

Policy Briefing Paper

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Connecticut's Supermarkets: Can New Strategies Address the Geographic Gaps?

It is a little known fact – except among the people who live there – that supermarkets cannot be found in many urban neighborhoods and rural areas. Surprising as it may seem, the principal link of the modern food chain is simply missing in certain communities. In the absence of supermarkets, many urban and rural residents rely on local retailers like bodegas and convenience stores for their grocery needs, or travel regularly outside their communities to buy food elsewhere.

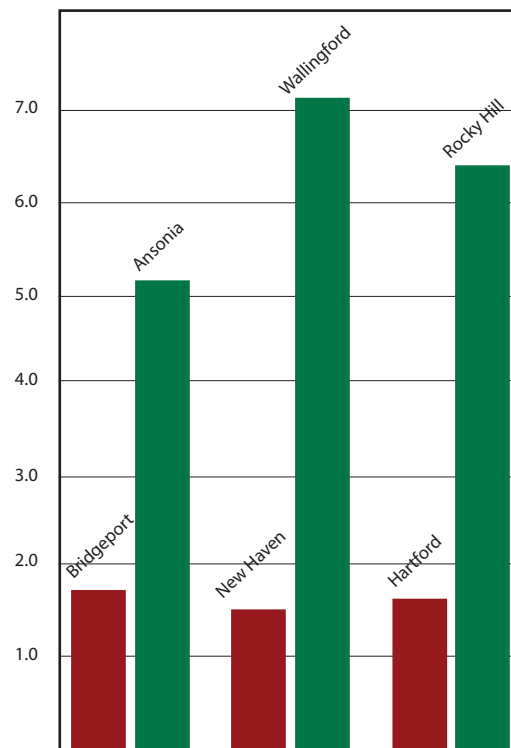
The majority of Connecticut residents are unaffected by these gaps in the retail sector. Supermarkets are readily available in most towns, anchoring shopping plazas on major routes and meeting the needs of average shoppers quite well. As we examine in the research that follows, this adaptation to the needs of the "average" consumer is a significant reason why so many urban and rural communities are underserved by the supermarket industry.

This *Policy Briefing Paper* is a study of every supermarket operating in Connecticut as of June 2006. Within the food industry, the standard definition of a supermarket is a grocery retail establishment with \$2 million or more in annual sales. Connecticut has 365 supermarkets in 119 towns.¹

While supermarkets aren't the only places to buy groceries, they are the dominant model for how the nation gets its food, accounting for 80% of all foodstore sales in the United States.² Prices are usually more affordable and the selection is much broader than smaller food retailers, making the shortage of supermarkets especially challenging in poor communities where other grocery options are limited and car ownership levels are low.

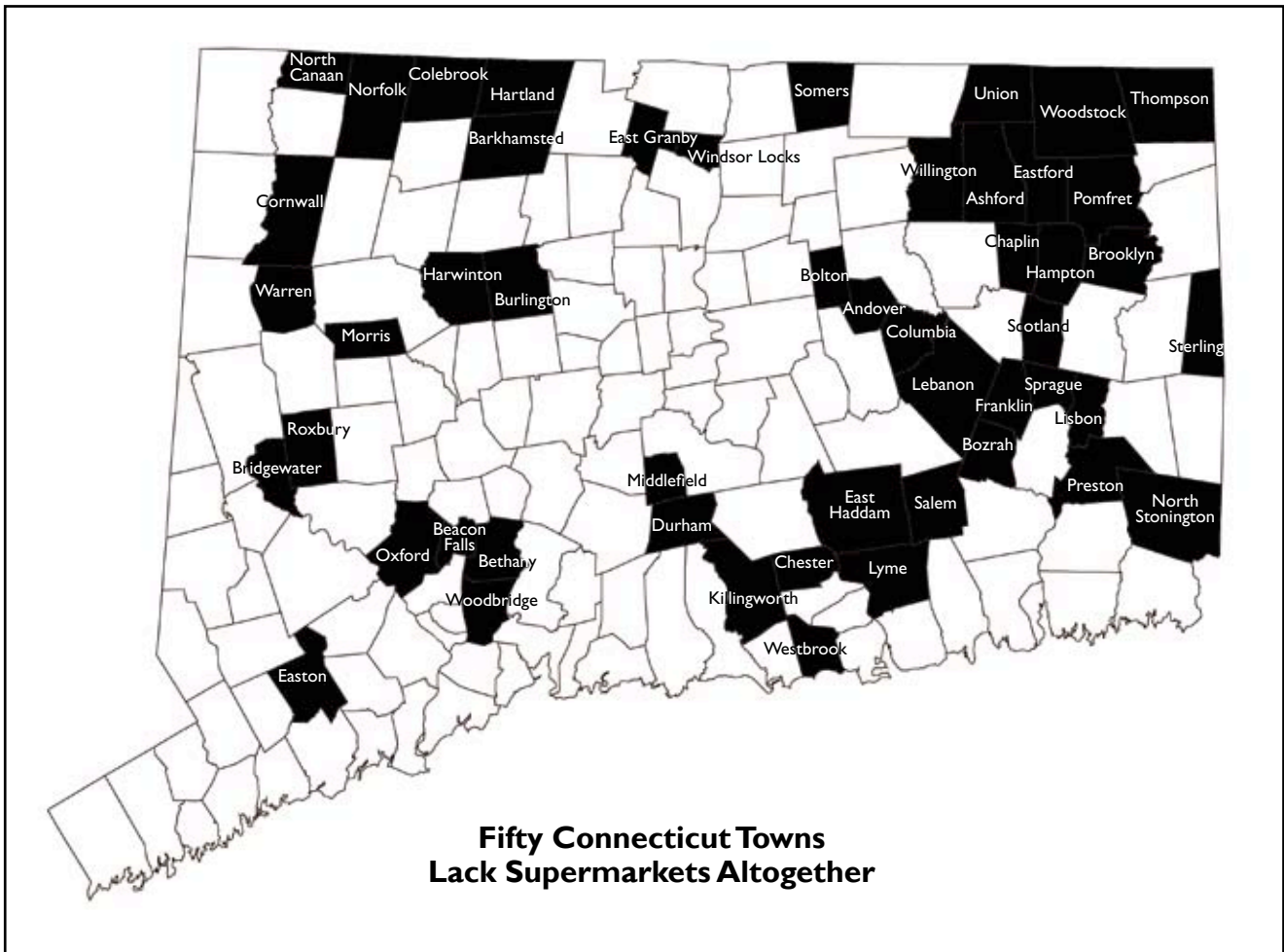
Using demographic and economic data from the 2000 Census, the Hartford Food System examined the communities in which Connecticut's supermarkets are located. This analysis reveals substantial disparities in supermarket availability in particular communities. We offer several recommendations for Connecticut's policymakers to address this issue, including market-based incentives to promote supermarket development in underserved areas.

Chart I: Underserved Urban Areas



Three largest cities and three nearby suburbs
(Supermarket space measured
by square feet per resident)





The average amount of supermarket space for each Connecticut resident is 3.1 square feet per person. One would not expect this retail capacity to be evenly distributed across the whole state, of course, but the current pattern of store locations varies widely for different areas. Fifty of Connecticut's 169 townships – primarily in less populated regions of the state – have no supermarkets at all. Major cities also have considerably less supermarket space than the rest of the state.

Most supermarkets are concentrated in the outer-ring suburbs around major population centers. For example, the towns of Berlin, Glastonbury, Newington, Rocky Hill, and Vernon collectively have four times as much supermarket space as the city of Hartford, even though the total population of these five surrounding suburbs is about the same as the number of people living in Hartford.³ Chart 1 on the preceding page shows a town-by-town comparison of supermarket space in Connecticut's three largest cities and three corresponding suburbs. In each case, supermarket capacity within these cities is only a fraction of the level found in suburban towns.

Rural areas also face a shortage of supermarkets, largely because they lack enough population density to support the huge facilities favored by major chains. Those supermarkets that can be found in rural areas are typically located in places that serve as a hub for larger geographic regions. For example, the small town of Canaan has a Stop & Shop and IGA that draw customers from the adjacent towns of North Canaan, Norfolk, and Cornwall which have no supermarkets. Putnam also has a Stop & Shop and a smaller independent supermarket (and a Price Chopper opening soon), while neighboring Thompson, Woodstock, and Pomfret have none.

The concentration of supermarket capacity in suburban towns and scattered rural sites leaves many residents with less access to groceries. This pattern is similar to spatial and demographic gaps that have been docu-

mented in other studies about food retailing. A 1995 study of the nation's largest metropolitan areas found that zip codes with the highest percentage of households on public assistance had less supermarket space per capita than other zip codes.⁴ Another study examining food stores in Maryland, Minnesota, Mississippi, and North Carolina found that chain supermarkets were four times more likely to be located in predominately white neighborhoods than black neighborhoods.⁵ Similarly, a study of rural supermarket patterns in non-metro counties of the Mississippi Delta found that zip codes with the highest percentage of low-income households had less access to supermarkets than other zip codes.⁶

Research has also measured changes in supermarket locations over time. A 1997 study of 28 metropolitan areas examined the decline in grocery sales within central cities between 1958 -1992. By comparing this retail data to consumer demand within both inner city and suburban communities, the study concluded that grocery shopping among central city residents had shifted considerably to suburban stores.⁷ Grocery sales in urban locations were lower than estimated consumer demand during this period, while grocery sales in suburban locations exceeded what would be expected from the data. In the case of Hartford, grocery sales within the city shifted from a net influx of suburban shoppers in 1958 to 65% of residents traveling outside the city for their grocery needs by 1987.⁸

About the Data Used in this Report

The Hartford Food System acquired a list of Connecticut supermarkets from Trade Dimensions, a market analysis subsidiary of the VNU media company that publishes *Progressive Grocer* magazine and other trade publications.

Connecticut's 365 supermarkets are located in 289 census tracts. The total population for these tracts was 1,341,742 during the 2000 Census. This data set comprises 39% of the statewide population, large enough to make reliable estimates about the community characteristics of supermarket locations.

Connecticut is one of only six states covered entirely by census tracts. Federal officials delineate tract boundaries to create relatively homogeneous areas based on economic status, living conditions, and other factors.

Several studies have also examined the shortage of supermarkets from the perspective of nutritional wellbeing and public health. A 2006 study found that minority and low-income areas had twice as many small grocery stores as white and wealthy areas, but half as many supermarkets. Fruit and vegetable markets, bakeries, specialty grocers, and natural food stores were more prevalent in upper income neighborhoods, while convenience stores and liquor stores were more common in poorer areas.⁹ Different types of food stores sell different types of groceries, and those in disadvantaged communities tend to stock a lot of unhealthy merchandise. For example, a 2004 study compared the availability of five recommended foods for people with diabetes in predominately minority and white sections of New York City. Only 18% of small grocery retailers in minority neighborhoods carried these healthy food items, compared to 58% of small grocery retailers in white neighborhoods.¹⁰ A similar study of Los Angeles and Sacramento found the same disparity in healthy food availability within neighborhoods of different income ranges.¹¹

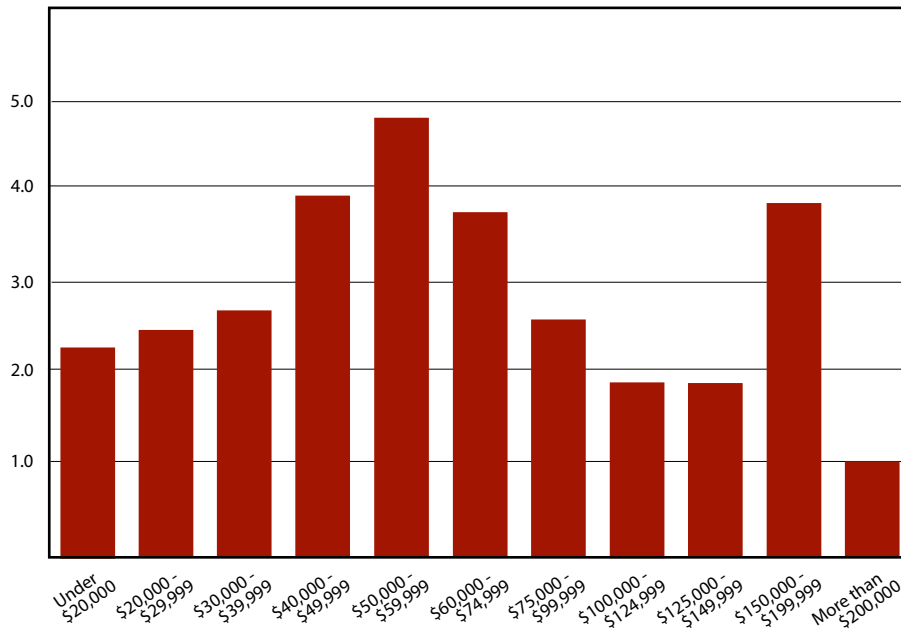
Geographic Patterns of Connecticut's Supermarkets

Based on these studies, one can conclude that supermarket scarcity is an issue affecting many communities, with greater severity in those places where poverty and food insecurity are already a problem. To gain a better understanding of Connecticut's own situation, the Hartford Food System geocoded the locations of every supermarket in the state by census tract. We then examined how this pattern of store locations compares to *median income* and *population density*, two factors commonly emphasized by supermarket executives and shopping center developers in describing their criteria for suitable locations. (See page 6: *How the Supermarket Industry Makes Location Decisions*).

In summary, we find that both median income and population density have a close relationship to the amount of supermarket capacity that can be found in a given community, with the former bearing a somewhat stronger correlation to the pattern of store locations than the latter. These two factors help explain grocery retail gaps in Connecticut, since large cities and rural areas have very different income levels and residential configurations from suburban communities.

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Chart 2: Supermarket Space and Median Family Income
(Supermarket space measured by square feet per resident)



Income Disparities: Earlier studies have inferred that supermarket capacity is positively related to income status – that is, fewer supermarkets are located in poor communities and more can be found in wealthier areas. Based on our analysis of the data, however, this assumption seems only partly true. As Chart 2 illustrates, the connection between store presence and income level is not a linear relationship but rather a curve. Connecticut's greatest concentration of supermarket capacity is found in communities where median family income falls between \$50,000 - \$60,000 annually.¹² Supermarket space per capita is more than double for these areas than either low-income or upper-income areas, both of which have diminishing store presence in comparison to this central peak in the graph. (The second peak in the \$150,000 - \$200,000 income range is attributable to upscale retailers like Trader Joe's and Wild Oats in our data set).

Disparities in Population Density: Supermarket capacity is also concentrated in communities with particular population densities. As Chart 3 shows, the greatest amount of supermarket space per capita is found in areas with 2,000 - 3,000 people per square mile. This retail concentration is one-third higher than the amount of supermarket space in lower-density (i.e. more rural) census tracts and nearly double the amount in higher-density (i.e. more urban) census tracts.

What is notable about both charts is that supermarkets are generally concentrated in places that fit a demographically "average" profile. Targeted consumers consist of people with middle-class income status who live in moderately populated areas. Communities on either side of the peaks in the two charts have less supermarket space per capita. In the extremities of either very high or very low incomes and population densities, few supermarkets can be found.

Economic Realities of Supermarket Site Decisions

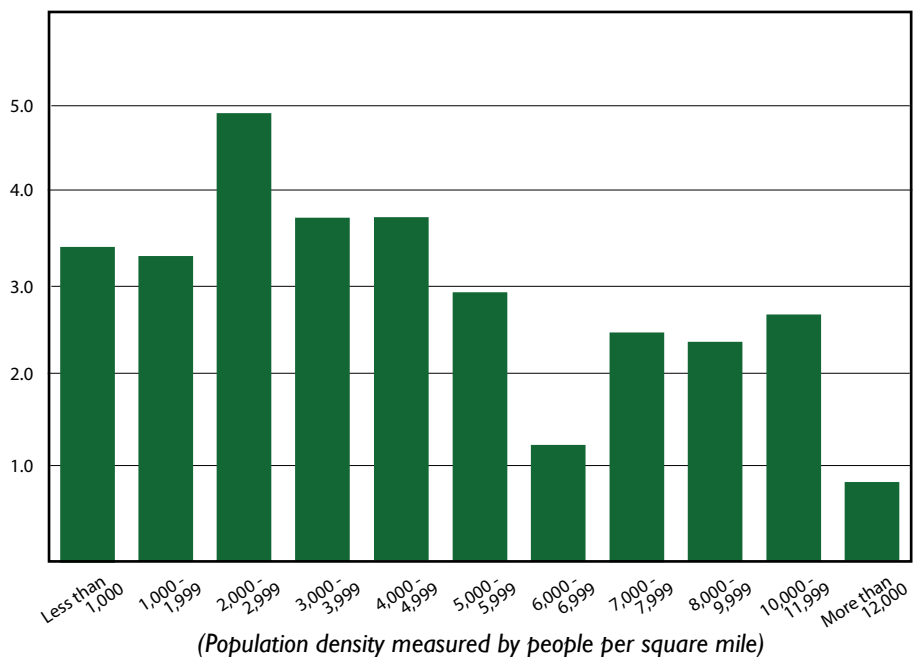
Like any other industry, supermarkets are in business to make money. Chains usually build stores in places where the profit-making potential is the greatest and the financial risks are most favorable to their company. Any effort to change this basic equation must tip the economic variables sufficiently to bring a supermarket into an area where it might not otherwise have been built.

Recognizing that access to groceries is too important to be left solely to these market forces, several cities and states have used economic development subsidies to bring stores into specific neighborhoods. Recent success stories include a Shaw's supermarket that opened in New Haven in 1998, a Pathmark in East Harlem in 1999 and another Pathmark five years later in the Bronx, an Albertsons in San Diego in 2000, and dozens of food retail projects with smaller chains or independent stores around the country. The Fresh Food Financing Initiative in Pennsylvania has also leveraged \$60 million in private capital for supermarket development over the past two years through a \$20 million state-funded commitment. These economic development initiatives reflect the hard-won efforts of nonprofit organizations and local political leaders, in partnership with intermediaries like the Local Initiatives Support Corporation (LISC) and The Reinvestment Fund.

While these examples show that subsidies can influence site decisions in certain cases, the use of economic development programs has not yet reached a scale to reverse urban and rural disparities in supermarket locations. Part of the problem is that most local officials who are responsible for land use planning in their communities do not see supermarkets as relevant to their job assignment, in contrast to duties related to affordable housing, transportation, and other community development issues.¹³ Unless a community organization is advocating for a particular store, most municipalities do not have incentive programs to correct deficiencies in the grocery retail sector.

More fundamentally, however, the financing tools that have been effective in these examples don't always work elsewhere. Economic development subsidies are simply not enough to trump the market conditions in many cases that make urban and rural communities less appealing to the supermarket industry. The reasons are chiefly economic. Most development subsidies are designed to reduce the *capital costs* of starting or relocating a business in a particular area, but not the *operating costs* of running a business. Although a variety of public subsidy mechanisms exist, the end result of urban action bond funds or property tax exemptions is to impact the expense of the facility. Subsidies like these can reduce land prices and construction costs for the developer, make grants for certain equipment purchases, and help assemble real estate parcels and pay for needed infrastructure improvements to build a shopping center site.

Chart 3: Supermarket Space and Population Density
(Supermarket space measured by square feet per resident)



Yet modern supermarkets are thinly margined businesses that require enormous sales volume to make a profit, where the cost of the facility is much less than other expenses. For a typical chain store, the rent burden can be as low as 3% of operating costs. Given this high-volume business model, supermarkets primarily base their location decisions on the revenue projections and number of targeted customers they can reach within the trade area, rather than the capital cost of the facility.

In some economically distressed areas, chains would be reluctant to open a store even if the building itself were free – the anticipated sales volume just wouldn't be enough to support a full-size supermarket. Since traditional economic development strategies are designed to lower capital costs and do not address these ongoing revenue concerns, they have less leverage in tipping the site selection factors toward the places that need stores the most.

New Strategies for Connecticut Policymakers

What is to be done in the face of these economic realities? If policymakers want to reduce geographic disparities that exist for grocery shoppers, they must either motivate the supermarket industry to embrace new retail strategies that are better suited for urban and rural environments or find new subsidy models that make the current retail strategies economically viable in these areas.

New Retail Models

A typical 50,000 square foot supermarket with a sushi counter and lobster tank might never turn a profit in an inner city or rural community, but other store configurations certainly could. The supermarket industry is in the best position to develop these alternative retail models, since it understands the market best, but it has little motivation to do so. The current strategy of huge suburban stores with high-volume revenue is working just fine for most chains.

Policymakers should consider a regulatory framework that pressures the supermarket industry to diversify its business model. This regulatory approach has worked in other sectors. For example, thirty years ago the banking industry avoided inner city and rural communities in much the same way that supermarkets do now. Banks did not consider these areas to be a good risk for loans, nor did they especially need urban and rural depositors in order to make a profit for their company. However, Congress recognized that access to financial services was too important to neighborhood sustainability to allow this practice to continue. The Community Reinvestment Act (CRA) was enacted in 1977 and banks soon developed new products and services that led to steady profits in disadvantaged areas. CRA has since leveraged

How the Supermarket Industry Makes Location Decisions

In the course of preparing this *Policy Briefing Paper*, the Hartford Food System spoke with a number of experts within the supermarket industry, from regional executives at major chains to real estate developers responsible for multi-billion dollar shopping center portfolios. These conversations yielded important insights into the complexities of site decisions within a highly competitive industry, as well as the remarkable conformity with which these choices are analyzed.

At the most basic level, supermarket chains build stores where they will do the most business. It's not a process of deciding which communities to serve, but rather which locations can best serve the needs of the store.

This feasibility analysis includes a demographic assessment of the local area, particularly in terms of disposable income. Population density is also a factor, since household spending power is examined on the basis of how many targeted customers are within the trade area for the location. The trade area for a rural supermarket might have a 10-mile radius, while a suburban trade area could be less than 3 miles. Based on these site-specific factors as well as proprietary data about grocery retail conditions, chains use location algorithms to estimate just how much sales volume a proposed store would generate.

Many other considerations are also taken into account. For example, chains generally want to increase their market share as they add stores, so a location might be chosen where the supermarket can draw customers away from a weaker rival or to block a stronger competitor. Real estate factors are often decisive, particularly if land costs are high or neighborhood opposition might delay a shopping center from being built at the desired location.

These variables are all assessed in similar ways by competing chains, which helps account for the uniformity in site criteria among the industry's major players.

\$4.2 trillion over the past three decades in private commitments for reinvestment into minority and low-income communities.¹⁴

Access to food is at least as fundamental to community wellbeing as access to financial services. Connecticut policymakers should consider a regulatory framework that prohibits the deliberate exclusion of particular types of communities and apply this standard to larger supermarket chains that are operating statewide. If a company covered by this regulation wants to build or expand a store somewhere else in the state, it must first demonstrate how it is meeting the grocery needs of the company's entire service area.

New Subsidy Models

Since traditional economic development strategies have worked in a number of cases, Connecticut policymakers should encourage wider use of these subsidies to bring supermarkets into disadvantaged neighborhoods. These incentives would be far more effective if augmented with a new subsidy mechanism designed specifically to offset operating expenses in urban and rural areas.

Policymakers should consider the creation of a public trust fund – capitalized by the industry itself – that subsidizes the ongoing operating costs of stores located in underserved areas. Supermarkets that are built or renovated in communities that already have high per-capita store capacity would pay into the fund. Supermarkets that are built or renovated in underserved communities would be eligible to draw money out of the fund.

This intra-regional subsidization method would create the right incentives to balance out the geographic disparities in supermarket locations. To minimize disruption of market share within the industry, supermarket chains would be eligible to draw only as much money as their own companies paid into the fund. That is, Stop & Shop would not be subsidizing Big Y stores or vice versa. After a period of eight to ten years, however, unused money in the trust fund would become available to any supermarket willing to locate in an underserved community.

Conclusion

In the absence of government action to correct the problem, Connecticut's disparities in grocery access will continue and potentially worsen over time. It is not the Hartford Food System's assertion that supermarket chains have acted greedily while avoiding certain areas in their store locations. They have merely managed their businesses in economically rational and predictable ways given the market incentives currently in place. Unless these incentives are changed by policymakers, stores will continue to be built in places that already have supermarkets and residents of disadvantaged areas will have to make do as best they can.

After all, supermarket chain executives never promised to promote the general wellbeing of all Connecticut residents. That is the job of our elected representatives and public servants. Through new strategies that change the incentives, opportunities, and regulations operating in the grocery retail sector, policymakers can address the gaps in supermarket availability.

Endnotes:

¹ Information about the characteristics and locations of Connecticut supermarkets is based on the *Retail Site Database* owned by Trade Dimensions. For more information about this database, please see the back cover.

² U.S. Census Bureau. *2002 Estimates of Monthly Retail and Food Services by Kind of Business*.

³ U.S. Census Bureau. *2005 Population Estimates*. The combined population of Berlin, Glastonbury, Newington, Rocky Hill, and Vernon is 130,606; Hartford's population is 124,397.

Endnotes, continued:

- ⁴ Cotterill, Ronald W. and Andrew W. Franklin (1995). *The Urban Grocery Store Gap*. Issue Paper No. 8, Food Marketing Policy Center, University of Connecticut, Storrs.
- ⁵ Morland, Kimberly, Steve Wing, Ana Diez Roux, and Charles Poole (2002). Neighborhood Characteristics Associated with the Location of Food Stores and Food Service Places. *American Journal Of Preventive Medicine*, 22(1): 23-29.
- ⁶ Kaufman, Phil R. (1999). Rural Poor Have Less Access to Supermarkets, Large Grocery Stores. *Rural Development Perspectives*, 13(3): 19-26.
- ⁷ Donohue, Ron Michael (1997). *Abandonment and Revitalization of Central City Retailing: The Case of Grocery Stores*. Doctoral dissertation, University of Michigan, Ann Arbor.
- ⁸ Ibid, pp. 71-73.
- ⁹ Moore, Latetia V. and Ana Diez Roux (2006). Associations of Neighborhood Characteristics with the Location and Type of Food Stores. *American Journal of Public Health*, 96(2): 325-331.
- ¹⁰ Horowitz, Carol R., Kathryn A. Colson, Paul L. Hebert, and Kristie Lancaster (2004). Barriers to Buying Healthy Foods for People with Diabetes: Evidence of Environmental Disparities. *American Journal of Public Health*, 94(9): 1549-1554.
- ¹¹ Jetter, Karen M. and Diana L. Cassady (2005). *The Availability and Cost of Healthier Food Items*. AIC Issues Brief No. 29, Agricultural Issues Center, University of California, Davis.
- ¹² U.S. Census Bureau. *Census 2000 Summary File 3 (SF 3)*. Reported family income is for 1999.
- ¹³ Pothukuchi, Kameshwari (2005). Attracting Supermarkets to Inner-City Neighborhoods: Economic Development Outside the Box, *Economic Development Quarterly*, 19(3): 232-244.
- ¹⁴ National Community Reinvestment Coalition (2005). *CRA Commitments*. Washington, DC.

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HARTFORD FOOD SYSTEM

The mission of the Hartford Food System is to enable people in Connecticut to have access to nutritious and affordable food. To this end, the Hartford Food System implements programs and advances policies that promote a sustainable and equitable food system, disseminates information that enables Connecticut residents to make informed food choices, and supports responsible food policies at all levels of government.

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