



University of Connecticut Health Center

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Connecticut Long-Term Care Needs Assessment

Focused Report III: An Analysis by Region

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Executive Summary

The 2007 Connecticut Long-Term Care Needs Assessment found few significant regional differences when using the three over-arching geographic regions identified by the Department of Social Services (Robison et al., 2007). However, this initial analysis indicated that differences may exist at the sub-region level, when the state is divided into twelve sub-regions. By examining the data from the general resident survey across the twelve regions, this report offers a more in-depth study of long-term care needs specific to the smaller geographical areas. In particular, this report describes differences among the twelve regions in the following content areas: demographics, transportation, finances, health, current use and unmet need for home and community-based services, and caregiving. These results augment the data previously reported by highlighting specific long-term care challenges faced by survey respondents in each region.

This analysis reveals marked regional differences in many domains, including:

- Financial resources and other demographic variables
- Multiple health indicators
- Assistance for daily activities
- Home and community-based service use and unmet need

Financial resources

Financial resources of survey respondents show great variation across the state. Compared to other regions, respondents in the New Haven and Willimantic regions have significantly fewer financial resources. Respondents in the Torrington, New Britain, Waterbury, and Norwich regions also have limited financial resources. In contrast, high incomes and much greater financial resources are found in the Stamford, Danbury, Bridgeport, and Hartford regions.

Health

Differences in health status and related indicators between the 12 regions are striking. Compared to respondents from other regions, Willimantic area respondents are in the poorest health. These respondents have the highest rate of fair/poor health, number of falls, and unintended change in weight, while at the same time reporting low rates of many routine health examinations. Respondents from the Waterbury, New Haven, Norwich, and New Britain regions also report higher than average fair/poor health. New Haven area respondents have the highest percentage of respondents with mental health disabilities and one of the highest rates of depression. In contrast, respondents from the Stamford and Danbury regions report the best health overall.

Regional variations in ability to perform daily living activities demonstrate a similar pattern. Much greater percentages of respondents from the New Haven and Willimantic regions need help with at least one daily living activity, especially when compared to respondents from the Danbury region.

Home and community-based service use and unmet need

Current community-based service use is greatest in the New Haven area. Respondents from this area report the highest rate of current use for five out of the eight services assessed in the survey. In contrast, Danbury respondents report very low or no current use of seven of the eight services. Respondents from the Bridgeport and New Britain regions also report low service use overall.

More respondents from the Willimantic region are missing needed community-based services compared to the other regions. These respondents report the highest rate of unmet need for all eight community-based services. New Haven respondents also report a high unmet need for two of the listed services. As with current use, unmet need for services is lowest in the Danbury region.

There is a clear association between socioeconomic characteristics, health, service use, and unmet service need. Willimantic and New Haven area respondents, the regions with the fewest financial resources, do poorly on a number of indices, such as health and need for assistance with daily activities. These regions contrast significantly with the Danbury region – an area with high socioeconomic status and very high financial resources, which also has the best health, lowest need for assistance, and very low unmet need. Other regions tend to fall in between on various indicators – the Stamford, Hartford, and Manchester areas do better overall, while the Waterbury and Torrington regions tend to be worse on some health and other indicators.

Intersection of unmet need and provider services

No consistent pattern emerges when overlap between regional need for certain home and community-based services and provider locations is examined. The rate of unmet need does not appear to correlate directly with the number or location of providers in specific regions. It is likely that a more complex interaction is at work, with other barriers, such as lack of knowledge, affordability, eligibility for services, availability of Medicaid providers, and regional characteristics (rural vs. urban), also playing a role.

Implications for need for future long-term care service use

Underlying the Needs Assessment is the guiding principle of creating parity with regard to long-term care services among residents of all ages or disabilities, basing service use on level of need. The achievement of this goal must address

geographic equality as well, so that residence in a particular part of the state does not contribute to disparities in services among residents with similar service needs.

This report demonstrates that inequalities do exist among regions with respect to access, use, and unmet need for long-term care services. Need for community-based long-term care services is not equally spread across the state. Regions such as Willimantic and New Haven show a high unmet need for such services. Respondents from other regions such as Bridgeport, Hartford, Middletown, and Torrington indicate a high need for some specific types of services, but not others. In contrast, Danbury, Stamford, and Manchester respondents more often report a low need for most services.

The clear association between reduced financial resources, poor health, increased service use, and high unmet need must also be considered when planning for services. Respondents in regions with lower median incomes tend to have greater service needs and, given the lack of financial resources, may need financial assistance to obtain these services.

While dividing Connecticut into 12 regions reveals important variation across the state, variation *within* the regions is not explored in this report. Geographic and other characteristics which contribute to an uneven need for long-term care services can vary not only regionally, but within regions as well. Socioeconomic and geographic differences among towns within a region can be great, which could lead to disparities in level of unmet need among nearby towns. Given this intra-region variation, municipalities, legislators, and state policymakers planning for services at a local level should consider other sources of information more specific to the area or towns involved in addition to this report.

These data also point to the reality that unmet need for such services is a complex issue, with multiple contributing factors, including some associated with geographic location within the state such as socioeconomic status, provider availability, infrastructure barriers such as lack of transportation, and geographical characteristics such as rural versus urban. As rebalancing policies develop and community-based service use expands, geographical characteristics should be considered along with other challenges and competing factors when developing policies and programs to address unmet long-term care needs across the state.

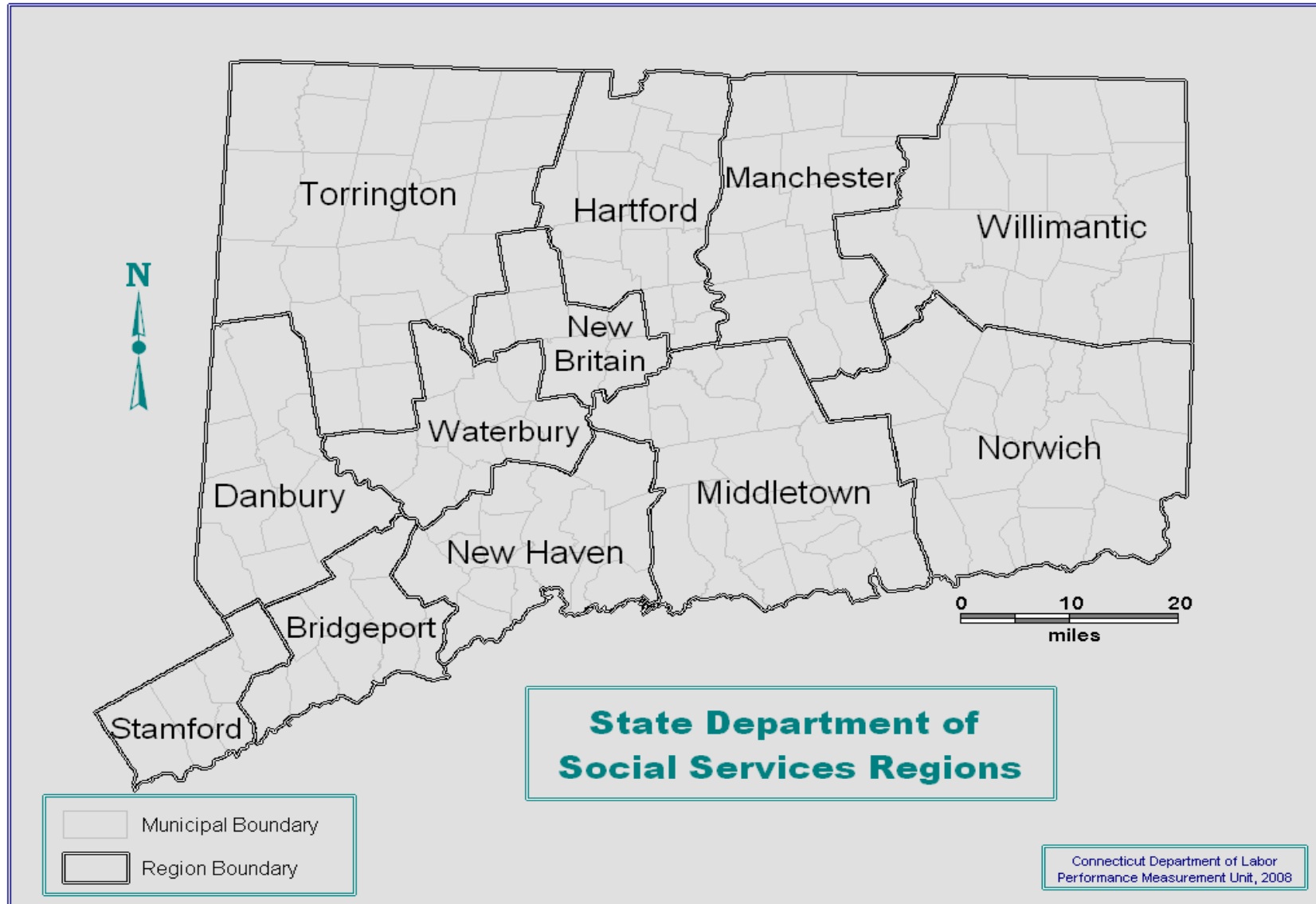
I. Introduction

The 2007 Connecticut Long-Term Care Needs Assessment report (Robison et al., 2007) documents that Connecticut residents statewide share a need for home and community-based services. After presenting the overall need for services across the state, the report examines the statewide results using the three over-arching geographic regions identified by the Department of Social Services. While few differences were found using these three regional categories, initial analysis indicated that differences may exist at the sub-region level. Using data from surveys mailed to residents age 42 or older and online/word of mouth surveys from residents of any age, this report examines the Needs Assessment data by each of the 12 regions in order to identify any differences which may exist at this level, including unmet need, service use, and other key variables.

Connecticut's system of state supported programs and services is divided geographically by region. The Department of Social Services uses three over-arching regions – Northern, Southern, and Western. These major regions are then further divided into twelve offices or sub-regions: Hartford, New Britain, Manchester, Willimantic, New Haven, Middletown, Norwich, Bridgeport, Danbury, Stamford, Waterbury and Torrington (Regions 1 – 12, respectively). These regions and the municipalities are visually represented in the map below (see Appendix A for a list of each region's municipalities).



Map I-1. Connecticut's 12 regions



Each region has its own office, providing local access for Connecticut's residents. This also encourages a more comprehensive knowledge of the region – its residents, strengths, and challenges – by the employees in each location. Using a regional approach can also support a more appropriate allocation of resources across the state. This is especially important as each region has its own unique set of geographic, demographic, and other characteristics. Differing geographical features include population density, square miles, number of towns, and portion of rural/suburban/urban areas. Contrasting demographic measures comprise age, income, education, race, ethnicity, and other socioeconomic characteristics. Another important regional variation is the number, type, and location of service providers as well as the actual services they provide. Transportation, housing, and other infrastructure dissimilarities exist as well.

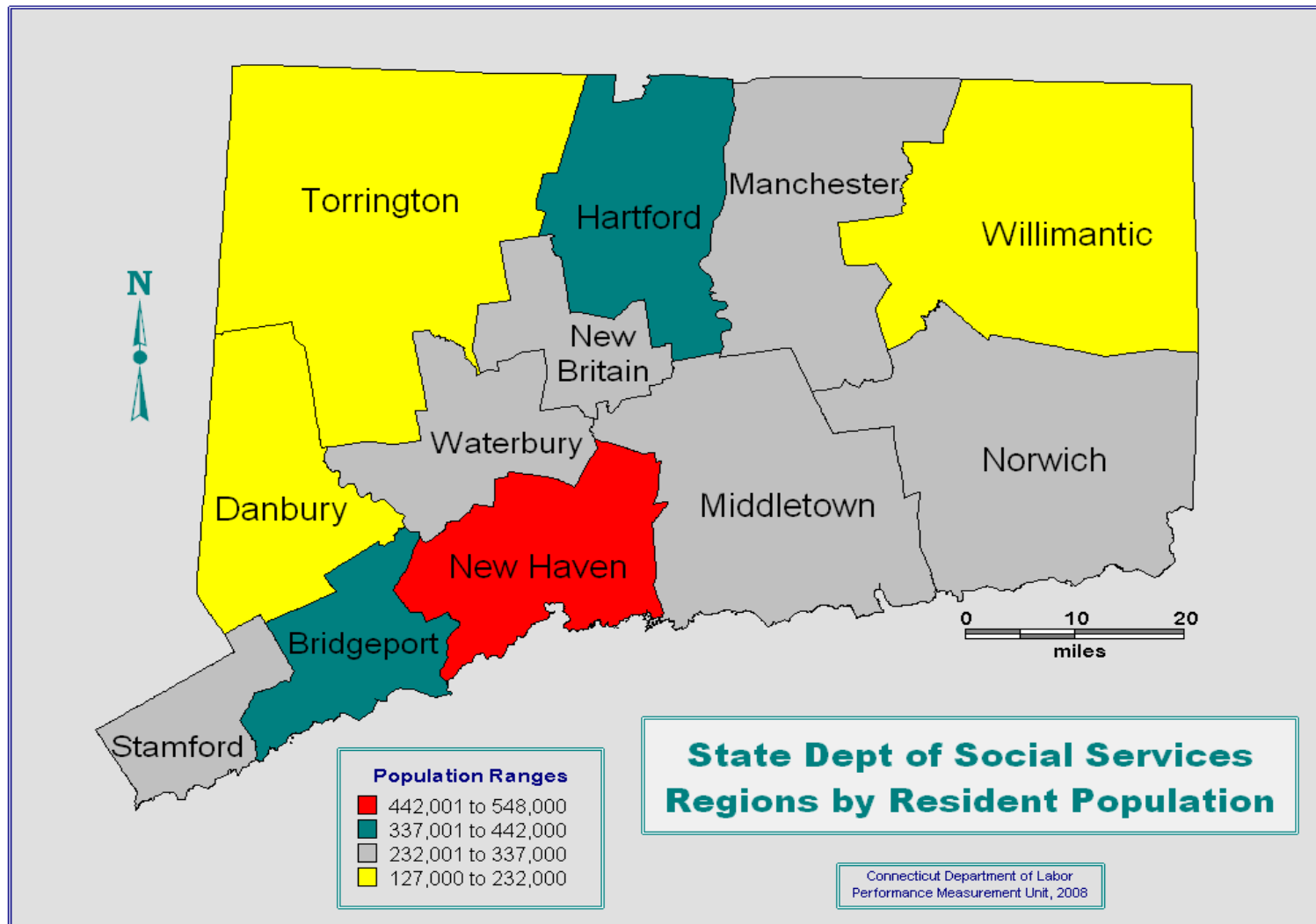
A. Regional overview

Regional differences in demographic characteristics include population, population density, age, income, and other socioeconomic characteristics. These features vary across regions, with no two regions alike. Any overall or average regional demographic trait is also mediated by the often great disparities between municipalities in any one region. For example, while the region of Bridgeport has one of the highest median annual household incomes overall, it is also home to one of Connecticut's poorest cities. Using 2000 census data, these regional demographic characteristics are graphically depicted in Maps I-2 – I-5.



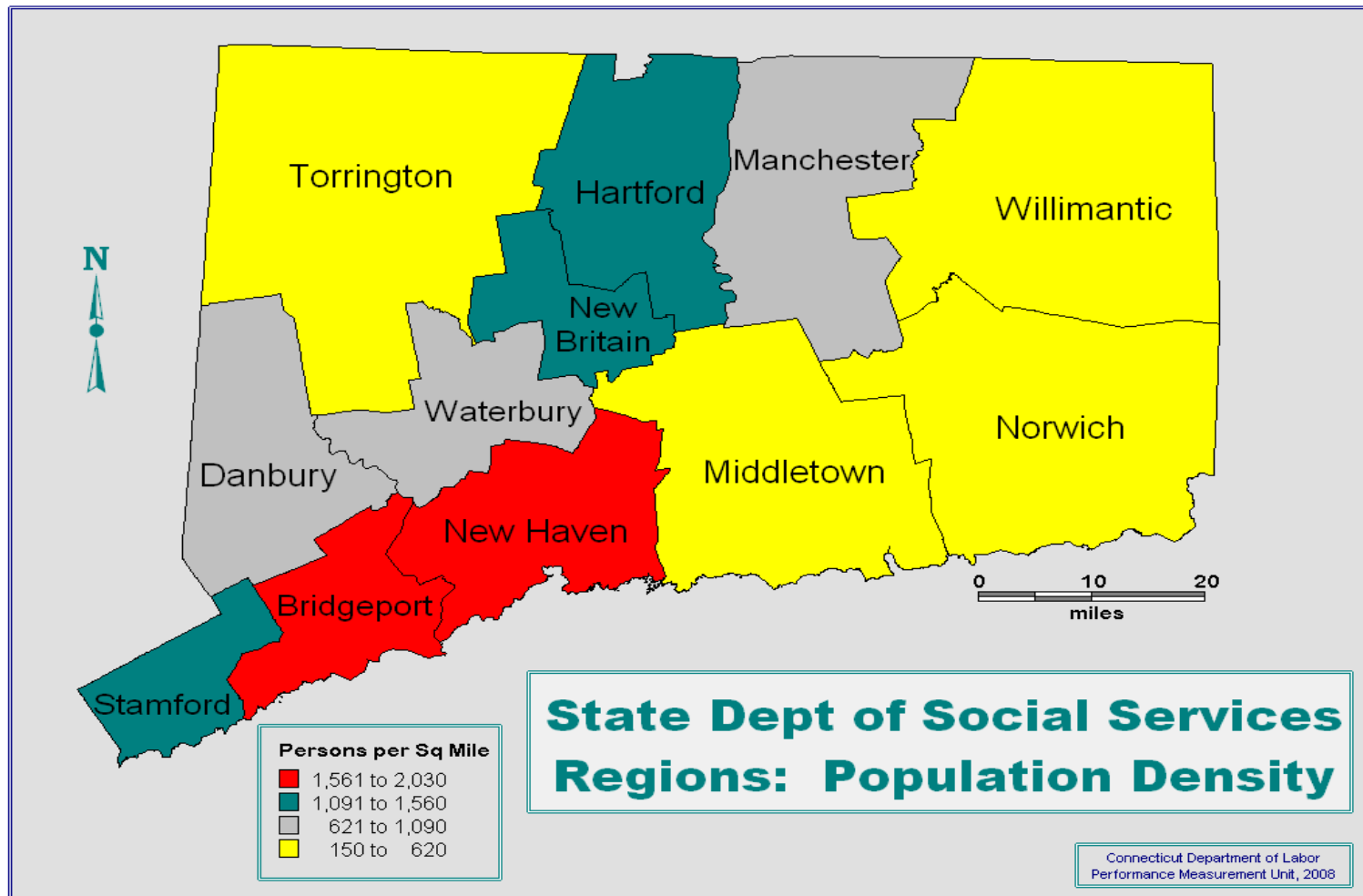
Overall population is highest in the New Haven region, which has 442,000 to 548,000 residents. Far fewer residents live in either the Danbury, Torrington, or Willimantic regions which each have an overall population of only 127,00 to 232,000 residents.

Map I-2. Overall population



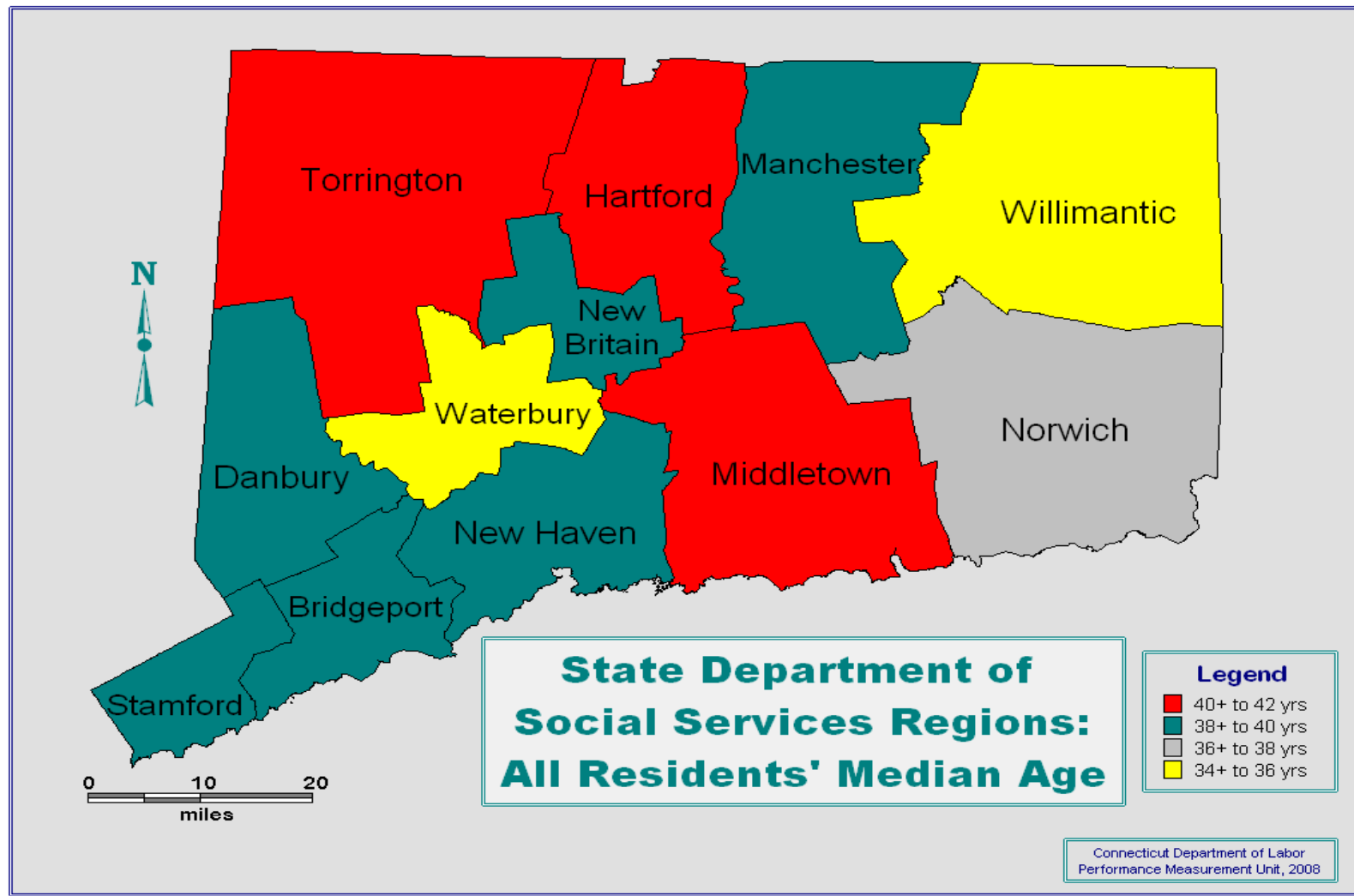
While the number of residents contributes to population density, the size of the region determines this as well. For six of the regions their comparative overall population and density of residents fall in the same comparative level. This can be seen in the Torrington and Willimantic regions. These regions have the lowest population density as well as overall number of residents. With only 150 to 620 residents per square mile, the Middletown and Norwich regions also have low population density. This contrasts markedly with the Bridgeport and New Haven regions, each of which has 1,560 to 2,030 residents per square mile.

Map I-3. Population density



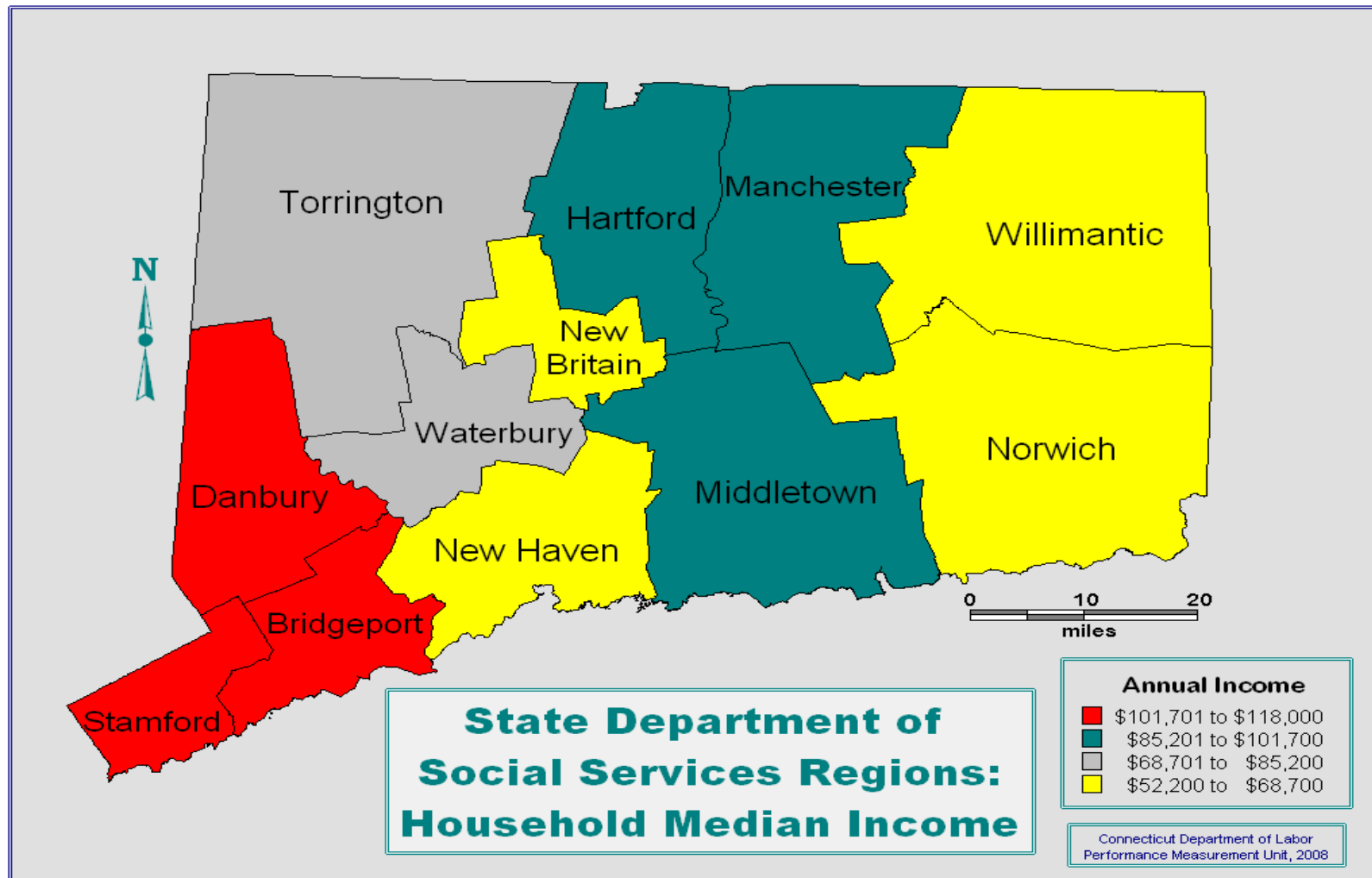
Median age varies regionally from 34 to 42. Overall, residents in the Willimantic and Waterbury regions are the youngest, as these regions have a median age ranging from 34 to under 36 years. Residents from the Torrington, Hartford, and Middletown regions each have the oldest median age, ranging from 40 to 42 years.

Map I-4. Median age



Annual gross income also shows significant regional differences. The Danbury, Stamford, and Bridgeport regions have the highest household income overall, with a median household income of \$101,701 - \$118,000. On the other end of the scale are the New Britain, New Haven, Willimantic, and Norwich regions, where the median household earnings fall between \$52,200 - \$68,700 per year.

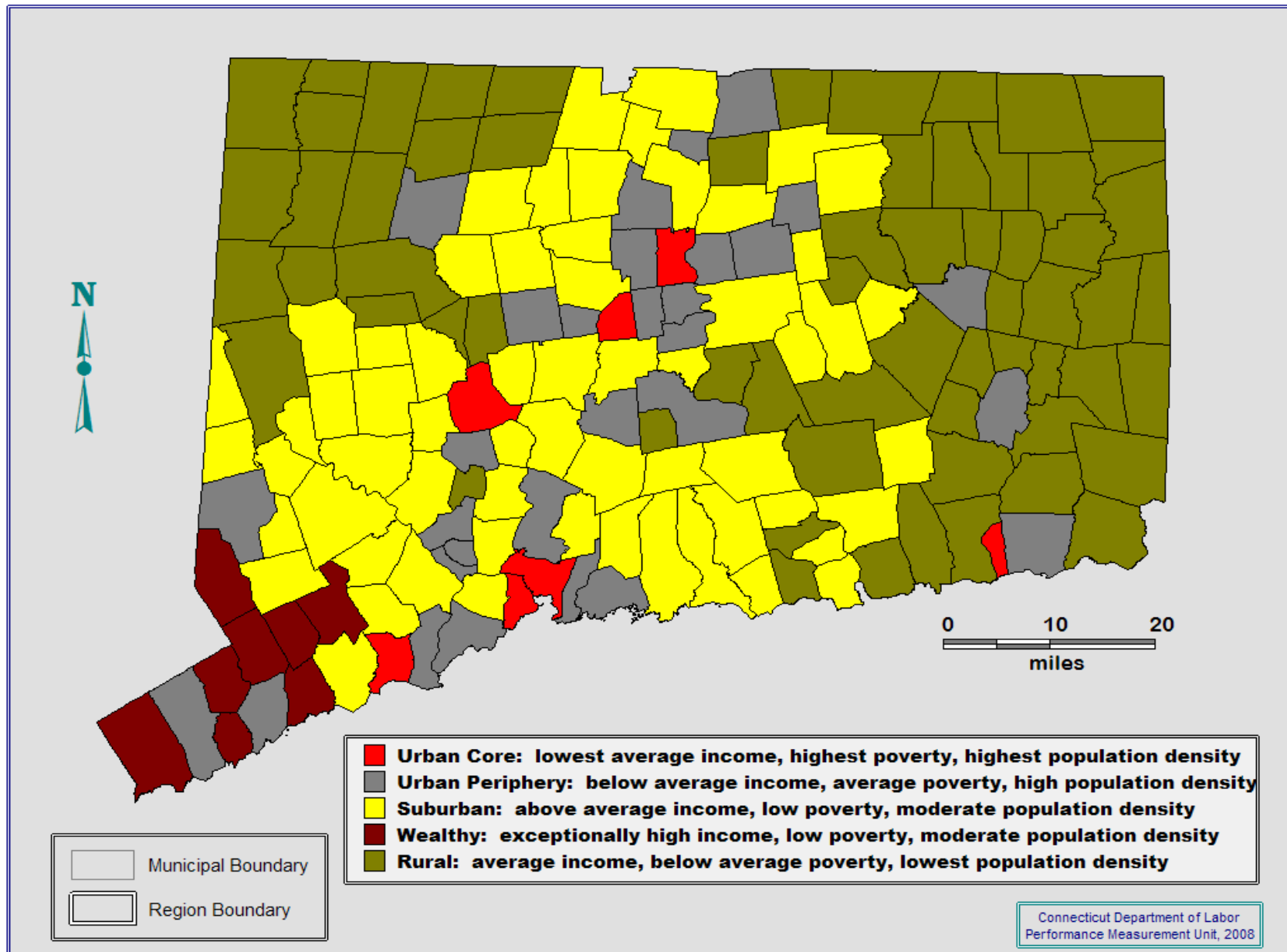
Map I-5. Median household income



Map I-6 provides a comprehensive look at the intersection of socioeconomic and geographic characteristics. Developed by the Connecticut State Data Center, each municipality is classified as one of five categories, termed the Five Connecticuts (Levy, Orlando & Villemmez, 2004). The Five Connecticuts describes each town as wealthy, suburban, rural, urban periphery, or urban core by considering household income, poverty level, and population density. This method illustrates a town's socioeconomic and geographic contribution to the region as a whole. For example, with one urban core and multiple urban periphery municipalities, the New Haven region is one of the four regions with the lowest median annual household incomes. On the other hand, while the Bridgeport region also encompasses an urban core in addition to two urban peripheries, these low income, high poverty cities are overshadowed by the region's three wealthy and three suburban municipalities, resulting in a very high regional income overall.



Map I-6. The Five Connecticuts



The impact of differences such as these on residents' health status and support needs is widely documented. Socioeconomic status is often associated with disparities in health status (Shavers, 2007), service use, need for assistance (Buka, 2002), and independence with daily living activities (Alegría, Pérez, & Williams, 2003). Although certain functional impairments in the activities of living and instrumental activities of daily living are associated with the need for nursing home care, studies show that significantly impaired people are receiving home and community-based services and want to remain in the community while continuing to receive long-term care (Borrayo, Salmon, Polivka, & Dunlop, 2004). Financial and employment status impacts what services can be afforded, eligibility for certain federal or state funded programs, and medical insurance options (Borrayo, Salmon, Polivka, & Dunlop, 2002; Brown, Ojeda, Wyn, & Levan, 2000). Rural populations, with their lower population density and larger geographic area, often face increased difficulties with issues such as transportation options, accessibility of health service providers, number of providers, and provider or service choice (Brems, Johnson, Warner, & Roberts, 2006; Houser, Fox-Grage, & Gibson, 2006; Iezzoni, Killeen, & O'Day, 2006; Sherrill et al., 2005). Core urban areas in Connecticut, distinguished by their very low income level, high poverty rate, and very high population density (Center for Population Research, 2004), can present challenges such as affordability, provider availability, and increased demands on available services and supports (National Center for Health Statistics, 2007). These and other distinctive regional features can lead to differences in the needs of the residents and correspondingly, the number of people served and the services they are receiving.

Analyses of regional difference for the original, comprehensive Connecticut Long-Term Care Needs Assessment compared the three larger regions and found few significant differences. By examining the data across the twelve regions, this report offers a more in-depth study of long-term care needs specific to the smaller geographical areas. In particular, this report describes differences among the twelve regions in the following content areas: demographics, finances, health, disability, long-term care services and needs, social support, and caregiving. These results augment the data previously reported by highlighting specific long-term care challenges faced by survey respondents in each region.

II. Methodology and analysis

Data for this report are from the 2007 Connecticut Long-Term Care Needs Assessment. For complete details about the methodology see the Connecticut Long-Term Care Needs Assessment Part 1: Survey Results at http://www.uconn-aging.uchc.edu/res_edu/assessment.html. The main method of data collection was a self-administered, written survey mailed directly to a random sample of Connecticut residents age 42 and older. This was enhanced by telephone interviews, survey packets distributed to numerous organizations, and a web-based survey. In order to provide greater opportunities for input from residents across the state, a widespread publicity campaign was conducted, including television appearances, radio interviews, newspaper articles, and posting on various web sites.

For this particular focused report, only information from the general resident survey (including web/word-of-mouth and the random mailing) was utilized. Although a separate mailing was done for people with disabilities, that information is not included within this report. Individual differences by disability and by waiver programs are covered in a separate focused report (Shugrue et al., 2008). Because the analysis for this report is specifically concerned with regional differences, any of the surveys which did not indicate a zip code were not included. In all, data from a total of 4490 surveys were included in this report.

Descriptive statistical methods using SPSS 15.0 were used to analyze and summarize data. Bivariate analyses were also used to identify differences and note any trends. Data were analyzed by individual survey question with a series of basic tests computed: frequency, average, and percentage. A comparison of the response distribution among the 12 regions was performed. Differences between regions were analyzed using chi-square and t-tests.

Qualitative or open-ended questions were entered into Microsoft Access for systematic analysis, and content were subsequently analyzed using standard qualitative analysis techniques (McCracken, 1988). Data from each of the open-ended questions were analyzed line by line in order to identify and interpret each individual's response. Two researchers independently analyzed the responses for each question and then concurred or reached a consensus if interpretations were different. Major areas of interest or concepts were organized into common themes using the constant comparative technique (Glaser & Strauss, 1967). Additional themes were included until no new topics were identified. Similar statements were explored and compared to refine each theme. Determining the percentage of response for qualitative items was calculated by dividing the number of times any specific theme was mentioned by the total number of responses

III. Quantitative results

In the Introduction section above, demographic information for all Connecticut residents is presented using census data. The rest of the report – quantitative/qualitative results and conclusions – uses data from respondents to Connecticut’s Long-Term Care Needs Assessment. In particular, this report discusses information only from survey respondents who completed either a resident mailed survey (sent randomly to 10,500 Connecticut residents age 42 or older), or the web-based or word-of-mouth paper surveys open to the general public.

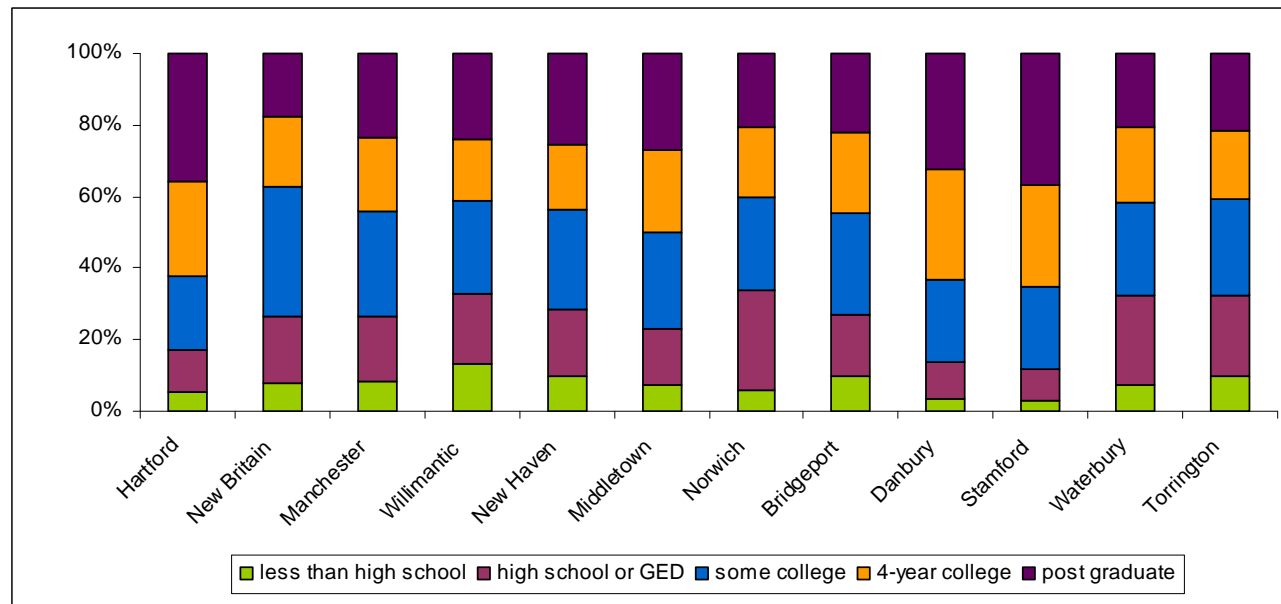
A. Demographic overview

Mean age of survey respondents does not show much variation among the regions. Overall mean age is 62, with a low mean age of 60 (Torrington) to a high mean age of 65 (Bridgeport and Norwich). Differences do exist when age categories are examined more closely. While each region has more older adults (60+) than boomers (42-60), for some regions the difference between these age groups is very slight. The percentages of boomer and older adult respondents in the Torrington region are equivalent – 46% older adult and 45% boomer. Other regions with similar ratios of older adult to boomer respondents include Hartford (48%, 44%) and Manchester (45%, 49%). On the other hand, older adults make up a considerably greater portion of respondents in the Bridgeport (65% older adult, 32% boomer), Willimantic (62%, 33%), and Norwich (61%, 37%) regions. Only a small number of respondents in each region are under age 41, as the web-based and word-of-mouth surveys were open to the general public. Only slight regional differences exist concerning gender – notably the Willimantic area has a higher number of female respondents (69%) than male respondents (31%).

The vast majority of respondents are White or Caucasian with only slight differences among the regions. Six to seven percent of respondents in the New Haven, Hartford, and Bridgeport regions indicate that they are Black, African American or Caribbean Black, compared to less than three percent in most other regions. Only small regional differences exist in the percentage of those with Spanish, Latino or Hispanic origin. The Waterbury area has the greatest percentage of Latinos (7%), while the Stamford area has the least number of Latinos (1%). The majority of all respondents speak English as their primary language. Those respondents who are more apt to use Spanish as their primary language come from the New Haven and Hartford areas, where four percent of respondents speak Spanish primarily, and the Willimantic area, where three percent of respondents speak Spanish primarily.

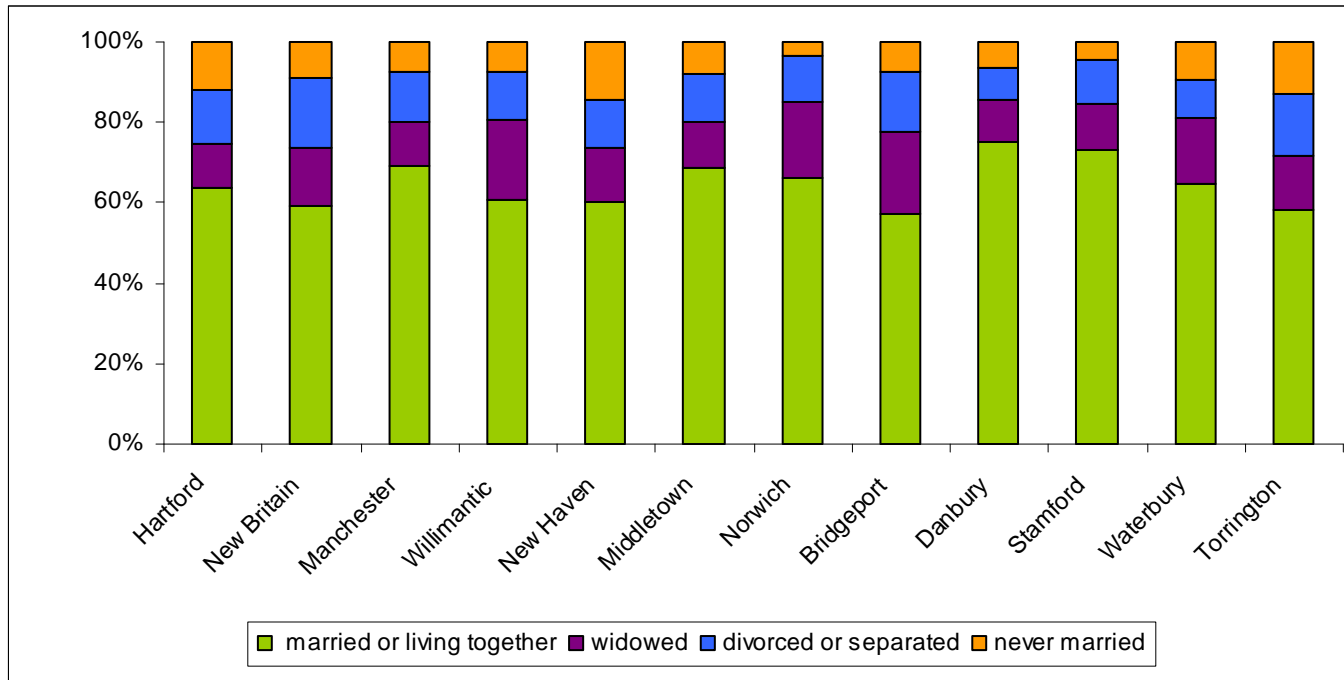
Respondents have a variety of educational backgrounds and only slight differences exist among regions. The Norwich and Waterbury regions have a higher percentage of respondents who only have high school diplomas or GEDs (28% and 25% respectively). Stamford has the smallest percentage of respondents who have only a high school diploma or less with only nine percent of respondents having a high school diploma or GED. On the other hand, the Stamford and Danbury regions have the highest percentage of respondents who have a four-year college degree (29% and 31% respectively). Along with the Hartford region, Stamford and Danbury also have higher percentages of respondents with post graduate degrees. Thirty-seven percent of respondents in the Stamford region, 36 percent in the Hartford region, and 32 percent in the Danbury area have post graduate degrees, while New Britain area participants have the least number of respondents with post graduate degrees (17%).

Figure III-1. Education



Marital status shows some regional variation. A greater percentage of respondents in Danbury and Stamford areas are married (71% each) than respondents from the other regions (mean=61%). Both Bridgeport areas and Willimantic areas have more respondents who are widowed (21% and 20% respectively). Only four percent of Norwich region respondents never married, while in the New Haven region 14 percent of respondents never married, compared to the average of nine percent for all regions.

Figure III-2. Marital status



Living arrangement and social support

While the majority of respondents from each region live in their own house or condominium, smaller percentages do so from the Willimantic and New Haven regions. New Haven has the largest percentage of apartment dwellers, and many more Willimantic respondents report living in a retirement community compared to other regions (11% versus 2% overall).

Household and family composition also vary by region. Significantly more respondents from the Stamford and Danbury regions live with a spouse or partner, while a smaller proportion of respondents from the Bridgeport or Torrington regions have this living arrangement. The Hartford region stands out in two ways – it has one of the largest percentage of respondents who have no living children, as well as the smallest proportion of adult children. Compared to the other eleven regions, significantly more respondents from the Norwich area have older children, while Stamford area respondents are much more likely to have, and live with, children under age 18. The Danbury area has fewer respondents with adult children, and fewer children of any age live within 45 minutes of their Danbury region parents.

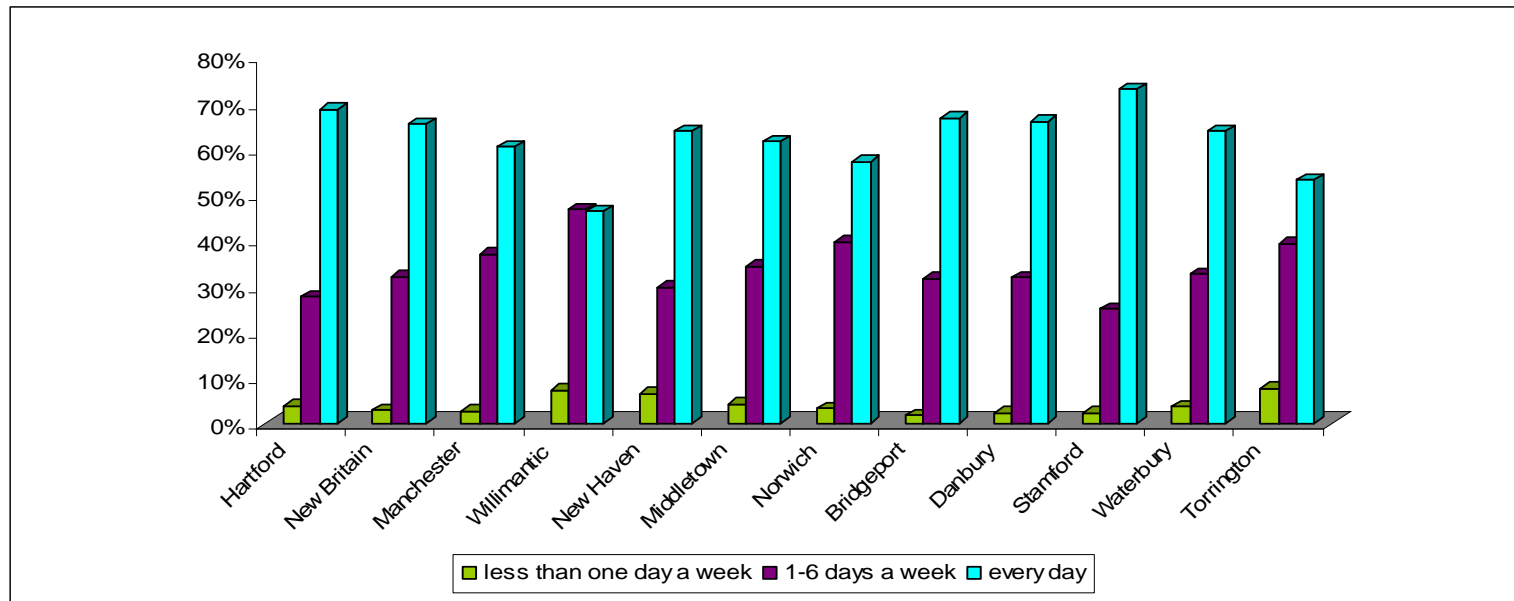
Living arrangements and the availability of social support from family or friends show some correlations. Comparatively more respondents from the Norwich area agree that they do have a family member or friend to turn to if they needed extra help for everyday tasks like grocery shopping or getting a ride. This is not surprising, given that significantly more respondents from this area have adult children. Along with Bridgeport, Danbury region respondents are the least likely to have access to this type of social support. Support from adult children may also be less available to Danbury area respondents, given the low ratio of respondents with adult children or with children who

live nearby. Experiencing such unpaid assistance can also increase one's awareness of the help available from family or friends. A larger percentage of the respondents from the Norwich and New Haven areas are currently receiving this unpaid assistance, while Danbury area respondents are the least likely to be currently receiving this assistance.



While the twelve regions all have similarly small percentages of nearly homebound respondents, both the Stamford and Hartford regions had much higher ratios of respondents who go out every day, especially compared to respondents of the Willimantic and Torrington regions (see Figure III-3). The presence of social support is particularly important for those living in the community who do not leave their homes often. This may be especially problematic in the Torrington, Willimantic and New Haven regions, where seven to eight percent of respondents leave their home less than once a week.

Figure III-3. Number of days leave home each week



B. Financial status

Financial resources show marked variation between the twelve regions (see Figure III-4). The New Haven region has significantly more respondents who are very poor – 16 percent report a pre-tax household income of less than \$12,000 a year. One-quarter or more of respondents in the New Haven, Torrington, Willimantic, New Britain, Waterbury, and Norwich areas have limited household incomes of less than \$24,000 a year. In contrast, only 12-16 percent of respondents in the Stamford, Danbury, and Hartford regions have this low a household income. On the other end of the scale, household incomes of \$100,000 or more are reported by much larger portions of respondents from the Stamford, Danbury, and Bridgeport regions. Approximately one-quarter of respondents from the Danbury (27%) and Bridgeport (23%) areas, and one-half of Stamford region respondents, report incomes at this level.

As shown in Figure III-5, total assets also vary considerably among the regions. As defined on the survey for respondents, assets do not include one's home or car, but instead comprise bank accounts, stocks, bonds, investment or business property, and cash value of any life insurance. The lowest amount of assets is reported in the Willimantic, New Haven, Torrington, and New Britain regions, where approximately one-fifth of respondents have under \$5,000 worth of assets. Significantly more respondents with asset levels of over \$350,000 are from the Stamford (61%) and Danbury (47%) regions. In the Hartford and Bridgeport regions, over one-third of respondents indicate that their assets are more than \$350,000 (Hartford 39%, Bridgeport 37%).

Homeownership varies by region as well. The Danbury region has the highest percentage of homeowners (88%), while respondents from the New Haven region are noticeably less likely to own their own home (71%).



Figure III-4. Annual household income

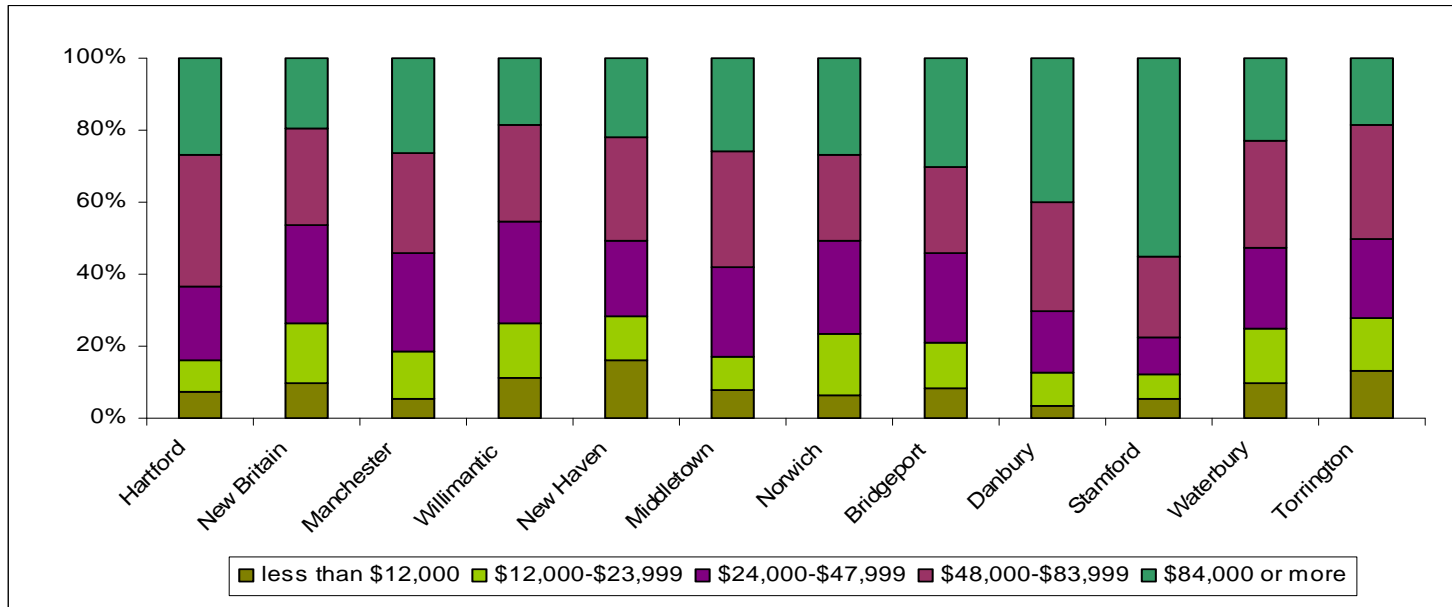
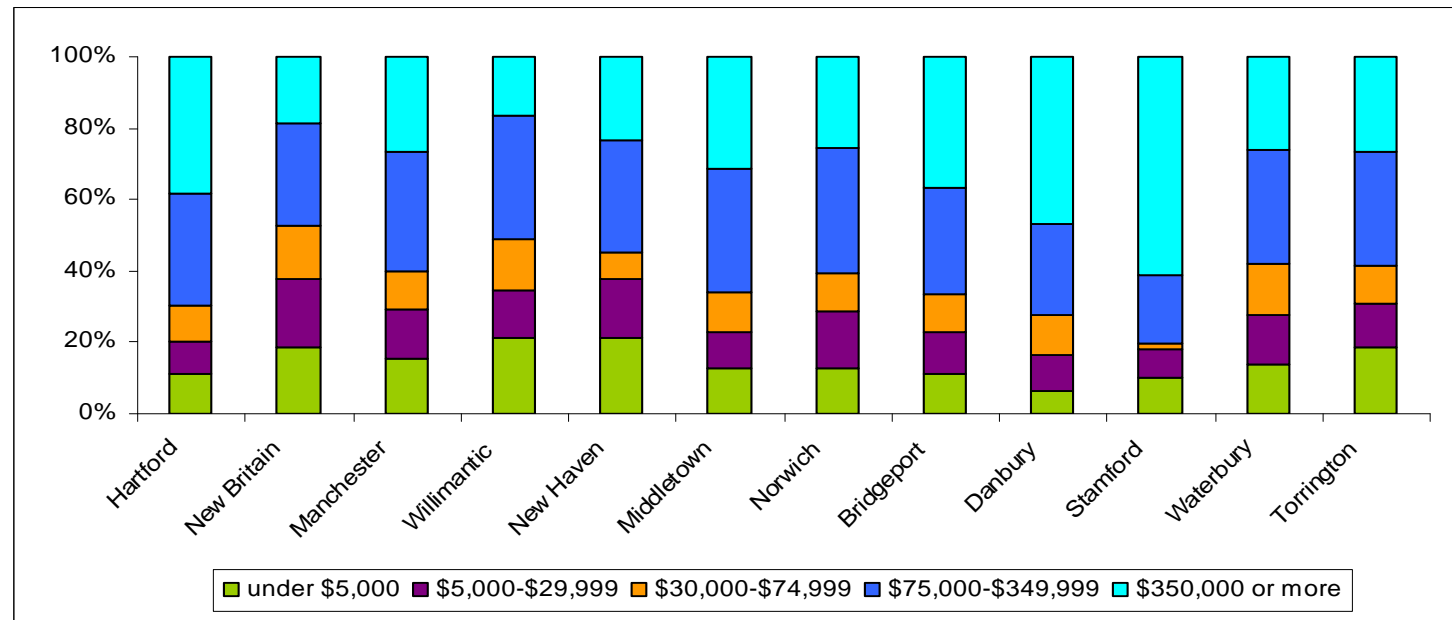
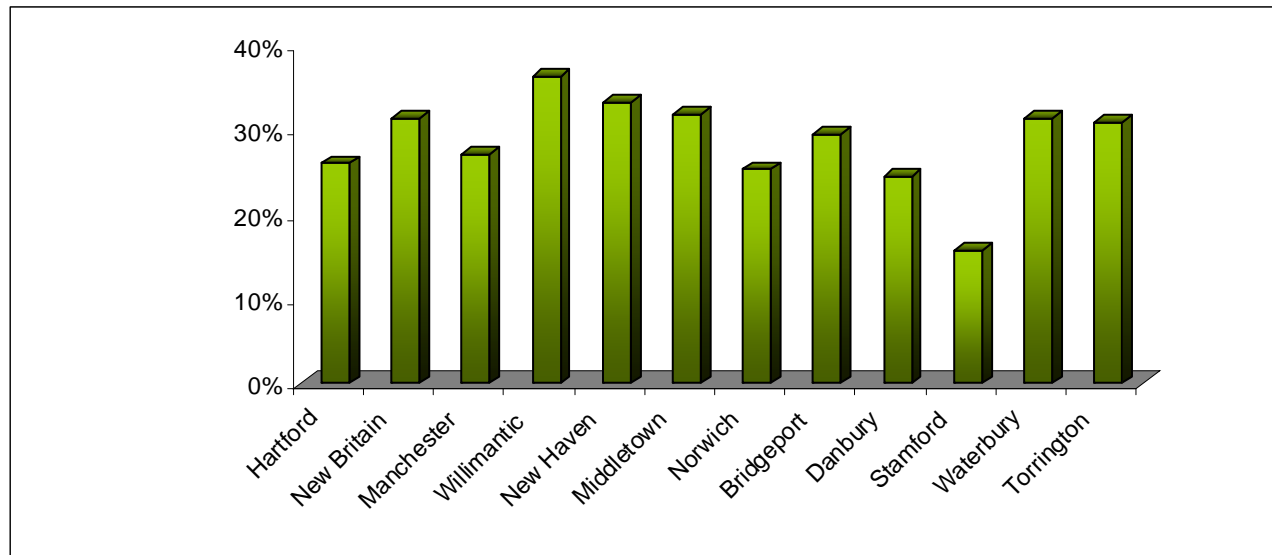


Figure III-5. Assets



When looking at ability to pay for expenses, a higher than average proportion of Willimantic area respondents describe themselves as having inadequate financial resources in the past year for at least one expense such as mortgage/rent/taxes, utilities, health care, bills, or a retirement account, while significantly fewer respondents from the Stamford region report any difficulties paying for living expenses.

Figure III-6. Difficulty paying bills



Almost three-quarters of respondents in the Stamford area have money left over at the end of the month, while significantly fewer New Haven region respondents (52%) have this financial flexibility. There at least some respondents in each region who usually do not have enough money to make ends meet at the end of the month, although this varies from only six percent in Norwich to 14 percent in Torrington (see Figure III-7).

As illustrated in Figure III-8, regional variation exists regarding the possibility of receiving financial help from family or friends (range 36-52%). Although the Danbury and Willimantic regions represent opposite ends of the financial resources spectrum, both regions have smaller proportions of respondents (36% each) who feel they have someone they can turn to for help financially. In contrast, over half of those from the Stamford area (52%) do have someone they can count on for such help.

Figure III-7. Not enough money to make ends meet

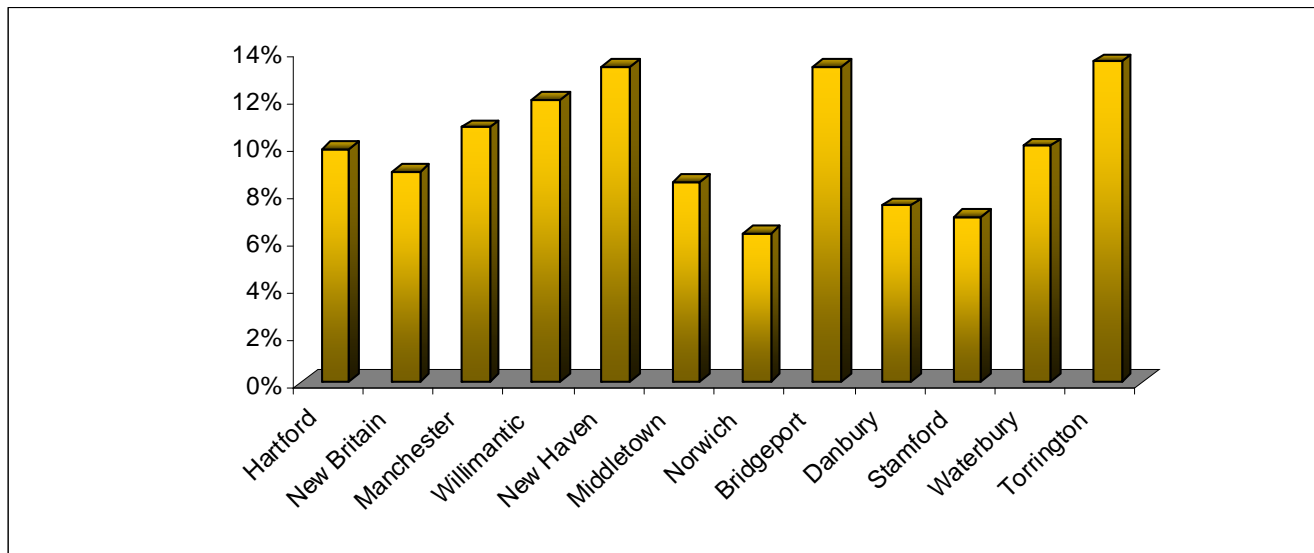
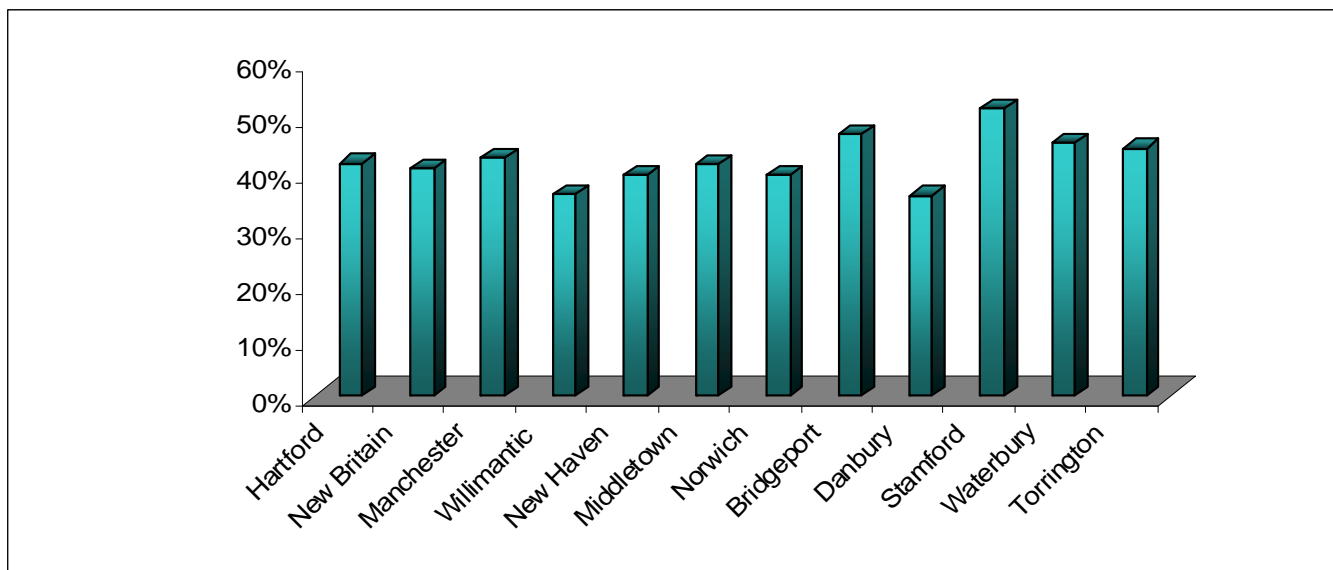


Figure III-8. Family/friends would give financial assistance

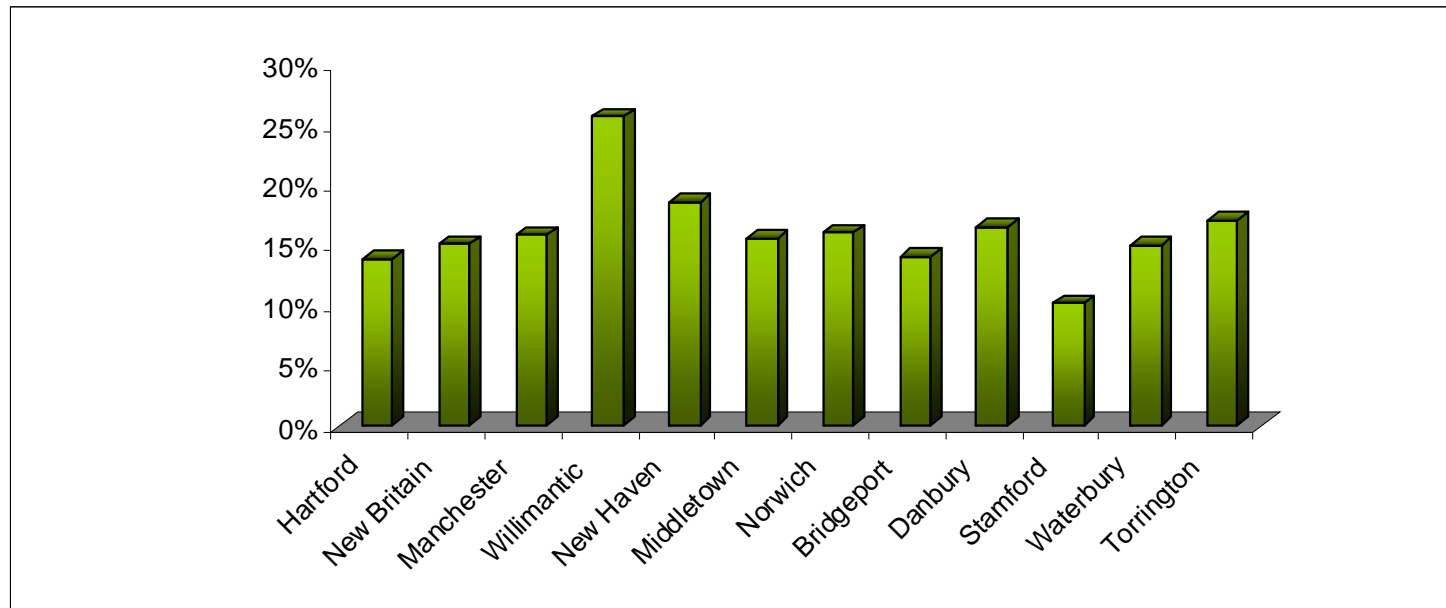


Notable differences regarding employment status also exist among the regions. While overall 40 percent of all the respondents work full time, Willimantic region has the lowest percentage of full time workers (30%). A greater percentage of respondents from both the Willimantic and Norwich regions describe themselves as retired (48% each), compared with 38 percent of respondents overall. Unemployment rates of survey respondents varied more widely across the regions, with New Haven (13%), Willimantic (12%), and Torrington (11%) regions reporting the highest rates, versus four to five percent in the Stamford and Danbury regions. A full quarter of nonworking respondents living in the New Haven region indicate they would like to work. While relatively few respondents from the Danbury region are unemployed, one fifth of them (21%) would also like to be working. New Britain and Norwich regions have the lowest percentages of those not currently working who would like to be employed (13% each).

C. Transportation

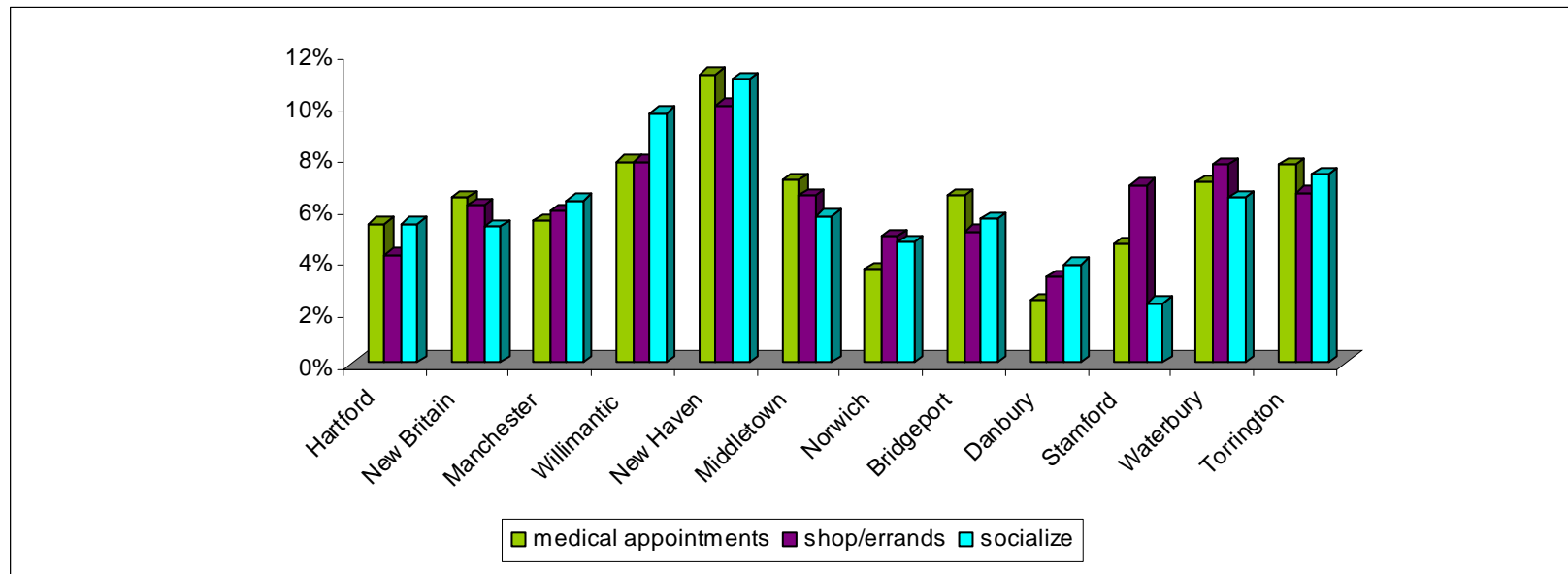
Percentage of respondents reporting difficulties with transportation varies widely among the twelve regions, ranging from 10% to 26% (average 16%). Transportation is especially difficult for respondents living in the Willimantic region, where one in four of respondents indicate they have at least one difficulty getting the transportation they need (see Figure III-9). This is striking when compared with Stamford, where only ten percent report transportation difficulties. For those in the Willimantic region, lack of available or dependable bus service is cited most frequently as the transportation difficulty, indicated by 17% of Willimantic respondents versus 7% overall. Significantly more respondents from this region also find that either the van service in their area is unavailable/undependable or that the van/bus will not take them where they need to go. Both of these difficulties are reported as an issue by approximately ten percent of Willimantic area respondents, versus about five percent overall.

Figure III-9. Overall difficulty with transportation



Interestingly, it is the New Haven area respondents, not those from Willimantic, who find that these difficulties are the most limiting when activities requiring transportation are examined. This applies especially for getting to medical appointments, shopping or doing errands, or visiting friends or family.

Figure III-10. Transportation difficulties interfering with activities or tasks

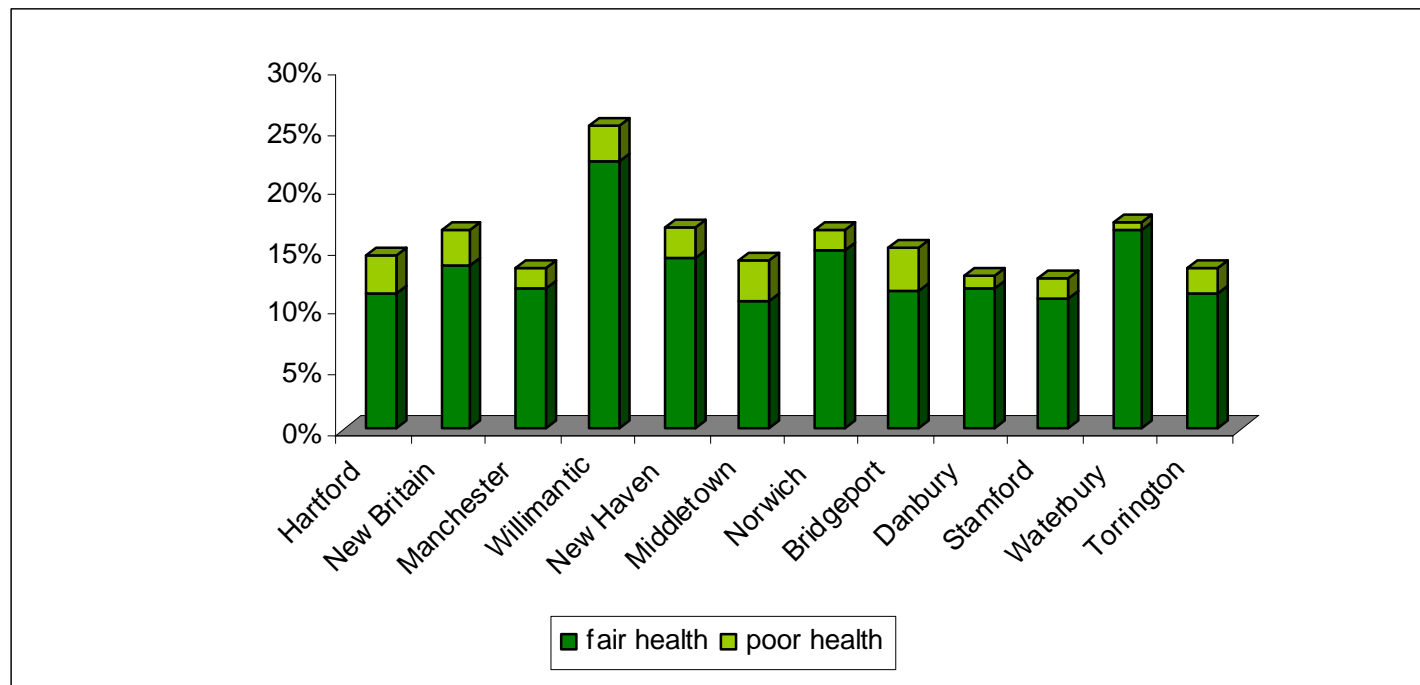


D. Health status

Physical health

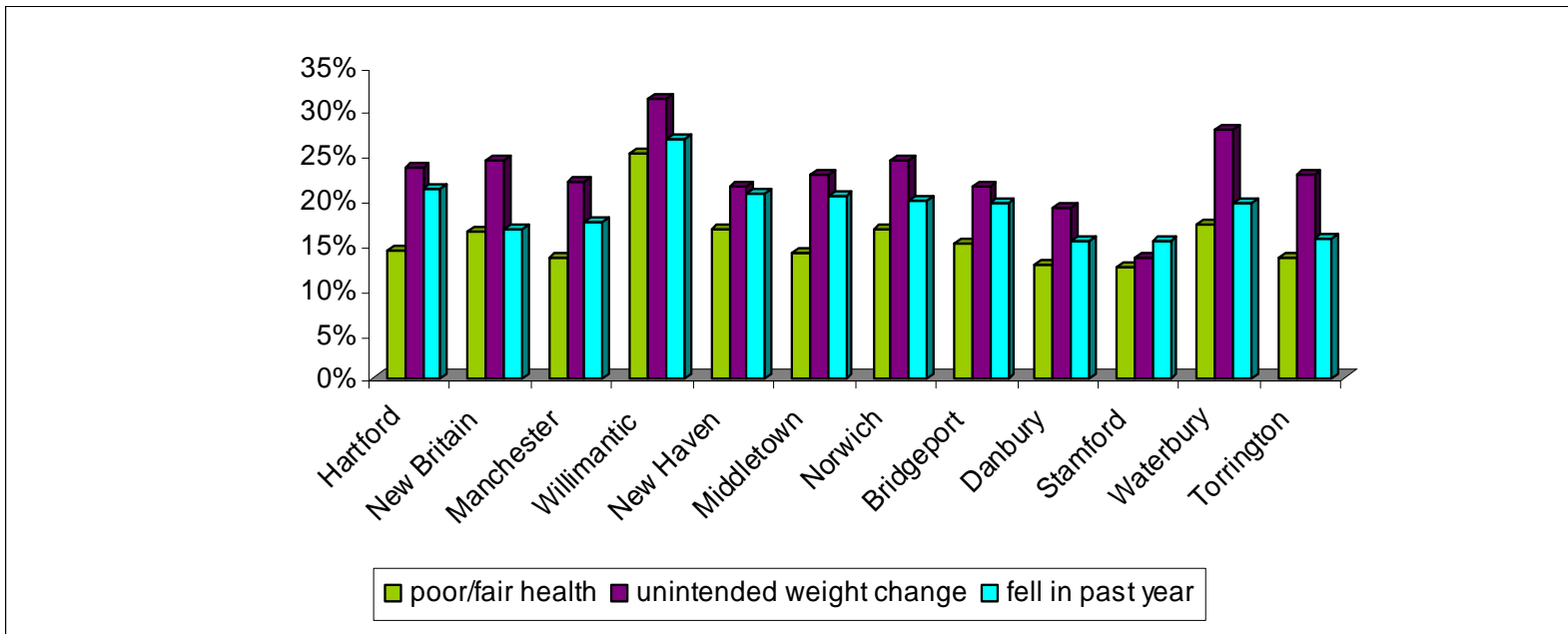
Indicators of physical health included in the long-term care needs assessment survey comprised overall health, unintended change in weight, falls, and utilization of preventive health care. Additional questions assessed mental health and quality of health care. As shown in Figure III-11, many more Willimantic area respondents rate their health as fair or poor, especially compared to respondents in the Stamford, Danbury, and Torrington regions. Waterbury, New Haven, Norwich, and New Britain also report higher than average fair/poor health.

Figure III-11. Self-reported health



When all three health indicators from the survey are examined together, the picture is even more striking (Figure III-12). Willimantic area respondents have the greatest percentage of those in fair or poor health (25%), unintended weight loss/gain (31%), or at least one fall in the past year (27%). These rates are much higher than the average percentages for these measures across all regions: 15% in fair/poor health, 23% with unintended weight change, and 19% fell in past year. Waterbury area respondents also have a very high rate of unintended weight change (28%). In contrast, respondents from the Stamford and Danbury regions report the best health overall.

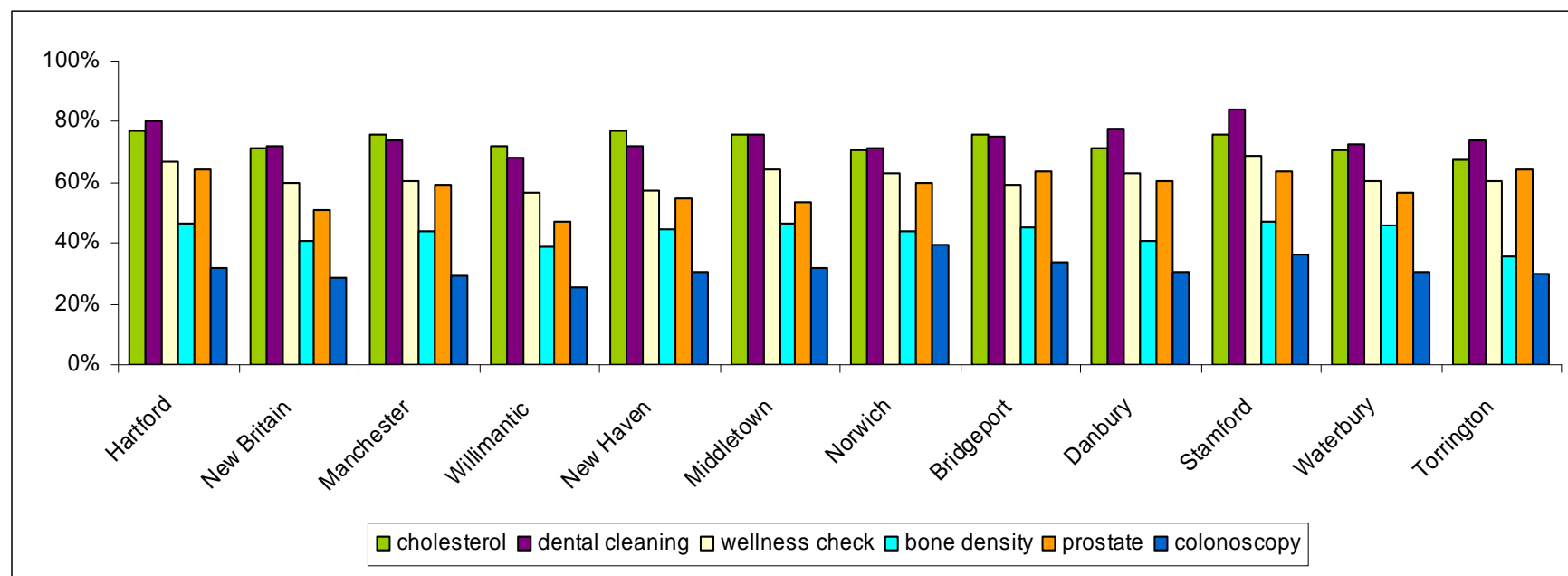
Figure III-12. Health indicators



The survey included a checklist of ten recommended yearly or biannual health screenings or preventative examinations. Six of the ten measures show marked regional variations: dental cleaning, sigmoid/colonoscopy, prostate examination, cholesterol screening, bone density test, and wellness check up (see Figure III-13). Looking at these six measures, a definite trend could be seen, as the Willimantic region has the lowest rate of compliance for three of these preventative exams (dental, prostate, sigmoid/colon), and ties with New Haven for lowest percentage of wellness check ups. The Torrington region also does not fair as well, having the lowest rate of cholesterol screenings or bone density tests. On the other hand, respondents from the Stamford region have the highest rate of dental cleanings, bone density tests, and wellness check ups, and have one of the two highest rates for prostate examinations.

Not all the results follow this pattern. For example, the Bridgeport and Torrington regions also have the highest rate of prostate examinations, and the New Haven region has one of the highest rates of cholesterol screenings. See Appendix B for detailed results of each screening by region.

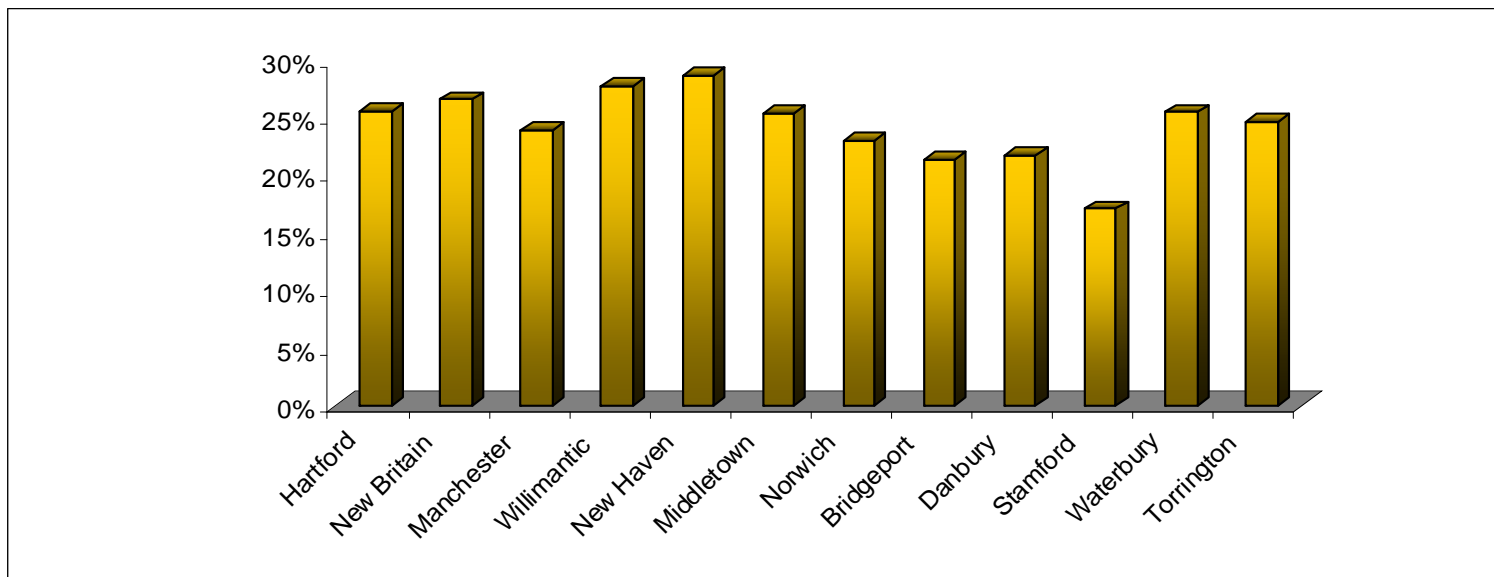
Figure III-13. Preventative health screenings



Symptoms of depression

A standardized two question scale was included to identify symptoms of depression (Whooley, Avins, Miranda, & Browner, 1997). The first question addresses if the person often feels down, depressed, or hopeless, while the second asks if he/she often has little interest or pleasure in doing things. Using this scale, a positive response to either question indicates depressive symptoms. Accordingly, the percentages reported below indicate the portion of respondents who indicate yes to either question. Overall rates of depressive symptoms across all regions are high (25 percent of all respondents report these symptoms). At 17%, the Stamford area has the lowest portion of respondents with depressive symptoms, while the New Haven (29%), Willimantic (28%), and New Britain (27%) regions have the highest rates (see Figure III-14).

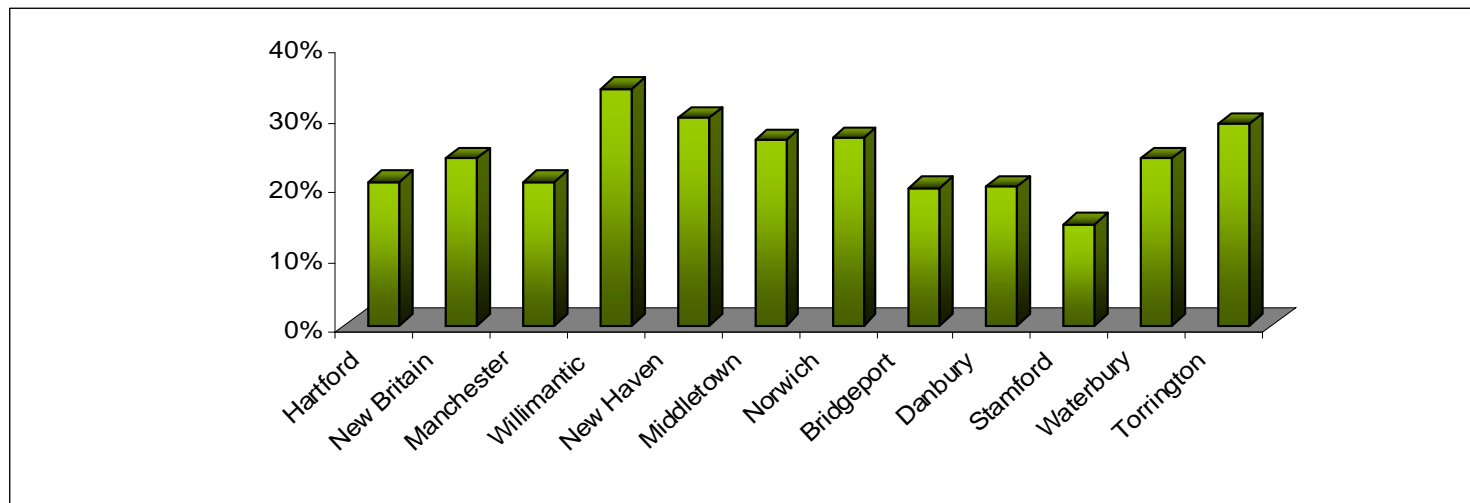
Figure III-14. Self-reported symptoms of depression



Disabilities and assistive devices

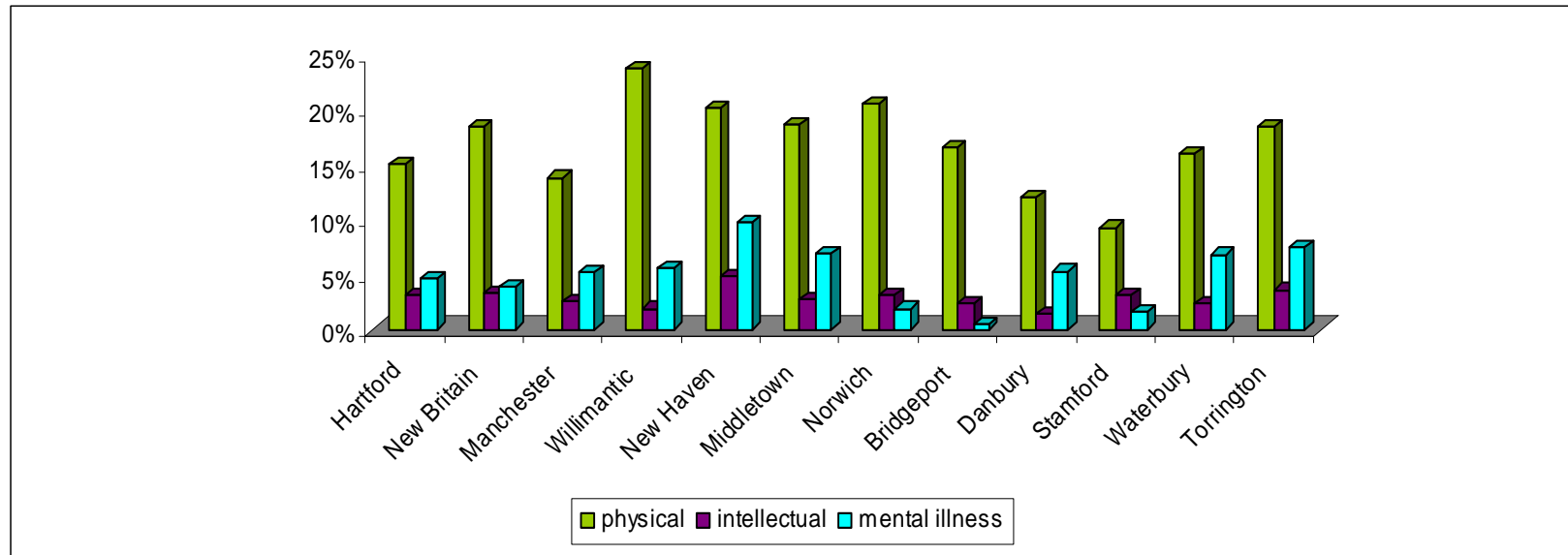
Figure III-15 depicts the percentage of respondents in each region with any type of disability. The needs assessment measured five distinct categories of disabilities: physical or chronic illness, intellectual or cognitive disabilities, mental illness, deafness, or blindness. Parallel to many of the other health measures, the Willimantic region has the highest percentage of people with any type of disability (34%). A significant portion of New Haven area respondents (30%) and Torrington area respondents (29%) have at least one type of disability.

Figure III-15. Rate of any disability



Willimantic area respondents have the highest rate of physical or chronic illness disabilities (24%) or severe hearing loss (15%), while respondents from the New Haven region have double the average rate of people with mental illness or psychiatric disabilities (10% New Haven; 5% overall). This rate contrasts to the less than one percent affected with this disability in the Bridgeport area. Figure III-16 depicts regional rates of physical, intellectual, and mental illness disabilities.

Figure III-16. Physical, intellectual, and mental illness disabilities

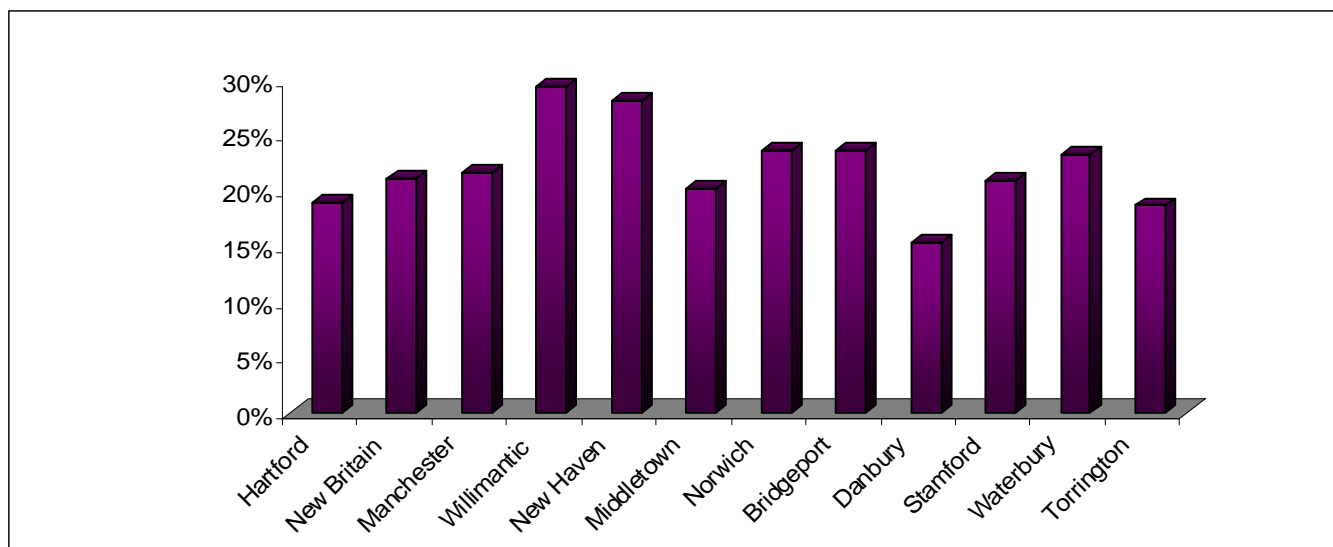


The overall average current use or unmet need for assistive devices or modifications is relatively low (6% building modifications, 5% mobility aides, 4% adaptive transportation, and 4% specialized computer equipment). When individual regions are examined, the Willimantic and New Haven regions show the greatest need for building modifications, mobility devices, and transportation aides. Computer access aides such as touch screens are the exception – for these, respondents of the New Haven and New Britain regions report the greatest need.

Assistance with everyday activities

Regional variations in ability to perform daily living activities demonstrate a similar pattern to the health indicators described earlier. Over one-quarter of respondents from the Willimantic (29%) and New Haven regions (28%) need help with at least one instrumental activity of daily living (IADL)¹, while only 15 percent of Danbury area respondents have any IADL limitation.

Figure III-17. Need for assistance with at least one IADL



As illustrated in Table III-1, many more respondents from both the Willimantic and the New Haven regions require assistance for any specific IADL, while respondents in the Danbury region need the least amount of assistance with these activities. For example, one fifth or more of Willimantic or New Haven respondents need assistance for routine household chores or getting to places out of walking distance, and only slightly fewer need assistance for grocery shopping. Meanwhile, less than ten percent of Danbury area respondents indicate need for assistance for any of these activities. Fewer respondents from any region indicate a need for assistance with taking medications correctly. Less than four percent of respondents from any region cannot independently use a telephone.

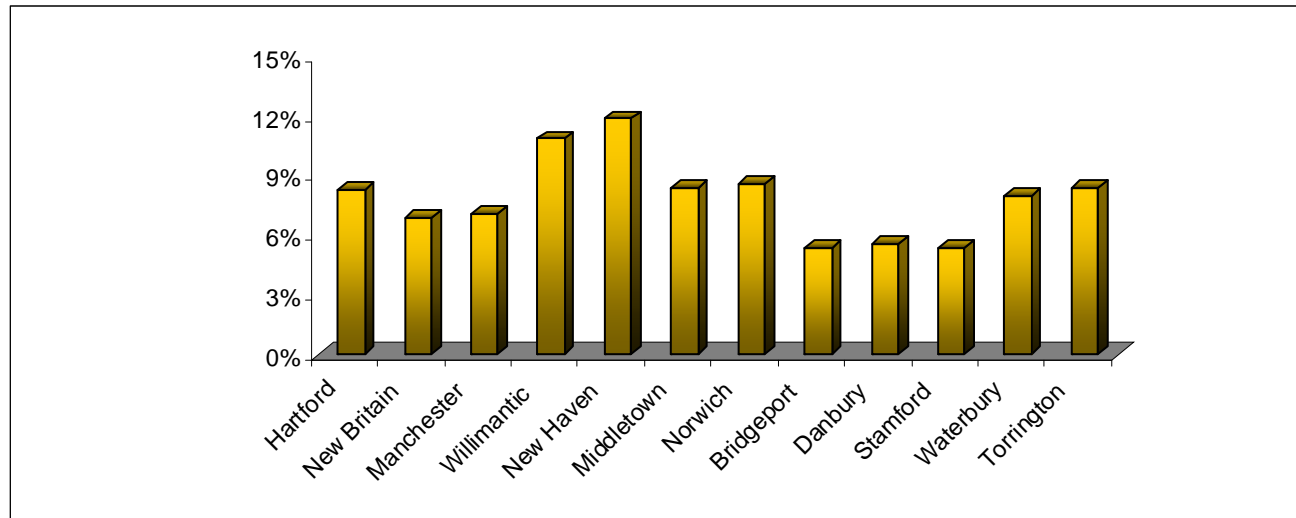
¹ Instrumental activities of daily living (IADLs) assessed: preparing meals, shopping for groceries, doing household chores, doing laundry, taking medications correctly, getting to places out of walking distance, and using the telephone.

Table III-1. Need for assistance with specific IADLs

Activity	Percentage requiring assistance with IADL activities (range)		
	High (%)	Low (%)	Overall (%)
Doing routine household chores	New Haven 23 Willimantic 23	Danbury 9	17
Getting to places out of walking distance	Willimantic 20 New Haven 19	Danbury 8	14
Shopping for groceries	Willimantic 18 New Haven 17	Danbury 9	13
Preparing meals	Willimantic 14 New Haven 13	Danbury 6	9
Managing money	New Haven 15 Willimantic 13	Danbury 7	10
Doing laundry	Willimantic 16 New Haven 14	Torrington 8 Danbury 9	11
Taking medications correctly	New Haven 8 Stamford 8 Bridgeport 8	Danbury 3	6

Although smaller regional differences exist when activities of daily (ADLs)² are examined, once again respondents from the New Haven and Willimantic regions do not fair as well. Twelve percent of respondents from the New Haven area and 11 percent of Willimantic area respondents need assistance with at least one ADL. Fewer respondents of the Bridgeport (5%), Stamford (5%), or Danbury (6%) regions require assistance in performing any ADLs.

Figure III-18. Assistance needed with at least one ADL



² Activities of daily living assessed: bathing, dressing, getting in/out of a chair, toileting, eating, continence, and getting around inside the house.

Assistance for most individual ADLs is small. The greatest assistance is needed for bathing (8%), while respondents report the least need for assistance with eating (3%) and toileting (4%). Even with these small numbers, once again more respondents from the Willimantic and New Haven regions need assistance with any specific activity. Stamford area respondents show the greatest ADL independence, as only 0 – 3% need assistance with any specific ADL. This is followed by respondents from the Danbury region, who tie for the least percentage needing assistance in three of the seven categories.

Table III- 2. Need for assistance with specific ADLs

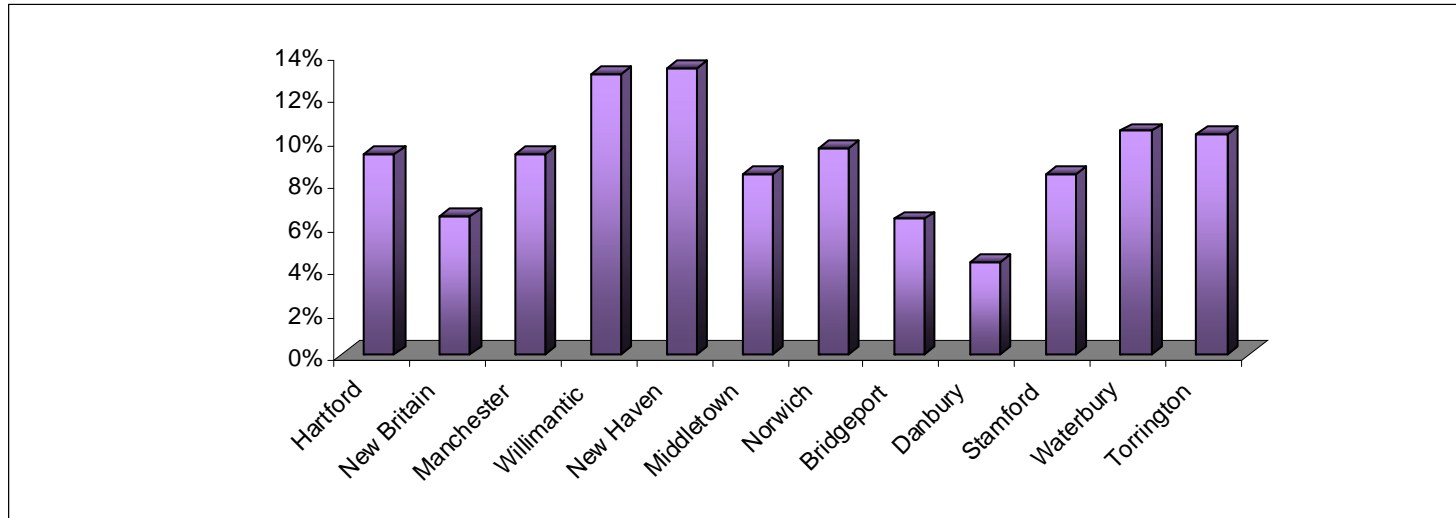
Activity	Percentage requiring assistance with ADL activities (range)		
	High (%)	Low (%)	Overall (%)
Bathing	Willimantic 8 New Haven 7	Danbury 3 Stamford 3 New Britain 3	5
Dressing	Willimantic 5 New Haven 5 Middletown 5	Torrington 2 Stamford 2 Danbury 2 Waterbury 2	4
Getting in/out of bed or chair	Willimantic 6	Stamford 1	4
Using the toilet	Willimantic 4	Stamford 0	2
Eating	New Haven 3 Bridgeport 3 Willimantic 3	Stamford 0 Torrington 0	2
Bladder/bowel continence	New Haven 7 Willimantic 7	Bridgeport 3 Stamford 3	5
Getting around inside the house	New Haven 5 Middletown 5	Danbury 1 Torrington 1	3

E. Home and community-based services

Current service use

Home and community-based services (HCBS) provide the long-term support needed by an individual to continue to live in the community. The HCBS assessed in the Needs Assessment were home health care, homemaker, visiting nurse, home delivered meals, transportation, friendly visitor, care management, and adult day programs. Respondents currently using a particular service include current users who receive enough and current users who need more of that service. Overall, current use of at least one type of HCBS varies regionally from 4 to 13 percent. As might be expected based on the health care data, many more users of at least one service live in the New Haven or Willimantic regions, while Danbury area respondents use the least amount of services overall.

Figure III-19. Current HCBS users overall



Rate of current use for any individual service varies from 3.7% to less than one percent (Table III-3). Homemaker, transportation, and care management are the most prevalent, while very few respondents use friendly visitor services. New Haven area respondents are the highest users for the majority of the services. In particular, five to six percent of all New Haven region respondents report they currently use care management, homemaker, transportation, or visiting nurse services. Respondents from the Stamford region also have high usage rates for several services: care management, adult day program, and home health care. Not surprisingly, the Danbury region has the lowest rate of use for the majority of services.

Table III- 3. Current users of HCBS

Service	Percentage current users of HCBS (range)		
	High (%)	Low (%)	Overall (%)
Home health care	New Haven 4.0 Stamford 3.8	Danbury 0.5	2.6
Homemaker	New Haven 5.7 Waterbury 5.4 Torrington 5.3	Danbury 1.0	3.7
Visiting nurse	New Haven 4.9	Danbury 1.0	2.7
Home delivered meals	Torrington 2.5	Danbury 0.0	1.3
Transportation	Manchester 5.3 New Haven 5.1	Danbury 0.5 Torrington 0.8	3.5
Friendly visitor	New Haven 1.6 Willimantic 1.4	Danbury 0.0 Stamford 0.0	0.9
Care management	New Haven 6.3 Stamford 6.2	Hartford 1.6	3.4
Adult day program	Stamford 5.5	Danbury 0.5	2.2

Overall, most respondents (63%, range 46% to 77%) who receive long-term care services indicate the services meet their needs “very well.” The most striking exception to this is the Willimantic region – less than half of respondents (46%) receiving care in this region indicate their services are meeting their needs very well. Waterbury area respondents are also not as highly satisfied with their services, as only just over half (53%) feel their current services meet their needs “very well.” Few respondents in any region (5% overall) rate their current long-term care services as meeting their needs “not very well,” with the exception of Willimantic, where 15 percent of current users find their services do not meet their needs. Even so, the great majority of respondents in any region rate their services as meeting their needs “very” or “somewhat” well. In particular, approximately three quarters of current users in the New Britain, Stamford, and Danbury regions find their long-term care service meet their needs “very well.”

For respondents already receiving services, markedly fewer respondents in the Danbury region report problems communicating with the person currently providing them care because of language or cultural differences. Only six percent of respondents using services in this region indicate these communication difficulties, compared to 21% overall. Respondents using services from the Waterbury area have the highest percentage (32%) of communication problems due to language differences with their current care provider, while smaller than average percentages of Torrington (11%) and Norwich (14%) area respondents report this difficulty.

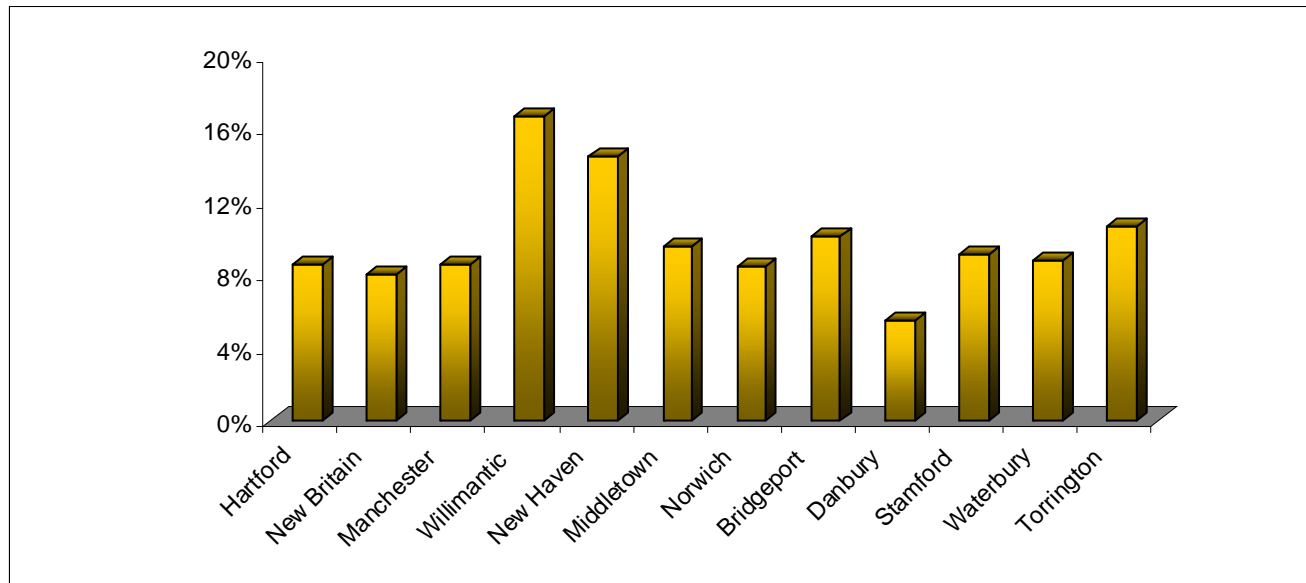
Few regional differences exist in the sources used by respondents already receiving care to get information about long-term care services. Stamford (12%) and Danbury area respondents (11%) are more than twice as likely as those living in the Manchester area to get this information from family or friends. More respondents from the Stamford region (7%) find out about long term care services from a social worker, compared to just one percent of those living in the Bridgeport area. Respondents from the Willimantic and Norwich regions (5% each) are somewhat more likely than other regions to receive this information from their local senior centers, especially when compared to the Danbury region (1%).



Unmet need

Unmet need for the services described above includes both people who indicate they need but do not have a particular service and those who currently use the service but do not have enough of it. Mirroring results in the health section, a greater percentage of respondents from the Willimantic region (17%) report any type of unmet need for community-based services, followed by New Haven respondents (15%). Fewer respondents from the Danbury region have this concern (6%).

Figure III-20. Overall unmet need for HCBS



Compared to overall need across all regions, markedly greater unmet need is indicated by Willimantic area respondents for transportation, homemaker, home health care, adult day programs, friendly visitor, care management, home delivered meals, and visiting nurse (see Table III- 4). For example, while less than four percent of respondents overall report the need for agency provided home health assistance, eight percent of Willimantic area respondents are missing this care. More than twice as many Willimantic area respondents report a need for transportation services compared to all regions overall. Other regions with a noticeably greater than average unmet need for community-based services include New Haven (homemaker and transportation); Bridgeport (transportation); Torrington (friendly visitor); New Britain (home delivered meals); and Middletown (visiting nurse). Several regions repeatedly have a smaller portion of respondents who are missing community-based services: Danbury, Stamford, and Manchester.

Among all regions, overall need is greatest for homemaker and transportation services, each reported as an unmet need by five percent of respondents overall, followed by friendly visitors and home health care.

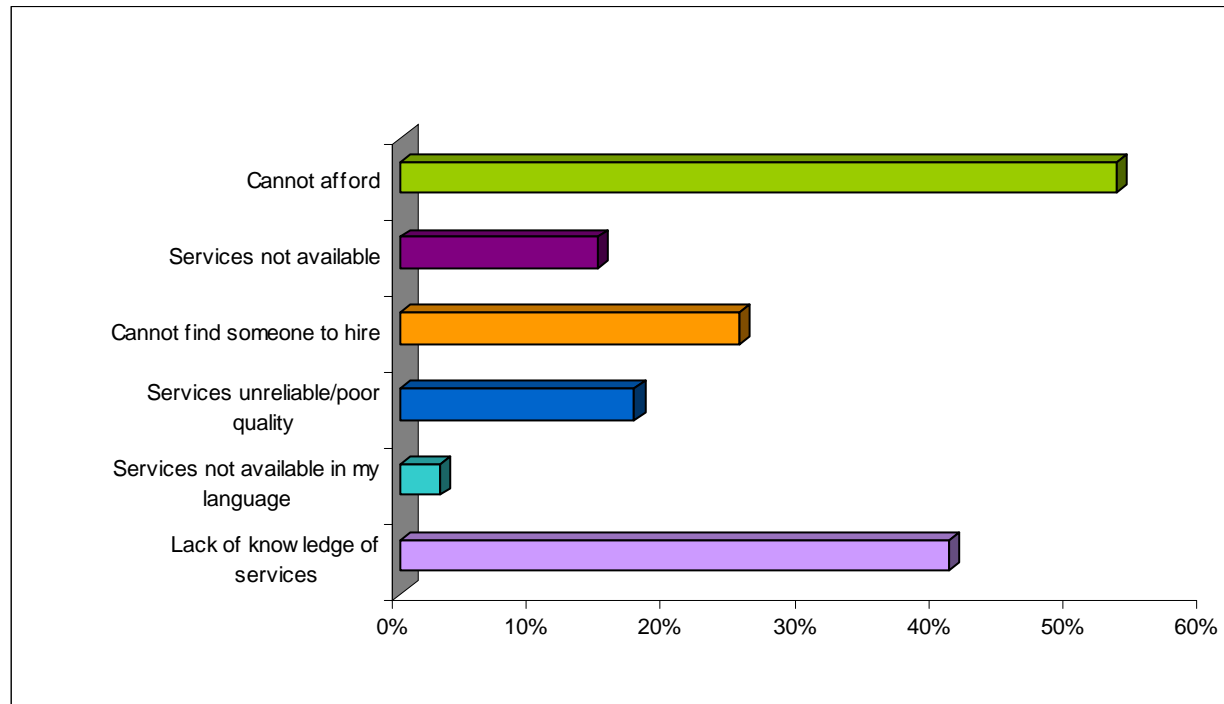
Table III-4. Unmet need for HCBS

Service	Percentage with unmet need for HCBS (range)		
	High (%)	Low (%)	Overall (%)
Home health care	Willimantic 7.5	Stamford 1.5	3.5
Homemaker	Willimantic 9.0 New Haven 7.1	Manchester 3.8 Danbury 3.9	5.3
Visiting nurse	Willimantic 4.3 Middletown 3.9	Danbury 1.4 Stamford 1.6	2.7
Home delivered meals	Willimantic 5.7 New Britain 4.1	Manchester 1.5	2.8
Transportation	Willimantic 10.5 Bridgeport 7.2 New Haven 7.0	Danbury 2.4	5.1
Friendly visitor	Willimantic 7.1 Torrington 5.0	Stamford 2.3 Danbury 2.4	3.6
Care management	Willimantic 6.1	Danbury 1.5 Stamford 1.5	3.1
Adult day program	Willimantic 7.2	Danbury 1.0	3.1

Barriers to receiving services

While location and number of providers may affect availability of services, they are just two of the multiple barriers which impact the services a person receives. Barriers assessed in the survey include affordability, availability, finding someone to hire, poor quality or unreliability of services, awareness of services, and language differences. Of the survey respondents examined in this report, approximately ten percent (443 respondents) lack at least some of the services they need. Affordability is the most commonly identified barrier to getting care – over half of the respondents (53%) with unmet long-term care needs indicate cost makes it difficult to get needed care, followed by lack of awareness of services (41%) and difficulty finding someone to hire (25%). Fewer respondents with unmet needs find that poor quality or reliability of services (18%) or lack of available services in their area (15%) pose difficulties for them getting care.

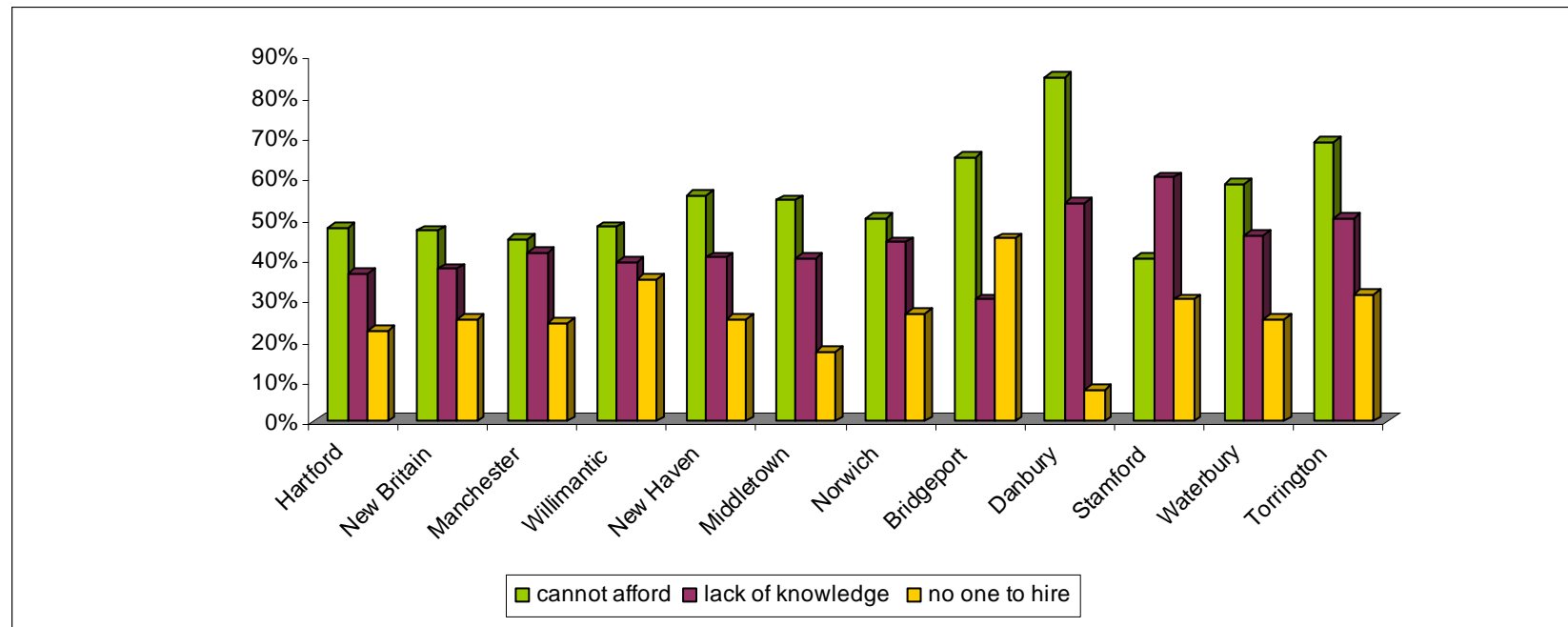
Figure III-21. Barriers to receiving services



Overall, respondents from every region who are not getting all the services they need find that affordability of services creates the largest barrier to getting these missing services, ranging from 40 to 85 percent (see Figure III-22). Especially high percentages of respondents from the Danbury region (85%) indicate cost of services is an obstacle to receiving care, along with respondents in the Torrington (69%) and Bridgeport (65%) areas. Relatively fewer Stamford area respondents find affordability presents a barrier to getting care, although this is still an issue for four out of ten respondents with unmet service needs in this region.

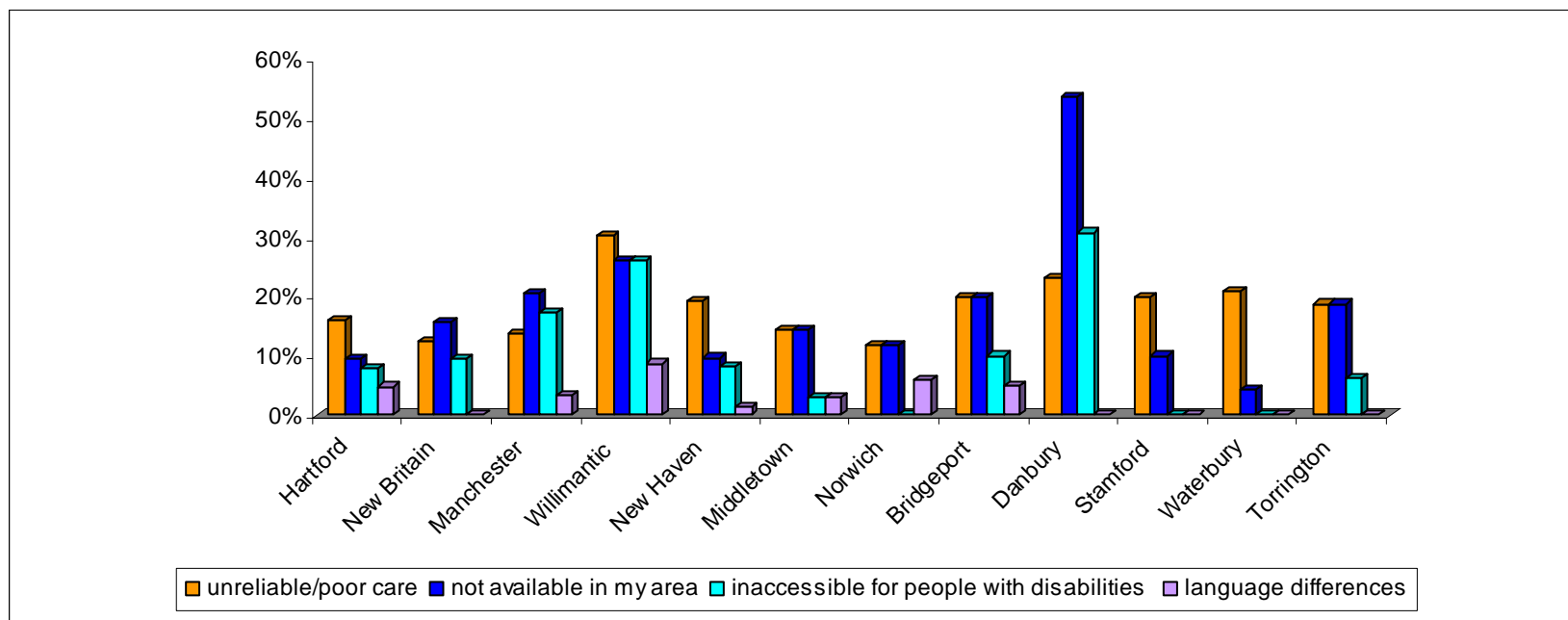
Lack of knowledge about what long-term care services are available is also a shared concern for respondents who are missing needed services. This is a particular concern for those in the Stamford area, where 60 percent of respondents needing services indicate that not knowing what services are available makes it difficult for them to receive care, while only half as many respondents from the Bridgeport area find this to be so.

Figure III-22. Specific barriers to receiving services



Compared to the other regions, notably more Bridgeport area respondents (45%) with unmet service needs indicate that difficulty finding a person to hire creates an obstacle to care, while Danbury area respondents (54%) most often report that needed services are not available in their area (see Figure III-23). Poor quality of services is more of a problem in the Willimantic area (30%) and least problematic for those in the Norwich and New Britain regions (12%, 13%, respectively). Compared to other regions, more respondents in the Danbury and Willimantic regions report that inaccessibility for people with disabilities makes it difficult to get needed services.

Figure III-23. Specific barriers to receiving services



F. Intersection of unmet need and provider services

Using these survey results and State of Connecticut long-term care provider data, it is possible to examine the overlap between provider location and unmet need for services (Robison et al., 2007). Three categories of HCBS overlap directly with provider types: home health (including home health aides and visiting nurse services), homemaker services, and adult day programs. Unmet need for each of these three services is divided into five levels: very low, low, medium, high, and very high. Maps III-1 – III-3 superimpose the level of unmet need for each region onto the locations of the service providers.

Home health and visiting nurse services

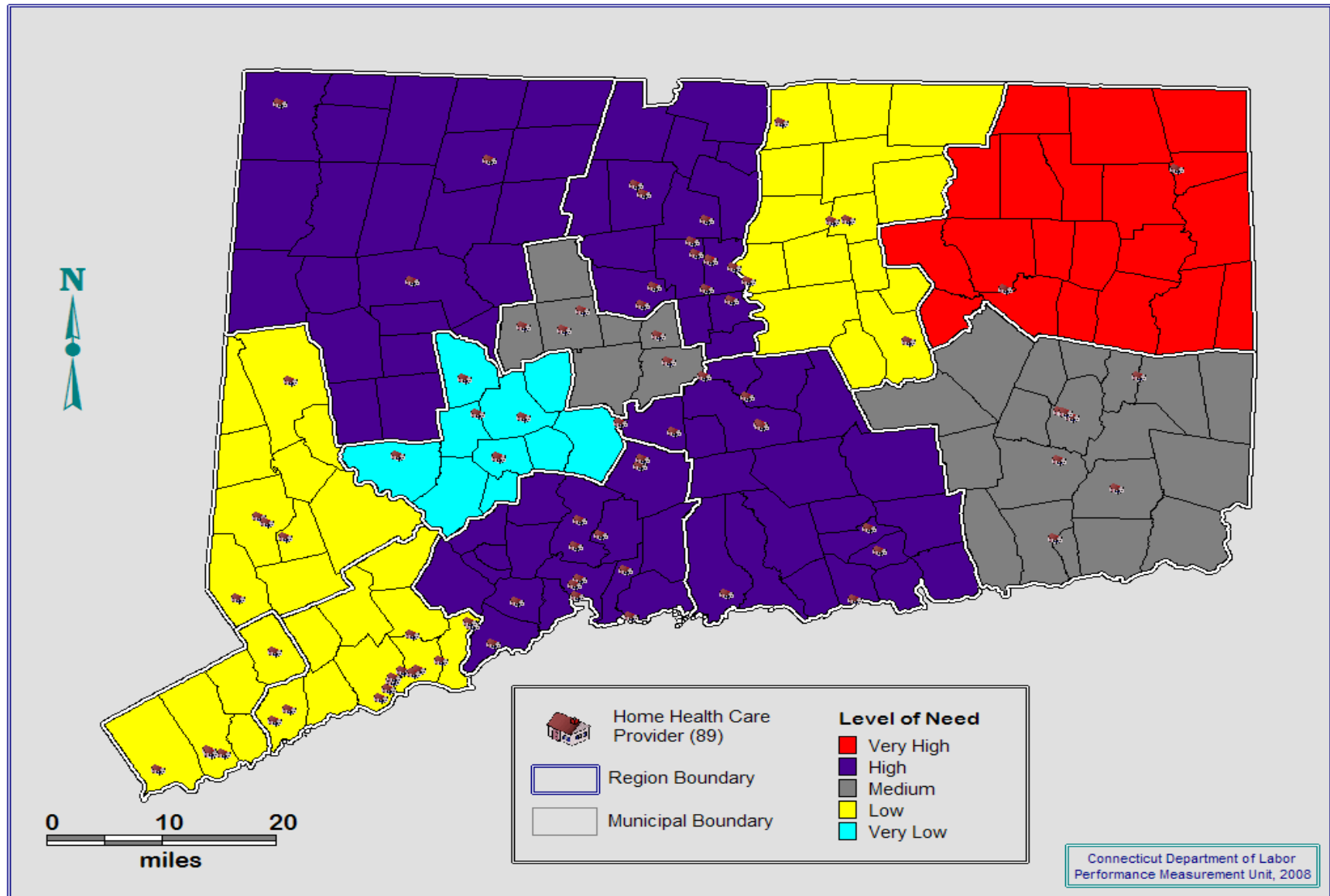
Unmet need for home health aide and visiting nurse assistance are combined to represent unmet need for home health care services. Overall, 3.7 percent of respondents indicate they do not have the home health services they need. Table III-5 shows the percentage of unmet need for home health care services. Level of unmet need ranges from very low in Waterbury to very high in Willimantic. High unmet need for these services is found in the New Haven, Hartford, Middletown, and Torrington regions.

Table III-5. Unmet need for home health care services

Very Low 1-1.9%	Low 2-2.9%	Medium 3-3.9%	High 4-4.9%	Very High 5% and above
Waterbury 1.8	Bridgeport 2.3 Stamford 2.3 Danbury 2.9 Manchester 2.9	New Britain 3.6 Norwich 3.7	Torrington 4.0 Middletown 4.2 Hartford 4.3 New Haven 4.8	Willimantic 6.4

Map III-1 superimposes the regional level of unmet need for home health care services over the location of providers of home health care services. The number of home health care providers per region varies from five (Willimantic and Danbury) to 14 (Hartford). The number of home health care providers available to each region does not show a straightforward relationship with the level of unmet need for this service. Very high unmet need for home health care services is seen in the Willimantic area, and this region ties with Danbury for the lowest number of these providers. Combined with its rural character, which itself might impact accessibility of services, it is easy to see why unmet need for home health care might be higher in this region. However, this relationship is not shown in all other regions. For example, respondents from either the Hartford or New Haven regions express a high unmet need for this service, along both regions have more than double the providers than Willimantic area (Hartford 14, New Haven 13).

Map III-1. Unmet need of home health and visiting nurse services and provider location



Homemaker services

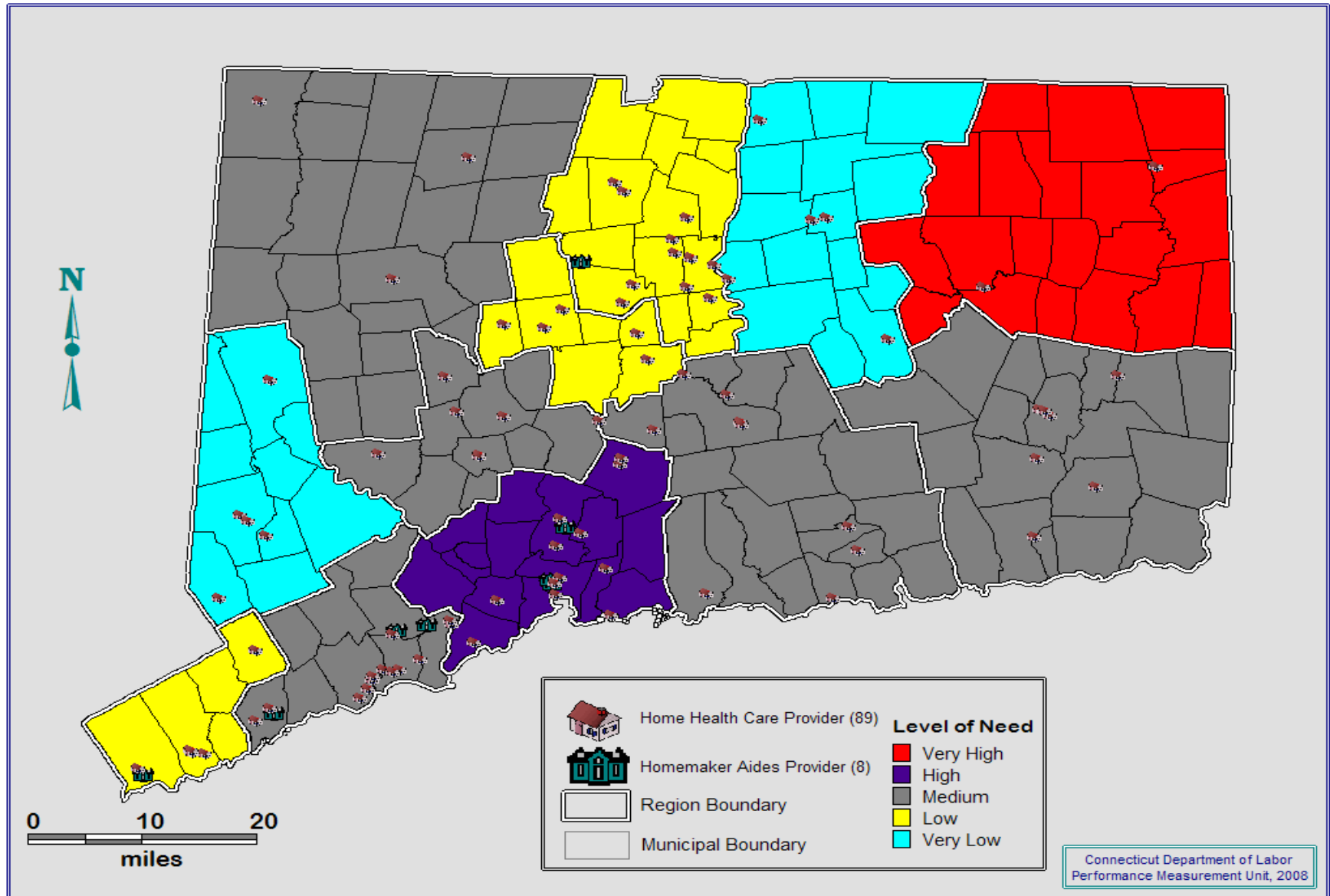
Percentage of unmet need for homemaker services shows great variation, from 3.8% to 9.0% (see Table III-6). Manchester and Danbury area respondents have a very low unmet need for these services, which contrasts with the high and very high unmet need for homemaker services expressed by respondents in the New Haven and Willimantic regions.

Table III-6. Unmet need for homemaker services

Very Low 3-3.9%	Low 4-4.9%	Medium 5-5.9%	High 6-7.9%	Very High 8% and above
Manchester 3.8 Danbury 3.9	New Britain 4.1 Stamford 4.6 Hartford 4.8	Torrington 5.0 Waterbury 5.1 Bridgeport 5.4 Norwich 5.5 Middletown 5.8	New Haven 7.1	Willimantic 9.0

Map III-2 shows the regional level of unmet need for homemaker services as well as the location of providers of these services. The number of homecare-home health aide providers per regional area varies from five (Willimantic and Danbury) to 15 (Hartford). When regional unmet need is examined by number of providers per region, no state-wide pattern is discernible. Willimantic area respondents, who along with Danbury report the highest unmet need of homemaker services, do have the fewest providers of this service. However, this does not hold for the New Haven region. While these respondents express a high unmet need for homemaker services, there are 14 of these providers in the region or its immediate area.

Map III-2. Unmet need of homemaker services and provider location



Adult day programs

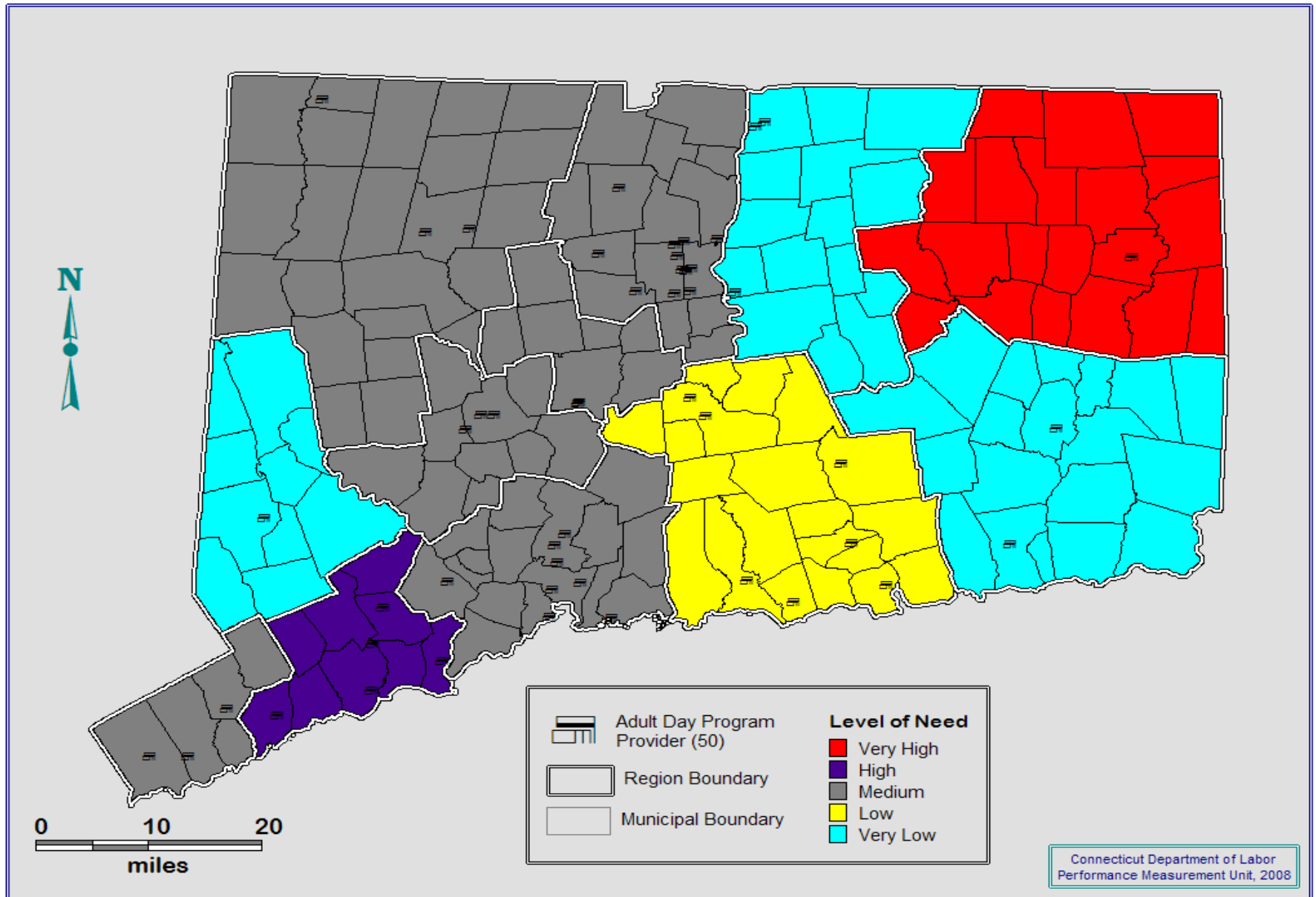
As shown in Table III-7, unmet need for adult day services also differs widely among regions, from very low in Danbury to very high in Willimantic. Bridgeport has a high unmet need for this service, while the Danbury, Norwich, and Manchester regions all show very low unmet need for adult day services.

Table III-7. Unmet need for adult day programs

Very Low 1-1.9%	Low 2-2.9%	Medium 3-3.9%	High 4-4.9%	Very High 5.0% and above
Danbury 1.0 Norwich 1.8 Manchester 1.9	Middletown 2.7	New Britain 3.0 Hartford 3.1 Torrington 3.2 Waterbury 3.7 New Haven 3.7 Stamford 3.9	Bridgeport 4.5	Willimantic 7.2

The location of adult day providers and the regional level unmet need for this service is shown in Map III-3. The number of adult day providers accessible to respondents in any region varies from one (Willimantic and Danbury) to 14 (Hartford). Once again, no relationship between level of unmet need and location of providers is present. While both the Danbury and Willimantic regions only have one adult day provider, Danbury respondents report the lowest level of unmet need, while respondents from the Willimantic region have the highest unmet need for this service.

Map III-3. Unmet need of adult day programs and provider location

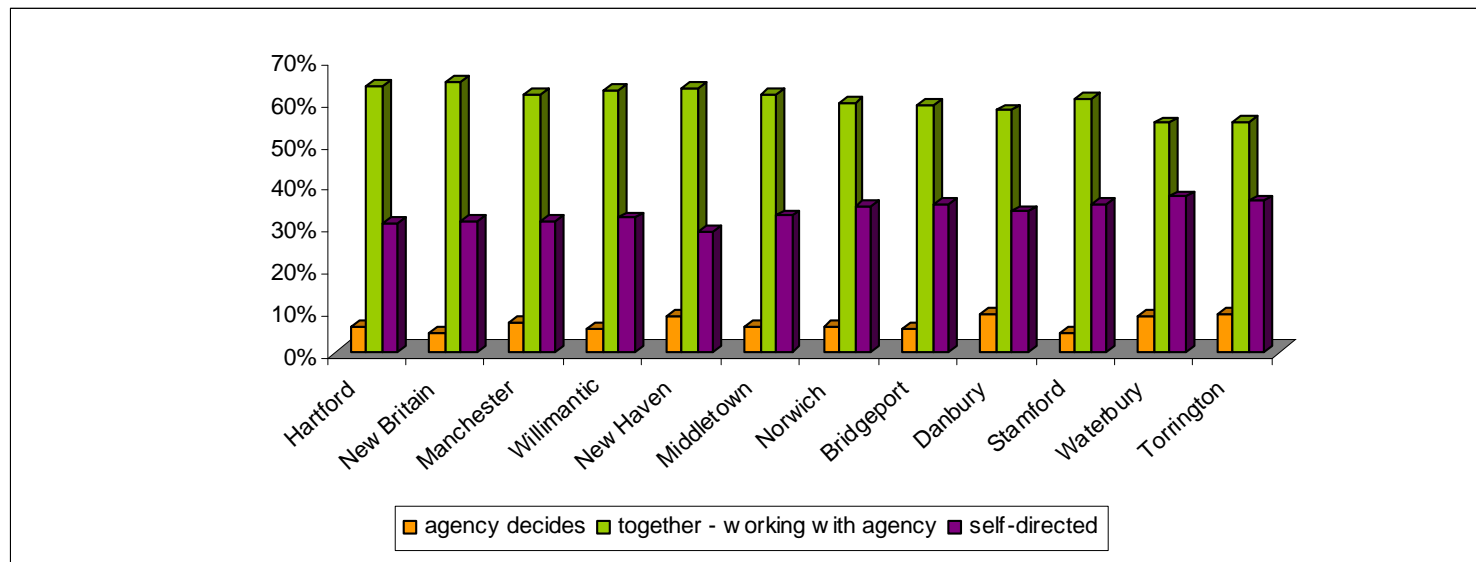


G. Future community-based service use

Expectations for future use of home and community-based services to support community living shows some regional variation. Willimantic area respondents indicate a greater future need for multiple services in order to continue living at home, including homemaker, home health care, transportation, and home delivered meals. By contrast, New Haven area respondents anticipate a below average future need for several community-based services: home maintenance services, home health care, lawn/snow services, or home delivered meals. A smaller percentage of Norwich area respondents also expect to use either home health or homemaker services, and fewer respondents from the Torrington region see themselves using homemaker services in the future. Meanwhile, a greater percentage of both Danbury and Stamford region respondents expect to use home maintenance or handyman services in order to stay living in the community.

Only slight differences exist among regions regarding respondents' preferences for managing their formal, or paid, long-term care services (see Figure III-24). The majority of respondents from any region would prefer to jointly manage any formal services along with an agency of their choice. This arrangement gives individuals more control of their services, but includes some agency assistance for arranging services and handling financial paperwork. This choice is especially popular in the New Britain, Hartford, and New Haven areas. One-third of all respondents would like a more autonomous approach, preferring to manage their services without agency assistance. Somewhat more respondents in the Waterbury and Torrington areas prefer this approach, while fewer from the New Haven region care for this management style.

Figure III-24. Preferences for management of services

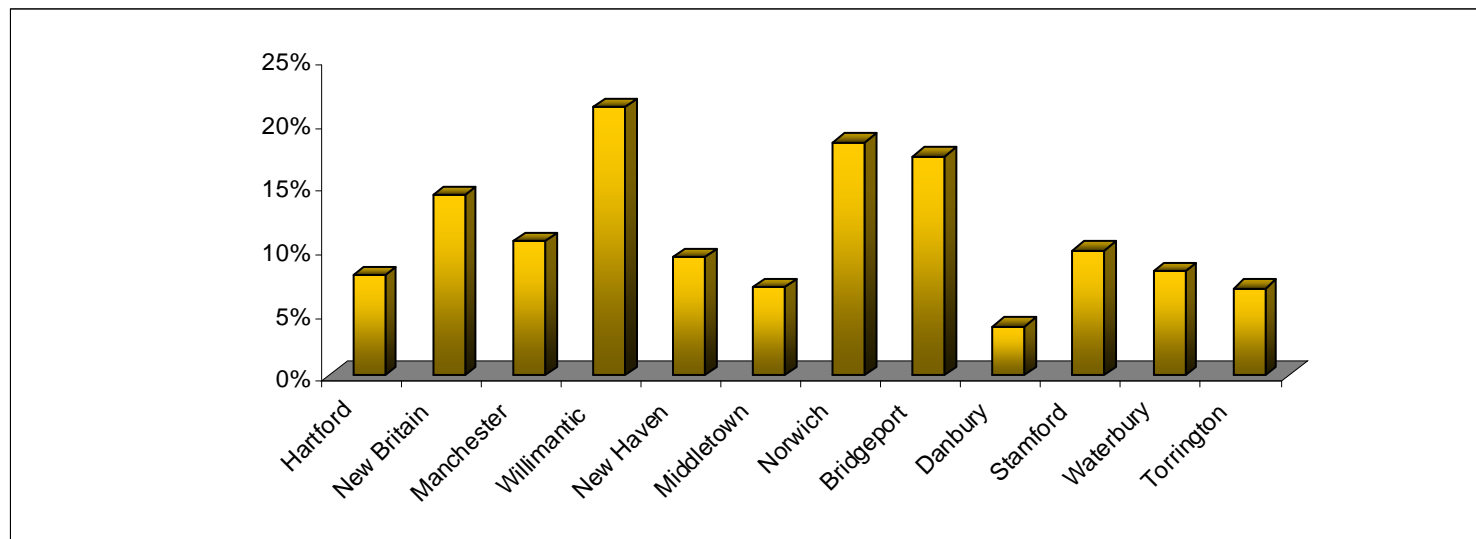


Senior centers

Although one in ten respondents overall currently visits a senior center, approximately two-thirds of all respondents (64%) report they are likely to do so in the future. Expected senior center attendance shows some regional variation – 69 percent of New Britain area respondents consider this likely, versus 57 percent of Torrington area respondents.

Current senior center attendance also varies regionally. Willimantic respondents currently attend a senior center at a much higher rate, as do respondents from the Norwich and Bridgeport regions (see Figure III-25). Rate of senior center attendance correlates somewhat with regional mean age of respondents, with some exceptions. For example, as with the Willimantic, Norwich, and Bridgeport regions, respondents in the Stamford area have a mean age of 64-65. However, just under ten percent of respondents in the Stamford region currently go to a senior center. On the other hand, although respondents from the New Britain region are some of the youngest overall (mean age=61), 14 percent of them currently go to a senior center.

Figure III-25. Current senior center attendance



Living arrangement preferences

As for future living arrangements, most respondents from all regions show a preference for aging in place with homemaker or home health assistance (see Robison et al., 2007, for a complete description of living arrangement options). Still, respondents from the Willimantic area are somewhat less likely to see this as an option, which may be related to the greater than average unmet need for services in this region. Home modifications to adjust for physical problems are needed by a greater percentage of New Britain area respondents in order to remain at home, while more Norwich area respondents plan to stay in their current residence even without such structural changes. More Stamford area respondents are inclined to sell their houses and move to an independent apartment/condominium or retirement community than respondents from other parts of the state.

Various other regional differences regarding anticipated future housing arrangements are evident. Living with an adult child in their home is considered much more likely by Waterbury area respondents, especially when compared to those from the Stamford or Hartford regions. More New Britain region respondents see themselves living in a retirement community in the future. Middletown area respondents do not anticipate living in senior housing; respondents from the Hartford region are the least likely to expect to live in assisted living; and fewer Waterbury region respondents see nursing home care as an option. Fewer respondents from the Stamford region consider it likely that they will live in a continuing care retirement community in the future.

Fewer Stamford region respondents expect that an adult child would provide this care for them, while more respondents from the Bridgeport region anticipate this type of familial care. Instead, a greater percentage of Stamford area respondents expect to receive services from a home care agency, while Norwich region respondents anticipate receiving either home care or assisted living services the least.

Long-term care planning

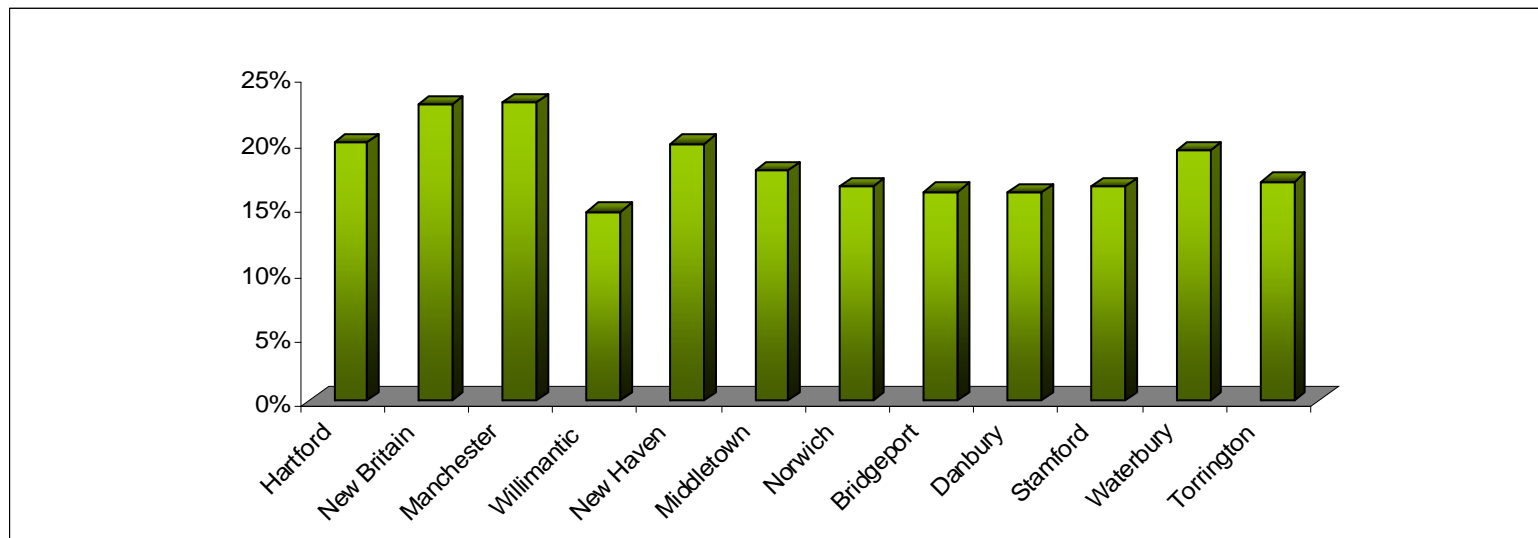
Respondents from the Stamford region clearly have the greatest resources to pay for any long-term care – almost one quarter could pay up to \$50,000 a year for five years for these services. By comparison, approximately 40 percent of New Haven and Willimantic area respondents cannot afford to pay anything for this care. Stamford area respondents also have the most concrete plans to pay for these services. Six out of ten Stamford area respondents plan to use their savings or investments, and more respondents from both the Stamford and the Hartford regions plan to use their long-term care insurance to cover their care. In contrast, over one-third of those from the Waterbury, New Britain, or New Haven regions have no plans to pay for this care, and Waterbury region respondents are the least likely to have long-term care insurance.

There were not many marked differences between the regions concerning the public-private responsibility to pay for long-term care. Overall, fewer Willimantic region respondents feel they should have to sell all their property before receiving government assistance, and more respondents from both the Willimantic and New Haven regions are undecided as to the role of the individual versus the government in paying for this care.

H. Caregiving

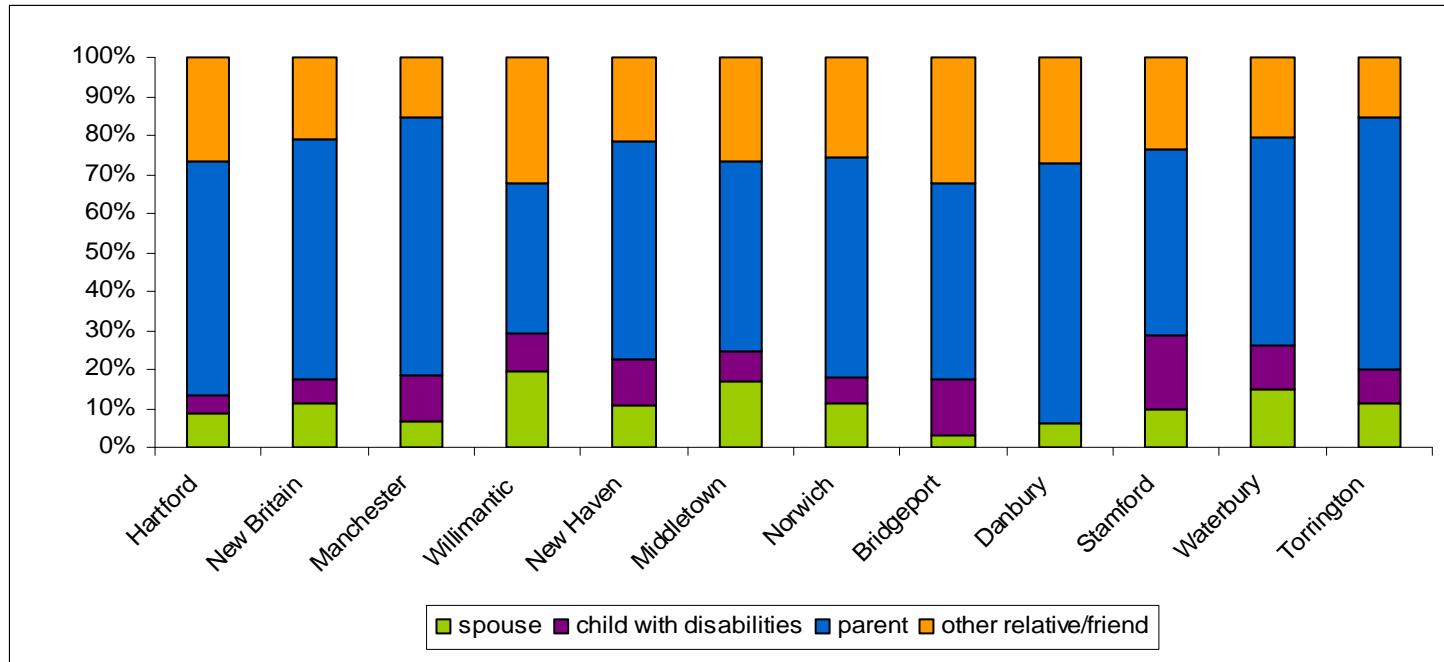
Caregivers are defined as those who provide unpaid care and assistance for a relative or friend living in Connecticut because of old age, disabilities or other problems. Overall, a total of 817 respondents define themselves as caregivers. A greater percentage of Manchester and New Britain area respondents are caregivers (23% each). Most caregivers from any region care for only one person, although significantly more caregivers living in the Waterbury or New Britain area provide unpaid care for more than one person.

Figure III-26. Respondents who are caregivers



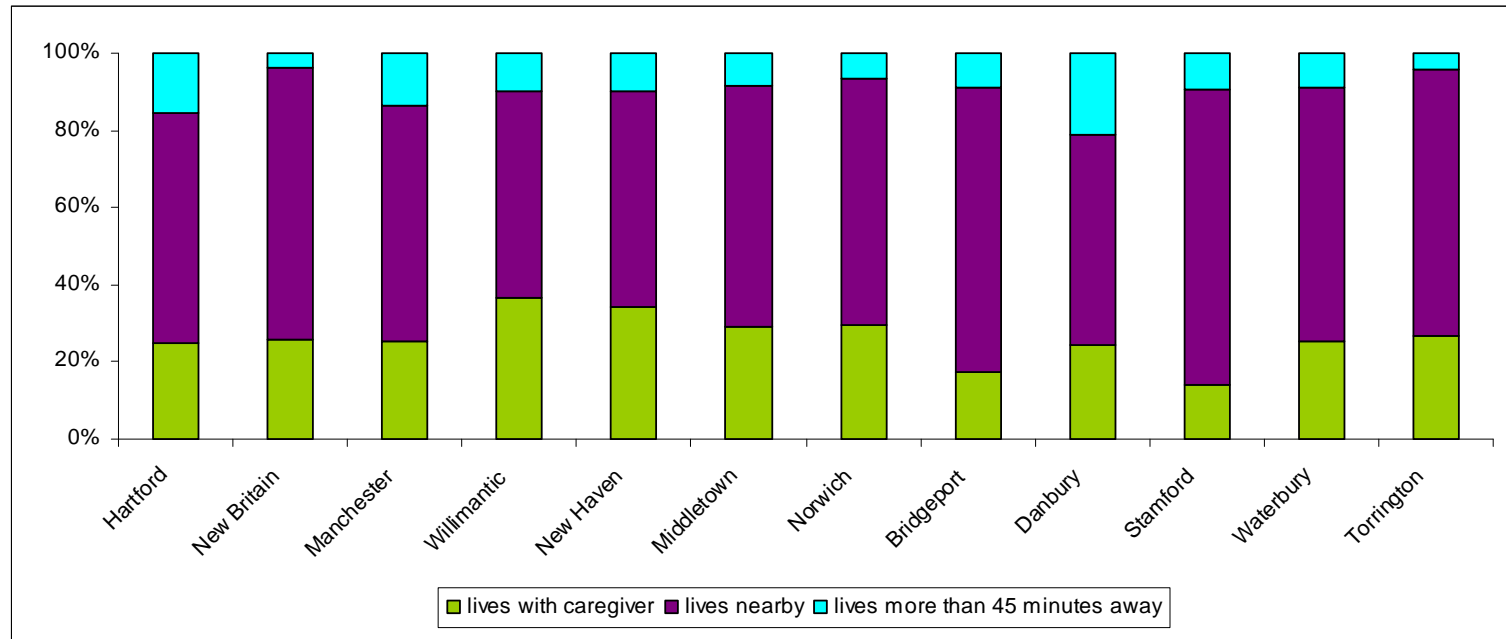
Overall, the greatest percentage of caregivers from each region take care of a parent, although the percentage varies from 39% (Willimantic) to 67% (Danbury). Noticeably more Willimantic area caregivers provide assistance to their spouse or partner, while only a very small percentage of Bridgeport region caregivers do so.

Figure III-27. Caregiver relationship



Most caregivers from each region provide assistance to someone who lives in the same town or a nearby community (range 53%-76%). Stamford, Bridgeport, and New Britain area caregivers are significantly more likely to live near the individual they are helping. More caregivers from the Willimantic and New Haven regions live with the person that they care for. Danbury area caregivers are more likely to live farther away (more than 45 minutes) from the person they are helping.

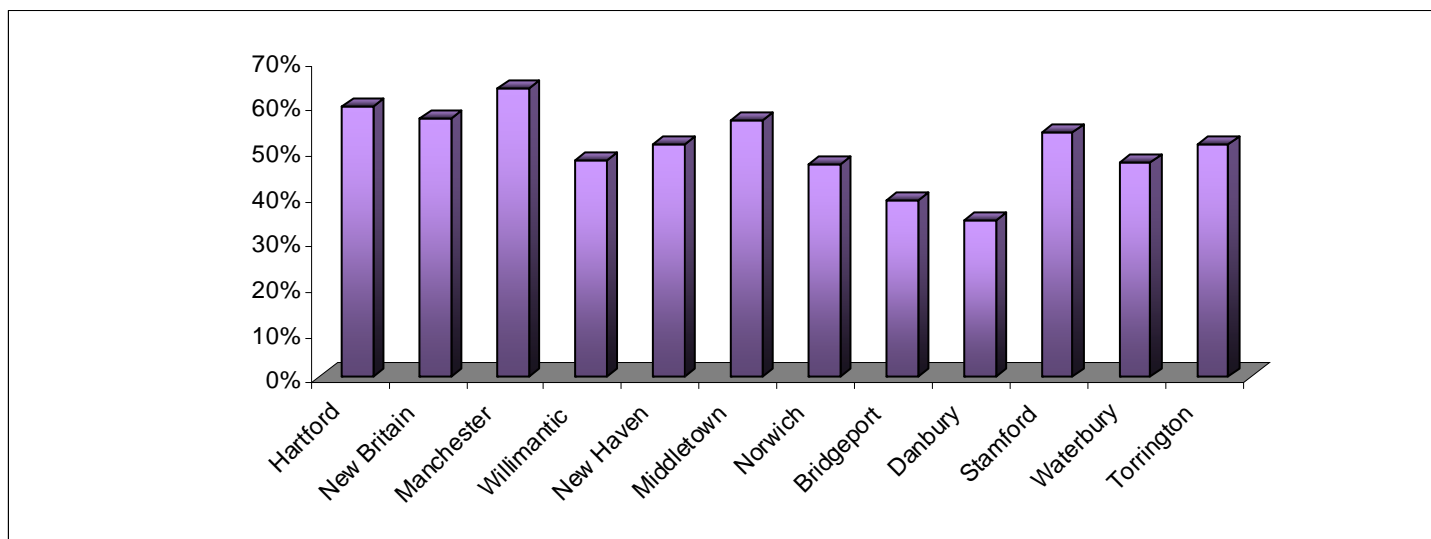
Figure III-28. Caregiver/care recipient living arrangement



A greater portion of caregivers from the New Britain region assist individuals with mild memory problems (46%), especially when compared to Bridgeport (19%). Stamford and Middletown area caregivers report the highest rate of care recipients with moderate to severe memory problems (40%, 38% respectively).

Almost three-quarters of caregivers are employed and must balance both caregiving and work responsibilities. Of these employed caregivers, over half took time off from work in the past year due to their caregiving responsibilities. Employed caregivers from the Manchester region report missing work or using sick or vacation time in the past year because of caregiving at a higher rate – almost two-thirds had to do so in the past year, compared to one-third of those from Danbury.

Figure III-29. Employed caregivers who missed work due to caregiving responsibilities in the past year



Caregiving home and community-based service use

A high percentage of caregivers overall (86%) report at least one unmet need for any type of service for their loved one. Sizable regional differences exist when need for each individual service is examined (see Table III-8). Willimantic caregivers consistently report very high needs for every listed service, especially for transportation, homemaker, adult day programs, and care management services. Caregivers in the Danbury region also report notably higher rates of unmet need for home health care, homemaker, and visiting nurse services. The need for many of the services listed is lowest in the Stamford and Torrington regions. In particular, Stamford caregivers report very low unmet needs for home health care, adult day programs, and home delivered meals, while a very low unmet need for visiting nurse services or home delivered meals is reported by caregivers from the Torrington area.

Table III-8. Care recipients' unmet need for community-based services

Service	Percentage with unmet need for services (range)		
	High (%)	Low (%)	Overall (%)
Home health care	Danbury 38.5 Willimantic 30.8	Stamford 0.0	21.7
Homemaker	Willimantic 42.9 Danbury 38.5	Stamford 11.8	29.3
Visiting nurse	Danbury 26.9 Willimantic 25.0	Torrington 0.0	9.9
Meals delivered	Willimantic 25.9	Stamford 6.3 Torrington 7.5	14.4
Transportation	Willimantic 44.4	Torrington 10.5	25.1
Care management	Willimantic 33.3	Norwich 9.3 Torrington 10.5	19.2
Adult day program	Willimantic 36.0	Stamford 6.3 New Haven 7.9	17.1

The number of caregivers reporting barriers from each region is small, ranging from 49 in the Hartford region to four from the Stamford area. Affordability is a greater concern for caregivers in the Norwich and Waterbury regions. More caregivers in the Stamford, Norwich, and Danbury regions report that services are not available in their area. Not being able to find someone to hire is most prevalent in the Bridgeport area, while unreliable or poor care is most problematic for caregivers from the Danbury, New Haven, and Willimantic regions. Lack of knowledge about services is especially a barrier for caregivers in the Willimantic, Bridgeport, and New Haven regions, while caregivers in the Stamford region did not find this to be the case. More Stamford area caregivers have difficulty communicating with a care provider because of language or cultural differences. This is an issue for almost half of Stamford area caregivers (47%), while fewer caregivers in the Waterbury (13%) or Bridgeport (15%) regions have this difficulty.

Danbury caregivers rely more often on family or friends for information about services (27%), while less than ten percent of caregivers from the Willimantic region obtain information this way. On the other hand, Danbury caregivers (15%) are much less likely to receive this information from a health provider, while over one-third of Middletown caregivers do. Few caregivers from the Bridgeport (0%) or Waterbury (8%) regions receive service information from social workers, compared to one quarter of caregivers in the Manchester area. State agencies and the telephone directory are used by more caregivers in the Danbury region to find information, while a greater percentage of caregivers from the Manchester region rely on the internet to find out about services. Middletown and Hartford region caregivers are more likely to use their senior center for this information.



IV. Additional services for older adults and people with disabilities

Respondents in all 12 regions who completed the general survey and those who responded via the web were asked an open-ended question about what services the state should provide for older adults and people with disabilities. A total of 1,162 individuals responded to the question. The responses were compared and contrasted, resulting in the following themes:

- Transportation
- Healthcare services
- Programs and services
- Financial concerns
- Home and community-based services
- Housing
- Recreation and social activities

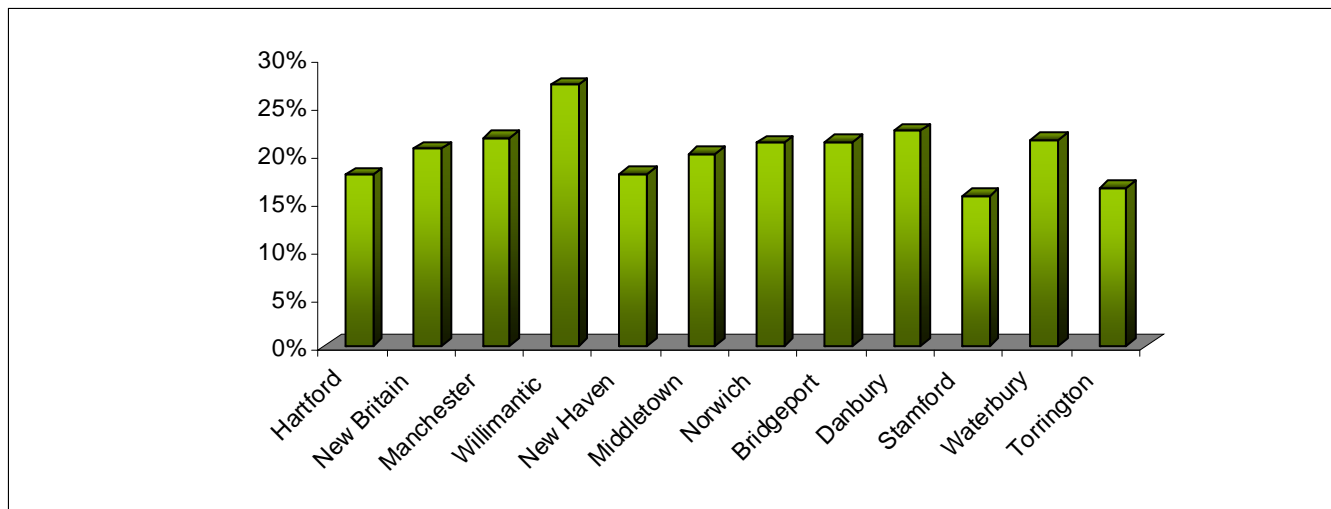
Transportation is by far the most important service wanted for older adults, as transportation concerns are mentioned the most frequently (20%). This is followed by health care services (20%), home and community-based services (17%) and various programs and services (16%). Although there are differences in exact percentages between the various regions for each theme, the overall results indicate that a high level of importance is attached to these four areas. The percentage of remarks regarding financial concerns (15%) indicate that this is also an area of great concern. On the other hand, issues regarding housing and recreation are cited less frequently. Each theme is discussed in detail below, with supporting quotes provided. Figures then compare the percentage of respondents from each region who mentioned each topic.



Transportation

One-fifth of Connecticut respondents across all 12 regions indicate that transportation in the state needs improvement. Many of the comments relate to accessing transportation for medical appointments or simply to expand services to include weekends and extended hours. Transportation between cities and more transportation in rural areas are also concerns. Over one-quarter of respondents from the Willimantic area made comments regarding transportation issues, while those from the Stamford and Torrington regions mention this concern the least.

Figure IV-1. Transportation



Better transportation. We have very little help in this area. – Willimantic area resident

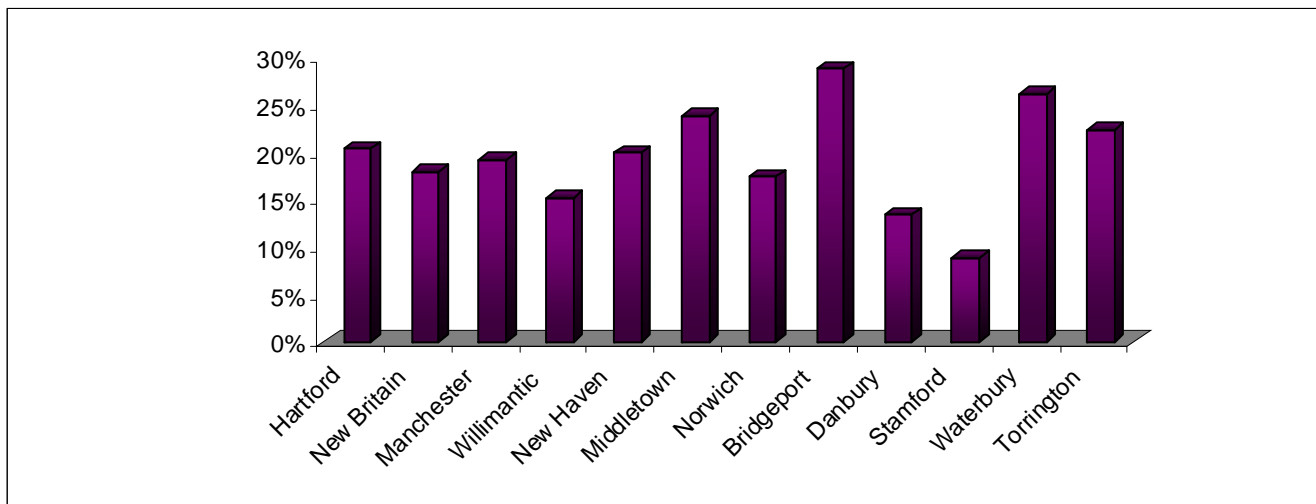
Connecticut desperately needs better public transportation – more buses running more frequently. – New Britain area resident

Door-to-door transportation using wheelchair accessible vans. – Middletown area resident

Healthcare services

Healthcare services is of equal importance, with one-fifth of the respondents indicating that issues of affordable health insurance and general healthcare services are of great concern. Most comments focus on health insurance coverage and its affordability. For example, there are suggestions to make long-term care insurance affordable, and others remark on improving pharmacy plans. Bridgeport and Waterbury area respondents comment on these issues more than the other regions, with over one-fourth of the responses regard healthcare issues, while less than ten percent of Stamford area respondents mention this concern.

Figure IV-2. Healthcare services



Provide medications at reasonable prices – no co pays for seniors. – Waterbury area resident

Further education regarding the need for long-term care focusing on the importance of securing long-term care insurance at approximately age 50. – Bridgeport area resident

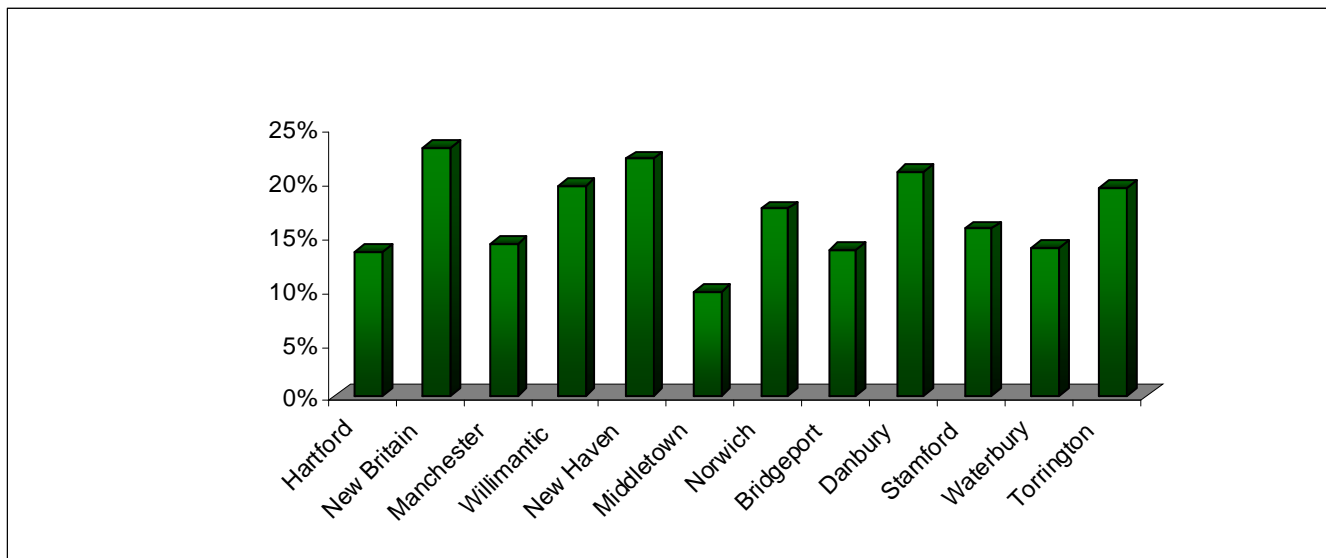
More patient advocates to help understand medical information, medication, etc. for families and patients. – Torrington area resident

Doctors who are willing to make visits for disabled seniors. – Bridgeport area resident

Home and community-based services

Overall, 17 percent of responses have to do with improvements or suggestions regarding home and community-based services. Some of these include alternatives to nursing homes, such as adult day programs, increased assisted living facilities, and more home care and personal assistance. Nearly one-fourth of residents from the New Britain area (23%) and New Haven region (22%) have comments about this. About one-fifth of the residents from the Willimantic, Danbury, and Torrington areas have similar comments regarding these issues whereas the fewest number of comments come from the Middletown region (10%).

Figure IV-3. Home and community-based services



[People] should not be forced to go into a nursing home, and [should] be able to get the help they need at home. This should be paid for by the same money that would be used for a nursing home. – New Britain area resident

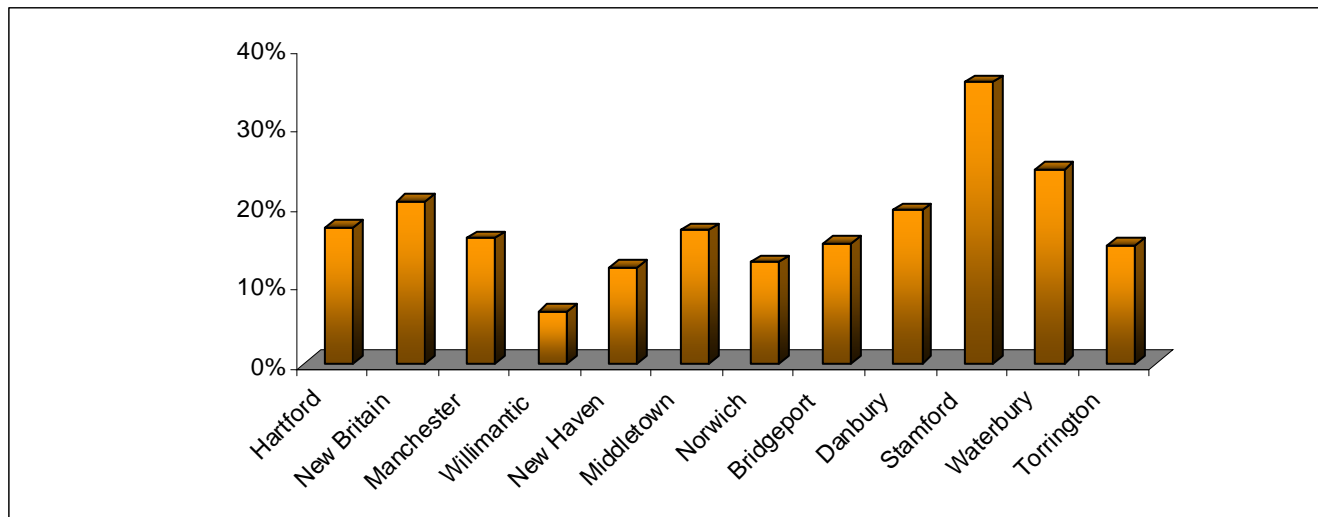
[We need] services outside of big cities – in smaller towns, etc., so that people can age in place and be able to keep their communities well-balanced (mix of younger, middle-aged, older, very old). Work on services in the home! – Willimantic area resident

Need more adult day care centers with better funding. – Danbury area resident

Programs and services

Sixteen percent of all respondents mention various programs and services which they feel that the state of Connecticut should offer to older adults or people with disabilities. These include, but are not limited to, support groups, information about case management, patient advocates for hospitalized people, friendly visitors, and handyman services. A great many of the responses indicate a need for having one source of information for all services and programs which are currently available. Well over one-third (37%) of Stamford area respondents indicate a need for various programs and services. One-quarter of respondents in the Waterbury areas also remark on offering more programs or services, while Willimantic area respondents mention this topic the least.

Figure IV-4. Programs and services



Don't know what is offered now! More publicity about available services. – Stamford area resident

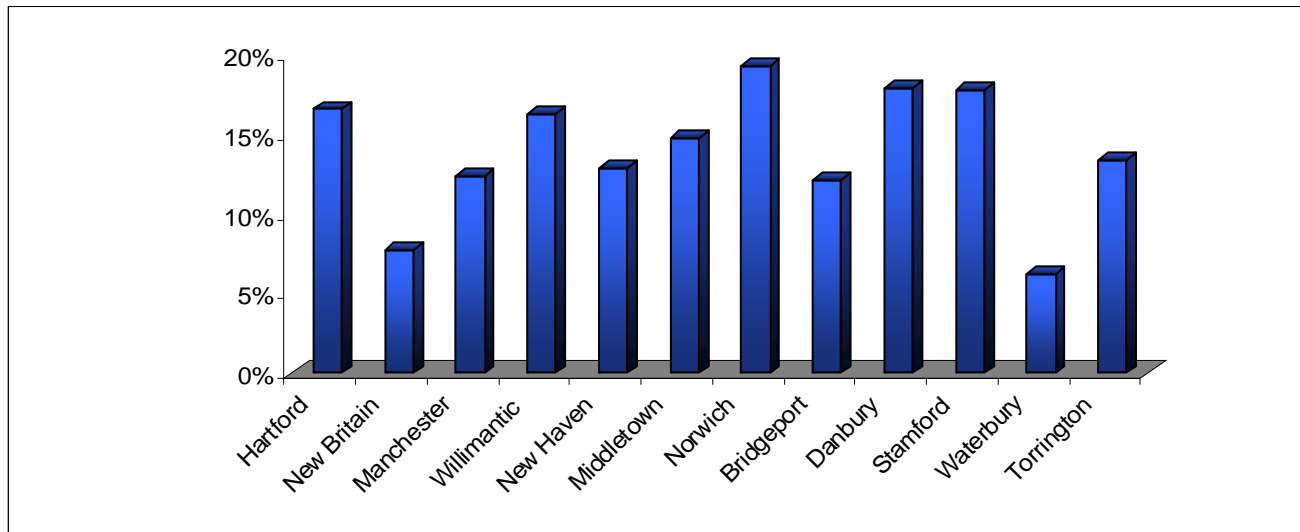
Help provide or help find jobs for people who want to work. Most people do not hire people with disabilities. – Willimantic area resident

A contact person to talk with to help you through all of the forms and phone calls that need to be made for the assistance that is out there. Finding the help is the toughest part of being disabled. Also being young and disabled makes it tougher. – New Britain area resident

Financial concerns

Fourteen percent of all responses remark on financial issues, with many indicating that financial assistance is needed, including tax breaks, help with paying for utilities, and money management services. Eighteen to 19 percent of respondents from the Norwich, Danbury, and Stamford regions comment on this concern, followed by the Hartford and Willimantic regions. By comparison, less than half as many respondents from the New Britain and Waterbury regions do so.

Figure IV-5. Financial assistance



Taxes in Connecticut are too high for senior citizens. – Norwich area resident

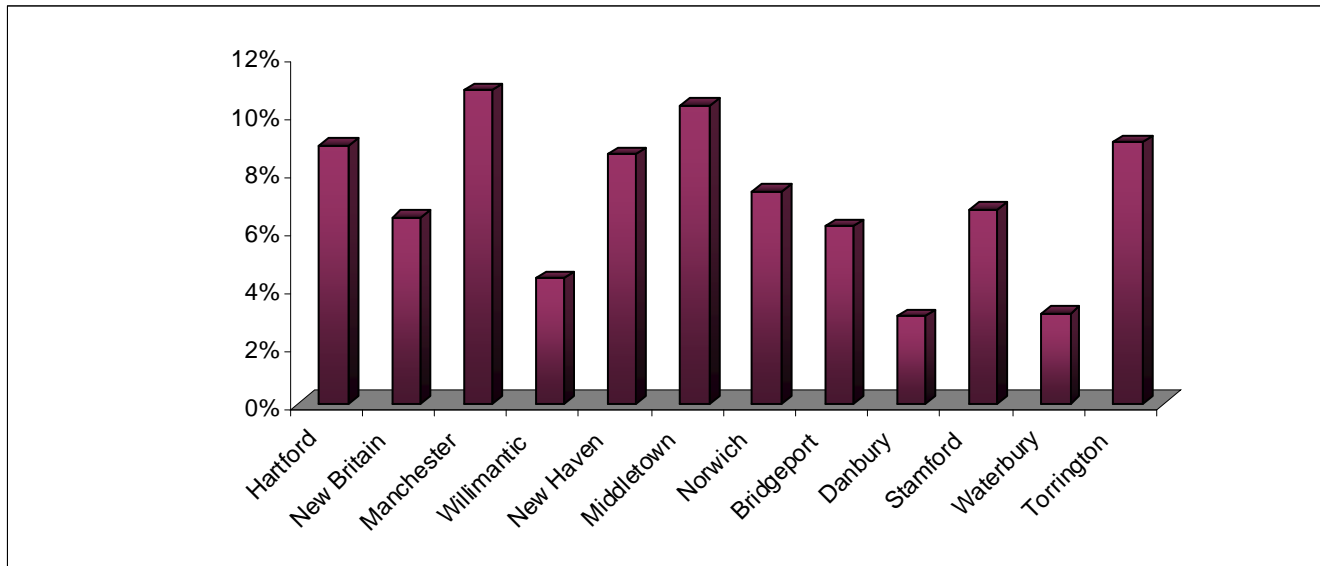
Assistance with utilities, lower property taxes, medication and food, in-home visitation for the elderly. This will help the elderly to stay in their home, and it would be a lot cheaper for the state. – Stamford area resident

I am trying to get some help to pay my bills, so that I can live and take care of my health. I can't walk too far. I can't bend because of my hip. – Hartford area resident

Housing

Eight percent of all responses have to do with housing, such as providing a broader range of housing alternatives for older adults and people with disabilities. These types of concerns are more predominant in comments from the Manchester (11%) and Middletown (10%) areas, while respondents from the Danbury and Waterbury regions mention it the least.

Figure IV-6. Housing



More low to middle income housing is needed. There is a great shortage of housing for low-middle income people with incomes between \$25,000 - \$45,000. – Middletown area resident

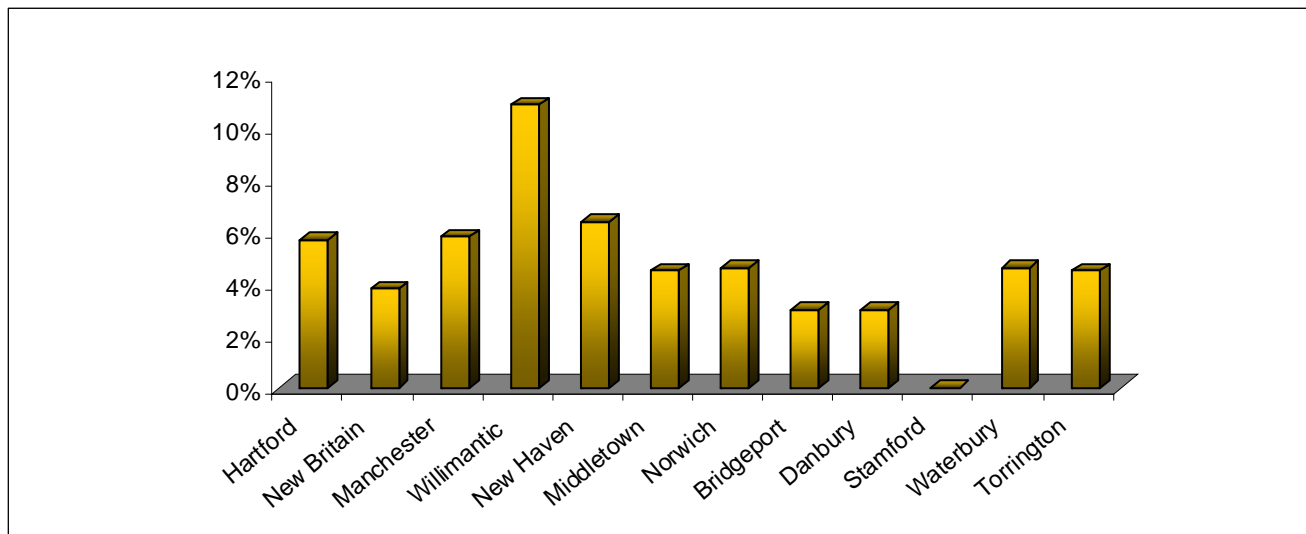
Transitional housing for people temporarily disabled or in transition from independent living to assisted or skilled nursing. More multi-level facilities, so seniors can age in place. – Torrington area resident

Assisted living residences and adult communities should be less expensive. – Hartford area resident

Recreation and social activities

Only about five percent of all the responses are directed towards having more recreational and social activities. In addition to socialization and recreation activities, some respondents suggest that simply having companions or friendly visiting are an important part of life that is lacking for many older people or people with disabilities who live alone. The Willimantic region has the greatest number of responses regarding recreation and social activities (11%), whereas respondents from the Stamford region do not mention this issue at all.

Figure IV-7. Recreation and social activities



I believe that some form of physical exercise is key to being proactive in staying healthy - even just walking a short distance on a daily basis. Because the loss of balance is usually a common problem for the elderly. Walking is curtailed for fear of a fall. – Willimantic area resident

Help or assist older adults and people with disabilities in having frequent friendly visitors available for one-to-one visitation in their homes or facilities... Help them become aware of the services that are available. – New Britain area resident

V. Conclusions

The twelve regions in Connecticut differ by characteristics such as population, density, income, socioeconomics, resources, and programs or services. These differing specific characteristics help to shape respondents' needs for services. For example, rural regions may find that accessibility to services and providers is a greater issue than more urban areas, and less affluent regions may experience affordability as a barrier more often than regions with greater financial resources.

Using data from 4490 survey respondents to the statewide Long-Term Care Needs Assessment, this report examines unmet need, service use, and other indicators for each region. This analysis reveals marked regional differences in multiple health indicators, need for assistance for daily activities, mental health, social support, financial resources, and need for community-based long-term care services. There is a clear association between socioeconomic characteristics, health, service use, and unmet service need. Willimantic and New Haven area respondents, the regions with the fewest financial resources, do poorly on a number of indices, such as health and need for assistance with daily activities. These regions contrast significantly with the Danbury region – an area with high socioeconomic status and very high financial resources, which also has the best health, lowest need for assistance, and very low unmet need. Other regions tend to fall in between on various indicators – Stamford, Hartford, and Manchester do better overall, while Waterbury and Torrington tend to be worse on some health and other indicators.

When the overlap between need for particular types of HCBS, for example adult day care, and the locations of those providers is examined, no consistent pattern emerges. The rate of unmet need for homemaker, home health, or adult day services for each region does not appear to correlate directly with the number or location of the providers in that area. It is likely that a more complex interaction is at work, with other barriers, such as lack of knowledge, affordability, eligibility for services, Medicaid providers, and regional characteristics (rural vs. urban), also playing a role. The pattern which does exist is that for most unmet needs, including the three mentioned here, the Willimantic area consistently has the highest unmet need. A correlation is also seen for regions with low unmet need: Danbury has the lowest unmet need for five of the eight community-based services included in the survey.

As a rural, low population density area, some services may not be readily available to respondents in the Willimantic region. However, this does not fully explain all regional unmet service need, especially for regions that have ample numbers of service providers available in that region. This can be seen in the New Haven region which, while also worse in many areas such as health, need for assistance, and unmet need, also has greater numbers of HCBS providers. On the other hand, the Danbury region, which has fewer HCBS providers than many other regions, consistently fares better in most categories including fewer people with unmet service needs. Overall, affordability and knowledge of services most often prevent respondents from receiving services, with the relative importance of specific barriers often differing by region.

While dividing Connecticut into 12 regions reveals important variation across the state, variation *within* the regions is not explored in this report. Each region encompasses municipalities with different socioeconomic and other characteristics. Transportation and other resources are often localized within regions. In addition, location near the border of a region may facilitate access to providers

from other regions. It is important to note that this sample primarily includes people age 42 and older. Thus, the mean age for any one region in this sample does not mirror the overall age for all residents of that region. For example, the average age of survey respondents from the Willimantic area is 64, compared to the overall median age range of 34-36 for all residents in this region.

Implications for need for future long-term care service use

Underlying the Needs Assessment is the guiding principle of creating parity with regard to long-term care services among residents of all ages or disabilities, basing service use on level of need. The achievement of this goal must address geographic equality as well, so that residence in a particular part of the state does not contribute to disparities in services among residents with similar service needs.

This report demonstrates that inequalities do exist among regions with respect to access, use, and unmet need for long-term care services. Need for community-based long-term care services is not equally spread across the state. Regions such as Willimantic and New Haven consistently show a very high unmet need for such services. Respondents from other regions such as Bridgeport, Hartford, Middletown, and Torrington indicate a high need for specific types of services, but not others. For example, Middletown respondents indicate a high need for visiting nurse services, but a low need for adult day programs. In contrast, Danbury, Stamford, and Manchester respondents more often report a low need for most services.

The clear association between reduced financial resources, poor health, increased service use, and high unmet need must also be considered when planning for services. Respondents in poorer regions tend to have greater service need and, given the lack of financial resources, may need financial assistance to obtain these services.

Geographic and other characteristics which contribute to an uneven need for long-term care services can vary not only regionally, but within regions as well. Socioeconomic and geographic differences among towns within a region can be great, which could lead to disparities in level of unmet need among nearby towns. Given this, municipalities, legislators, and state policymakers planning for services at a local level should consider other sources of information more specific to the area or towns involved in addition to this report.

These data also point to the reality that unmet need for such services is a complex issue, caused by a variety of contributing factors, including some associated with geographic location within the state such as socioeconomic status, provider availability, infrastructure barriers such as lack of transportation, and geographical characteristics such as rural versus urban. In order to implement any policy or program changes, it is recommended that each region do a more in depth needs assessment of their constituents and their specific long-term care needs. As rebalancing policies develop and community-based service use expands, geographical characteristics should be considered along with other challenges and competing factors when developing policies and programs to address unmet level of need across the state.

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VII. Appendices

Appendix A. The 12 regions of Connecticut and their municipalities

Appendix B. Health and wellness screenings

Appendix A. The 12 regions of Connecticut and their municipalities

Hartford		
Avon Bloomfield Canton East Granby Farmington	Granby Hartford Newington Rocky Hill Suffield	West Hartford Wethersfield Windsor Windsor Locks

New Britain		
Berlin Bristol Burlington	New Britain Plainville	Plymouth Southington

Manchester		
Andover Bolton East Hartford East Windsor Ellington	Enfield Glastonbury Hebron Manchester Marlborough	Somers South Windsor Stafford Tolland Vernon

Willimantic		
Ashford Brooklyn Canterbury Chaplin Columbia Coventry Eastford	Hampton Killingly Mansfield Plainfield Pomfret Putnam Sterling	Thompson Union Willington Windham Woodstock

New Haven		
Ansonia Bethany Branford Derby East Haven Hamden	Milford New Haven North Branford North Haven Orange Seymour	Shelton Wallingford West Haven Woodbridge

Middletown		
Chester Clinton Cromwell Deep River Durham East Haddam East Hampton	Essex Guilford Haddam Killingworth Lyme Madison Meriden	Middlefield Middletown Old Lyme Old Saybrook Portland Westbrook

Norwich		
Bozrah Colchester East Lyme Franklin Griswold Groton Lebanon	Ledyard Lisbon Montville New London North Stonington Norwich	Preston Salem Sprague Stonington Voluntown Waterford

Danbury		
Bethel Bridgewater Brookfield Danbury	New Fairfield New Milford Newton	Redding Ridgefield Sherman

Bridgeport		
Bridgeport Easton Fairfield	Monroe Norwalk Stratford	Trumbull Weston Westport

Stamford		
Darien Greenwich	New Canaan Stamford	Wilton

Waterbury		
Beacon Falls Cheshire Middlebury Naugatuck	Oxford Prospect Southbury	Waterbury Watertown Wolcott

Torrington		
Barkhamsted Bethlehem Canaan Colebrook Cornwall Goshen Hartland Harwinton	Kent Litchfield Morris New Hartford Norfolk North Canaan Roxbury Salisbury	Sharon Thomaston Torrington Warren Washington Winchester Woodbury

Appendix B. Health and wellness screenings

The following table shows the percentage of respondents in each region who indicate they had the following health examinations or screenings in the past one or two years. Highest percentage of positive responses is in blue; highest percentage of negative response is in red.

Table VII-1. Respondents who had the examination/screening

	Hrtfrd %	NB %	Mnchtr %	Wilmte %	NH %	Midtwn %	Norwch %	Brgprt %	Danbry %	Stmfrd %	Wtrbry %	Trngtn %	Mean %
Within past year													
Blood pressure	92	89	91	89	90	91	89	89	88	88	91	88	90
Cholesterol	77	71	76	72	77	76	70	76	71	76	70	67	74
Dental cleaning	80	72	74	68	72	76	71	75	77	84	72	74	75
Flu vaccine	61	60	61	57	58	59	58	62	56	63	54	55	59
Pneumonia vac.	14	17	16	20	17	17	17	19	18	16	16	15	16
Within past 2 years													
Wellness check up	67	60	61	57	57	64	63	59	63	69	60	61	62
Mammogram*	78	77	77	71	71	77	78	80	78	78	79	71	76
Prostate**	64	51	59	47	55	54	60	64	61	64	57	64	58
Bone density*	46	41	44	39	45	46	44	45	41	47	46	36	44
Sigmoid/colon	32	28	30	25	31	32	40	34	30	37	31	30	32

* Percentage of female respondents

** Percentage of male respondents