - Facilities/ access centers
  - Transportation (including supportive business practices, processes, and policies)
  - Information Technology
2. Ensure incentives exist within state agency contracts that engage and support service providers in rural communities.
3. Address disparities in reimbursement experienced by human service providers in rural areas due to the added costs of rendering services in these communities.
4. Support the establishment/alignment of access policies across state agencies.
  - Respond to specific challenges related to access and ensure state policies consider distance to services and account for travel time
5. Support workforce planning for providers serving rural residents, including recruitment, retention, and training.
6. Improve access to, and coordination of, services provided to rural residents and reduce administrative complexity to allow for better (and easier) navigation of the system.
  - Support the Commonwealth's vision for an Integrated Eligibility System and processes that move the commonwealth toward categorical eligibility
7. Support information availability in ways that are accessible to rural communities.
8. Respond to challenges of housing, including access to public housing, homelessness, affordable housing, adequate housing stock, and healthy and safe homes.
9. Identify/leverage national best practices.

**IMPROVING OUTCOMES FOR INDIVIDUALS AND FAMILIES**

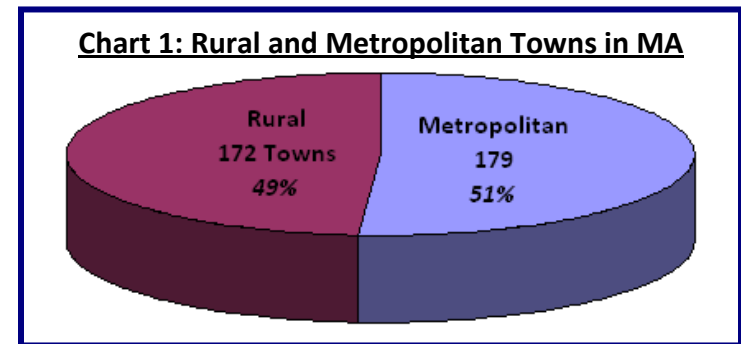
Key Goals	Experience of Rural Communities Today	Desired Experience of Rural Communities Tomorrow
Develop sustainable infrastructure	Rural residents must often travel long distances to access state-sponsored services and due to lack of broadband internet access, residents are limited in their ability to access web-based tools and information. Public transportation is limited if available at all making travel costly and time consuming.	Access to services centers will be further supported through technology and access points in the community (virtual and physical). Quality of life and economic development will be strengthened as residents are able to get to work and access services via expanded transportation and technology systems.
Engage and support service providers	Rural service providers incur additional expenses and are not always compensated for additional costs. Lower population density makes per client costs higher as compared to metropolitan areas. Few incentives exist to attract rural professionals to careers in human service delivery.	Incentives exist that promote careers in rural human service delivery. Factors that are unique to rural communities and that influence the experience of service providers are considered by policy-makers.
Support the Commonwealth’s vision for an Integrated Eligibility System	Residents must navigate multiple access points/”doors”, applications and forms and are not aware of all of the services for which they are eligible.	Residents complete a common application and provide required documentation one time. Residents learn about their eligibility for multiple services in an efficient and timely way, allowing residents and service providers to focus more on service planning and client needs versus application processes.
Support workforce planning	Due to various social, economic, and geographic factors unique to rural areas, educational, employment and employment training opportunities are not available to rural residents at the same levels as their counterparts in metropolitan areas.	Through robust partnerships and better use of technology and other resources, education and employment training opportunities are available to rural residents. Opportunities are designed to prepare residents for the knowledge and innovation economy of the Commonwealth and promote economic development.
Respond to challenges of housing	Individuals and families experiencing housing instability have limited options to secure affordable housing in their community.	Individuals and families have access to more comprehensive support services that respond to the primary causes of an individual or family’s housing instability. Housing options are varied such that opportunities to keep an individual or family in their homes or within their community are fully leveraged. Housing strategies are oriented toward long-term housing solutions within the individual or family’s community.

## DEFINING RURAL

A study by the Center for Rural Massachusetts, titled “Rural Massachusetts: A Statistical Overview” (MacDougall and Campbell, 1995) sought to find the most appropriate definition of rural communities for the State of Massachusetts. The publication discusses the methods and sources that were used. The main source of information for this study was the 1990 Census of Population and Housing from the United States Census Bureau. The study tests six definitions of rural communities and determines which one is most applicable to Massachusetts. Although these definitions were originally tested using population data from the 1990 U.S. Census, the number of rural communities under each definition may have changed since the release of the 2000 U.S. Census, the definitions themselves and the work done in this study remain valuable.

The following is a basic summary of the definitions tested.

- Population definition: Rural communities are those with a population of less than 10,000.
- U.S. Census Bureau definition: Rural areas are those that are not urbanized, not a Census Designated Place with more than 2,500 people, and that are not incorporated as cities.
- Under 10,000 and outside I-495 definition: Rural communities are those that are not within the Boston metropolitan areas as defined by Interstate 495 and have populations under 10,000.
- 1987 Center for Rural Massachusetts Report definition: Municipalities were separated into rural, suburban, and metropolitan areas based on population density at 252 and 1,000 people per square mile. Categories were divided again into communities that had more or less than either 10 percent or 95 percent of its households connected to public sewer systems. Those with lower population densities and less sewer service were considered to be rural.
- Department of Education definition: The Department of Education classified all cities and towns in the State as Urbanized Centers, Economically-Developed Suburbs, Growth Communities, Residential Suburbs, Rural Economic Centers, Small Rural Communities, or Resort/Retirement/Artistic Communities. Those with population densities under 500 people per square mile were considered to be rural.
- Population density definition: Communities with less than 500 people per square mile were considered to be rural.



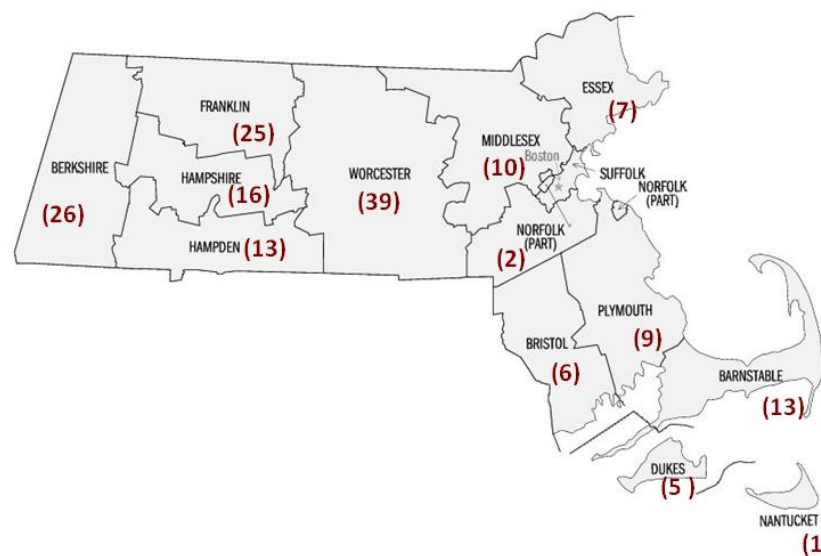
The population density method was chosen as the most suitable way to determine the rurality of communities. This is a simple method, but it is more indicative than population size alone. Although other methods utilize more characteristics of towns, doing so can be complicated and unnecessary for certain studies. Also, this method defines the greatest number of cities and towns as being rural in Massachusetts. The study found that there were 190 rural communities in Massachusetts in 1990. All of the definitions discussed here are valid and useful in certain contexts, but population density was chosen to be most suitable and relevant for this particular study. Defining rural communities is necessary so that urban areas in Massachusetts can be eliminated from analysis. The population density method was found to be most simple and appropriate for this thesis.

### RURAL COMMUNITIES

For the purpose of this study, the definition of rural areas is communities that have population densities of less than 500 people per square mile (MacDougall and Campbell, 1995). There are 14 counties in Massachusetts, consisting of 351 communities total, of which 172 can be classified as rural.

**Table 2: Rural Communities by County in Massachusetts, 2000**

County Name	# of Rural Communities	Total # of Communities	% Rural
Barnstable	13	15	86.7%
Berkshire	26	32	81.3%
Bristol	6	20	30.0%
Dukes	5	7	71.4%
Essex	7	34	20.6%
Franklin	25	27	96.3%
Hampden	13	23	56.5%
Hampshire	16	20	80.0%
Middlesex	10	54	18.5%
Nantucket	1	1	100.0%
Norfolk	2	28	7.1%
Plymouth	9	27	33.3%
Suffolk	0	4	0.0%
Worcester	39	59	66.1%



## SECTION 5: KEY CHALLENGES TO BE CONSIDERED

The Commonwealth provides many services to individuals and families in rural areas. As a result of state-sponsored services, many individuals and families have been able to obtain support in times of need, while they move toward greater self-reliance. While service providers and agencies have been able to meaningfully respond to the needs of people in rural communities, several challenges remain.

### Transitional Services in Rural Communities

Recipients of state-sponsored services and low-wage workers living in rural areas can benefit from a wide range of programs designed to support work and encourage greater self-reliance. Rural service recipients and low-income workers may have multiple jobs, often with little to no health benefits, and still live in poverty. Transitional services, including job training initiatives and programs for child care and transportation, must take into account the unique needs of rural residents in order to be effective. Limited financial resources, infrastructure challenges and lower population density in these communities impact service delivery options.

Rural residents' participation in the informal economy does not meet the work requirements of the state's transitional assistance programs. Additionally, rural residents may be reluctant to admit they need assistance, even if they are eligible, because dependency on programs such as TANF (Temporary Assistance to Needy Families), MassHealth, and SNAP

(Supplemental Nutrition Assistance Program) carries a stigma (O'Hare, 2009).

Research by the USDA Economic Research Service found that the rate, depth, and severity of poverty are higher in nonmetropolitan areas compared to rates in metropolitan areas (Tiehen, Jolliffe, and Gundersen 2012).

As shown in the USDA's study of rural communities, economic conditions in rural areas differ greatly as compared to metropolitan areas. Low population density and infrastructure challenges in rural areas can hinder economic development efforts that could bring new jobs to these communities. Different than more densely populated metropolitan areas, rural areas are more likely to be dependent on a single employment sector. Wages tend to be lower in rural jobs, and in many cases, jobs are seasonal. Sporadic pay periods can also be a challenge and can make workers ineligible to receive benefits in some months.

#### Did you know?

The budget for a single parent with preschool and school-age children ranges from a low of \$52,284 in Franklin County to a high of \$74,772 in Norfolk County, with a statewide average cost of \$65,880. In Boston, that budget is \$67,200



### Transportation

In rural settings, the availability of public transportation is often limited if provided at all. Reliable transportation is critical to helping rural communities and community members remain healthy and productive; it helps to bring communities together and promotes employment and economic growth. When public transportation is available in rural areas, it may involve an appointment-based service intended for periodic use as opposed to regularly scheduled route. Many low-income and unemployed rural residents are not able to purchase or maintain a car to get to a job, job training, or other services.

Rural residents need to receive medical care, get to work, access child care, purchase food and household items, attend school events, and access many other services just as residents in non-rural communities. Routine accessibility may be limited because of the distance to services or opportunities, and the lack of public or private transportation. Oftentimes, special needs that can be alleviated through medical facilities, social service agencies, and educational programs are unaddressed because of the client's remote location. Further, there are comprehensive transportation options in urban areas, subsidized by all of the state's residents, which provide ready access to services and employment; these options simply do not exist in the rural (and suburban) corners of the Commonwealth.

Transportation is also a key factor in determining whether people with disabilities and elders are able to remain home and in their community. Expanding transportation opportunities for

a rural community can improve economic growth and community development and act to improve quality of life for residents in rural areas.

### Technology/Broadband or Other Internet services

According to 2010 Census data, 61% of adults in rural America have mobile broadband or other Internet services at home versus 73% of urban adults (The Department of Commerce's Economics and Statistics Administration, 2011). People in metropolitan areas usually have access to the Internet, at home, school or another community location. However, rural residents often have limited access to the Internet in their homes.

Lack of access to high-speed Internet connections presents a challenge to the economic development of rural communities. It also adversely impacts the availability of educational content for K-12 education and adult learning. Broadband provides users with instant access, and enables them to download and upload information and software at a much faster speed.

The Commonwealth has made tremendous strides in expanding access to broadband internet for rural communities. The Mass Broadband Institute (MBI) and its partners are investing in, supporting and facilitating the new infrastructure needed to bring affordable, high-speed broadband to underserved areas across the Commonwealth. MBI identified over 1,000 Community Anchor Institutions (CAI) identified as providing important services to the people living around them, such as schools, colleges and universities, career centers, libraries, town halls, police and fire stations, and healthcare facilities. MBI considers identified CAIs in its infrastructure planning.

### Availability of Information

The Commonwealth currently has a state-wide information and referral service that is supported by the United Way. MASS 2-1-1 is a statewide collaboration that includes local United Ways from across the state. They provide information and referral services 24 hours a day, 7 days a week. Simply by dialing 2-1-1 from any landline or cell phone, individuals or families can be connected to valuable resources at appropriate community based organizations or government agencies. MASS 2-1-1 also provides information and referral services for the Massachusetts Emergency Management Agency, and the Massachusetts Department of Early Education and Care.

However, information regarding community-based services in rural areas for individuals and families is not always included in MASS 2-1-1 and therefore may not be readily available via the state-wide service. Further, MASS 2-1-1 as a resource is not always the place families go when in crisis (both rural and non-rural residents). While it is essential that all relevant state-sponsored services provide information that is accessible to individuals and families, considerable effort should be made to ensure a system exists that is inclusive of all community services. In many communities the local food pantry, family/youth centers, civic groups, senior centers, faith-based organizations, schools and other non-state funded programs and services provide considerable supports to individuals and families. Any state-wide database should include comprehensive and updated information and a plan to update the database on a regular basis; plans for ensuring participation of rural areas should also be considered.

### Rural Domestic and Sexual Violence

In rural Massachusetts, domestic and sexual violence continue to be leading health problems exacerbated by social and geographic isolation and the lack of public transportation, housing, employment, child care, anonymity and accessible health and human services. Although domestic and sexual violence crosses all socioeconomic lines, the overwhelming poverty of many rural communities in Massachusetts further limits the choices of victims there, preventing escape and access to assistance.

Without understanding the unique characteristics of rural environments, it is impossible to respond appropriately and fully to domestic violence and sexual assault in rural areas. Rural environments are distinct from urban environments in ways that affect the ability of the criminal justice system to investigate and prosecute domestic violence and sexual assault, and to provide appropriate and effective intervention. It is also more difficult for service providers to treat and counsel victims. The geographical and cultural features of the rural environment also impact the ability of abused rural victims and their children to access the justice system and social service agencies and these challenges impact holding perpetrators accountable. (Rural Domestic and Sexual Violence Draft Report, Services Accessibility Sub-Committee of the Governor's Council Addressing Sexual and Domestic Violence, 2012).

### Employment Services

Education and training programs range in scope from pre-employment job skills to specialized vocations and on-the-job



training. The success of rural communities depends on local residents developing marketable, practical job skills. A skilled rural workforce increases the scope of locally-available professional services for all residents, improves employee (and resident) retention, and makes it easier for employers to fill open positions.

Economic development efforts, including skills development and training programs that could bring new jobs to rural areas are often hindered by low population density and infrastructure challenges, particularly transportation and broadband internet and communications systems. Further, rural communities are more likely to depend on a single employment sector which can make wages less competitive and employment seasonal.

### **Housing and Homelessness**

Traditionally, low-income and working families in rural areas are more likely to own their homes than the residents in metropolitan areas. However, rural residents in the Commonwealth do experience a number of challenges. For example, homeowners and renters in rural communities are more likely to live in inadequate housing when compared to the metropolitan areas. Elders, a significant population in rural areas, need housing accommodations that help them to stay in their own homes rather than having to leave their communities for assisted living facilities or nursing homes.

For rural individuals and families who are homeless or at risk of becoming homeless, access to services – prevention, shelter, and stabilization – can be problematic. Because homelessness can be the result of domestic violence, job loss or various other

factors, access to a range of services is essential. Aligning service areas, having a central point of access, and coordinating services would improve service delivery to this most vulnerable population.

### **Healthcare workforce shortage**

Health care workforce shortage problems are prominent in rural areas due to several reasons. These include: an aging workforce population, high retirement eligibility, difficulty in retention of workers, difficulty in recruitment of workers, lack of educational and training opportunities, high vacancy rates, high turnover rates, lack of opportunities for career advancement, financial concerns including lower pay and increased workload.

### **Behavioral health**

Nearly half of the American population is affected by a behavioral health disorder at some time in their lives and yet the misconceptions, myths, and cultural taboos associated with mental illness may be the most significant barriers that keep persons with behavioral health needs from seeking and receiving treatment in rural areas (Rural Behavioral Health Programs and Promising Practices, 2011).

The most significant challenge regarding behavioral health care in rural communities is the lack of health care providers and services. Addressing this challenge will require closer integration

#### **Did you know?**

99.8% of children in Massachusetts have health care coverage – this is highest percentage of any state in the nation.



of behavioral health and primary care services, for rural areas. Integration of behavioral health and primary care services also responds to the challenges regarding confidentiality and privacy. Rural patients may be reluctant to be seen in settings where their privacy might be compromised but more willing to seek behavioral health care from a primary care clinic.

Outreach services rather than clinics are a good option for rural areas given the confidentiality concerns that exist in rural communities. However, the cost per capita can be greater given travel distances.

### Food and Food Security

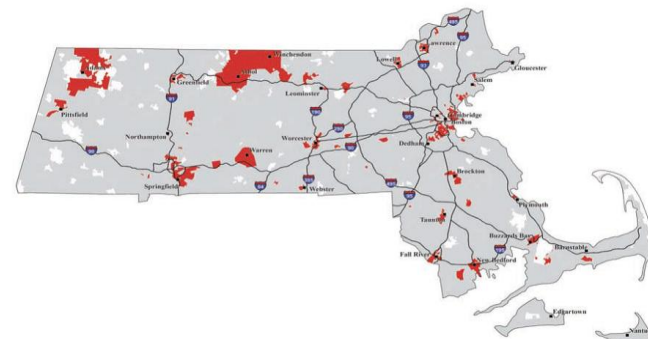
The study, *Hunger in Massachusetts 2010*, shows that one in eight residents of Massachusetts is at risk of hunger. Of those in need in the Commonwealth, 43 percent do not qualify for government benefits because their income is too high; they cannot meet basic needs and therefore require emergency assistance. 2 The recent *Map the Meal Gap* study, conducted by Feeding America, indicates that 121.6 million additional meals are needed across the state to ensure that all residents are able to eat three meals a day. MEFAP plays a vital role in bridging the Meal Gap and providing all those in need with a continual supply of quality, nutritious food staples, as well as fresh produce through the Massachusetts Grown Initiative.

During FY12, the four Massachusetts Regional Food Banks collectively distributed over 54 million pounds of food, 16 million of which was purchased through the MEFAP program. The food provided through this program is integral to the

mission of the Commonwealth’s emergency food providers to address food insecurity in their communities.

MEFAP does not fund the 885 local feeding programs that are affiliated with each of the state’s four food banks (Food Bank of W. Mass., Greater Boston, Worcester, and Merrimack Valley) - MEFAP food is distributed to food insecure households in the state through these local programs. Hundreds of the rural and local feeding programs are critical partners in regional emergency food networks, yet they receive no state funding. Moreover, a historically important federal source of funding, the Emergency Food and Shelter Program, has been drastically cut by more than 40% in the last couple of years.

Rural communities experience differences in access to adequate and affordable food supplies and in most rural communities, residents rely more on small supermarkets or "mom and pop" stores, where prices are higher and food choices are more limited than those found in larger supermarkets.



**Food deserts (in red) in the Commonwealth.** Note large red areas in rural parts of Franklin/Worcester counties and northern Berkshire counties (Source: “Food for Every Child Massachusetts”)

### Substance Abuse

Substance abuse has long been perceived to be a problem of the inner city. However, alcohol and drug abuse is also a problem in rural areas. Today, adults and young teens in rural areas are just as likely to abuse substances as those in larger metropolitan areas. The problems may be the same, but smaller communities have limited resources to deal with the consequences of substance abuse.

In Massachusetts, the nationally recognized model, Communities That Care Coalition of Franklin County and the North Quabbin (Communities That Care, CTC) was established to address the issue of substance abuse. The CTC was formed in 2002 in Franklin County, Massachusetts, when a group of community members came together to address alcohol, tobacco, and other drug use among local youth. CTC provides a structure for community members to coordinate their work around a common data-driven and evidence-based plan. That is, CTC uses data about the status of local young people to identify needs and measure the success of programs. And CTC stays current with prevention research and selects strategies that have been proven effective in reducing risky youth behaviors.

### Child Care

Accessing reliable and affordable child care may sometimes be a challenge for rural working families. The number of skilled and available child care providers in rural areas is more limited than in urban communities, and child care centers are widely scattered, thus center-based care is typically not an option. When child care is available, it is often home-based. Home-

based child care may be more likely to offer extended or weekend hours to address the needs of workers having to work extended shifts. However, the number of Family Child Care providers for state funded childcare slots is shrinking as the credentialing becomes more rigorous.

To address their child care needs, many rural residents rely on informal arrangements with family and friends. Although these child care arrangements are less expensive and more flexible, caregivers are generally not licensed and may lack formal training. Family and friends may also have limited access to available resources and supports that can help in their efforts to provide child care assistance. Local social service agencies can address these concerns by helping providers become licensed and by building a training infrastructure that includes basic training on child safety and development however, funding must be available to local agencies to support these efforts.

### Interagency Collaboration (State and Local Human Service agencies)

Improving the manner in which services are delivered is particularly important to achieving the right outcomes for individuals and families. A family/individual's involvement with more than one service system can be very confusing. Families/individuals that need information or help in various domains of their lives can have a difficult time obtaining assistance. When they are able to access a service, it may address one need but not another, resulting in the family/individual needing to go somewhere else for complimentary information or support. It is clear that the state's system needs to evolve in order to better serve the complex and



evolving needs of residents by moving from a fragmented model to a more integrated one.

In order to better support individuals and families, the Commonwealth needs to develop a system of care that is better integrated and coordinated.

The Commonwealth has taken on a number of initiatives that act to better coordinate state-sponsored services as well as community-based sponsored services. For example, the Executive Office of Health and Human Services has implemented “EHS Centers” to support its “no wrong door” policy and better integration of human service agencies; Family Access (or Resource) Centers have also been supported by state agencies. However, these efforts and investments have largely been directed toward more densely populated areas, not rural communities. Policies and state agency-led strategies that help to integrate services or access points can be particularly beneficial in rural areas.

### **Elders Services**

Elders who live in rural areas face additional challenges. These include lack of transportation such as rides for essential trips, medical appointments, business errands, shopping and senior activities; lack of access to medical care; unavailable cultural and social services; and lack of adequate housing.

Isolation in rural areas is acute for the older old age group. Statistics indicate that mental and physical health and the accompanying costs related to those issues are significant. Creating opportunities for isolated seniors to stay in the main

stream whether in person or electronically will have positive impact from both a quality of life perspective and health care expenditures. There is a high incidence of chronic conditions in persons age 65 or older coupled with distant health care in rural communities.

Elders and their caregivers who are seeking in home services also face a shortage of availability of direct care workers, especially in more remote locations. Elders and caregivers also need to travel distances to access specialized health care services which is both a transportation challenge and may be difficult for elders to travel to appointments.

Providers and their caregiver staffs face significant barriers as they work to provide appropriate in home services for their clients. Provider payments do not recognize that home care activities for some clients need to be administered seven days/week. Provider payments including transportation and paid travel time for workers are wholly inadequate. Programs for low paid home health workers should be initiated and include a transportation dividend to enable the staffs to use their own vehicles but not be penalized financially for doing so.

### **Cultural Competence**

Responding to the unique needs of rural residents is critical to service providers seeking to engage and support rural residents as they move toward greater self-reliance.

Culturally and linguistically competent health and human services are essential for the state’s diverse populations. Cultural competence includes the ability of service delivery

systems to provide quality assistance to clients with diverse values, beliefs, or traditions, including structuring delivery to meet social, cultural, and linguistic needs of clients.

### **Fuel Assistance**

The Low Income Home Energy Assistance Program, (LIHEAP), commonly known as fuel assistance, provides critical help to low-income families in paying their heating bills in the winter. The challenges in this program are essentially the same as with other services in rural areas. First-time applicants must appear in person at one of the 28 agencies that administer LIHEAP across the state. Rural areas tend to rely on “delivered” fuel, i.e., oil and propane, and some wood, for heating. As with other services in rural areas, the cost of delivery is high. The high cost of those fuels, combined with the minimum delivery amount most companies require, mean that families can use up their maximum LIHEAP benefit and not be able get a partial delivery, even if there is money left in their account.

## SECTION 6: COMMUNITY PROFILE – ATHOL, MA

### About Athol

**Athol** is the economic and population center of the North Quabbin region, a nine-town rural area in north central Massachusetts. Athol is the largest community of the area with a population of 11,857 according to US Census 2010 data. Athol is the most densely populated, but still have fewer than 350 people per square mile. There is little ethnic/racial diversity and only a small percentage of new immigrants who have limited English proficiency.

The North Quabbin area of north central Massachusetts includes the nine towns of Athol, Erving, New Salem, Orange, Phillipston, Petersham, Royalston, Warwick and Wendell with a combined population of 28,600. The North Quabbin, a unique region with a distinct identity and rich history, is split between two neighboring counties. This nine-town region is spread over 344 square miles with five towns having fewer than 30 people per square mile. Five of these towns (Erving, New Salem, Orange, Warwick, and Wendell) are in Franklin County; the remaining four (Athol, Petersham, Phillipston and Royalston) are in Worcester County. The North Quabbin region's economic and social service centers are exclusively located in Athol.

For more than a century, the most important economic activity here has been manufacturing and the principal employment was in agriculture and manufacturing. However, the region has experience long-standing economic challenges largely due to the

decline of the manufacturing industry coupled with geographic and transportation barriers. Many of the jobs in the manufacturing sector are no longer available because of plant closings and through other downsizing. A large proportion of the population has been affected by unemployment and underemployment during the past two decades.

In the early 1980s, the state targeted the principal town of Athol for funding to promote economic development as the area had the highest unemployment rate in the state. As of January 2010, the local rate of unemployment soared to 13.5% with a state rate of only 8.9%. Unemployment remains higher than the state average. Despite the challenges, there are groups actively working to improve the local economy including the Economic Development and Industrial Corporation, a quasi-public entity and the North Quabbin Chamber of Commerce.

#### Did you know?

In 2010, Athol's employment rate reached 13.5%, compared to a state rate of 8.9%

### Responding to the Challenge

The North Quabbin region experienced a sudden economic downturn in 1983 when the second largest employer closed its doors. This shift in employment led to a grassroots organizational

model that still stands today in the **North Quabbin Community Coalition (NQCC)**. The infrastructure provided by the Coalition has been at the core of advocacy for securing resources for the region. For almost 30 years, the Coalition has served as the primary point of coordination for local access to services. The NQCC continues to serve as the site for networking among health and human service providers, and now hosts the region's only Economic Development Task Force. The Coalition distributes a community newsletter to over 800 residents each month and hosts a monthly topic-based forum attended by an average of 50 people and open to the public to address community needs.

### **Model for transportation**

Transportation was identified early on as a specific barrier to access for area residents. In working closely with the two regional transit authorities that serve the region and the area's Congressman, John Olver, an innovative system to serve the rural area was developed. The North Quabbin region is fortunate to be served by a two-tiered transit system. The first is a fixed route system serving the main route between Athol and Orange (Route 2A and reaches from Greenfield to the west and Gardner to the east. This system is called the G-Link Service and is provided by Franklin Regional Transit Authority to the west and Montachusett Area Regional Transit to the east. The second tier is a demand-response system which is facilitated by a local non-profit called Community Transit Services (or CTS) where residents throughout Athol and Orange may call for a ride the day before needed and can be picked up at their door and delivered to their destination at a given time or can be driven from outlying areas of town to the fixed-route system. Today over 5,000 rides per

month are delivered by the CTS system with over 50% of those to work. The rest of the service provides transportation to medical appointments, child care education and shopping/general purpose destinations. CTS works closely with local employers to offer rides to employment centers. "Dial a ride" (demand response) transportation and out of county medical transportation has been available through the Regional Transit Authority in collaboration with Franklin County Home Care Corporation and the Council on Aging. Transportation is also available to Adult Day Health Services which are available in Athol.

### **Developing an Integrated Service Delivery Network**

One unique model that was founded by the Coalition was Valuing Our Children (VOC), a comprehensive parent education and family support center. VOC has grown and diversified its funding base to include Family Center Funding from the Children's Trust Fund, funding from Early Education and Care, the Department of Children and Families (DCF) and several other small local grants.

In 1998, VOC partnered with the DCF (then the Department of Social Services), the Department of Youth Services (DYS), NQCC and area family support providers in the establishment of the Patch project. This partnership involved bringing together community-based organizations, state agencies and residents in a process of developing and implementing collaborative practices to prevent abuse and neglect.

The Family Support Worker Program evolved out of Patch practice. Through Family Team Meetings, DCF and VOC staff saw



greater coordination of services but a gap in the support for families to access those services or make progress on identified family goals. Family Based Services supported the development of a program in which cases were referred by social workers to VOC Family Support Workers for home visits and individual support. The primary goal of the program is to improve family functioning by helping each family identify strengths within their family and build upon those strengths. Joint meetings occur with the Family Support Worker, the family and the DCF social worker to ensure that the family has input into service plan development and has successfully engaged in services.

Through NQCC's Community Connections funding, Patch, and the Family Support Worker program, VOC has extensive experience in collaborating with DCF. The day-to-day proximity of VOC staff, DCF staff and community providers in the Patch office has provided opportunities for formal and informal joint practice. This shared practice has promoted a mutual understanding of community and agency systems, has contributed to team building, and has enhanced the development of negotiation and problem solving skills and information exchange. NQCC has facilitated the connection of local DCF practice to other area providers of family support and promoted a focus on integrated, strength-based, and family-centered practice.

In 2000, the Patch model was piloted as part of VOC in the North Quabbin region as the rural test site for a community-based collaboration with the DCF and DYS. Patch located on Main Street in Athol now serves as a point of co-location for several state agencies on a part-time basis. Mass Rehab, the Food Bank

of Western Mass. (for SNAP applications), Community Legal Aid, Early Intervention Services (provided by Reach/ ServiceNet) all use the space at least once a week offering access to these services for residents from across the North Quabbin region. Since the closure of the Athol DTA office in 2002, an outreach worker from DTA had been out posted to the site once per week. In FY2013, staffing at DTA no longer supported this and the challenge of transportation to Greenfield persists. The Patch site is the permanent home of a unit of DCF Social Workers, a DCF Supervisor, a part-time DYS Case Manager, the local Parent Child Home Program and the Community Partnership office of a local CAP agency (MOC).

The VOC Family Resource Center was one of the initial four FRCs funded by DCF three years ago. VOC has operated as a family support organization since the mid-90s based on providing strength-based, community centered support for all families in the nine towns of the North Quabbin.

There was also recognition that family systems included a number of grandparents who were raising their grandchildren and also needed support. For the last several years, a support group for grandparents raising their grandchildren has been funded by Franklin County Home Care Corporation. These caregivers receive specialized support and the strength gained through working with peers. It also serves as a source of referral and coordination for elders who may need other types of home and community supports, assistance with benefits/Medicare counseling, referrals, or information through the local Area Agency on Aging or Council on Aging.

### **Model for family-centered community-based service delivery**

Given this basic structure, a comprehensive Family Resource Center (FRC) model was an ideal fit to build capacity for an increased continuum of care and support for families at risk. Practice has broken down into three levels, all requiring on-going focus:

- Basic Information and Referral – making sure that all staff, including receptionists at all sites, has updated comprehensive information regarding phone numbers, resource guides, etc. Keeping up with the changes in how eligibility and program requirements.
- Single issue crisis management – when family functioning has been generally fine, then a crisis hits (e.g., a family loses their housing, or has a medical crisis, or has an issue with the schools), a family support worker is assigned to work with the family short term to help them resolve the issue at hand
- Long term support for a family for whom the “crisis” is a symptom of a much more complicated issue. For example, the current crisis may be related to a lack of resources or are mental health issues, substance abuse, or domestic violence issues.

The North Quabbin model of FRC provides strength based family support, parenting skills, and the protective factors framework; the ability to do successful outreach with both families and providers; referrals from formal and informal systems,

connecting with families in a variety of ways; the ability to partner with providers and community resources; and triage skills.

The infrastructure provided by the community based organizations is fragile and must be maintained in order to continue to provide access to critical services for many residents. Local organizations have built lasting trusting relationships with all sectors of these isolated communities including faith-based communities, schools, law enforcement and municipal leadership and thus have developed a large network for outreach. The trust that is placed in such organizations and their staff has enabled many vulnerable residents to access services that provide for basic needs, educational and economic opportunities and enhance the quality of life for many.

#### **Athol Profile Highlights:**

- Infrastructure for advocacy and securing resources
- Established primary point of contact for coordination for local access to services
- Model for Transportation
- Consistent and ongoing outreach, engagement, and communication
- Integrated service delivery network
- Meaningful partnerships and trusting relationships








## SECTION 7: KEY PRIORITY AREAS

### KEY PRIORITY AREAS

In response to the challenges outlined in Section 5 and in order to strengthen services in the state’s rural communities, we recommend improvements across the areas of: Access, Policy, Workforce Planning, Technology, and Service Delivery.

**Note:** When considering recommendations, priority should always be placed on worker and family/client safety at all times. Accordingly, in some cases, the recommendations outlined below may not be appropriate where process or policy changes have the potential to adversely impact worker or family/client safety. For example, workers responsible for assessing living conditions at family’s home would need to directly observe conditions – use of teleconference or other technology options would not be appropriate vehicles for conducting business in these types of scenarios.

Key Priority Area	High-level recommendations
 <p style="text-align: center;"><i>Access</i></p>	<ul style="list-style-type: none"> <li>▪ Expand transportation options for rural residents</li> <li>▪ Strengthen effective, relationship-based Information and Referral services available</li> <li>▪ Increase access to subsidized child care</li> </ul>
 <p style="text-align: center;"><i>Policy</i></p>	<ul style="list-style-type: none"> <li>▪ Review agency polices that require clients to travel to agencies</li> <li>▪ Review DTA car asset limit policy</li> <li>▪ Support Categorical eligibility for services</li> <li>▪ Increase reimbursement rate for child transportation</li> <li>▪ Review rate models for rural providers</li> <li>▪ Support rural appropriate models of health care</li> <li>▪ Establish ongoing Commission on Rural Services</li> <li>▪ Review policies of Low Income Home Energy Assistance Program (LIHEAP)</li> <li>▪ Develop a system-wide response to Rural Domestic and Sexual Violence</li> <li>▪ Improve the ability of state agencies to reach and serve those in rural communities</li> </ul>

	<p><b>Workforce Planning</b></p>	<ul style="list-style-type: none"> <li>Develop an enhanced and coordinated state infrastructure that identify and address rural workforce needs</li> <li>Implement data-driven and evidenced based strategies to address health care worker shortage in rural communities</li> <li>Address Family Child Care Provider shortage for children in state funded slots</li> </ul>
	<p><b>Technology</b></p>	<ul style="list-style-type: none"> <li>Expand broadband access to rural communities and service providers</li> <li>Strengthen communications options</li> <li>Improve outreach and service delivery through use of smart phone technology</li> <li>Support data-sharing</li> <li>Expand the use of telemedicine and health information technology</li> </ul>
	<p><b>Service Delivery</b></p>	<ul style="list-style-type: none"> <li>Integrate eligibility processes</li> <li>Support service availability and a more comprehensive service experience in rural areas</li> <li>Establish service access centers</li> </ul>

**KEY RECOMMENDATIONS**



**Access:** The ability for individuals and families to access comprehensive, quality health and human services and other state-sponsored services is critical to the quality of life experienced by people in need of assistance. In rural communities, access can be impacted significantly due to a range of factors unique to rural areas. Access to state-sponsored services includes both obtaining information about available services as well as locating and gaining entry to services. Timely access to the right information and services is critical to individuals and families in need. Lack of access can adversely impact the overall health status and quality of life of individuals and families.

High-level recommendations	Description and Key Action Steps
<p><b>Expand transportation options for rural residents</b></p>	<ul style="list-style-type: none"> <li>Support consumer directed care through the adoption of alternate transportation models in order to address both workforce and access issues</li> <li>This might include the establishment of travel vouchers through sponsoring agencies</li> </ul>

High-level recommendations	Description and Key Action Steps
	<p>that can be used to off-set travel costs for clients in rural communities.</p> <ul style="list-style-type: none"> <li>○ Vouchers enable funding agencies to pay existing public and private transit providers where routes and services do not exist. A voucher system is a way to grow transportation options and usage, particularly for those with significant need for transportation.</li> <li>○ Being able to rely on voucher-supported services means additional independence for the customer previously dependent on others (e.g. family members or friends) for their personal transportation. A voucher system allows clients to choose transportation services to match their need.</li> </ul> <ul style="list-style-type: none"> <li>▪ Explore use of car ownership programs in rural areas. Car ownership programs can be an effective alternative when public transportation and ridesharing options are not feasible, particularly in rural areas.</li> <li>▪ In many states, vehicle ownership programs are small and initially were funded with non-TANF funds. However, TANF funds have helped states and counties leverage their resources so they can now reach a broader group of low-income families.</li> <li>▪ Subsidizing transportation costs will ensure transportation options to seniors, persons with disabilities, and individuals with lower incomes.</li> </ul>
<p><b>Strengthen Information and Referral services available</b></p>	<ul style="list-style-type: none"> <li>▪ Strengthen Information and Referral services available in Rural Areas through better linkages between state and local agencies and service providers and support the consistent adoption of “managed referral” processes (or warm hand-offs and follow up) across state-sponsored programs and services.</li> <li>▪ Leverage and strengthen the state’s primary Information and Referral Systems to extend and deepen Information and Referral (I&amp;R) services available to rural residents (e.g., MASS 2-1-1, 1-800ageinfo, etc.) <ul style="list-style-type: none"> <li>○ Work with MASS 2-1-1 and/or other state-sponsored comprehensive I&amp;R service providers to ensure a plan exists to collect more comprehensive information regarding available services in rural areas around the state and promote MASS 2-1-1 as a resource to residents in rural areas to ensure the</li> </ul> </li> </ul>

High-level recommendations	Description and Key Action Steps
	<p>resource is utilized more widely by rural residents.</p> <ul style="list-style-type: none"> <li>Develop a Rural/Local Resource Guide – Develop locally-based resource guides for rural areas. The guides should be available online and include information regarding local resources “on the ground.” The guides could be developed in partnership with MASS 2-1-1, or another organizing body, but must be informed by local community service providers to ensure they contain the most accurate, complete, and up-to-date information made available in ways useful to individuals and families in crisis that may need to access information differently.</li> </ul>
<p><b>Increase access to subsidized child care</b></p>	<ul style="list-style-type: none"> <li>Increase access to subsidized child care across applicable state agencies for residents in rural communities. This includes programs available through the Department Early Education and Care, agencies within the Executive Office of Health and Human Services, etc.</li> </ul>



**Policy:** As the Commonwealth considers the unique needs of individuals, families, and service providers in rural areas, it must evaluate its policies governing state-sponsored services in rural areas. In order to support the social and economic development of rural communities, policy-makers must understand the challenges faced by rural residents and implement policies that support individuals and families utilizing state-sponsored services transition to greater self-reliance. In addition, policy-makers must consider how policies across government agencies and programs are aligned; local, state, and federal policies should be considered.

High-level recommendations	Description and Key Action Steps
<p><b>Review agency polices that require clients to travel to agencies</b></p>	<ul style="list-style-type: none"> <li>Review agency polices that require clients in rural communities to travel to agencies in order to be screened for eligibility. Applicable policies should be reviewed to determine the added value and necessity of clients presenting in person at the agency. Agencies should consider the geographic distance or amount of time needing</li> </ul>

High-level recommendations	Description and Key Action Steps
	<p>to be travelled by the client and develop policies that waive the need for clients to travel to agencies if the associated travel distance/time is beyond an established threshold. E.g., DTA’s in-person interview policy.</p> <ul style="list-style-type: none"> <li>▪ Where it is determined that clients presenting in person is necessary to optimally serve the client and ensure the integrity of programs, alternative options should be explored that allow for program and client goals to be achieved while mitigating the challenges associated with travel. This might include use of video conferencing or other technologies that allow for case workers and clients to view each other.</li> </ul>
<b>Review DTA car asset limit policy</b>	<ul style="list-style-type: none"> <li>▪ Review DTA’s asset limit policy and consider waiving car assets from the asset calculation for rural residents. Waiver would apply to rural residents only.</li> <li>▪ In the absence of reliable public transportation, workers need cars or other means of reliable travel to obtain and retain jobs, address emergencies and advance in the labor market. Families in rural areas may need two cars per household because family members are travelling to different geographic areas for work and one car may not support the family.</li> </ul>
<b>Support Categorical eligibility for services</b>	<ul style="list-style-type: none"> <li>▪ Review state policies in order to support movement toward categorical eligibility for state-sponsored services.</li> </ul>
<b>Increase reimbursement rate for child transportation</b>	<ul style="list-style-type: none"> <li>▪ Increase reimbursement rate for child transportation.</li> </ul>
<b>Review rate models for rural providers</b>	<ul style="list-style-type: none"> <li>▪ Review cost implications of service delivery in rural communities: review would include consideration of time, client volume, vehicle depreciation cost, and travel and fuel costs experienced by service providers rendering services in rural communities versus those providers delivering services in non-rural areas.</li> <li>▪ Refine provider rate setting methodologies to account for rural provider costs.</li> <li>▪ Explore the establishment of an administrative overhead rate for state sponsored services</li> </ul>

High-level recommendations	Description and Key Action Steps
<p><b>Support rural appropriate models of health care</b></p>	<ul style="list-style-type: none"> <li>▪ Support the participation of rural pilots, and rural appropriate practices, in the Patient-Centered Medical Home (PCMH) model initiative developing comprehensive, coordinated, patient-centered care delivered by teams of primary care providers.</li> <li>▪ Promote the development, and stabilization of infrastructure for, rural community coalitions, such as the Communities that Care models, to address alcohol, tobacco, and other drug use among local youth. These coalitions are effective rural models since they bring together community members to coordinate their work on a common data-driven and evidenced-based plan while staying current with prevention research and proven effective strategies. Also, examine access to detoxification beds and the availability of continuum of inpatient and outpatient services available to rural communities.</li> <li>▪ Develop a rural focused initiative to promote better collaborative and/or integrated models of care for mental health and primary care services.</li> </ul>
<p><b>Establish ongoing Commission on Rural Services</b></p>	<ul style="list-style-type: none"> <li>▪ Establish an ongoing committee on rural services and access.</li> <li>▪ The committee will provide ongoing feedback on key activities associated with implementing the recommendations through regularly scheduled committee forums. The committee will support implementation by communicating and advocating for proposed recommendations as well as identifying other needs and challenges related to rural communities, developing and proposing recommendations.</li> <li>▪ The Committee will make efforts to ensure that impacts to rural communities are considered as part of state-wide policy making.</li> <li>▪ The committee would include representation from those agencies represented on the FY13 Commission on Rural Access as well as the Department of Public Health’s State Office on Rural Health; Department of Transportation, Department of Education; Mass Broadband Institute, and labor and workforce development.</li> </ul>

High-level recommendations	Description and Key Action Steps
<p><b>Review policies of Low Income Home Energy Assistance Program (LIHEAP)</b></p>	<ul style="list-style-type: none"> <li>▪ Review LIHEAP polices and consider policy opportunities that promote streamlined application processes for rural residents (e.g., first time applicants must appear in person at a at the fuel assistance agency in their area – are there options for applicants in rural areas to apply at other community identified locations, or can a LIHEAP representative be integrated into a community-based family access center on a periodic basis)</li> </ul>
<p><b>Improve the ability of state agencies to reach and serve those in rural communities</b></p>	<ul style="list-style-type: none"> <li>▪ Continue to engage individuals and families in rural communities in an ongoing manner through public listening sessions, advisory committee meetings, and other forums.</li> <li>▪ Develop an on-line program available to state government employees through PACE for new state staff to acquaint themselves with the characteristics of Massachusetts’ rural communities and the best ways to provide information, work with rural health and human service providers, and serve rural residents.</li> <li>▪ Develop a system of EHS state agency staff who can provide a rural voice and in-person workshops in agency-appropriate forums at least once a year to provide updated information on rural Massachusetts and best practices being used to reach and work with rural communities.</li> <li>▪ Encourage each state agency to analyze key data sets so that the data can be examined and data reports produced in ways useful for rural Massachusetts communities. This should include grouping rural communities into locally appropriate rural areas, grouping more years of data together, or collapsing multiple data points into broader elements or indexes, so that rural data will not be left out of data reports due to low volume. Data analysis should include comparisons between rural and urban, and rural and the state as a whole.</li> </ul>
<p><b>Develop a system-wide response to Rural Domestic and Sexual Violence</b></p>	<ul style="list-style-type: none"> <li>▪ Support the recommendations identified in the 2012 Rural Domestic and Sexual Violence Draft Report developed by the Services Accessibility Sub-Committee of the Governor’s Council Addressing Sexual and Domestic Violence.</li> <li>▪ Key recommendations focus on:</li> </ul>

High-level recommendations	Description and Key Action Steps
	<ul style="list-style-type: none"> <li>○ Safety and Access: Offering accessible, culturally relevant services is crucial in the success of rural victim service programs. Because of the profound isolation of rural victims, programs need funding to establish and maintain accessible satellite offices and safe home networks, as well as the capacity to support ongoing safety strategies with survivors who remain in abusive relationships.</li> <li>○ Law Enforcement: State Troopers in rural areas respond to the majority of domestic violence and sexual assault calls, and need to coordinate their efforts with local police departments.</li> <li>○ Partnership and Buy-In with Rural Leaders and Key Stakeholders: In rural communities, building strong relationships and partnerships with respected community members is essential. Community members provide critical information and knowledge about the traditions, cultural values and community resources that will work to resist and respond effectively to domestic and sexual violence.</li> <li>○ Creative Outreach and Community Organizing Strategies: Programs and policies should match local characteristics as much as possible; one solution will not work for all rural areas. Effective violence prevention activities must take into account the unique nature of the rural community through creative engagement strategies.</li> </ul>





**Workforce Planning:** Workforce planning is an ongoing planning process to align the employment needs of the community with the skills of the available workforce. This also involves designing and implementing policies and procedures that act to strengthen this alignment. Rural workforce planning at the community level should include the assessment of existing and future workforce needs and gaps within rural communities. The focus of planning in rural areas should consider educational and employment training opportunities to address the skills gaps across rural communities to ensure workers are equipped and prepared for the knowledge and innovation economy of the Commonwealth and the jobs needed (or to be needed) in rural areas.

High-level recommendations	Description and Key Action Steps
<p><b>Develop an enhanced and coordinated state infrastructure that identify and address rural workforce needs</b></p>	<ul style="list-style-type: none"> <li>▪ This includes continuing to support the legislatively mandated activities at the MDPH Health Care Workforce Center to collect health workforce data and assess needs in order to use resulting data and reports.</li> <li>▪ Continue to further develop MDPH Healthcare Workforce Center per the requirements set forth in recent Massachusetts Healthcare Reform legislation.</li> <li>▪ Enhance coordination to promote better overall effectiveness among the many state agencies and stakeholder groups engaged in components of healthcare workforce development, training, recruitment, and retention efforts.</li> </ul>
<p><b>Implement data-driven and evidenced based strategies to address health care worker shortage in rural communities</b></p>	<ul style="list-style-type: none"> <li>▪ Increase the accessibility of state healthcare workforce programs to rural healthcare organizations.</li> <li>▪ Promote the further development of workforce pipeline programs to interest rural youth in health careers and health professions students in rural healthcare practice settings, for example the Rural Scholars Program at the University of Massachusetts Medical School.</li> <li>▪ Develop a robust program of technical assistance for rural communities to enhance their ability to recruit and retain health care professionals.</li> <li>▪ Address health professional retention needs for rural areas of the state so that those trained</li> </ul>

High-level recommendations	Description and Key Action Steps
<p><b>Address Family Child Care Provider shortage for children in state funded slots</b></p>	<p>and/or recruited to the state will stay.</p> <ul style="list-style-type: none"> <li>▪ Support for onsite child care by ensuring that as agency offices or service centers are established, state agencies operating these facilities in rural areas review the availability of child care in the area and as necessary, consider having child care services onsite where services are not readily available in the immediate area.</li> <li>▪ Review family childcare provider qualifications for child care subsidies.</li> </ul>



**Technology:** Technology is changing the health and human service delivery system. How people retrieve information, obtain or deliver services, communicate, and manage their day to day lives is all supported by technology. Consumers expect to have the ability to perform many transactions via internet or interactive voice response systems or other tools that make it easier and faster to transact business or communicate with service providers. In Rural areas, implementation of broadband internet technology and adoption of other technologies that allow for residents to get the information or services they need easier, faster, and without having to travel unnecessarily are tremendous opportunities to improve the quality of life of rural residents.

High-level recommendations	Description and Key Action Steps
<p><b>Expand broadband access to rural communities and service providers</b></p>	<ul style="list-style-type: none"> <li>▪ Review Anchor Sites from MBI as part of its expansion to rural areas and identify gaps. Identify additional anchor sites as needed and other opportunities to close gaps in order to further expand broadband access to service providers in rural communities.</li> </ul>

High-level recommendations	Description and Key Action Steps
<b>Strengthen communications options</b>	<ul style="list-style-type: none"> <li>▪ Ensure internet access and implement video conference technology in key locations. Key locations should be community-identified or in known community hubs. Hubs may not be “traditional” office buildings but are known in the community and are generally accessible via local transportation.</li> </ul>
<b>Improve outreach and service delivery through use of smart phone technology</b>	<ul style="list-style-type: none"> <li>▪ Consider investment in the development of smart phone and mobile apps to promote better client outreach and engagement. This might include support for mobile friendly web-sites, etc.</li> </ul>
<b>Support data-sharing</b>	<ul style="list-style-type: none"> <li>▪ Develop processes that facilitate <i>appropriate</i> data-sharing across state agencies.</li> <li>▪ Identify and overcome legal barriers to implementing data-sharing processes where processes have been determined to improve client experience, strengthen service delivery, and improve outcomes for individuals and families.</li> <li>▪ Explore the potential of leveraging the work that has been done around electronic medical records to facilitate data-sharing.</li> <li>▪ Implement technology to support sharing of information.</li> <li>▪ Work with individuals and families to understand and address privacy concerns, allow opt-in/opt-out, and ensure informed consent practices are followed.</li> </ul>
<b>Expand the use of telemedicine and health information technology</b>	<ul style="list-style-type: none"> <li>▪ Expand the use of telemedicine and health information technology to improve access, quality, and cost effectiveness of health care services in rural communities.</li> <li>▪ Inventory rural healthcare organizations on their current uses of telemedicine; identify current barriers and further development interest.</li> <li>▪ Form a workgroup to address policy changes needed to more fully utilize telemedicine and health information technologies in rural Massachusetts.</li> <li>▪ Continue to promote the use of telemedicine and health information technologies to rural healthcare organizations through a variety of mechanisms</li> </ul>



**Service Delivery:** Improving the manner in which state-sponsored services are delivered is particularly important to achieving the right outcomes for individuals and families. To achieve better outcomes for individual and families, the Commonwealth needs to support the development of a service system that is better integrated and coordinated. Individuals and families often have multiple service needs that are not sufficiently addressed in a divided system of services. For example, a family that has a child with behavioral health needs may access state services through one agency, but the parent may have housing and domestic violence issues with which they also need help. While the child receives services through the agency, the adult parent may not access vital assistance they need in order to fully support the child. Strengthening the service delivery system to be more responsive to individuals and families that are eligible for multiple state-sponsored services will greatly improve the quality of life for rural residents.

High-level recommendations	Description and Key Action Steps
<b>Integrate eligibility processes</b>	<ul style="list-style-type: none"> <li>Supports state’s plan to move to an integrated eligibility system/process for key state-sponsored services (E.g., MassHealth, SNAP, TANF, etc.).</li> </ul>
<b>Support service availability and a more comprehensive service experience in rural areas</b>	<ul style="list-style-type: none"> <li>Develop a “Roaming or Mobile Service Center” model where small teams of agency representatives can travel to different communities on a rotating basis to provide rural residents with a one-stop service experience within their community. The Roaming Center would not have permanent dedicated space in the community but would station services at a local agency or other community-identified location where service center would be hosted on an established regular schedule. Services offerings should be broad and where possible stigma associated with obtaining transitional support services should be mitigated in the design of the mobile center.</li> </ul>

High-level recommendations	Description and Key Action Steps
<p><b>Establish service access centers</b></p>	<ul style="list-style-type: none"> <li>▪ Establish access points within communities that act as an entry way to all of the state’s social service agencies – these may be achieved by co-locating the multiple agency-specific resource centers that exist today or by expanding the capability of these centers to provide support, information, and referral to all visitors, regardless of eligibility and primary agency affiliation. Whether one door or multiple doors, there should be “no wrong door.”</li> <li>▪ Wherever possible develop community-based centers, in cooperation with community partners, that are welcoming, non-stigmatizing, family friendly, and responsive to the holistic needs of children, youth, and families.</li> <li>▪ Facilities should be open convenient hours and be staffed with culturally and linguistically appropriate staff.</li> <li>▪ Engage community organizations and partners to ensure access centers provide information related all of the resources available to families in that community (both state and non-state funded).</li> <li>▪ Serve as the primary physical “door” to access easily navigated entry to the right services at the right time.</li> </ul>

## SECTION 8: TOPICS TO BE FURTHER DEVELOPED

**Access to Health Care (Primary Care services and Critical Access Hospitals):** Explore initiatives that seek to improve availability of and access to primary care services, improve health care outcomes and quality, retain and recruit healthcare workers, lower health costs, and promote use of technology to better managed and coordinate health services.

**Contract Incentives:** Explore use of contract incentives that support service models that encourage collaboration, collocation, and/or cost sharing in rural areas. Consider the inclusion of transportation costs in contracts where providers would be travelling inordinate distances or time to interface with clients and deliver services. Consider relieving the requirement for providers to conduct in person assessments at an office, or structure payments to allow workers to perform assessments at the client's home.

**Grant funds:** The state should review its approach to grant making to ensure rural communities are not particularly disadvantaged due to population density. Policies regarding the state grant making should: 1) address eligibility of rural cities; 2) the ability for cities with low population density to jointly apply for state grants; and 3) encourage population centers and gateway communities to act as a hub or central coordinating body for grants to surrounding rural cities.

**Careers in early childhood development:** Support licensing of workers in early childhood development and proper credentialing. Strengthen incentives to work in child care. E.g., offering discounted educational opportunities, etc.

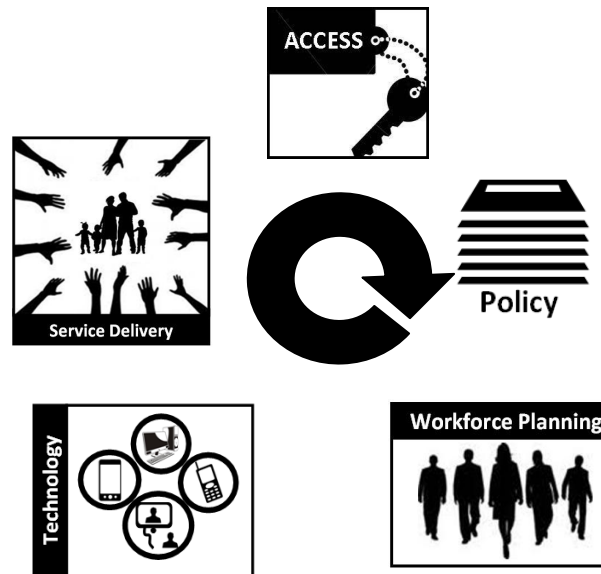
**Secondary Education / School-based learning and training programs:** Explore the establishment of satellite locations for local universities and other learning and education programs in select rural areas.

**State Funding:** Explore initiatives to blend funding from state agencies to service providers in order to streamline administration, optimize funding streams, and maximize service delivery to clients.

**Data collection and analysis:** Explore opportunities to strengthen data collection and analysis of state rural population across state agencies.

## SECTION 9: IMPLEMENTATION CONSIDERATIONS AND NEXT STEPS

To ensure the implementation of the recommendations set forth in this report, the Commission has proposed the establishment of a committee on rural services and access. The committee would be a sub-committee of MA Department of Public Health's Rural Health Advisory Council, and will provide ongoing feedback on key activities associated with implementing the recommendations through regularly scheduled committee forums. The committee will support implementation by communicating and advocating for proposed recommendations as well as identifying other needs and challenges related to rural communities, and developing and proposing recommendations.



## SECTION 10: STRENGTHENING RURAL MASSACHUSETTS

Massachusetts has a number of other initiatives underway focused on supporting the needs of rural residents. Below are some of the efforts underway.

### State Office of Rural Health

The Massachusetts State Office of Rural Health (SORH) was established in 1994 at the Department of Public Health. The SORH builds partnerships and assists with technical assistance and resources to address a variety of health needs and build better systems of organized care in rural Massachusetts communities. SORH works closely with a vast statewide network of providers, healthcare organizations, community groups, and local officials across the state. SORH also serves as a focal point for addressing rural health needs within state government. The Massachusetts SORH is funded through a base grant from the Federal Office of Rural Health Policy at HRSA with considerable additional matching and in-kind funds from the Massachusetts Department of Public Health.

### Major Areas of Activity

Collection and dissemination of rural health information through a variety of means.

Coordination of rural health networking activities within the state and region.

Provision of technical assistance for planning, development, and implementation of local rural health projects and initiatives.

Providing leadership to strengthen local, state, and federal partnerships and secure additional resources to improve rural health.

Administration of the MA Rural Hospital Flex Program.

Administration of the MA SHIP Program (Small Rural Hospital Improvement).

Administration of Massachusetts' participation in the National Rural Recruitment and Retention Network (3R Net).

Leadership and coordination for special rural initiatives in areas such as rural primary stroke services, health information technology, healthcare workforce, chronic disease and elder health service models, oral health, EMS, expanding safety net models of primary care, etc.

### Rural Health Roundtable

The New England Rural Health Roundtable is the official state rural health association for Massachusetts, and the other New England states, affiliated with the National Rural Health Association. The Roundtable is a vibrant membership-driven association comprised of a broad range of individuals and organizations committed to improving health and health care throughout rural New England communities. There is very good leadership and participation from Massachusetts Roundtable members. The Massachusetts State Office of Rural Health also works closely with the Roundtable to support its efforts and further development as an effective strategy and resource for Massachusetts and New England.



### **Rural Recruitment and Retention Network**

The Massachusetts State Office of Rural Health is administering Massachusetts' participation in the National Rural Recruitment and Retention Network (3R Net), coordinating activities with other state partners such as the MA DPH Primary Care Office and the AHEC Program at the University of Massachusetts Medical School along with hospitals, community health centers, and healthcare organizations in rural communities.

### **MA Small Rural Hospital Improvement Program (SHIP)**

The Massachusetts Small Rural Hospital Improvement Program (SHIP) is administered by the Massachusetts Department of Public Health's State Office of Rural Health in partnership with the Massachusetts Hospital Association. Using federal funds, this program makes annual grant awards of approximately \$8,000 to \$9,000 each to help nine small rural hospitals (49 beds or less) with any of the following: 1) Value Based Purchasing (VBP): enable the purchase of equipment and/or training to help hospitals attain value-based purchasing provisions in the federal Patient Protection and Affordable Care Act (ACA), 2) Accountable Care Organizations/Shared Savings (ACO): aid small rural hospitals in joining or becoming accountable care organizations (ACO), or create shared savings programs per the ACA, and 3) Payment Bundling/PPS (PB/PPS): enable small rural hospitals to purchase health information technology equipment and/or training to comply with meaningful use, ICD-10 standards, and payment bundling. Currently, the nine SHIP-eligible

community hospitals in rural Massachusetts are: Athol Memorial Hospital, Baystate Mary Lane Hospital, Clinton Hospital, Fairview Hospital, Martha's Vineyard Hospital, Nantucket Cottage Hospital, Nashoba Valley Medical Center, North Adams Regional Hospital, and Wing Memorial Hospital.

### **Massachusetts Rural Hospital Flexibility Program**

The Massachusetts Rural Hospital Flexibility Program (Flex) is a project of the Massachusetts Department of Public Health, managed by the State Office of Rural Health, in collaboration with the Massachusetts Hospital Association, Masspro, three Critical Access Hospitals (CAHs), six other small rural hospitals, as well as several additional external partners and internal state programs. The purpose of Flex is to support CAHs and small rural hospitals in achieving measurable quality, operational, and financial improvement, as well as to support rural health system development and community engagement. The Program has been a vital ongoing technical and strategic resource to small rural hospitals in their efforts to improve financial, operational, and quality status.

To that end, the MA Flex Program coordinates multiple collaborative networks of hospital administrators and provides technical assistance and resources for quality and performance improvement projects. The Program is actively responsive to the changing healthcare reform and regulatory environment in MA and nationally, dialoging with senior hospital leadership, bringing in expertise, and offering group technical assistance and support for smaller rural facilities whose needs are often overshadowed by larger, urban

healthcare organizations. In addition, we conduct projects in collaboration with the State EMS Office to strengthen local rural EMS management, develop more coordinated rural EMS systems, and improve the quality of EMS care provided.

Highlights of projects include:

- A Rural Hospital Pharmacy Network focused on medication safety and management including projects on chronic disease management, 340B implementation, antibiotic stewardship, medication shortages, pharmacy workforce, and the use of new technology.
- Technical assistance for small rural hospitals to assist with collecting and reporting quality data, provision of benchmarking data, and quality improvements activities.
- A multi-year initiative to assist small rural hospitals with developing teams and implementing approaches to reducing hospital re-admission rates and improving patient care transitions.
- A partnership with Institute for Healthcare Improvement for the development of rural specific quality improvement projects and resources through the New England Rural Hospital Performance Improvement Network.
- Participation in a national Medicare Beneficiary Health Status Improvement Project in collaboration with the Federal Office of Rural Health Policy and other State Offices of Rural Health.
- Assistance to the small rural hospitals with implementing state and national healthcare reform priorities.
- Assistance with the implementation of the new ICD-10 CM/PCS Coding Systems including a workshop for rural

hospital administrators, readiness assessments and planning assistance at small rural hospitals, and the development of a learning network across all small rural hospitals.

- Access to a comprehensive benchmarking system designed for small rural hospitals that produce hospital specific and statewide reports using current and meaningful performance data from multiple national databases generating Hospital Strength Indexes based on four performance dimensions.

#### **The Rural Health Scholars Program**

The Rural Health Scholars program is an inter-professional learning experience for medical and advanced practice nursing students at the University of Massachusetts Medical School developed by the Department of Family and Community Medicine to nurture the interest of medical and advanced practice nursing students who want to pursue a career in rural health. The longer range goal of the program is to increase the likelihood of these students practicing in rural Massachusetts communities upon completion of their training. Participating students a) acquire the skills and develop the attitudes necessary to become effective clinicians for rural and small town communities, b) learn about important linkages between clinical practice and public health aimed at developing healthy rural and small town communities, and c) have the opportunity to meet and form relationships with others in the medical, public health, and governmental sectors who are working to meet the needs of rural and small town communities.

### **Massachusetts Rural Domestic and Sexual Violence Project**

This project funds and partners with three domestic and sexual violence agencies in rural areas of Western Massachusetts to educate the public and professionals about domestic and sexual violence and to provide direct services and advocacy to adult and adolescent survivors and their children who witness the abuse. In addition, the Project has built a strong collaborative rural network, established and maintained accessible satellite offices in rural communities and implemented innovative violence prevention trainings, initiatives and policies that aim to improve the systemic response to this violence in 84 rural jurisdictions in the Commonwealth.

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## APPENDIX

### Massachusetts Rural Towns Massachusetts Meal Gap

**APPENDIX 1: RURAL TOWNS OF MASSACHUSETTS BY COUNTY**

<b>Barnstable County 2010 population data 2000 square mile data</b>						
<b>Town</b>	<b>Square Meters*</b>	<b>Square Miles*</b>	<b>Population</b>	<b>Density**</b>	<b>Active SNAP Cases</b>	<b>Active Member in Active SNAP Cases</b>
Bourne Town	105,960,227	41	19,754	483	1,003	1,710
Brewster Town	59,530,561	23	9,820	427	283	506
Chatham Town	42,013,344	16	6,125	378	193	297
Eastham Town	36,234,926	14	4,956	354	202	339
Orleans Town	36,712,857	14	5,890	416	250	331
Provincetown Town	25,020,528	10	2,942	305	220	267
Sandwich Town	111,470,243	43	20,675	480	528	974
Truro Town	54,524,929	21	2,003	95	76	101
Wellfleet Town	51,370,071	20	2,750	139	128	201

<b>Berkshire County</b>						
<b>Town</b>	<b>Square Meters*</b>	<b>Square Miles*</b>	<b>Population</b>	<b>Density**</b>	<b>Active SNAP Cases</b>	<b>Active Member in Active SNAP Cases</b>
Adams Town	59,405,541	23	8,485	370	844	1,545
Alford Town	29,937,166	12	494	43	2	4
Becket Town	119,818,918	46	1,779	38	129	245
Cheshire Town	69,766,862	27	3,235	120	184	330

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Clarksburg Town	33,041,993	13	1,702	133	94	153
Dalton Town	56,489,588	22	6,756	310	322	602
Egremont Town	48,788,973	19	1,225	65	6	11
Florida Town	63,093,882	24	752	31	45	74
Great Barrington Town	117,027,149	45	7,104	157	425	699
Hancock Town	92,537,133	36	717	20	19	33
Hinsdale Town	53,963,994	21	2,032	98	138	252
Lanesborough Town	75,216,881	29	3,091	106	166	277
Lee Town	68,367,412	26	5,943	225	307	551
Lenox Town	54,950,028	21	5,025	237	170	288
Monterey Town	68,632,683	26	961	36	15	25
Mount Washington Town	57,558,103	22	167	8	11	15
New Ashford Town	35,066,594	14	228	17	10	19
New Marlborough Town	122,244,703	47	1,509	32	42	72
Otis Town	92,821,567	36	1,612	45	63	110
Peru Town	67,167,645	26	847	33	38	70
Richmond Town	49,112,111	19	1,475	78	22	38
Sandisfield Town	135,504,821	52	915	17	36	62
Savoy Town	92,888,795	36	692	19	28	50



Sheffield Town	124,698,769	48	3,257	68	133	283
Stockbridge Town	59,411,043	23	1,947	85	90	144
Tyringham Town	48,441,904	19	327	17	7	12
Washington Town	97,799,802	38	538	14	15	28
West Stockbridge Town	47,856,969	18	1,306	71	40	59
Williamstown Town	121,442,692	47	7,754	165	253	422
Windsor Town	90,621,679	35	899	26	17	36

Bristol County						
Town	Square Meters*	Square Miles*	Population	Density**	Active SNAP Cases	Active Member in Active SNAP Cases
Berkley Town	42,833,886	17	6,411	388	249	427
Dighton Town	57,975,326	22	7,086	317	273	486
Freetown Town	94,817,703	37	8,870	242	345	545
Rehoboth Town	120,425,495	46	11,608	250	292	571
Westport Town	129,627,545	50	15,532	310	684	1,112

Dukes County						
Town	Square Meters*	Square Miles*	Population	Density**	Active SNAP Cases	Active Member in Active SNAP Cases
Aquinnah Town	13,891,941	5	311	58	8	19
Chilmark Town						

	49,584,683	19	866	45	18	38
Edgartown Town	69,908,903	27	4,067	151	102	183
Gosnold Town	34,554,673	13	75	6	-	-
West Tisbury Town	64,780,358	25	2,740	110	15	29

Essex County						
Town	Square Meters*	Square Miles*	Population	Density**	Active SNAP Cases	Active Member in Active SNAP Cases
Boxford Town	62,090,404	24	7,965	332	42	68
Essex Town	36,674,348	14	3,504	247	81	125
Ipswich Town	84,391,017	33	13,175	404	427	726
Newbury Town	62,797,361	24	6,666	275	102	158
Rowley Town	48,482,177	19	5,856	313	105	190
Topsfield Town	32,994,248	13	6,085	478	113	156
West Newbury Town	35,010,358	14	4,235	313	38	77

Franklin County						
Town	Square Meters*	Square Miles*	Population	Density**	Active SNAP Cases	Active Member in Active SNAP Cases
Ashfield Town	104,364,029	40	1,737	43	77	134
Bernardston Town	60,635,090	23	2,129	91	118	207
Buckland Town	50,663,626	20	1,902	97	9	17

**Rural Access Commission  
(SECTION 203 OF THE FY13 GAA)**

Charlemont Town	67,591,891	26	1,266	49	113	221
Colrain Town	112,356,411	43	1,671	39	93	194
Conway Town	97,658,199	38	1,897	50	53	89
Deerfield Town	83,636,253	32	5,125	159	173	286
Erving Town	35,933,000	14	1,800	130	107	182
Gill Town	36,213,287	14	1,500	107	61	91
Hawley Town	79,931,563	31	337	11	18	32
Heath Town	64,498,132	25	706	28	29	63
Leverett Town	59,171,628	23	1,851	81	69	112
Leyden Town	46,600,751	18	711	40	2,230	3,877
Monroe Town	27,730,424	11	121	11	7	13
Montague Town	78,736,709	30	8,437	278	934	1,597
New Salem Town	116,488,738	45	990	22	27	56
Northfield Town	89,129,019	34	3,032	88	124	230
Orange Town	91,588,665	35	7,839	222	988	1,852
Rowe Town	60,993,691	24	393	17	22	46
Shelburne Town	60,220,383	23	1,893	81	182	329
Shutesbury Town	68,925,446	27	1,771	67	69	131
Sunderland Town	37,260,437	14	3,684	256	118	192

Warwick Town	96,525,099	37	780	21	44	74
Wendell Town	82,862,084	32	848	27	68	112
Whately Town	52,256,371	20	1,496	74	20	30

Hampden County						
Town	Square Meters*	Square Miles*	Population	Density**	Active SNAP Cases	Active Member in Active SNAP Cases
Blandford Town	134,018,910	52	1,233	24	38	70
Brimfield Town	89,886,184	35	3,609	104	172	291
Chester Town	95,122,301	37	1,337	36	72	156
Granville Town	109,389,366	42	1,566	37	65	145
Hampden Town	50,864,592	20	5,139	262	136	235
Holland Town	32,097,701	12	2,481	200	120	235
Monson Town	114,692,878	44	8,560	193	454	823
Montgomery Town	38,984,038	15	838	56	16	41
Palmer Town	81,666,180	32	12,140	385	1,186	2,118
Russell Town	45,478,842	18	1,775	101	114	252
Southwick Town	80,173,652	31	9,502	307	390	767
Tolland Town	81,943,667	32	485	15	19	49
Wales Town	40,786,143	16	1,838	117	133	240

Hampshire County						
Town	Square Meters*	Square Miles*	Population	Density**	Active SNAP Cases	Active Member in Active SNAP Cases
Belchertown Town	136,563,735	53	14,649	278	682	1,270
Chesterfield Town	80,554,078	31	1,222	39	31	57
Cummington Town	59,710,259	23	872	38	49	79
Goshen Town	44,987,508	17	1,054	61	16	40
Granby Town	72,162,284	28	6,240	224	249	461
Hadley Town	60,360,648	23	5,250	225	239	378
Hatfield Town	41,484,082	16	3,279	205	141	199
Huntington Town	68,989,533	27	2,180	82	116	227
Middlefield Town	62,562,420	24	521	22	9	14
Pelham Town	64,919,645	25	1,321	53	31	58
Plainfield Town	54,526,021	21	648	31	32	63
Southampton Town	72,903,656	28	5,792	206	186	354
Ware Town	89,118,978	34	9,872	287	1,071	2,072
Westhampton Town	70,290,221	27	1,607	59	32	47
Williamsburg Town	66,368,744	26	2,482	97	129	204
Worthington Town	83,032,143	32	1,156	36	56	93

Middlesex County

Town	Square Meters*	Square Miles*	Population	Density**	Active SNAP Cases	Active Member in Active SNAP Cases
Ashby Town	61,629,333	24	3,074	129	104	228
Boxborough Town	26,845,100	10	4,996	482	63	113
Carlisle Town	39,787,361	15	4,852	316	24	34
Dunstable Town	42,858,273	17	3,179	192	32	56
Groton Town	84,876,229	33	10,646	325	151	271
Lincoln Town	37,211,140	14	6,362	443	74	117
Sherborn Town	41,346,218	16	4,119	258	20	37
Shirley Town	40,985,295	16	7,211	456	302	546
Stow Town	45,644,617	18	6,590	374	94	162
Townsend Town	85,138,281	33	8,926	272	284	565

Nantucket County						
Town	Square Meters*	Square Miles*	Population	Density**	Active SNAP Cases	Active Member in Active SNAP Cases
Nantucket Town	123,826,853	48	10,172	213	189	371

Norfolk County						
Town	Square Meters*	Square Miles*	Population	Density**	Active SNAP Cases	Active Member in Active SNAP Cases
Dover Town	39,703,447	15	5,589	365	15	39

Wrentham Town	57,490,056	22	10,955	494	248	442
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Plymouth County						
Town	Square Meters*	Square Miles*	Population	Density**	Active SNAP Cases	Active Member in Active SNAP Cases
Carver Town	97,251,518	38	11,509	307	613	1,039
Halifax Town	41,821,733	16	7,518	466	324	584
Lakeville Town	77,444,319	30	10,602	355	446	793
Marion Town	37,891,141	15	4,907	335	129	216
Mattapoisett Town	42,678,799	16	6,045	367	145	261
Middleborough Town	180,143,819	70	23,116	332	1,381	2,585
Plympton Town	38,300,553	15	2,820	191	98	170
Rochester Town	87,883,085	34	5,232	154	104	200
West Bridgewater Town	40,768,179	16	6,916	439	259	433

Worcester County						
Town	Square Meters*	Square Miles*	Population	Density**	Active SNAP Cases	Active Member in Active SNAP Cases
Ashburnham Town	100,146,696	39	6,081	157	175	347
Athol Town	84,361,215	33	11,584	356	1,420	2,678
Barre Town	114,813,799	44	5,398	122	274	545
Berlin Town						



**Rural Access Commission  
(SECTION 203 OF THE FY13 GAA)**

	33,481,557	13	2,866	222	54	96
Bolton Town	51,621,224	20	4,897	246	42	58
Boylston Town	41,520,553	16	4,355	272	82	141
Brookfield Town	40,204,917	16	3,390	218	220	373
Charlton Town	110,149,084	43	12,981	305	492	920
Douglas Town	94,193,698	36	8,471	233	260	501
East Brookfield Town	25,496,848	10	2,183	222	88	186
Hardwick Town	99,951,868	39	2,990	77	153	297
Harvard Town	68,264,015	26	6,520	247	31	51
Holden Town	90,622,504	35	17,346	496	358	655
Hubbardston Town	106,256,485	41	4,382	107	119	206
Lancaster Town	71,678,282	28	8,055	291	221	365
Leicester Town	60,500,344	23	10,970	470	523	856
Lunenburg Town	68,431,481	26	10,086	382	361	666
Mendon Town	46,873,770	18	5,839	323	97	178
New Braintree Town	53,619,061	21	999	48	19	50
North Brookfield Town	54,551,380	21	4,680	222	267	501
Oakham Town	54,704,053	21	1,902	90	54	107
Paxton Town	38,159,563	15	4,806	326	87	161
Petersham Town						

	140,469,912	54	1,234	23	31	62
Phillipston Town	62,836,157	24	1,682	69	73	148
Princeton Town	91,797,446	35	3,413	96	49	99
Royalston Town	108,493,823	42	1,258	30	73	126
Rutland Town	91,313,879	35	7,973	226	219	369
Southborough Town	36,641,891	14	9,767	690	92	129
Spencer Town	85,076,998	33	11,688	356	930	1,722
Sterling Town	79,055,981	31	7,808	256	152	254
Sturbridge Town	96,894,339	37	9,268	248	406	713
Sutton Town	83,861,803	32	8,963	277	166	325
Templeton Town	82,971,637	32	8,013	250	366	752
Upton Town	55,728,445	22	7,542	351	147	246
Uxbridge Town	76,517,411	30	13,457	455	393	755
Warren Town	71,303,171	28	5,135	187	403	817
West Brookfield Town	53,027,834	20	3,701	181	215	387
Westminster Town	91,961,417	36	7,277	205	211	397
Winchendon Town	112,103,924	43	10,300	238	755	1,516

\* Land Area

\*\*Calculated by dividing population into land area in square miles

**Barnstable County 2010 population data 2000 square mile data**

Town	Square Meters*	Square Miles*	Population	Density**	Active SNAP Cases	Active Member in Active SNAP Cases
Bourne Town	105,960,227	41	19,754	483	1,003	1,710
Brewster Town	59,530,561	23	9,820	427	283	506
Chatham Town	42,013,344	16	6,125	378	193	297
Eastham Town	36,234,926	14	4,956	354	202	339
Orleans Town	36,712,857	14	5,890	416	250	331
Provincetown Town	25,020,528	10	2,942	305	220	267
Sandwich Town	111,470,243	43	20,675	480	528	974
Truro Town	54,524,929	21	2,003	95	76	101
Wellfleet Town	51,370,071	20	2,750	139	128	201

Berkshire County						
Town	Square Meters*	Square Miles*	Population	Density**	Active SNAP Cases	Active Member in Active SNAP Cases
Adams Town	59,405,541	23	8,485	370	844	1,545
Alford Town	29,937,166	12	494	43	2	4
Becket Town	119,818,918	46	1,779	38	129	245
Cheshire Town	69,766,862	27	3,235	120	184	330
Clarksburg Town	33,041,993	13	1,702	133	94	153
Dalton Town	56,489,588	22	6,756	310	322	602

Egremont Town	48,788,973	19	1,225	65	6	11
Florida Town	63,093,882	24	752	31	45	74
Great Barrington Town	117,027,149	45	7,104	157	425	699
Hancock Town	92,537,133	36	717	20	19	33
Hinsdale Town	53,963,994	21	2,032	98	138	252
Lanesborough Town	75,216,881	29	3,091	106	166	277
Lee Town	68,367,412	26	5,943	225	307	551
Lenox Town	54,950,028	21	5,025	237	170	288
Monterey Town	68,632,683	26	961	36	15	25
Mount Washington Town	57,558,103	22	167	8	11	15
New Ashford Town	35,066,594	14	228	17	10	19
New Marlborough Town	122,244,703	47	1,509	32	42	72
Otis Town	92,821,567	36	1,612	45	63	110
Peru Town	67,167,645	26	847	33	38	70
Richmond Town	49,112,111	19	1,475	78	22	38
Sandisfield Town	135,504,821	52	915	17	36	62
Savoy Town	92,888,795	36	692	19	28	50
Sheffield Town	124,698,769	48	3,257	68	133	283
Stockbridge Town	59,411,043	23	1,947	85	90	144

Tyringham Town	48,441,904	19	327	17	7	12
Washington Town	97,799,802	38	538	14	15	28
West Stockbridge Town	47,856,969	18	1,306	71	40	59
Williamstown Town	121,442,692	47	7,754	165	253	422
Windsor Town	90,621,679	35	899	26	17	36

Bristol County						
Town	Square Meters*	Square Miles*	Population	Density**	Active SNAP Cases	Active Member in Active SNAP Cases
Berkley Town	42,833,886	17	6,411	388	249	427
Dighton Town	57,975,326	22	7,086	317	273	486
Freetown Town	94,817,703	37	8,870	242	345	545
Rehoboth Town	120,425,495	46	11,608	250	292	571
Westport Town	129,627,545	50	15,532	310	684	1,112

Dukes County						
Town	Square Meters*	Square Miles*	Population	Density**	Active SNAP Cases	Active Member in Active SNAP Cases
Aquinnah Town	13,891,941	5	311	58	8	19
Chilmark Town	49,584,683	19	866	45	18	38
Edgartown Town	69,908,903	27	4,067	151	102	183
Gosnold Town						

	34,554,673	13	75	6	-	-
West Tisbury Town	64,780,358	25	2,740	110	15	29

Essex County						
Town	Square Meters*	Square Miles*	Population	Density**	Active SNAP Cases	Active Member in Active SNAP Cases
Boxford Town	62,090,404	24	7,965	332	42	68
Essex Town	36,674,348	14	3,504	247	81	125
Ipswich Town	84,391,017	33	13,175	404	427	726
Newbury Town	62,797,361	24	6,666	275	102	158
Rowley Town	48,482,177	19	5,856	313	105	190
Topsfield Town	32,994,248	13	6,085	478	113	156
West Newbury Town	35,010,358	14	4,235	313	38	77

Franklin County						
Town	Square Meters*	Square Miles*	Population	Density**	Active SNAP Cases	Active Member in Active SNAP Cases
Ashfield Town	104,364,029	40	1,737	43	77	134
Bernardston Town	60,635,090	23	2,129	91	118	207
Buckland Town	50,663,626	20	1,902	97	9	17
Charlemont Town	67,591,891	26	1,266	49	113	221
Colrain Town	112,356,411	43	1,671	39	93	194

**Rural Access Commission  
(SECTION 203 OF THE FY13 GAA)**

Conway Town	97,658,199	38	1,897	50	53	89
Deerfield Town	83,636,253	32	5,125	159	173	286
Erving Town	35,933,000	14	1,800	130	107	182
Gill Town	36,213,287	14	1,500	107	61	91
Hawley Town	79,931,563	31	337	11	18	32
Heath Town	64,498,132	25	706	28	29	63
Leverett Town	59,171,628	23	1,851	81	69	112
Leyden Town	46,600,751	18	711	40	2,230	3,877
Monroe Town	27,730,424	11	121	11	7	13
Montague Town	78,736,709	30	8,437	278	934	1,597
New Salem Town	116,488,738	45	990	22	27	56
Northfield Town	89,129,019	34	3,032	88	124	230
Orange Town	91,588,665	35	7,839	222	988	1,852
Rowe Town	60,993,691	24	393	17	22	46
Shelburne Town	60,220,383	23	1,893	81	182	329
Shutesbury Town	68,925,446	27	1,771	67	69	131
Sunderland Town	37,260,437	14	3,684	256	118	192
Warwick Town	96,525,099	37	780	21	44	74
Wendell Town	82,862,084	32	848	27	68	112



Whately Town	52,256,371	20	1,496	74	20	30
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Hampden County						
Town	Square Meters*	Square Miles*	Population	Density**	Active SNAP Cases	Active Member in Active SNAP Cases
Blandford Town	134,018,910	52	1,233	24	38	70
Brimfield Town	89,886,184	35	3,609	104	172	291
Chester Town	95,122,301	37	1,337	36	72	156
Granville Town	109,389,366	42	1,566	37	65	145
Hampden Town	50,864,592	20	5,139	262	136	235
Holland Town	32,097,701	12	2,481	200	120	235
Monson Town	114,692,878	44	8,560	193	454	823
Montgomery Town	38,984,038	15	838	56	16	41
Palmer Town	81,666,180	32	12,140	385	1,186	2,118
Russell Town	45,478,842	18	1,775	101	114	252
Southwick Town	80,173,652	31	9,502	307	390	767
Tolland Town	81,943,667	32	485	15	19	49
Wales Town	40,786,143	16	1,838	117	133	240

Hampshire County						
Town	Square Meters*	Square Miles*	Population	Density**	Active SNAP Cases	Active Member in Active SNAP Cases
Belchertown Town	136,563,735	53	14,649	278	682	1,270
Chesterfield Town	80,554,078	31	1,222	39	31	57
Cummington Town	59,710,259	23	872	38	49	79
Goshen Town	44,987,508	17	1,054	61	16	40
Granby Town	72,162,284	28	6,240	224	249	461
Hadley Town	60,360,648	23	5,250	225	239	378
Hatfield Town	41,484,082	16	3,279	205	141	199
Huntington Town	68,989,533	27	2,180	82	116	227
Middlefield Town	62,562,420	24	521	22	9	14
Pelham Town	64,919,645	25	1,321	53	31	58
Plainfield Town	54,526,021	21	648	31	32	63
Southampton Town	72,903,656	28	5,792	206	186	354
Ware Town	89,118,978	34	9,872	287	1,071	2,072
Westhampton Town	70,290,221	27	1,607	59	32	47
Williamsburg Town	66,368,744	26	2,482	97	129	204
Worthington Town	83,032,143	32	1,156	36	56	93

Middlesex County						
Town	Square Meters*	Square Miles*	Population	Density**	Active SNAP Cases	Active Member in Active SNAP Cases
Ashby Town	61,629,333	24	3,074	129	104	228
Boxborough Town	26,845,100	10	4,996	482	63	113
Carlisle Town	39,787,361	15	4,852	316	24	34
Dunstable Town	42,858,273	17	3,179	192	32	56
Groton Town	84,876,229	33	10,646	325	151	271
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Town	Square Meters*	Square Miles*	Population	Density**	Active SNAP Cases	Active Member in Active SNAP Cases
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Town	Square Meters*	Square Miles*	Population	Density**	Active SNAP Cases	Active Member in Active SNAP Cases
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Halifax Town	41,821,733	16	7,518	466	324	584
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Marion Town	37,891,141	15	4,907	335	129	216
Mattapoisett Town	42,678,799	16	6,045	367	145	261
Middleborough Town	180,143,819	70	23,116	332	1,381	2,585
Plympton Town	38,300,553	15	2,820	191	98	170
Rochester Town	87,883,085	34	5,232	154	104	200
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Worcester County						
Town	Square Meters*	Square Miles*	Population	Density**	Active SNAP Cases	Active Member in Active SNAP Cases
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Barre Town	114,813,799	44	5,398	122	274	545

**Rural Access Commission  
(SECTION 203 OF THE FY13 GAA)**

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Brookfield Town	40,204,917	16	3,390	218	220	373
Charlton Town	110,149,084	43	12,981	305	492	920
Douglas Town	94,193,698	36	8,471	233	260	501
East Brookfield Town	25,496,848	10	2,183	222	88	186
Hardwick Town	99,951,868	39	2,990	77	153	297
Harvard Town	68,264,015	26	6,520	247	31	51
Holden Town	90,622,504	35	17,346	496	358	655
Hubbardston Town	106,256,485	41	4,382	107	119	206
Lancaster Town	71,678,282	28	8,055	291	221	365
Leicester Town	60,500,344	23	10,970	470	523	856
Lunenburg Town	68,431,481	26	10,086	382	361	666
Mendon Town	46,873,770	18	5,839	323	97	178
New Braintree Town	53,619,061	21	999	48	19	50
North Brookfield Town	54,551,380	21	4,680	222	267	501
Oakham Town	54,704,053	21	1,902	90	54	107
Paxton Town	38,159,563	15	4,806	326	87	161

Petersham Town	140,469,912	54	1,234	23	31	62
Phillipston Town	62,836,157	24	1,682	69	73	148
Princeton Town	91,797,446	35	3,413	96	49	99
Royalston Town	108,493,823	42	1,258	30	73	126
Rutland Town	91,313,879	35	7,973	226	219	369
Southborough Town	36,641,891	14	9,767	690	92	129
Spencer Town	85,076,998	33	11,688	356	930	1,722
Sterling Town	79,055,981	31	7,808	256	152	254
Sturbridge Town	96,894,339	37	9,268	248	406	713
Sutton Town	83,861,803	32	8,963	277	166	325
Templeton Town	82,971,637	32	8,013	250	366	752
Upton Town	55,728,445	22	7,542	351	147	246
Uxbridge Town	76,517,411	30	13,457	455	393	755
Warren Town	71,303,171	28	5,135	187	403	817
West Brookfield Town	53,027,834	20	3,701	181	215	387
Westminster Town	91,961,417	36	7,277	205	211	397
Winchendon Town	112,103,924	43	10,300	238	755	1,516

\* Land Area

\*\*Calculated by dividing population into land area in square miles

APPENDIX 2: MASSACHUSETTS MEAL GAP



Map the Meal Gap 2013

Massachusetts Food Insecurity by County in 2011 <sup>1</sup>



County	Population	Food insecurity rate <sup>2</sup>	Estimated number food insecure individuals (rounded)	Income within the food insecure population <sup>3</sup>		Cost-of-food index	Weekly food-budget shortfall per food insecure person <sup>4</sup>	Total food-budget shortfall reported by the food insecure in 2011 <sup>5</sup>	Weighted cost per meal <sup>6</sup>	The "Meal Gap"
				% below SNAP threshold of 200% poverty	% above SNAP threshold of 200% poverty					
Barnstable	216,639	8.6%	18,550	55%	45%	1.3521	\$ 19.40	\$ 10,917,220	\$ 3.61	3,024,161
Berkshire	131,221	10.0%	13,160	70%	30%	1.2921	\$ 18.54	\$ 7,401,770	\$ 3.45	2,145,441
Bristol	547,305	12.1%	66,180	60%	40%	1.0936	\$ 15.69	\$ 31,504,340	\$ 2.92	10,789,158
Dukes	16,353	8.5%	1,380	63%	37%	1.2060	\$ 17.31	\$ 724,430	\$ 3.22	224,978
Essex	739,505	10.1%	74,330	61%	39%	1.1124	\$ 15.96	\$ 35,989,960	\$ 2.97	12,117,832
Franklin	71,495	9.4%	6,730	72%	28%	1.1311	\$ 16.23	\$ 3,313,470	\$ 3.02	1,097,175
Hampden	462,752	12.9%	59,890	75%	25%	1.0524	\$ 15.10	\$ 27,436,040	\$ 2.81	9,763,715
Hampshire	157,630	9.2%	14,520	54%	46%	1.2659	\$ 18.17	\$ 8,001,000	\$ 3.38	2,367,160
Middlesex	1,491,762	8.8%	131,710	51%	49%	1.1536	\$ 16.55	\$ 66,134,830	\$ 3.08	21,472,347
Nantucket	10,135	9.3%	940	47%	53%	1.1760	\$ 16.88	\$ 481,190	\$ 3.14	153,245
Norfolk	666,426	8.2%	54,410	44%	56%	1.1273	\$ 16.18	\$ 26,699,680	\$ 3.01	8,870,326
Plymouth	492,934	8.9%	43,830	50%	50%	1.2622	\$ 18.11	\$ 24,080,310	\$ 3.37	7,145,493
Suffolk	713,089	17.0%	121,030	79%	21%	1.2247	\$ 17.57	\$ 64,521,070	\$ 3.27	19,731,214
Worcester	794,981	10.2%	80,760	57%	43%	1.1386	\$ 16.34	\$ 40,024,940	\$ 3.04	13,166,099
<b>State Total<sup>7</sup></b>	<b>6,587,536</b>	<b>12.3%</b>	<b>809,920</b>	<b>52%</b>	<b>48%</b>	<b>1.101</b>	<b>\$ 15.80</b>	<b>\$ 388,195,260</b>	<b>\$ 2.94</b>	<b>132,039,204</b>

For additional data and maps by county, state, and congressional district, please visit



Gundersen, C., Waxman, E., Engelhard, E., Satoh, A., & Chawla, N. Map the Meal Gap 2013: Food Insecurity Estimates at the County Level. Feeding America, 2013. This research is generously supported by the Howard G. Buffett Foundation and The Nielsen Company.

<sup>1</sup>Map the Meal Gap's food insecurity rates are determined using data from the 2001-2011 Current Population Survey on individuals in food insecure households; data from the 2011 American Community Survey on median household incomes, poverty rates, home ownership, and race and ethnic demographics; and 2011 data from the Bureau of Labor Statistics on unemployment rates.

<sup>2</sup>The statistical model for estimating food insecurity in 2013 differs slightly from the model used in 2012. The updated 2013 model includes "homeownership" in addition to the variables used in previous years to account for household assets and help produce more accurate estimates of food insecurity at the local level. For more information about these factors, please see the technical brief or supplemental methodology information on

<sup>3</sup>Numbers reflect percentage of food insecure individuals living in households with incomes within the income bands indicated. Eligibility for federal nutrition programs is determined in part by these income thresholds which can vary by state.

<sup>4</sup>Weekly food-budget shortfall is the national average amount of money food insecure people report needing to move to food security, weighted by the cost of food in the area.

<sup>5</sup>Total food-budget shortfall for this year calculated using the following formula:

*Annual dollars=weekly food budget shortfall \* # food insecure persons \* 52 weeks \* Average months of the year a person is food insecure (7/12)*

<sup>6</sup>Weighted cost per meal is the national average cost spent on a meal by food secure persons weighted by the cost of food in the area.

<sup>7</sup>Population and food insecurity data in the state totals row do not reflect the sum of all counties in that state. The state totals are aggregated from the congressional districts data in that state. All data in the state totals row pertaining to the cost of food or the "Meal Gap" reflect state-level data and are not aggregations of either counties or congressional districts.