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# Transportation and Food: The Importance of Access

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## A Policy Brief of the Center for Food and Justice, Urban and Environmental Policy Institute

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### **Linking Food and Transportation: A New Opportunity**

Millions of Americans, especially people with low incomes, the elderly, disabled, and other transit-dependent populations, have difficulty accessing fresh, nutritious food. Food insecurity and hunger have stubbornly persisted, even through periods of economic growth.<sup>1</sup> Rates of diabetes, obesity and other diet-related diseases are on the rise. Meanwhile, the majority of the nation's farmers struggle to stay in business and on the land. They face challenges in finding transportation options, markets, and fair prices for the food they grow.

Transportation and land use policies attuned to the nation's food security needs can build bridges between family farmers, food retailers, and consumers. Transportation policies and programs can make it easier for low-income families, the aged, and others with mobility challenges and particular nutrition needs to access supermarkets, farmers' markets, and other sources of affordable, healthy food. Innovative policies can also help small farmers transport their products to market and meet untapped demand for local, fresh food. These links can help revitalize rural and urban neighborhoods and improve the health and wellbeing of millions. Developing policies to change food access enables transportation advocacy groups to focus on critical community and household needs.

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### **Fast Facts:**

- ▶ There are typically 3 times as many supermarkets per capita in upper and middle-income neighborhoods as in low-income neighborhoods.<sup>2</sup> Some of this shift can be attributed to the development of stores with large parking lots located near freeway exits outside the urban core.
- ▶ Over 30 million U.S. residents (10.5 percent of the population) faced food insecurity in 2000.<sup>3</sup> Many of these people were obliged to pay higher prices for lower quality and less fresh food.
- ▶ Food is traveling further and further (between 1000 and 2000 miles on average) to reach consumers.<sup>4</sup>
- ▶ Low-income households are 6 to 7 times more likely than other U.S. households to *not* own cars.<sup>5</sup> Nevertheless, most low-income households attempt to use cars for food shopping, even though more than half cannot rely on a car that they own.<sup>6</sup>

► Obesity, fueled by poor nutrition and a sedentary lifestyle, has become the nation's second leading cause of preventable mortality, responsible for 300,000 deaths each year.<sup>7</sup>

► Between 1979 and 1997, 300,000 farmers in the U.S., most of them small, family farmers, went out of business.<sup>8</sup> One of the few bright spots has been the rise of direct farm to consumer programs such as farmers' markets.

Opportunities for establishing a food and transportation link based on the goal of *increased access* may be available through the mammoth omnibus transportation bill, or what used to be known as the "Highway Bill." The last two rounds of transportation legislation re-authorization (ISTEA and TEA-21) have extended transportation goals beyond the dominant focus on efficiency and highway infrastructure to a greater emphasis on equity, access, and multi-modal linkages. This shift in focus has emphasized the importance of land-use decisions in transportation planning and access to important resources to all people (rather than simply enhancing mobility for automobiles). Transportation and land use policies need to do more to improve access, including access to food. Similarly, food policies need to focus on their transportation and land use ramifications. This includes:

► Access for all people--urban and rural--to healthy, nutritious foods obtained through sources that foster dignity and self-reliance

► Access for urban and rural workers to job sites in urban and rural communities

► Access for small, low-income, and minority farmers to markets for their food products

This Policy Brief focuses on how the reauthorization of TEA-21, now under consideration by Congress, can provide those opportunities to increase these kinds of access.

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## Transportation and Food Access in Urban Areas

Residents of lower income and minority neighborhoods in most urban areas face a double bind that severely limits their access to fresh, healthy food. Full service supermarkets and farmers' markets are scarce in low-income areas. Residents of areas poorly served by food retail options are also more likely than the general public to be transit-dependent, so it can be difficult for them to travel to food markets located outside of their immediate neighborhoods. Studies have consistently shown that there are fewer full service food markets per capita in neighborhoods with predominately low

income, minority, or immigrant residents.<sup>9</sup> For example, in Los Angeles a "grocery gap" persists despite the pledges of retail companies following the 1992 civil unrest to build more markets in depressed neighborhoods. There are 3 times as many supermarkets per capita in parts of L.A. where only 10-20 percent of residents fall below the poverty line than in areas with 60-70 percent of residents living in poverty.<sup>10</sup> According to a study of 216 neighborhoods in Maryland, Minnesota, Mississippi, and North Carolina, there are on average four times as many supermarkets in predominately white neighborhoods as predominately black ones.<sup>11</sup>

Those food markets that are located in low-income neighborhoods are often smaller, with less selection in general, and less and lower quality produce. One study in Detroit found that only 18 percent of the stores selling food in three low-income zip code areas sold a minimal "healthy food basket" of items necessary to assemble balanced meals.<sup>12</sup> What food is available tends to cost more than similar items at supermarkets located in middle-income areas.<sup>13</sup> The increase in farmers' markets has been a boon for many urban shoppers, but the distribution of farmers' markets tends to follow the same inequitable trends visible for supermarkets. With fewer supermarkets and farmers' markets, residents of low-income neighborhoods rely heavily on liquor stores, corner markets, and small ethnic retailers for groceries. These establishments stock packaged and processed food items, but few if any fruits or vegetables. There are also fewer, and a smaller range of sit-down restaurants in many low-income areas. Fast food chains, serving high-fat items, are often the only source of prepared food.<sup>14</sup>

Residents of urban neighborhoods with few food markets have to travel farther to shop for food. According to data from the federal government's survey of personal transportation, a quarter of low-income households lack access to an automobile.<sup>15</sup> This percentage is higher in some urban areas, leaving many residents dependent on walking, cabs and transit for food shopping trips. Unfortunately, taxis are expensive, and despite some notable exceptions (see innovative practices sidebar) most existing transit systems are designed to meet commuter needs rather than urban shopping patterns.<sup>16</sup> However, the recent focus on transit-oriented development could provide new opportunities for establishing supermarkets and farmers' markets at major transportation stops, thereby increasing fresh food access. But without adequate transportation options, many families are denied equitable access to fresh, nutritious food.

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## Transportation and Food Access in Rural Areas

Since rural poverty is often less visible than poverty in urban areas, few would guess that food insecurity is rampant in rural areas. In the midst of our nation's agricultural areas, 13.5 percent of rural people faced food insecurity in 2000, compared to a nationwide figure of 10.5 percent.<sup>17</sup> Because population densities are low and stores widely scattered in rural areas, distance to market is a significant barrier for low-income, elderly, and disabled residents. While most rural residents do have cars, those families that do not or cannot afford a dependable automobile have even greater access problems than their counterparts in urban areas. About half of rural counties, including the most isolated areas, have no public transit system at all.<sup>18</sup>

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## Transportation and the Plight of Small Farmers

The nation's family farmers continue to face hard times. Concentration in the agricultural economy, from corporate ownership of farms, to the new "serfdom" of contract growing, to the market power of food processors and shippers, squeeze small family owned farms. Four corporations control 80 percent of the country's beef industry, for example. As the Department of Agriculture admitted in 1998, government policies have not helped.<sup>19</sup> The nation's largest and wealthiest farms get the lion's share of federal farm payments. The resulting overproduction and artificially low prices for primary commodities benefit processed food companies, but hurt farmers. Even though 94 percent of farms in the U.S. are considered small (sales of \$250,000 or less annually), small farms earn just 41 percent of the nation's farm receipts.<sup>20</sup> As a result, every year, thousands of family farmers are forced to abandon their livelihood and land. Minority farmers are particularly hard hit. African-American farmers are losing their farms three times faster than white farmers, at a rate of a thousand acres a day.<sup>21</sup>

Transportation infrastructure and policies have contributed to the marginalization of many small farmers. Refrigerated trucks and railcars, silos and storage facilities, produce brokers, and specialized agricultural shipping firms have all lowered the costs of shipping agricultural produce. But many of these transport modes and intermediaries are economical only when farm products are transported in large quantities. By subsidizing roads, rails, and barge channels, governments at all levels (especially the federal government) have added to the advantages held by the largest farmers.<sup>22</sup> To stay in business, many small farmers have tried to diversify outside of standard commercial markets. They sell their produce at farmers' markets, which means driving their own vehicles into urban centers. They set up community supported agriculture (CSA) ventures and deliver food boxes to drop

off points. Farmers have also started pursuing institutional food buyers such as public schools as potential steady markets for local produce.<sup>23</sup> But when scaling up their sales, farmers have discovered there is often a gap in food transportation infrastructure between their own farm vehicles and large commercial shippers. Transportation (delivery and logistics) support systems for "direct marketing" (farm to consumer or farm to institution) has emerged as a critical need, even as programs like farmers' markets and farm to school initiatives have become increasingly popular among both farmers and consumers

In addition, because of subsidized transportation for long distance shippers, and agricultural policies and practices favoring export production rather than local food systems, food items, including produce and animal products, travel farther and farther to reach consumers. Beyond the added stresses on roads, rails, and canals and the increased energy demand, an estimated 6-12 percent of household food expenditures represent transportation costs; while transportation of food accounts for around 2 percent of total U.S. energy use. These numbers also reflect the long distance nature of food transport, subsidized in part by transportation costs that favor a long distance-oriented system.<sup>24</sup>

Finally, roads construction, particularly as a component of suburban sprawl, contributes to the loss of prime farmland.<sup>25</sup> Planners and transportation and land use laws need to do more to ensure road construction does not hasten conversion of family farms to tract houses and retail outlets.

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## Innovative Food Transportation Projects

Despite a food and transportation system that creates more barriers than opportunities for reducing the distance that food travels and increasing access to markets, a number of innovative food transportation projects have been initiated in the past few years that can serve as a signpost for new programs and approaches. These include:

► **The Seniors Farmers' Market Nutrition Pilot Program (SFMNPP)** is a USDA program that awards grants to States, U.S. Territories and Indian tribal governments to provide coupons to low-income seniors that may be exchanged for eligible foods at farmers' markets, roadside stands, and CSA programs. **Eleven current funded projects also incorporate transportation components, either partnering with senior centers to take seniors to and from markets, or arranging local farmers to bring their produce directly to senior housing.**<sup>26</sup>

► **The Chelsea Farmers' Market and the Chelsea Area Transportation System (CATS)**

**are partnering for the first time to bring senior citizens to the Chelsea Farmers' Market on Saturday mornings.** The CATS bus is an "on demand" service but on Saturdays it runs a scheduled route to three senior centers in town and drops them at the market at 9am and picks them up an hour later for the return trip. Serving this community in this way provides the seniors with more variety and choices, as opposed to setting up shop with a few vendors at one of the homes.

► **The Hartford Food System in Connecticut also runs a program for seniors, partnering with Geissler's Supermarket to provide phone order grocery service.** Funded by the North Central Area Agency on Aging and other local businesses and churches, delivery is free for participants, making the service a competitively priced way for elderly people without cars or with disabilities to have access to a variety of fresh, quality food.<sup>27</sup>

► **For the working people of Hartford, CT, the L-Tower Avenue bus route plays an impressive role in increasing access to major supermarkets for transit-dependent residents.** The L-Tower Avenue route was designed as part of the Jobs Access program to link people who lived in the north end with jobs, shopping and medical service. Food shopping immediately surfaced as a major benefit of the new route: ridership increased from 4,978 passengers in September 2000 to 10,349 passengers the following August, and grocery shopping was cited as the primary reason to take the bus by 33% of riders. With future funding of the route in jeopardy, the City of Hartford Advisory Commission on Food Policy is advocating the route as one that works.<sup>28</sup>

► **In a similar example, the Austin, Texas Capital Metro, working with the Austin/Travis County Food Policy Council started a "grocery bus" line in 1996** with the specific intent of providing improved food access to residents of the primarily low-income, Latino Eastside. The bus route was designed to run at regular intervals seven days a week and to link neighborhoods with two supermarkets.<sup>29</sup>

► **The city of Miami recently received a grant for a shuttle bus system that will fill public transportation gaps,** helping transit-dependent residents of North Miami access jobs and services, such as the Publix supermarket at the Biscayne Boulevard stop.<sup>30</sup>

► **In other cases, the supermarket itself has operated a shuttle bus for its shoppers.** Numero Uno Market in Los Angeles, CA capitalized on the population density and high transit-dependence in the inner city to establish a van shuttle service that takes shoppers who spend at least \$30 to their door.

Coordinated with two Metropolitan Transportation Authority bus routes as a means for people to get to the store, Numero Uno's 9-van shuttle service made it one of the top five grossing supermarkets in Los Angeles.<sup>31</sup> In an effort to ensure that the one supermarket that serves 26,000 people in a neighborhood in Springfield, MA, did not close, community members, public officials and store management developed a free, once-a-week shuttle service that improves access for transit-dependent residents and increases business for A&P.

► **A number of farmers' markets locate in areas that are accessible for public transit riders.** For example, the farmers' market in El Segundo, CA, can be accessed by two bus lines.

► **In California, the Department of Defense's fresh produce project will be linking directly farmers to schools** by acquiring 5 produce items from local farmers at a fair market price but then making available the produce at a minimal cost for use in school meal programs.

► The Boston-based Food Project promotes food security by providing transportation to inner city youth and seniors to regional farms for educational and recreational purposes.

► In addition to connecting rural food production with urban consumers, some cities are linking transportation and food production within the urban setting. **In Tennessee, ISTEAF funds a program that constructs community gardens along recreational corridors like bike and walking trails. In Madison, WI, low-income gardeners working with the Community Action Coalition set up food gardens in highway rights of way, within cloverleaf intersections and by the side of roads.**

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## Opportunities to Advance Food Security in TEA-21 Reauthorization

Adequate nutrition is commonly seen as a social welfare issue. The health of the nation's family farms is considered the purview of agricultural policy. Neither health nor nutrition policies have been sufficiently linked to transportation. Upcoming TEA-21 Reauthorization provides a vital opportunity to connect food and nutrition concerns with transportation policies and programs. Food access concerns could be funded through TEA-21's existing transit grant categories. In addition, Congress could create a new transit grant category to address food access-related transportation needs. This food access program could follow the model of TEA 21's Job Access and Reverse Commute Grants in using transit funding to enhance social equity.

## 1. Increase food access in urban and rural communities

Food Access Need	TEA-21 Reauthorization Opportunity
Study barriers to food access and map food and transportation assets.	Address through TEA-21's Research and Planning programs.
Ensure existing and new transit systems provide direct connections between low-income communities and food retail locations.	Fund through a new food access grant program and/or existing transit funding sources such as urban area formula grants, rural transportation access incentive programs, new starts, and bus programs.
Fund local governments, transportation agencies, community development corporations, and non-profit organizations to operate para-transit systems (ideally using low-emissions vehicles) connecting low-income community members to grocery stores, farmers' markets, and community supported agriculture programs.	Fund through a new food access grant program and/or existing transit funding sources such as urban area formula grants, rural transportation access incentive programs, and clean fuel grants.
Fund transportation programs to increase access to fresh produce and healthy food for seniors, schools, child-care centers, and after-school programs.	Fund jointly through a new food access grant program and/or existing transit funding streams; and Federal senior nutrition, meals on wheels, child nutrition, and community food security programs.
Provide incentives for food and farmers' markets that provide customers free or low-cost transportation.	Establish food access business tax break (equivalent to tax incentive for employers offering employees commuter fringe benefits)
Encourage local jurisdictions to lower minimum parking space requirements for food establishments, in exchange for store-initiated transportation alternatives.	Transportation and Communities and System Preservation Pilot Program
Coordinate economic development efforts and transportation and land use policies to site new food and farmers' markets at transit hubs.	Transportation and Communities and System Preservation Pilot Program

## 2. Expand transportation options and economic opportunities for small farmers:

Small Farmer Need	TEA-21 Reauthorization Opportunity
Support small and medium scale cooperative food transportation ventures.	Fund through a new food access grant program and/or existing transit funding sources such as rural transportation access incentive programs and clean fuel grants.
Reduce federal subsidies for large-scale transportation projects that primarily benefit large commodity producers (canal dredging, highway construction, international trade promotion).	Continue TEA-21's trend of reducing the percentage of Federal transit dollars going to new highway construction.
Fund programs that allow small farmers to transport produce to institutional buyers like schools and hospitals.	Fund research, planning, and Food to Institution Logistics pilot projects jointly with USDA.
Research plant-based alternative fuels.	Clean fuel grants.
Ensure road building and other transportation projects do not spur loss of farmland to development.	Transportation and Communities and System Preservation Pilot Program. Small family farms could also be classified as resources to be protected in transit planning (similar to historical landmarks, some environmentally sensitive areas). <sup>32</sup>
Fund the development and dissemination of mobile "farmers' markets" with Electronic Benefits Transfer capabilities.	Fund jointly through a new food access grant program and/or existing transit funding sources such as urban area formula grants and rural transportation access incentive programs; and WIC farmers' market and Seniors Farmers' Market Nutrition Pilot Programs.
Fund local governments and nonprofit organizations in rural areas to help connect farm workers with job-sites, social services, and food establishments.	Address through new food access program and/or existing job access and reverse commute grants.

### Next Steps

The initiatives described in this policy brief have been developed in conjunction with a coalition of organizations that have developed a New Transportation Charter. The Charter in turn has been seen as an organizing tool to bring together a powerful coalition working to make transportation serve communities better. The link between food access and transportation that resonates as part of that organizing effort while also presenting for food and transportation advocates to work together. To learn more about these efforts, please contact us.

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# Sources and Notes

## (Endnotes)

- <sup>1</sup> Food Insecurity exists whenever the availability of nutritionally adequate foods or the ability to acquire acceptable foods in socially acceptable ways is limited or uncertain. Hunger is one manifestation of food insecurity.
- <sup>2</sup> Ronald Cotterill and Andrew Franklin, "The Urban Grocery Store Gap," Food Marketing Policy Center, University of Connecticut, April 1995; Amanda Shaffer, "The Persistence of Los Angeles' Grocery Store Gap," Urban and Environmental Policy Institute, May 31, 2002; Kimberly Morland et al, "Access to Healthy Foods Limited in Poor Neighborhoods," American Journal of Preventive Health, January 2002.
- <sup>3</sup> Mark Nord, "Rates of Food Insecurity and Hunger Unchanged in Rural Households," Rural America, USDA: Volume 16, Issue 4/Winter 2002.
- <sup>4</sup> Estimates of average "food miles" traveled by fresh produce consumed in the U.S. range from around 1100 miles (Austin, TX), to 1500 miles (Chicago terminal market), to 1700 miles (Jessup, MD terminal market). Rich Perog, "Food, Fuel, and Freeways: An Iowa Perspective on how Far Food Travels, Fuel Usage, and Greenhouse Gas Emissions," Leopold Center for Sustainable Agriculture, Iowa State University, June 2001.
- <sup>5</sup> Elaine Murakami and Jennifer Young, "Daily Travel by Persons with Low Income," paper for NPTS Symposium, 1997.
- <sup>6</sup> USDA "Food Stamp Participants' Access to Food Retailers: Summary of Findings" July 1999 (<http://www.fns.usda.gov/oane/MENU/Published/nutritioneducation/Files/sumnfsps2.htm>)
- <sup>7</sup> U.S. Department of Health and Human Services, "The Surgeon General's call to action to prevent and decrease overweight and obesity." U.S. Department of Health and Human Services, Public Health Service, Office of the Surgeon General, 2001.
- <sup>8</sup> USDA, "A Time to Act," A Report of the USDA National Commission on Small Farms, January 1998.
- <sup>9</sup> The Urban Grocery Store Gap, op cit.
- <sup>10</sup> The Persistence of Los Angeles' Grocery Store Gap, op cit.
- <sup>11</sup> Access to Healthy Foods Limited in Poor Neighborhoods, op cit.
- <sup>12</sup> Kami Pothukuchi. "The food system in Detroit: A Handbook for local planning", Detroit: Wayne State University, 2001.
- <sup>13</sup> Department of Urban and Regional Planning, "Fertile Ground: A report on the Madison/Dane County Food System", University of Wisconsin, 1997.
- <sup>14</sup> For example, a survey of a two square mile area in Los Angeles by the Community Coalition, a non-profit organization, counted 39 fast food restaurants but just one sit down eating establishment. (other studies: community food security surveys in Oakland, Sacramento, San Francisco).
- <sup>15</sup> 26 percent of low-income households have no car, compared to just 4 percent of other households. Federal Highway Administration, National Personal Transportation Survey, 1995. A 1980 study found an even more startling disparity that only 22 percent of food stamp recipients drove their own car to shop for food, compared to 96 percent on non-food stamp recipients. (Paul Nelson, James Zellner, "Store Selection by Food Stamp Household," National Food Review, Summer 1980.)
- <sup>16</sup> UCLA Pollution Prevention Education and Research Center, "Homeward Bound; Food-Related Transportation Strategies in Low Income and Transit-Dependent Communities," 1997. Linda Ashman et al, "Seeds of Change: Strategies for Food Security for the Inner City," Department of Urban Planning, UCLA, June 1993.
- <sup>17</sup> Mark Nord, "Rates of Food Insecurity and Hunger Unchanged in Rural Households," Rural America, USDA: Volume 16, Issue 4/Winter 2002.
- <sup>18</sup> Eileen S. Stommes, Dennis M. Brown, "Transportation in Rural America: Issues for the 21<sup>st</sup> Century," Rural America, Vol. 16, Issue 4, Winter 2002.
- <sup>19</sup> The USDA's National Commission on Small Farms concluded that "policy choices [have] perpetuated the structural bias toward greater concentration of assets and wealth in fewer and larger farms and fewer and larger agribusiness firms." A Time to Act, op cited.
- <sup>20</sup> Time to Act, *ibid*.
- <sup>21</sup> Oxfam America, "Saving Family Farms in the United States," <http://www.oxfamamerica.org/art829.html>.
- <sup>22</sup> For example, inland barge routes, among the lowest cost option for bulk foods, depend heavily on government construction and maintenance subsidies. A coalition of environmental and taxpayer organizations advocates cutting major dredging and

locks projects scheduled to cost more than \$3.5 billion. Friends of the Earth, Taxpayers for Common Sense, U.S. PIRG, "Green Scissors 2002," April 2002.

<sup>23</sup> See Andrea Azuma and Andy Fisher, "Healthy Farms, Healthy Kids: Evaluating the Barriers and Opportunities to Farm to School Programs," Community Food Security Coalition, January 2001.

<sup>24</sup> Food, Fuel, and Freeways, op cited.

<sup>25</sup> The United States loses between 500,000 to 650,000 acres of farmland each year to development. USDA, National Resource Conservation Service, 1997 National Resource Inventory.

<sup>26</sup> <http://www.ams.usda.gov/farmersmarkets/facts.htm>

<sup>27</sup> The Hartford Food System Grocery Delivery Service Program, [http://www.hartfordfood.org/programs/grocery\\_delivery.html](http://www.hartfordfood.org/programs/grocery_delivery.html)

<sup>28</sup> The Hartford Food System Grocery Delivery Service Program, [http://www.hartfordfood.org/programs/grocery\\_delivery.html](http://www.hartfordfood.org/programs/grocery_delivery.html)

<sup>29</sup> Homeward Bound, op cited, p. 44.

<sup>30</sup> Wong, Cindy "City gets \$890,000 grant to pay for shuttle transportation system" (June 30, 2002, <http://www.miami.com/mld/miami/3568965.htm>)

<sup>31</sup> TCRP Web Document 7: Using Public Transportation to Reduce the Economic, Social and Human Costs of Personal Immobility ([www.nap.edu/openbook/tcr007/html/261.html](http://www.nap.edu/openbook/tcr007/html/261.html), 1999, The National Academy of Sciences)

<sup>32</sup> Department of Transportation, *Standard Environmental Reference, Chapter 20, Section 4(f)*, from [www.dot.ca.gov/ser/vol1/sec3/special/ch204f/chap20.htm](http://www.dot.ca.gov/ser/vol1/sec3/special/ch204f/chap20.htm)