

# Cardi Reports ISSUE NUMBER 7/JANUARY 2009

## **New York Communities 2008:**

## A Year of CaRDI Publications









A Multidisciplinary Social Sciences Institute of Cornell University www.cardi.cornell.edu

### **Preface**

The following is the 2008 collection of two CaRDI publications: the *Rural New York Minute* and the *Research & Policy Brief Series*. Both publications are released monthly, and are available on our website at www.cardi.cornell.edu. In addition to the publications featured here, we also published two *CaRDI Reports* during 2008, which can be found at the CaRDI website.

The CaRDI publications are an important vehicle for connecting Cornell University researchers and their work on community and economic development issues with stakeholders across New York State and beyond. The publications may be reprinted in community newspapers, published in organizations' newsletters, forwarded via listservs, and used as teaching tools in schools and elsewhere. It is our hope that these publications provide evidence-based research to inform decision-making at the local, regional, and state level. We strive to foster a productive dialogue around these and other issues and to strengthen our relationships with stakeholders across the state.

If you have any questions or comments about these publications, please contact Robin Blakely at rmb18@cornell.edu or 607-254-6795.

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# rural new york minute ISSUE NUMBER 13/JANUARY 2008

### Are New Yorkers Satisfied with the Public Education in their Communities?

By Robin M. Blakely, and John W. Sipple, Cornell University

Public education is viewed by many people as fundamental to a democratic, civil, and productive society. Community support, public engagement, and adequate resources are seen as essential to the success of public education (Public Education Network). New Yorkers view education as one of the top issues facing their communities (see our July Rural New York Minute issue, #7). But how satisfied are New Yorkers with public education in their communities? Does this support vary across the state?

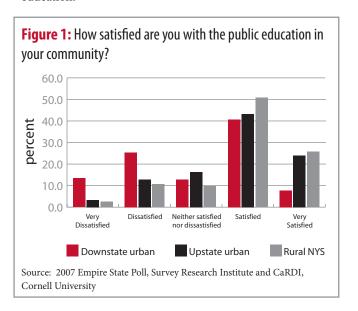
In the 2007 Empire State Poll, 1,100 New York residents were interviewed by telephone on a number of issues and topics. Respondents were asked: "Every community has good points and bad points about living within it. Thinking about availability, cost, quality, and any other considerations important to you, how satisfied or dissatisfied are you with the public education in your community?" Overall, New Yorkers are relatively satisfied with public education in their communities, but this varies significantly by where people live.

Almost half (49%) of downstate urban respondents report satisfaction (almost 8% are *very* satisfied with the public education in their communities), though almost 39% report being *dissatisfied* (with 13% being *very* dissatisfied). Rural New Yorkers, on the other hand, differ dramatically from their downstate urban counterparts. Almost 77% of rural New Yorkers interviewed report satisfaction with the public education in their communities (with one in four being *very* satisfied). Only about 12% of rural respondents reported dissatisfaction (less than 3% are *very* dissatisfied). Upstate Urban respondents fall somewhere in between downstate urbanites and rural New Yorkers. Just over 67% of upstate urban respondents report being satisfied with their communities' public education (24% are *very* satisfied), while 16% report being dissatisfied (just over 3% are *very* dissatisfied).

Why do citizens tend to report high or low levels of satisfaction? On the one hand, satisfaction with a public service may suggest a belief (based on firsthand information or simply reputation) that the school is providing a quality education program. On the other hand, reported levels of satisfaction may be more a reflection of contentment with the relative tax burden or quality of local leadership (school board and/or Superintendent), rather than a direct assessment of the quality of the educational program offered. If, for instance, current levels of taxation and investment in one's local public school are considered reasonable, then

overall satisfaction with the schools is often indicated. Conversely, in communities with relatively high school tax rates, research has documented that citizens often report higher levels of dissatisfaction. Moreover, researchers have used superintendent turnover and school budget failure as community-level indicators of satisfaction with their local school.\*

Despite all the attention on measuring academic growth and success, parents often judge the quality of local schools on the availability of extracurricular activities (e.g., band, sports, arts). Given the dramatic increase in academic requirements imposed by the New York State Board of Regents and the Federal government through the *No Child Left Behind* legislation, there is evidence that school districts are responding by either increasing tax rates to continue to support a full academic and extracurricular program, or are maintaining level tax efforts and cutting into some of these optional extras. Since satisfaction with local education is a mixture of local leadership, tax burden, educational programs, and extracurricular offerings, these responses are likely to affect satisfaction levels with community public education.



<sup>\*</sup> References available on the CaRDI website





# rura new york minute ISSUE NUMBER 14/FEBRUARY 2008

## Are Older In-Migrants to Rural Communities "Grey Gold"?

By David L. Brown, and Nina Glasgow, Cornell University

igration often accompanies life course transitions, including retirement. While young people are much more likely to move than older folks, almost 10% of Americans aged 60+ migrated between 1995 and 2000, with a disproportionate share of them moving to rural communities, which we call rural retirement destinations (RDD). This phenomenon is not as widespread in NYS as it is nationally, but the 2000 Census showed that 12 NYS counties (9 of which are rural) positive high rates of older in-migration (see Figure 1). Older in-migration has a profound effect on destination communities. Because older in-migration affects age composition, it indirectly shapes community needs and demands for goods, services, and economic opportunities as well as patterns of consumption, life style and social relationships.

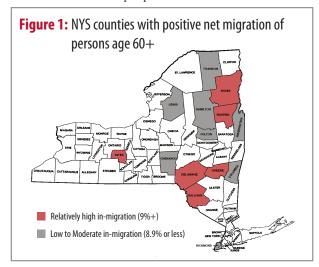
Our research identified opportunities and challenges for the rural communities these retirees move to. We conducted a nation-wide study of older in-migrants, and the communities in which they settle, using a combination of survey research and census analysis. In addition, we interviewed over 60 civic, business and organizational leaders in 4 communities. Our main findings include:

- Older in-migrants become quickly involved in their new communities. Our initial concern that older in-migrants would be socially isolated was unfounded; they are active in a wide range of social, civic and service organizations, especially as volunteers. Through their labor, technical expertise, and financial contributions older in-movers are often a driving force in community activities and organizations.
- In-migration of retirees has a positive impact on the real estate market and on construction in-migrants provide financial and technical assistance to a wide array of civic needs and they invigorate the arts and cultural scene.
- Benefits associated with older in-migration may also have costs, depending upon one's perspective or position.
- Rising real estate prices, for example, reduced the supply of affordable housing, especially for teachers, health workers, first responders and young families. Volunteering reduces public costs, but it may diminish the demand for paid professional workers, thereby undermining a community's ability to retain its better trained youth.
- Older in-migrants who take positions of cultural leadership may be insensitive to traditional ways of doing things and may force their tastes and preferences on the community. Older inmigrants who become politically active may compete for power with the established leadership.
- About 30% of older in-migrants have adult children residing nearby, and thus are unlikely to move away as they age, become ill or disabled, lose their spouse, or have to relinquish their driver's license. They are likely to remain after their contributions to the community diminish in relation to their costs.

How can rural destinations maximize the opportunities and reduce the costs associated with older in-migration? Older in-migration should not be seen as a "pensions and care issue" or as a panacea for strapped rural economies, but rather as a source of challenges and opportunities. With thoughtful planning, older in-migration can contribute to rural community development. We recommend the following:

- Communities should encourage high levels of social participation among older residents. This will contribute to productive aging among the older in-migrants themselves, and it will supply volunteer labor and other types of support for community organizations and activities.
- Community decision-making should be open and inclusive so that all voices are heard when the public agenda is established and when policy actions are taken. In-migrants' needs and opinions cannot be privileged above those of longer-term residents.
- Community planning must engage both shorter and longerterm concerns. Older in-migrants may have few immediate needs, but they may require public transportation, more health care and other forms of assistance as they age.

As the baby boom enters older age and new waves of older inmigrants move to rural destinations, the population of such areas will take on a more diverse age composition. This will result in a complex mix of costs and benefits to be considered when planning for community needs and opportunities in the future. The "grey gold" that older in-migration represents in the perceptions of some public officials and community leaders needs to be considered from a balanced perspective.







Cornell University

# rura new york minute

## Local land uses and downstream benefits: How farmer attitudes influence watershed conservation practices

By Richard C. Stedman (Cornell University), Erin E. James (Virginia Tech), and Peter J. Kleinman (USDA-Agricultural Research Service)\*

New York City's

he well being of metropolitan areas depends in part on resources provided by rural landscapes, which in turn can lead to tensions over traditional rural land uses such as agriculture. Farmers' perceptions of "who benefits" may be crucial to their willingness to engage in conservation practices. We examined farmer adoption of the conservation enhancement reserve program (CREP) in the Cannonsville Watershed in Delaware County, 150 miles northwest of New York City (NYC). The watershed is a primary source of drinking water for NYC, and a good illustration of how farmer attitudes can affect conservation practices.

The expansion of the NYC water supply system began in 1842 when the city experienced water shortages and disease outbreaks. The Cannonsville was the last reservoir to be constructed in the system. To maintain drinking water quality, the city acquired land surrounding the reservoir. When water flooded the valley in 1966, it covered nearly 20,000 acres of Delaware County dealing an economic blow to upstate residents, particularly dairy farmers. The combination of forced evictions and low payments for land acquired by NYC created animosity towards the city and its endeavors.

New York City spent considerable time and resources developing a watershedmonitoring program that established buffer zones around watercourses. The Watershed Agriculture Program (WAP) was established in 1992 to address environmental problems, while allowing a continued presence of agriculture in the watershed. In addition, the CREP (Conservation Reserve Enhancement Program) has been adopted

by approximately one-third of the farms in the watershed since 1999. CREP is a voluntary program that uses financial incentives to encourage farmer enrollment in 10-15 year contracts to remove certain lands adjacent to water from production.

We explored farmer adoption of conservation practices via a mail survey to the more than 200 farmers in the watershed in the summer of 2004. The questionnaire addressed farmer and farm characteristics, as well as attitudes and beliefs.

50% of the farmers surveyed had adopted at least some CREP practices. Compared to non-adopters, adopters tended to be older, had been farming fewer years, were more politically liberal, and were affiliated with more environmental organizations. They sought information from multiple sources, including extension agents, consultants, and Watershed Agricultural Council (WAC) personnel. CREP adopters were more likely to identify themselves as innovators and less likely to see best management practices (BMPs) as risky. They perceived livestock access to streams as detrimental to water quality, and generally held more positive attitudes toward WAC and NYC's presence. All survey respondents agreed that protecting local water quality should be an important priority for local farmers, and supported private property rights. Adoption of CREP is not related to education level, the presence of an off-farm job, or

anticipated plans for children continuing to farm in the future.

The combination of farm and farmer characteristics (smaller operations, older but farming fewer years) suggests that many of the CREP adopters are non-traditional farmers: retiree or 'hobby' farmers. More importantly, we find that attitudinal variables rooted in the local context are strong predictors of adoption. The question "who benefits" from local practices is crucial: the fact that farmers are being asked to change their land use practices, for the benefit of outside interests, even with technical and financial recompense, alters or even negates the concept of a "common goal". The watershed has several particular characteristics that have shaped our results: most notably, the economic incentives and extra-local control have led to local resentment and the perception that farmer interests are being subordinated to those of NYC water consumers.

Thus, a particular conceptualization of conservation is especially relevant here.

Perceptions of stewardship have shifted from protecting one's own farm for future prosperity to vaguer notions of protecting "the environment" for the greater good of someone else: either diffuse and abstract (i.e., "society as a whole") or particular, but distant (i.e., improved water quality for downstream interests). Understandably, Cannonsville farmers may not readily embrace the idea that they are responsible for the quality of New York City's water supply.

EAST OF HUDSON Water Supply System

> \*We would like to thank the staff of the New York City Watershed Agriculture Council and the New York City Department of Environmental Protection for their assistance in the conduct of this study. For references and the full paper (by the same authors), "Adoption of the Conservation Reserve Enhancement Program in the Cannonsville Watershed, New York", please visit the CaRDI website.





# rura new york minute ISSUE NUMBER 16/APRIL 2008

## The Impact of Agriculture: It's More Than Economic (Part I)\*

By Duncan L. Hilchey, Gilbert W. Gillespie Jr., David L. Kay, and R. David Smith, Cornell University

here is growing evidence of agriculture's positive impacts on rural economies. Indicators such as income and employment multipliers help Extension staff, planners and economic developers make the case for protecting agriculture and for promoting agricultural economic development. However, the non-economic benefits of agriculture for local communities, including recreational access, aesthetically-pleasing green space in the countryside, and quality of life for residents have received comparatively little attention. Increased awareness of these benefits may help local leaders more fully understand the importance of local agriculture, and develop and successfully implement policies and strategies for sustaining agriculture in communities.

#### Feedback from focus groups

We facilitated a series of focus groups<sup>1</sup> to gauge public and agricultureindustry understandings of a range of possible non-economic benefits that agriculture provides to local communities. We conducted three focus groups in one of each of the following types of counties: rural; rapidly suburbanizing; and dominated by a metropolitan area, for a total of nine focus group meetings.

More than 50 people participated. One focus group in each county was composed of a random sample of adults without ties to agriculture. Another group was composed of farmers, businesspeople, and local farm agency staff nominated by local Cornell Cooperative Extension staff members to represent agriculture and related organizations in their respective counties. The third group was composed of a mix of people from these two categories. We began each focus group by asking participants the following questions: "From your own perspective, is having agriculture in your community important to you? For what reasons?" We specifically told participants that we were interested in more than just the economic reasons, and asked the participants to post all of their comments under the headings of "social/cultural," "environmental," and "economic." We then discussed what these comments meant to the participants. The nine focus groups yielded 338 individual statements on the importance of local agriculture. These were later coded into the benefit themes shown in Table 1.

#### What are the perceived benefits of local agriculture?

The stated non-economic benefits of agriculture were wide-ranging, including preserving open space (for wildlife and bucolic views), providing a buffer to development, providing a local source of fresh food, and preserving a highly valued heritage and its traditions. The most frequent comments fell under the subtheme "provides aesthetic benefits and open space" and the subtheme "contributes to quality of life in the community."

<sup>1</sup>A focus group is a qualitative research method which includes posing a research question or questions to a selected group of participants and then guiding them through a moderated discussion to gather in-depth insights about the topic.

## **Table 1:** What are the reasons having agriculture in your community is important to you?

Focus Group Responses Categorized by Theme and Subthemes

Benefit Theme Category	Percent
Social/Cultural (143 Comments)	
Provides high-quality & local food	29%
Contributes to community & quality of life	25%
Maintains important heritage/tradition/work ethic	22%
Promotes public awareness of importance of agriculture	17%
Contributes to local food security and safety	7%
,	100%
Environmental (94 Comments)	
Provides aesthetic benefits & open space	60%
Agriculture is consistent with environmental ethic & wildfire	31%
Agriculture is a clean industry	10%
,	100%
Economic (71 Comments)	
Provides employment	41%
Supports economy (including local)	38%
Provides tourism benefits & opportunities	13%
Contributes taxes & public services	8%
	100%
Other/uninterpretable/adverse impacts (30 Comments)	
Total Comments	338

Table 1. Note: The emphasis in the focus groups was on identifying the different impacts of agriculture. We specified that we were interested in more than just the economic impacts. This table reflects the diversity of the responses in the respective categories and does not indicate any ranking of importance.

In the focus group discussion, many participants, especially those without ties to agriculture, tended to differentiate the impacts of agriculture by farm size and articulate the environmental and social contributions of small- and medium-scale agriculture. A significant proportion of participants expressed willingness to support family farms near where they live, through a variety of public policy initiatives such as buy local campaigns, public education, and farmland protection. Moreover, language used by the focus group participants reflects the complexity of attitudes and values people have regarding farming (corporate vs. non-corporate; family vs. non-family; large vs small; organic vs. conventional; local vs. non-local; industrial vs. craft). Non-farm participants tended not to favor farm enterprises they perceived to be large and "industrial," which they characterized as having negative environmental and social impacts. Those with this view tended to be interested in seeing public policies which support "family farms."

Our focus group results suggest that people in New York hold diverse views on agriculture, think that agriculture has many economic, social and environmental benefits, and that agriculture in New York can benefit from a large reservoir of support among the non-farming population.

\*Part II (Issue 17/May 2008) will highlight data from the Empire State Poll on this issue.





# rura new york minute ISSUE NUMBER 17/MAY 2008

## The Impact of Agriculture: It's More Than Economic (Part II)\*

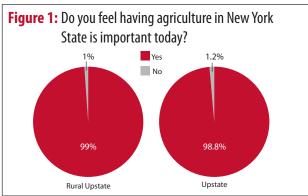
By Gilbert W. Gillespie Jr., Duncan L. Hilchey, David L. Kay, and R. David Smith, Cornell University

he character of farming in New York State has evolved, and the number of residents deriving their livelihoods directly from agriculture has declined to a small fraction of the population. However, our survey data suggests almost unanimous agreement among upstate New York residents that agriculture is important in the state, with more than half of respondents choosing reasons other than economic ones.

In last month's Rural New York Minute (Issue 16/April 2008) we discussed the non-economic benefits of agriculture for local communities identified by participants in a series of nine focus groups held in three counties in NYS. The focus groups were designed to gauge public and agriculture-industry understandings of a range of possible non-economic benefits that agriculture provides to local communities. Our results suggested that people in New York hold diverse views on agriculture and believe that agriculture has many economic, social and environmental benefits. In this month's issue we report on data gathered from upstate New York State residents in the 2004 Empire State Poll in which we examined their opinions on the importance of NYS agriculture, and why agriculture might be important to them.

We included two questions in two surveys of New York State residents conducted by Cornell University's Survey Research Institute. The first survey was answered by 420 randomly selected respondents from the upstate population. The second survey was answered by 200 rural residents. The second survey was commissioned by the Community and Rural Development Institute (CaRDI) to compare rural residents' opinions with those of upstate residents in general.

The survey participants were asked "Do you feel having agriculture in New York State is important today?" The virtually unanimous response, for both upstate residents and rural residents specifically, was "yes" (see Figure 1). One hundred ninety seven of the 199 rural participants who answered the question said "yes" as did 395 of the 400 upstate participants. Only one participant in each of the surveys

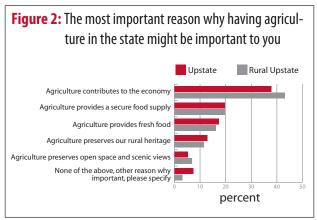


Source: 2004 Empire State Poll

said they "didn't know." This finding is consistent with the results of our focus groups reported in last month's issue.

Survey participants were then given a list of possible reasons why having agriculture in the state might be important to them. Then they were asked to choose which of these they thought was most important. The most frequently selected reason was that agriculture contributes to the economy, chosen by 43% of the 193 rural participants and 37% of the 392 upstate participants who answered the question (see Figure 2). Nearly 20% of participants in both surveys identified agriculture's role in providing a secure food supply as their most important reason, followed by the provision of fresh food.

Smaller proportions of participants chose preservation of open space and rural heritage as their primary reasons that agriculture in NYS is important. These findings might appear to differ from the focus group findings, but the differences are most likely due to asking Empire State Poll survey participants to limit their response to one reason, whereas focus group participants offered an average of about six reasons each. Nevertheless, while open space and rural heritage issues may be important as indicated by the focus groups, topics related to food and economy hold center stage in upstate residents' perceptions of the importance of agriculture.



Source: 2004 Empire State Poll

Even though the economic impacts of agriculture tend to be the first to come to many people's minds, about half of the respondents chose one of the non-economic effects as being the most important. Identifying and bringing these non-economic considerations into discussions of issues along with the economic considerations may be important for mobilizing support of local agriculture.



 $<sup>^*</sup>$  Please see Issue 16/April 2008 for Part I of this 2-part series. A selected bibliography for this issue is also available on the CaRDI website.



# rura new york minute ISSUE NUMBER 18/JUNE 2008

### The Census Counts...and How!

By Warren Brown, Cornell University, Jeff Osinski, NYS Association of Counties, & Robert Scardamalia, Empire State Development\*

he founders of the United States understood the importance of accurately counting the nation's population in order to allocate representation in the national legislature. As called for in the Constitution of the United States, the nation's first census was conducted in 1790. The U.S. Census Bureau's role has expanded since then. The Bureau's data are routinely relied upon for allocating federal, state and local government resources, and for guiding private investment. Local governments play a critical role in ensuring the quality of these data, primarily through their role in verifying annual estimates of population, and by helping to ensure that each decennial Census provides a complete count of local populations.

#### **Annual Estimates of Population**

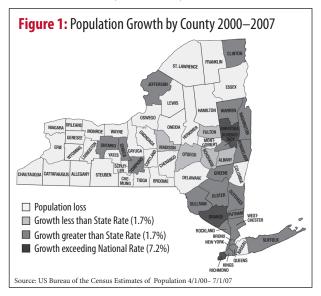
The constitutional mandate requires that a complete enumeration of the population be carried out every ten years, with the next such enumeration scheduled for 2010. In order to track population changes between census years, the Census Bureau partners with the states to produce annual estimates of county and municipal populations. Cornell University's Program on Applied Demographics (PAD) represents New York State in this partnership. PAD is designated by the Governor of NYS to perform in this role, as a coordinating agency in Empire State Development's State Data Center Program.

The most recent estimates of county population are for July 1, 2007. Figure 1 shows that the general pattern of growth and decline in NYS differs between downstate and upstate. Growth is generally seen in the portion of the state extending from the New York City metropolitan area, up the Hudson River to the Capital District region while the upstate areas to the north and west are generally lagging behind or declining. In total, 33 counties (32 in Upstate) lost population since the last census. There are notable exceptions to this pattern. For example, largely due to the influence of their dominant employers, Tompkins County (Cornell University) and Jefferson County (Fort Drum) have exceeded NYS's average rate of growth since 2000.

The Census Bureau's method to estimate changes in county population relies upon administrative records and surveys that are uniformly available for all counties. The Bureau recognizes that this method is not perfect, and that estimates for certain groups of people—college students, young adults launching their careers, immigrants, military personnel, and new residents of rapidly developing areas—may contain errors. The Bureau encourages counties—working with their state representative (in NYS that is Cornell's PAD)—to review the estimates and make recommendations for corrections. Local data on changes to the housing stock are accepted as an alternative data source. Working with Cornell's PAD, eight counties—Bronx, Jefferson, Kings, New York, Queens, Richmond, Rockland, and Westchester—have succeeded in having their initial estimates corrected.

#### Complete Count in the 2010 Census

It is likely that NYS will lose 2 Congressional seats after the 2010 Census. Four existing upstate Congressional districts are in areas of



population loss. A shrinking share of the national population results in a smaller share of federal representation and funding for some programs. Within the state, representation and government funding tied to population will shift away from the declining areas of upstate toward the growing areas of downstate. With these issues in mind, the state cannot afford to have any residents missed in the upcoming census or for the current population estimates to *under*estimate the number of residents. To help ensure a full and accurate census count in 2010, NYS needs to ensure that the Census Bureau has a complete list of all living quarters, and it must motivate all New Yorkers to be counted.

The Census Bureau's Local Update of Census Addresses (LUCA) coordinated by Empire State Development's NYS Data Center Program, and carried out by planning and municipal offices throughout the state has just been completed. It was an enormous undertaking with local governments containing 93 percent of the state's housing units agreeing to participate. Preparation now shifts to educating local officials and residents about the importance of responding to the 2010 Census. NYS will continue to work with county and regional agencies to improve understanding of the Census process and energize community leaders and organizations as April 1, 2010 approaches.

The 2010 Census will be a watershed moment for NYS, with congressional representation and hundreds of millions of dollars in federal funding at stake. NYS and its local municipalities need to work together to obtain a full count of our population, as if our future as a state depends on it. Considering the consequences of an inaccurate count, it does!

\* See CaRDI website for contact information





# rura new york minute ISSUE NUMBER 19/JULY 2008

## Land and Diet: What's the most land efficient diet for New York State?

By Christian J. Peters, Jennifer L. Wilkins, and Gary W. Fick, Cornell University\*

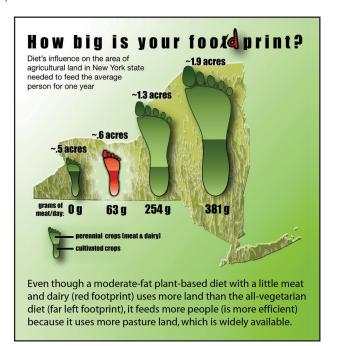
Increasing numbers of consumers are considering the environmental, social and economic impacts of their food purchasing and consumption habits.¹ To reduce environmental costs associated with transportation and support local economies, some consumers favor buying and consuming locally or regionally produced food. While this approach may seem logical, to support the nutritional requirements of a population an area's land base must be able to produce an appropriate variety and quantity of foods. Research suggests that while New York State doesn't have the land base to provide for its population's total food needs, more people could be fed by making some important adjustments to both diet and land use.²

We set out to understand how diet influences the amount of land needed to produce the food we eat and, consequently, how many people can be fed by the NYS land base. We compared 42 complete diets (2300 calorie/day) – all including the same NYS grown grains, fruits, vegetables, and dairy products, but varying in the amounts of meat and in the amounts of energy supplied by fats. We found a five-fold difference in acreage requirements between the diets incorporating the least amount of fat and meat and those with the least amount of fat and greatest amount of meat. A person following a low-fat vegetarian diet requires less than half an acre per year to produce the food required for their meals while a person consuming a low-fat diet with a lot of meat requires over 2 acres.

Importantly, even though all the vegetarian diets require less land than the meat diets, they do not necessarily feed the most people (see illustration). Because different soil types are suited to different crops (some of which are not consumed directly by humans), more people can be fed when their diets are not strictly vegetarian. The components of a vegetarian diet – fruits, grains, and vegetables – require high quality land, whereas meat producing animals can be raised on lower quality lands which produce crops we don't eat. In NYS, more land is suited to perennial forage production (pasture, dry hay, haylage, and greenchop) than for growing annual crops (corn, soy, wheat, and vegetables). In other words, land suited to the production of dairy and meat but not fruits, grains, and vegetables is more readily available, making it theoretically possible to feed more people who eat a modest amount of meat than those whose diets are completely vegetarian.

<sup>1</sup>Wilkins, J. How many people can the land feed? Depends on the amount of meat and milk in the diet. Hunger and Environmental Nutrition Newsletter, American Dietetic Association Hunger and Environmental Practice Group. Winter 2008. http://www.hendpg.com/

<sup>2</sup>Peters, CJ, Fick GW, Wilkins JL. Testing a complete-diet model for estimating the land resource requirements of food consumption and agricultural carrying capacity: The New York State example. *Renewable Agriculture and Food Systems*. 2007; 22(2): 145-153



Source: Illustration by Steve Rokitka/University Communications. This graphic originally appeared in the Cornell Chronicle, 10/5/07.

"Modest amount" of meat is the key, however. If all of the land suited to producing meat but not plant foods is used, *additional* meat production would require the use of land required for the production of plant foods. In order to achieve the most efficient balance between land use and consumption, our research suggests that New Yorkers would need to limit their egg and meat consumption to 2 cooked ounces per day. This adjustment would require a significant reduction in meat consumption, as the average American consumed almost 6 ounces of such products per day in 2005. It would also require NYS producers to significantly change their land use practices. The influence of diet on land use has important implications for individuals and communities. Understanding these relationships can help policy makers ensure the well-being of both.

<sup>3</sup>U.S.Department of Agriculture, Economic Research Service. 2007. Food consumption (per capita) data system: Loss-adjusted food availability. Available at Web site: http://www.ers.usda.gov/Data/FoodConsumption/FoodGuideIndex.htm (verified 19 June 2008).



<sup>\*</sup> Heidi Mouillesseaux-Kunzman serves as guest editor for this issue.



# rural new york minute ISSUE NUMBER 20/AUGUST 2008

### **Understanding EU US Rural Policy Differences**

by Mildred Warner (Cornell University), and Sally Shortall (Queen's University, Belfast)

#### Agricultural versus Rural Policy

In both the European Union (EU) and the United States, explicit rural development policy is miniscule in comparison to agricultural policy. Agriculture accounts for most of the funding and is a top priority. In the EU, however, agriculture is viewed as multi-functional and the link between agriculture, environment and rural development is clear. Agriculture in the EU is viewed as a driver for rural development, and a means to provide stewardship for the environment which helps promote tourism and preserve rural culture. In the US there is no such explicit link between agriculture and rural development. American agricultural policy has a singular commodity focus, not a multi-functional link that could connect it to broader rural development objectives.

#### How History, Governmental Scale, and Politics Influence Rural Policy

The broader EU rural development emphasis draws from the post World War II experience and the desire to build more social cohesion in a process of Europeanization, resulting in more attention to leadership and community development (especially programs such as LEADER, a rural development program focused on promoting local leadership and initiative). Although rural development policies in both the US and EU focus on market competitiveness, the EU has more emphasis on social inclusion (Shortall and Warner, forthcoming). Equalizing investments across territory is an important component of EU policy. In the US, on the other hand, a competitive market focus is primary. There is less commitment to place, little attention given to leadership, and most rural development funds are focused on physical infrastructure that is thought to affect economic efficiency. There is no community development initiative of the size and scale of LEADER in the US. Efficiency and resource mobility are the primary goals of rural policy - not social inclusion.

The roles of governmental scale and political power are also important considerations. At the EU level, we see a concern with global competitiveness and European regional integration. National-level policies can substitute for explicit rural policy because rural development policy is linked to other policies (social welfare, infrastructure, education, health, labor mobility). Infrastructure is the cornerstone of US rural development policy, but not in the EU because infrastructure is handled at the national scale. Typically, on both sides of the Atlantic, agricultural objectives are dealt with at the international and national scales

while rural development is seen as a local initiative. In the US we see an emphasis on trade and commodity policy at the national level, services and infrastructure at the state level, and economic development and services at the local level. Research in the US suggests a declining national interest in equalizing investments, but a rising interest at state and local levels as more attention is given to local self development.

To understand policy we must consider politics. The urban literature speaks of growth coalitions of real estate developers, business interests and government that cooperate to promote economic development and higher real estate values, in turn fueling the local tax base. These growth coalitions are held together by mutual self interest and represent the power of elites in the city context. Rural development interests, on the other hand, are coalitions of different actors and interests – local government, local business, human welfare and environmental groups. While they offer the potential to promote a multi-functional rural development, they fail to attract policy attention in the US in part because they are too diffuse. Rural development actors are typically grounded in place, but these coalitions do not have an ability to scale up, making it difficult for their issues to be "seen" at the national (US) or international (EU) policy scale. In addition, the short term project focus of many rural development initiatives undermines the long term sustainability of these coalitions. These loose coalitions can be easily trumped by commodity interests as agriculture has the ability to scale up to represent itself nationally or internationally. Even in the EU, rural development funds are increasingly being shifted toward commodity interests which have greater political and economic power.

#### A Look to the Future

In the future, rural policy will be increasingly affected by changing environmental pressures regarding energy, water and the need to preserve rural areas as the reserve for cities, rather than places deserving development in their own right. These pressures will be tempered in the EU by broader values regarding territorial equality and social inclusion. In the US, where attachment to place is lower and market competitiveness is paramount, broader rural development policy is less likely to receive significant attention.

#### For more information see:

Special Issue Comparing EU and US Rural Development Policy, *EuroChoices* 7(1), April 2008.

Shortall and Warner, "Social Inclusion or Market Competitiveness: A Comparison of EU and US Rural Development Policies," *Regional Studies* (forthcoming).





# rural new york minute ISSUE NUMBER 21/SEPTEMBER 2008

## **Attitudes Toward Rural Community Life in New York State**

By Robin M. Blakely & David L. Brown (Cornell University)

## In an increasingly urban nation, why are attitudes about rural life important?

Public attitudes affect public policy. When positive attitudes toward rural people and communities are prevalent, policies fostering rural life are more likely to be on the public agenda and supported. However, given that the U.S. is about 80% urban, why should this majority care about rural places and people? For starters, rural areas contain most of our nation's land, water and natural resources, energy generation facilities, physical infrastructure and recreation destinations. Most of our nation's food, fiber and energy sectors are located in rural areas. And, while rural people only comprise about 20% of the US population, this still constitutes a sizeable "minority" and a significant force in state and national elections.

Attitudes also influence our private choices. How people feel about rural versus urban areas may be associated with their decisions about where to live and work. Collectively, these individual attitudes may influence migration patterns which affect land use, community character, and economic development patterns. Where people live has a significant impact on their opportunities and life chances, as well as on their personal identities.

#### Research on attitudes about rural life

In a recent study, we examined people's perceptions about particular aspects of rural and urban life in New York State in 2008. This issue has not been examined for at least a decade. Previous research shows that rural Americans and rural areas are viewed as worthy of attention in public policy (Kellogg, 2001, Roper Association, 1992\*). In Pennsylvania, Willets et al. (1990) found that regardless of where people lived (urban, suburban, or rural), their attitudes were comprised of both pro-rural and anti-urban responses, a pairing which can be considered a critique of urban life.

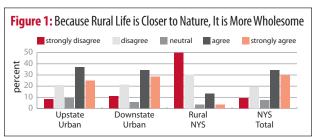
Our study revisits the Pennsylvania work. We surveyed 1,100 New Yorkers in 2008 via the annual Empire State Poll telephone survey conducted by Cornell University. Respondents were presented with a set of ten statements that elicited the clearest pro-rural, anti-urban, and anti-rural sentiments in the previous Pennsylvania research and asked whether they agreed or disagreed with the statements. Survey respondents were grouped according to residential place type – upstate urban, downstate urban, or rural.

## What are the attitudes in NYS? Do they vary depending upon where one lives?

We find that while the general attitudes in NYS are similar to those found in Pennsylvania two decades ago, NYS respondents were often divided depending on the specific sentiment being expressed. Agreeing with one pro-rural sentiment, usually, but not always, meant that a respondent will

agree with other pro-rural sentiments. In fact, respondents often agreed with both pro-rural and anti-rural sentiments (especially those reflecting material conditions), indicating that overall pro-rural attitudes are complex and may even be coupled with realistic ideas about rural deficits.

In addition, responses are consistent across residential place types for some attitudes but not for others. For example, there is strong agreement across New York that "neighborliness and friendliness are more characteristic of rural areas." However, rural New Yorkers tend to disagree (and disagree strongly!) that "because rural life is closer to nature, it is more wholesome", while urban New Yorkers tend to agree with this statement (see Figure 1). In general, rural respondents were more likely to differ from other New Yorkers in their attitudes about rural areas. They often take a slightly more negative (and perhaps realistic) view of the material aspects of rural life, such as limited economic opportunities, than do their urban counterparts. On the other hand, rural respondents were the most likely to disagree with the anti-rural sentiment, "Rural life is monotonous and boring," suggesting that rural residents value the quality of life aspects of rural living regardless of the material conditions.



Source: 2008 Empire State Poll, Cornell University.

#### Conclusions

We find that pro-rural and anti-urban attitudes are strong in NYS despite high levels of urbanization, but these attitudes are more complex than might appear from an overall general or "global" preference question. More global attitudes towards rural or urban life can mask differences across specific questions that tap particular dimensions of the broader attitude. This suggests that these global attitude measures should be avoided in policy prescriptions and future research.

While people are rather consistent in their attitudes, with those who hold pro-rural attitudes also tending to hold anti-urban attitudes, many people appear to hold both pro- and anti-rural attitudes at the same time. This finding suggests that people have a realistic idea about limited rural opportunities while still holding positive sentiments about other aspects of rural life. Since attitudes toward rural people and communities can affect the public policy process, thoughtful research and policymaking will examine who thinks what about rural people and places, and avoid over-generalizing. •

 $^{\ast}$  All citations posted on the CaRDI website with this issue.





# rura new york minute ISSUE NUMBER 22/OCTOBER 2008

### **Gas Drilling in NYS:** Riches or Ruin for Landowners and Communities?

By **Rod Howe** & **David Kay** (Cornell University)

igh prices and new drilling technology have made natural gas recovery seem more economically attractive across a large portion of south-central New York State, part of the Marcellus Shale area, attracting energy companies from around North America. By the end of summer 2008 many NYS landowners had signed gas leases and many more had been approached to sign. Some perceive this as an exceptional opportunity for individuals and communities in an economically challenged region. Others fear dire, if unintended, environmental and social consequences. Many aren't quite sure what to think.

Natural gas has been extracted from underground sources in NYS since 1821. More than 600 new drilling permits have been applied for during each of the past two years. Most existing wells have been drilled vertically to tap reserves a few thousand feet below the earth's surface. New technologies – in particular, horizontal drilling combined with water intensive fracturing of the rock to release the gas from the shale matrix ("fracing") – could make extraction from the Marcellus Shale economically feasible. However, while there has been some horizontal drilling in NYS, the combination of hydrofracturing and horizontal drilling required to tap the Marcellus formation has not yet been permitted in our state.

Landowners, municipal and state officials, energy firms, and concerned citizens are now paying close attention. Each of these groups have a range of interests, responsibilities, and opinions. However, as new issues like this emerge into public view, it is easy

for rumor to outpace informed opinion. In order to make balanced, informed decisions, it is important that all concerns and hopes be carefully weighed and addressed. Despite the long history of gas drilling in the state, there is a general consensus that many questions posed by the proposed drilling for Marcellus gas do not yet have good answers.

In response, the NYS Department of Environmental Conservation has stated its intention to "ensure that any issues unique to Marcellus and other horizontal shale formation drilling are adequately addressed" through a new environmental review. The DEC has been further directed by the Governor to consider implications for "staff resources, existing

regulations, jurisdiction over water withdrawals, permit application fees and procedures, and legal and regulatory compliance" and to look at "ways to enhance the role of local governments in the regulatory process and compliance."

Here is a small subset of questions being regularly asked by landowners and local government representatives at the many community seminars and workshops that have been offered recently. Some questions have clear answers. Others do not.

#### **Local Government**

- · Who regulates gas drilling and water withdrawals in NYS?
- What protections can Town government provide for local watersheds and aquifers?
- What, if any, kinds of rules, restrictions, and guidelines can municipalities pass to control gas exploration?
- · What will the impact be on property taxes and assessments?
- Will our emergency vehicles be able to gain access to an accident site via the access roads or will we need ATV or snowmobiles in the winter?

#### Landowners

- How do I make sure that I'm getting the "going rate" for my area?
- What happens if I don't sign a lease?
- Do I need a lawyer?
- Can I lease my gas rights without allowing access to the surface of the land?
- If a well is drilled on my property, what impacts can I expect?"

Some questions about the extent, recoverability, distribution and value of the gas resource will necessarily remain open until drilling in this portion of the Marcellus Shale provides tangible evidence. Moreover, proprietary and other information that becomes available as drilling proceeds will not be equally available to all parties. Even when information is made widely available, questions about validity

are typical – not all people trust a given "authoritative" information source equally. Finally, even when information is accepted as valid, generally accepted goals - energy security, property rights, financial return, rural economic development, independence from foreign oil, reducing carbon emissions - may be in conflict and given different priority by different people.

There is a need for ongoing training, information sharing and public discourse. Many organizations within the Marcellus Shale region, including Cornell Cooperative Extension Associations and the NYS Farm Bureau, are fielding numerous calls. There have already been a number of informational

events targeted to landowners and a smaller number for municipal officials. Many websites provide varying perspectives on the issue. CaRDI and CCE are committed to working with knowledgeable partners to help ensure as high a level of information, discourse, and policy making on this topic as possible. For more information and links to resources on this topic, please visit the Cornell Cooperative Extension Natural Gas Leasing website at: http://gasleasing.cce.cornell.edu/



Source: Appalachian Fracture Sytems. Modified from U.S. Geological Survey sources





# rural new york minute ISSUE NUMBER 23/NOVEMBER 2008

### The Economic Significance of the Not-for-Profit Sector

By David Kay, Cornell University

any public benefits of the not-for-profit sector are commonly recognized - the provision of important community services, the enhancement of the cultural and artistic quality of life, and so on. However, the *economic* significance of the sector is not well theorized, researched, measured, or understood. Based on a recent study in New York State, the not-for-profit sector is shown to have a sizable and significant localized economic presence in addition to its broad and very real social and civil contributions.

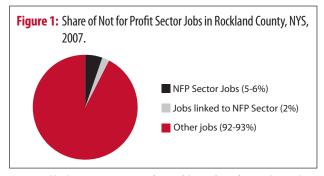
It is precisely because of traditionally presumed public benefits that qualified not-for-profit organizations (religious, charitable, educational, scientific, or literary in purpose) are granted preferred tax status by the IRS as well as by state and local governments. The Nonprofit Almanac (2007) identifies 1.4 million nonprofit organizations registered with the IRS. Collectively, they make important direct contributions to jobs and national wealth. These organizations constitute 5.2 percent of the gross domestic product (GDP) and 8.3 percent of wages and salaries paid in the U.S. as reported in 2007. When considering only the subset of not-for-profits that are public charities, these charities had revenues of \$3,587, and expenses of \$3,351, per U.S. resident in 2004.

In a recent study of New York State's Rockland County, Cornell researchers found that the not-for-profit sector had a sizable and significant localized economic presence. In September, 2007, we surveyed 208 Rockland County not-for-profit organizations. Various economic information was collected including income and employment data. These data, in combination with supplemental data available from the web and other sources, were used to estimate the sector's total size. Based on the survey, we estimated that the sector accounted for about 5-6% of all jobs in the county. When jobs that were supported through the "ripple effects" of dollars attracted into the county from elsewhere were factored into this analysis, about 7-8% of jobs in the county were estimated to be either part of or linked to the not-for-profit sector.

To all outward appearances, profit and not-for-profit enterprises may in some cases seem practically indistinguishable. In particular, there is often little difference between not-for-profit and for-profit enterprises in terms of the major factors that drive

local and regional economic impacts, like their employment and purchasing behaviors. Though the distribution of profit remains a significant, obvious difference, the profit versus not-for-profit status of many kinds of businesses - be they hospitals or day care centers, schools or grocery stores -- is more likely to create subtle than dramatic differences for local employment, wages, and purchases of inputs. In many of these cases, after all, the enterprise produces a similar service or product with similar input requirements regardless of whether it is motivated by profits. The growing tendency of certain categories of not-forprofit enterprises that are less likely to have for-profit analogues - religious and community organizations, environmental organizations, symphonies and various other cultural organizations, etc. - to sell merchandise and pursue other profit making activities serves to further blur the differences between this sector and the rest of the economy. This makes it even more important to take the economic role of not-for-profits seriously.

We believe that it is a mistake to think of not-for-profits as a group exclusively in terms of their tax advantages and social functions. Just like their for-profit cousins, not-for-profits hire workers, purchase custodial services, buy supplies from local farmers, pay for local accounting services, and so forth. Just like their for-profit cousins, the economic contributions of these services can be quantified. Results like those in Rockland County remind us that not-for-profits have important, basic and measureable economic impact on local economic development too.



Source: Rockland County: Economic Significance of the Not-for-Profit Sector, by David Kay and Duncan Hilchey. Unpublished report submitted to Cornell Cooperative Extension, Rockland County, August 2008.





# rural new york minute ISSUE NUMBER 24/DECEMBER 2008

### **Local Politics and Market Forces:** A case study of ethanol development in NYS\*

By **Djahane Salehabadi** and **Max J. Pfeffer**, Cornell University

#### What is the Issue?

In May of 2008 an out-of-state corporation specializing in ethanol production announced that it was backing out of its plan to build a plant in Upstate New York, a decision that came as both a surprise and disappointment for the economically depressed region. The project had begun in early 2007 when the company linked up with a group of local farmers trying to site a plant in their area. A previously unsuccessful attempt had left these local farmers in need of financial backing. The out-of-state corporation was, in turn, seeking opportunities to expand its operation. Collaboration between the two parties promised to be mutually beneficial; the arrangement gave local entrepreneurs access to technological and financial resources, and gave the out-of-state corporation local knowledge and connections to help them expand their business. The project promised to create jobs and establish a new market for local corn farmers. Further, ethanol is a source of bio-energy, which appeals to growing citizen energy and environmental concerns throughout the state.

Why did this seemingly 'ideal' ethanol development project fail to materialize? We explore answers to this and other questions, including: What is the relative importance of market factors and local permitting processes in developing bio-energy schemes? What are the advantages and disadvantages of locally controlled permitting for this type of development in upstate New York?

#### How was the study conducted?

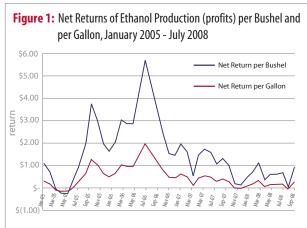
Between August 2007 and August 2008, we conducted semi-structured interviews with key informants involved with the ethanol project site selection. We interviewed executives of the out-of-state company, officials at the local development agency, officials at the local planning board and members of the planning board in the affected town. In addition, we interviewed local residents that opposed the project as well as state-level development officers.

During the interviews, we asked respondents to recount the sequence of events from their first encounter with the proposal up to the project's abandonment, and we asked interviewees why they thought the development project was unsuccessful. We also collected and analyzed documents pertaining to the ethanol development project from institutional websites, published materials and news articles.

#### **General Findings**

Our findings show that a mixture of local, market, and political conditions combined to make it difficult to site the proposed ethanol plant. Specifically, the proposed ethanol project failed for three key reasons. First, as a result of past events, the local population distrusted town officials in charge of development. The constituent's misgivings ultimately led to organized resistance in the form of a lawsuit as well as a widespread antiethanol development campaign. Second, New York's emphasis on local control amplified the impact of the existing distrust. Due to the way NYS's development process is structured, local officials, who many residents

suspected of being corrupt, were in charge of evaluating and permitting the project. This led to increased resistance to the project. Furthermore, the state's development process stipulates that public approval and local input are important and must be sought at key moments during the permitting process, affording those who objected to the project numerous occasions to stall the permitting process. Third, the drop in ethanol profitability, which was caused by a combination of dropping ethanol prices and rising production costs, rendered the project unviable (see Figure 1).



Source: Iowa Ethanol Report

#### Conclusion: Lessons Learned

This case study demonstrates that economic development is often difficult to achieve because favorable market conditions and political support must coincide for a project to move ahead. Although few development processes are alike, our case study identifies certain factors that economic developers might consider when working on a local economic development effort.

More emphasis is needed on developing the capacity of local officials to facilitate local development. Local leaders and officials must be able to elaborate and implement development strategies and to take full advantage of state and federal resources and opportunities. Leaders and public officials come from a variety of backgrounds and may not have had sufficient training to deal with complex and changing circumstances. Leaders must competently manage the development process and instill the trust of their constituents. Only then can they effectively respond to emerging domestic and global market opportunities for community and economic development.

 $^{\star}$  Please visit the CaRDI website for a full list of references. In addition, a longer report on this subject will be available in early 2009 under "CaRDI Reports".





1330E NOMBER 13/JANUARI 2000

## The Capacity of Early Childhood Care & Education in Rural NYS

By **John W. Sipple, Lisa A. McCabe**, and **Judith Ross-Bernstein**, Cornell University

#### What is the Issue?

Comprehensive early education programs can have a positive impact on children's future success in school and employment. Yet, despite the importance of such experiences to later outcomes, early education is delivered through a complex network of programs-with different settings, regulations, goals, and funding-the availability of which may differ in urban, suburban, and rural contexts. In fact, little is known about the capacity of early care and education in rural areas of the United States, and New York State in particular.

Currently, New York is one of 38 states that fund pre-kindergarten programs. With regard to child care, rural children are only two-thirds as likely as nonrural children to be in center-based care (other than Head Start). Instead, rural children are often cared for by relatives, typically in homes that are not part of any regulated system (in what is termed "informal" child care in New York State; Grace, et al., 2006). Limited research also suggests some challenges with child care in rural communities. One of the biggest challenges is that a smaller, dispersed population tends to limit the child care options available. Not only are there fewer providers and programs (especially centers) to choose from, but there are also problems with transportation due to the longer distances between home, child care setting, and workplace (Colker & Dewees, 2000).

With funding from the state Legislature obtained by the Legislative Commission on Rural Resources in 2006-2007, the NYS Rural Education Advisory Committee commissioned a study assessing these research questions:

- What is the incidence of early childhood learning program slots for children under age 5 in New York State rural counties and school districts?
- How does the number of early learning program slots relate to the population of children in rural and non-rural settings?

 What factors (e.g. space, wealth, education level) may be related to patterns of early learning programs in rural versus non-rural communities in New York State?

#### Data and Methods

The data for this study are drawn from three sources: 1) NY State Education Department; 2) NYS Office of Children and Family Services; and 3) the U.S. Census. By using multiple sources of data, this report is the first to provide a comprehensive look at the complex early care and education system in New York State with a special emphasis on rural communities. Information on key segments of the early care and education community, including child care centers, home-based family child care, state-funded pre-kindergarten, and Head Start are all included in order to provide the most complete picture possible.

#### Early care and education terminology used in this report:

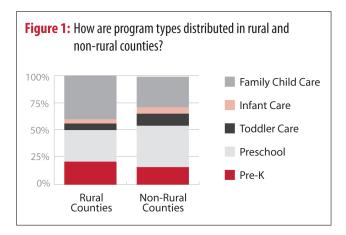
- Center-based child care (including Head Start) includes settings for three age groups of children: Infants (0- to 18-months), Toddlers (18 months to 3 years); and Preschoolers (3- to 4-year olds). Individual programs may include slots for all three age groups or may specialize in only one or two.
- Pre-kindergarten includes state-funded programming for 4-yearold children. Until the 2007-2008 school year, pre-kindergarten in New York State included two state-wide programs: Targeted and UniversalPre-kindergarten. Data for this report includes 4-year-old children in either program.
- Family child care refers to care for children under age 5 in homebased, registered settings.

#### Findings:

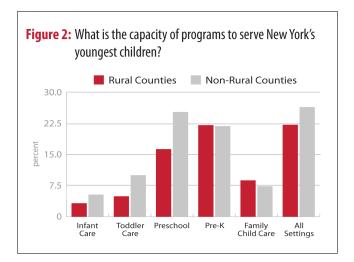
• Rural and non-rural settings offer the same program types, however the distribution varies (see Figure 1). Family child care and public pre-kindergarten

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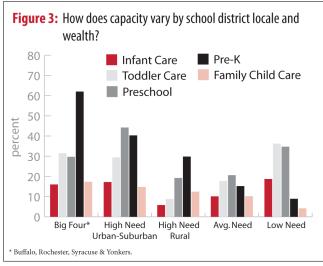
are slightly more represented in rural counties while slots for infant, toddler, and preschool center care are less represented in non-rural counties.



• In both rural and non-rural counties, the number of slots available does not come close to matching the number of children in a region whose families may participate in these programs (see Figure 2). In rural counties, slots only cover 22% (about 1 in 5) of all children. In non-rural counties this percentage is 26% (about 1 in 4).



• Regions served by high need rural school districts have substantially less capacity in all program types than do those living in areas served by high need urban and suburban school districts (see Figure 3). The more urban locations have two to three times the capacity for infants, toddlers, preschool, and pre-kindergarten participants.



- Districts with more square footage per student, higher rates of student poverty, or larger district enrollment are significantly more likely to offer pre-kindergarten than those districts with less space, higher wealth, and lower enrollment.
- Even after controlling for space, wealth, enrollment and adult education level, the high need urban and suburban school districts are two-and-a-half times more likely to offer prekindergarten than high need rural school districts.

#### **Conclusions**

This is a study of the capacity of communities across New York State to serve the youngest segment of society in early education programs. In particular, this study assesses the current state of regulated care and education in rural portions of New York State. This report offers considerable evidence of variation in the patterns of early-child care and education between rural and non-rural settings. These differences are at both the county and school district level with less capacity for services often evident in rural communities when compared to non-rural areas of NYS. This difference in education capacity is especially noticeable when comparing state-funded pre-kindergarten. Such programming is more than two-anda-half times more likely in high need urban/suburban districts when compared with their low-income rural counterparts. New York State must recognize these patterns and engage in action to reconcile these differences in capacity to better serve the youngest citizens of the state.

\* For references and the full paper, please visit the CaRDI website.





133UE NUMBER 14/FEDRUART 2000

## The Role of Cornell University in Training Local Government Leaders

By **Rod Howe**\*, Cornell University

#### **Building Capacity by Training Local Government Officials**

Cornell's Community and Rural Development Institute (CaR-DI) views the training of local government officials as a key strategy to help New York communities meet their current challenges. Community and economic development in NYS in the 21st century requires educated leaders with the skills to develop and implement sustainable development strategies. Successful leaders foster strong networks and partnerships, pride of place, and solid citizen engagement. Skillful leaders know how to work with Federal and State government agencies and non-governmental entities in an era of enhanced regional collaboration. Additionally, municipalities benefit from policymakers who understand and can make the most of the interrelationships among issues.

CaRDI's local government training efforts are part of Cornell's commitment to serving New Yorkers through university-community linkages. CaRDI is committed to strengthening community leadership through an organized program of research-supported training, working in consort with Cornell Cooperative Extension (CCE). The training programs for local officials help CCE implement its own overarching mission: improving the lives of New Yorkers by "putting scholarship and local knowledge to work."



Graduates of the Dennis A. Pelletier County Government Institute, a joint training program conducted by the NYS Association of Counties (NYSAC) and Cornell University.

## Universities and Capacity Building for Community and Economic Development

Substantial literature on research universities' work with local government officials and community leaders demonstrates

that institutions of higher education are "uniquely qualified to discover and develop new knowledge; to fill knowledge gaps in their communities; to provide economic, social, cultural, and organizational trend analyses; to educate and train individuals; and to convene groups concerned about informed, rational discourse on issues of common concern."

"NYSAC and Cornell University have designed a comprehensive program for county elected and appointed officials, the Dennis A. Pelletier County Government Institute, that will make us all more knowledgeable of the issues and more prepared to engage in civil and constructive dialogue on the challenges we face."

-Stephen J. Acquario, NYSAC Executive Director

Universities can help elected and appointed officials by aligning research and outreach toward community and economic development. For example, Cornell University collaborates with municipal leaders to encourage new interdisciplinary efforts, foster innovation, and "grow" entrepreneurs. Current economic development research points to the importance of industry/governmental/institutional/educational "clusters" in promoting local development. This research highlights the importance of Cornell's and other universities' enhanced delivery systems that bring educational programs and research-based information to communities and to regions to support their development.

Nationally, Land Grant Universities and their affiliated state Cooperative Extension systems, increasingly provide training for public officials through the use of distance learning technologies. The Morrill Act of 1862, which established the land grant colleges and universities across the U.S., was a timely and effective economic development strategy for its time. Ron Seeber, Vice Provost for Cornell's Land Grant Affairs, describes Cornell's enduring land grant mission as creating and applying "knowledge with a public purpose." The training programs cover a wide range of topics and are geared not only to elected and appointed local officials, but also to municipal professional staff who provide leadership and technical know how to their communities. Cooperative Extension systems

<sup>1</sup>Walshok, M.L. 1997. Expanding Roles for Research Universities in Regional Economic Development. New Direction for Higher Education, no. 97, Spring 1997.

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typically provide training to elected officials that enhance their understanding of their community dynamics, and the internal and external forces that affect them. Training sessions start with the reality that community issues are continually changing, frequently controversial, and often complex. Universally recognized "right" answers are rare; nor does "one" expert have all the answers.

#### **Local Government Officials Seek Training**

Cornell's 2000 Survey of New York Local Chief Elected Officials indicated that an increasing number of local elected officials actively seek "training opportunities that address the skills and practices that are unique to leading a municipality, particularly practices and skills that improve performance" in overall management and policy formation.<sup>2</sup> The survey results also suggested the need for applied research to inform educational outreach in areas such as state aid and revenue reform, capital planning, economic development, planning and land use management, community strategic planning, and communication and leadership skills.

"For a long time, I have been an advocate for education – both for professional development and personal development. Education is one of those things that, once you acquire it, no one can take it away from you; that is why I call it an investment."

-Eric Denk, graduate of the Cornell Municipal Clerks Institute, and Clerk of the Broome County Legislature

Offering training based on applied research can help communities face rapid and profound social and economic change, often with leaders who have relatively little governance experience. Leaders and public officials come from a variety of backgrounds and may not have had previous access to training related to their public roles. High turn-over among local leaders can adversely affect the effectiveness and continuity of public management. Training can mediate this problem because so many officials are part-time and lack formal training in governance.

Experience and research suggest that well-trained local government officials know how to use tools and resources to move their communities toward program implementation, benchmarking and evaluation. In essence, trained leaders are better at leveraging limited resources to help their communities achieve their goals. Communities that are effective in conducting such basic functions as fostering civic participation, data gathering and analysis, program implementation and evaluation also have a competitive advantage in applying for state and federal grants.

#### CaRDI's Training Approaches

CaRDI responds to community leadership needs by providing a diverse and integrated portfolio of training opportunities to local government officials. Topics such as climate change, renewable energy, land use, and economic development receive a great deal of media attention, but these issues are intertwined and operate at multiple scales; a community or region cannot successfully consider them only as single or local issues.<sup>3</sup>

## CaRDI's approach to training promotes informed decision making, collaborative partnerships, and innovation. Hallmarks are:

- Training based on applied research and analysis covering
- Community dynamics
- Historical, cultural, community contexts
- Community economic base
- The interplay between economic sectors
- Interpretation and use of socio-economic and demographic data
- Collaboration with regional and state organizations and agencies
- Promotion of peer-to-peer/community-to-community learning and the exchange of best practices
- Support of mechanisms that enhance regional coordination and cooperation
- Building from community and regional assets

The importance of offering frameworks to help manage those interconnecting issues has become an important feature of CaRDI's training. One of the frameworks that resonates with policymakers is the Total Development Paradigm, also known as the Layer Cake Model. This model underscores that community development is broader than economic or industrial development and both distinguishes and highlights the interdependence of various components, or layers, of communities.

It is not enough to offer training and expect that it will automatically increase the capacity of local leaders to improve their communities. More attention needs to be given to building support networks, and elucidating the interdisciplinary nature of community issues. CaRDI, as part of Cornell University and the land grant university network, is committed to developing new training models that are based on partnerships that will create platforms for bold and innovative strategies for livable communities and revitalized regions across New York State.

Note: Please visit CaRDI's website for further information on the Cornell Municipal Clerks Institute, the Dennis A. Pelletier County Government Institute, and the Rural Learning Network of Central and Western New York.

\* Rod Howe is the Executive Director of CaRDI, and an Assistant Director for Cornell Cooperative Extension.



<sup>&</sup>lt;sup>2</sup> Hattery, Michael. 2000 Survey of New York's Local Government Leaders: Policy Issues, Training Needs and Technology Use. Management & Finance Report Series, Number 16. Cornell Local Government Program.

<sup>&</sup>lt;sup>3</sup>The need for integration across functional areas was a key theme that emerged from the Rural Vision Project CaRDI conducted in 2006, in collaboration with the NYS Legislative Commission on Rural Resources.



## Management Activities of Private Forest Landowners in New York State\*

by Shorna Broussard, Nancy Connelly, Tommy Brown, and Peter Smallidge, Cornell University

#### What is the Issue?

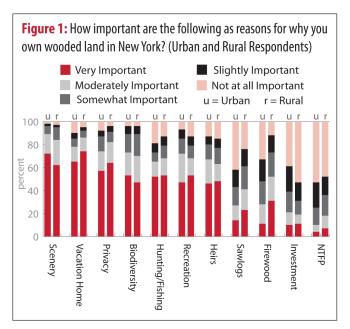
Over sixty percent of the land in New York State is forested. Most NYS forest land is privately held, rather than under state or federal control. Decisions made by the more than a half million individual and family owners (controlling 14.2 million acres of forestland in the state) collectively shape the landscape and the benefits that it provides. Some of the many social, ecological, and economic benefits provided by private forestlands include recreation, forest products, wildlife habitat, and aesthetics. Private individual and family forestlands are an essential component of New York's natural landscape. It is important to understand not only what forest management activities are being undertaken and planned, but also the diversity of perspectives of both rural and urban private forest owners, since those perspectives influence management decisions and ultimately the land.

#### **Data and Methods**

To explore the views and decisions of private individual and family forest owners of New York State, a questionnaire was mailed to 2,200 forest owners, and a telephone survey was conducted with approximately 50 rural and 50 urban non-respondents to assess whether there was any response bias between responders and non-responders. The rural sample consisted of 1,100 forest owners who resided in the same county as their property and whose property was in a county with less than 150 persons per square mile ("rural private forest owners" or "rural owners"). The urban sample consisted of 1,100 owners who resided in different counties than their property and who lived in a county with over 500 persons per square mile ("urban private forest owners" or "urban owners"). The samples were drawn from the 2006 Assessment Rolls of the NYS from the Office of Real Property Services and included parcels of 25 acres or more and property classified as likely wooded and not in public or industrial ownership. When the term "significant" is used to describe the results in this document, this term denotes a statistically significant difference between the urban and rural respondents at the p<.05 level.

#### Why do forest owners own their land?

Rural and urban private forest owners view their land and the reasons for owning similarly in terms of motivations but differently in terms of the intensity of that opinion. Urban forest owners identified most with scenery, having woodland as part of their home, vacation home, or farm, privacy, protecting biological diversity, and hunting or fishing. Rural forest owners indicated that owning forestland was important to them because it is



part of their home, vacation home, or farm, and that they valued privacy, scenery, and hunting or fishing opportunities the land afforded them (see Figure 1).

#### What management activities are most prevalent?

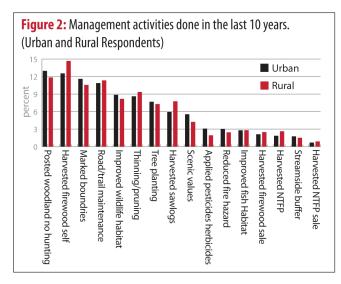
When asked what forest management activities they had undertaken in the last 10 years, urban forest owners were most likely to report posting their land for no hunting, harvesting firewood for their own use, marking the boundaries of their property, conducting road and trail maintenance, and improving wildlife habitat. Rural owners reported harvesting firewood for their own use, posting the land for no hunting, maintaining or repairing roads and trails, marking the boundaries of their land, and thinning or pruning trees (see Figure 2). Improving scenic value was the least frequently cited management activity for both rural and urban forest owners. Rural owners were significantly more likely than urban owners to have undertaken cutting firewood, thinning, and timber harvesting compared to urban forest owners.

#### What are owners' plans for the next 5 years?

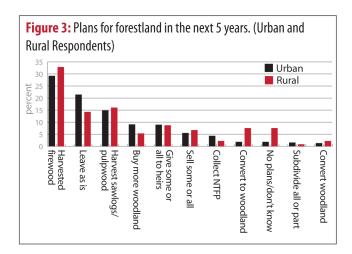
When asked about their plans for the next 5 years, harvesting firewood was the most frequently cited activity for both groups of owners, but particularly for rural owners. Rural owners were also significantly more likely to include conducting commer-

<sup>\*</sup> Please see Connelly et al. 2007 for a full reporting of the survey methodology and results (full report can be accessed at www.dnr.cornell.edu/hdru).

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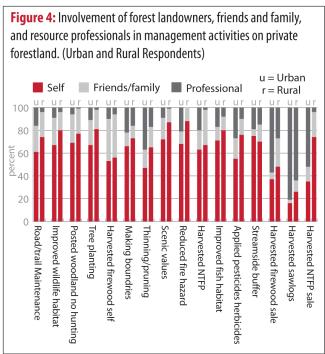


cial timber harvests and collecting non-timber forest products (NTFP) in their upcoming plans compared to their urban private forest owner counterparts. Urban dwelling forest owners were significantly more likely than rural owners to indicate a "hands off" or laissez-faire approach to management. Leaving the land as is was in the 5 year plan for over 38% of urban forest owners and 31% for rural owners. Also, urban residing forest owners were significantly less likely to have any plans or not know what their plans are (23%) compared to rural forest owners (16%). Selling their forestland was not in the 5 year plan of most private forest owners, whether urban (5.5%) or rural (3.6%). Of note is that almost 9% of both urban and rural residing forest owners plan to pass their land on to heirs in the next 5 years.



#### Who is involved in the management activities?

When undertaking forest management activities many forest landowners —whether rural or urban—are very self reliant, but some rely on the help of family and friends, and professionals with the notable exception of timber harvesting (see Figure 4). Thinning is another activity for which rural owners enlist the aid of a forestry professional. Urban residents rely on professional involvement for a broader range of management activities, while rural private forest owners indicate more self reliance. Those



landowners who did not work on their wooded property when they desired to do so identified the lack of time, lack of equipment, expenses, their physical health, and lack of knowledge as factors.

#### Conclusions and Policy Implications

Many private forest landowners see value in managing their forestlands. However, many landowners do not feel that professional assistance is needed for most of the management activities other than timber harvesting. Professional foresters are trained and can provide assistance to forest landowners in managing their land sustainably for a variety of outcomes including timber, recreation, and wildlife. However, many management decisions take place without such professional guidance—decisions which can affect the viability and sustainability of forestlands in New York State. When forest owners act without adequate knowledge and awareness of the environmental and ecological impacts, the sustainability of forestland is threatened. Those who deliver professional assistance and services to forest owners must focus on addressing the barriers to owners seeking professional assistance, appealing to ownership motivations, and providing guidance on management activities that include timber harvesting, but also focus on wildlife, recreation, and scenery.

The impending turnover in forestland ownership also has implications for the viability and existence of forestland. Approximately 9% of landowners plan to pass their land on to heirs in the next 5 years, the mean age of respondents is nearly 60 years, and many forestland owners are retired. Previous research has shown that the views of forestland differ between current owners and their offspring. As years pass, a new cadre of forestland owners, many of whom may have had little or no involvement in the management of forestland will enter into such ownership and begin making decisions that have implications for the condition of forestland across New York State. This turnover in ownership, coupled with the need to deliver professional assistance to existing and future forestland owners presents a considerable challenge. •





## **Addressing a Moving Target:**Poverty and Student Transiency in Rural Upstate New York

by Kai Schafft, Penn State University, and Kieran M. Killeen, University of Vermont

#### What is the Issue?

Student transiency refers to students making unscheduled and non-promotional school changes from one school or school district to another, most often as a consequence of residential change. Often described as "bouncing" or "ping-ponging," transient school children tend to be disproportionately low income, low achieving, high need students who may, over the course of several years, withdraw and re-enroll in the same set of school districts multiple times (Schafft 2005; 2006)1. High levels of mobility, especially when associated with social and economic distress, can pose significant social and academic problems, affecting students, families, schools, and communities (Killeen & Schafft 2008). Mobility in the rural context may involve particular challenges including additional records transfers across districts, heightened probability of interrupted student services, and greater academic disruption as students encounter varying curricula and academic scheduling.

We often assume that families move in response to opportunity at the place of destination, such as a more desirable neighborhood or school district, or to be closer to a new job. However, when economically distressed families move, it is often not in response to the "pull" of opportunity. Rather, it often comes as a consequence of employment instability, family disruption, and, in particular, problems with housing availability, affordability and safety that act to "push" families out of a residence. These types of moves occur more frequently in communities experiencing economic downturns, especially those characterized by shortages of adequate, affordable and safe housing and limited labor market opportunities (Fitchen 1995; Schafft 2005). Student transiency can be pronounced with some districts experiencing 25 percent or higher turnover rates (Schafft 2005). This means that over the course of an academic year a district can expect that 1 in 4 students will make an unscheduled entrance to or exit from the district.

#### Data and Methods

We explored the causes and consequences of student transiency through a mixed methods case study of three predominantly rural Upstate New York school districts<sup>2</sup>. The qualitative data were gathered from 30 interviews with teachers and administrators across the three districts. The quantitative analysis was based on two years of student-level administrative record data including student demographics and family structure of

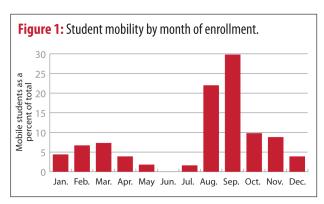
<sup>1</sup>For a full copy of the 2007 Condition Report which includes all references (with the exception of footnote 4), please visit the Education Finance Research Consortium's Website at http://www.albany.edu/edfin/.

<sup>2</sup>This research was funded by the State University of New York's Education Finance Research Consortium.

mobile students, date of entrance and/or withdrawal from the district, district of origin and/or destination, schools attended in the last 4 years, and reasons for school change. These data were supplemented in two of the districts by data maintained in a School Master Database system as well as by student achievement data for grades 3-12 obtained through the local Board of Cooperative Educational Services (BOCES).

#### Findings

Our study revealed significant levels of student movement and associated challenges. With annual turnover rates between 18% and 26%, these districts experience pronounced levels of student mobility<sup>3</sup>. The majority of in-migration or new student enrollments occur after the start of the school year, with half occurring on a fairly even basis from mid-September through the end of the school year (see Figure 1). Since the frequency of new student enrollment varies considerably over a calendar year, we characterize students that enroll between May 31st and September 20th as movers. Those that arrive after September 21st of a given year are termed late *movers*. This categorization proves to be a very useful way to examine variability among mobile school children.

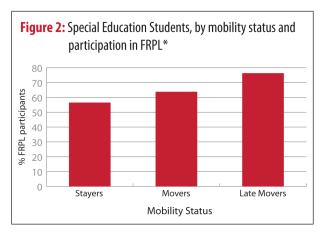


Mobile students, particularly late movers, have problematic social and academic outcomes relative to their non mobile peers. Disciplinary and attendance patterns for mobile students are weaker relative to non-mobile students. Test score evidence generally, but not at each grade level, suggests a relationship between mobility and reduced test scores. Specifically, end of grade examinations in mathematics, across Grades 3-8, show

<sup>&</sup>lt;sup>3</sup>An earlier study of student transiency in Upstate New York found that average transiency rates in persistently poor districts were about 15 percent as compared with 9 percent in wealthier districts (Schafft 2005).

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reduced outcomes associated with mobility. Educators report a high proportion of mobile students in need of special education services. Indeed more than three-quarters of students eligible for free or reduced priced lunch (FRPL - is one indicator of poverty status) who enroll after September 20th (late movers) also receive special education services (see Figure 2).



\*Relative poverty status determined by participation in the (national) Free and Reduced Lunch Program (FRPL) which determines eligibility for families at or below 185% of official poverty levels.

#### Causes of high mobility in rural areas

While teachers and other district staff often have incomplete knowledge of the circumstances surrounding each unscheduled student entrance into or exit from a district, they do have detailed local knowledge about the contexts in which families live and how this might affect school mobility. Consequently district staff are able to offer important insights into the broader underlying causes and the immediate and longer term consequences of student mobility. Poverty, family related instability and housing insecurity were all viewed by interviewees as important causes of student transiency.

A high school teacher noted,

"Overall the economic status in this community is not very high. It just seems the economic status and family breakdown is kind of like a combined picture. I think that what ends up happening is families are not together anymore. The whole environment has changed. They go back and forth from one parent to another and the parent moves from one community to another."

While family instability was noted as the primary cause of student movement, unaffordability or inadequacy of housing was described by district respondents as another important cause of movement. An elementary school principal explained,

"We get families that move out of the district because their homes were condemned. I had a family last year with about five different children. Their house was not livable. They found a place up in (a neighboring district). They were driving the kids in, in the back of a pickup and dropping them off out in front. We were aware that they were doing this, but they were also in the process of trying to find another place to live in the community."

Highly mobile students in this study are largely untargeted and underserved as a student population with special needs and only rarely identified as migrant or homeless. Further, most movement is geographically bound, occurring both within districts (and hence not resulting in a school change, but contributing nonetheless to a child's overall sense of social stability and continuity), and across districts, most often to adjacent and nearby districts.

#### Consequences of high mobility

Socially and economically unstable home environments place students at a pronounced social and academic disadvantage by disrupting educational experiences and reducing the commitment that mobile students have to both the school in which they are enrolled and their education in general. High stakes assessments associated with the federal No Child Left Behind legislation further complicates the picture. Public ratings of schools mean that teachers and district personnel face pressure to show acceptable student performance levels, raising concerns about the effects of low-achieving highly mobile students on test scores. In smaller rural schools this may take on a magnitude not found in larger, urban schools (Goetz 2005)4, and teachers find that they may be cast suddenly in the spotlight because of low scoring students. Teachers in our study reported concerns over their ability to get a student caught up, especially if the student is under-performing academically. However, some personnel may also be less willing to invest time and energy in the welfare of mobile children because of the perceived (and often actual) risk that they will move on again shortly.

#### Conclusion

While student transiency is an issue with very immediate educational implications, its root causes are beyond the typical purview of educators. Rather, the precipitating causes of mobility reflect the multiple social and economic stressors faced by poor families in New York's rural communities. Public policy, especially connected with educational assessment, must recognize this so that schools are not sanctioned due to the low achievement of economically displaced and residentially mobile students, and, secondly, so that students are not stigmatized for their mobility. The NYS Department of Education may wish to consider partnering with its Boards of Cooperative Education Services in an effort to more systematically document and address student movement. Our research strongly suggests that integrated community-level interventions involving coordination not only across school districts, but new and strategic collaborations between schools and a variety of community-based organizations such as housing and social service agencies should be considered. In sum, student transiency needs to be understood not as simply an educational problem, but rather a phenomenon that is symptomatic of a much deeper and broader set of social and economic insecurities facing many of rural Upstate New York's communities.

<sup>4</sup>Goetz, S.J. (2005). Random variation in student performance by class size: Implications of NCLB in Pennsylvania. *Journal of Research in Rural Education*, 20(13), 1-8.





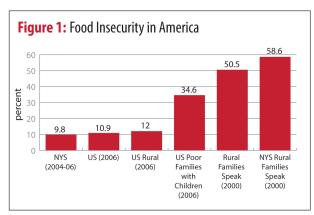
## Food Insecurity in Rural New York State

By Christine Olson and Megan Lent, Cornell University

#### What is The Issue?

In 2006 10.9% of U.S. households reported experiencing food insecurity at some time during the year, according to the annual U.S. Household Food Security Report from US-DA's Economic Research Service. In this brief we examine the characteristics of food insecure families, the factors that keep families food insecure, and the relationship between health and food insecurity, particularly the hunger-obesity paradox.

Food insecurity is defined as "the limited or uncertain availability of nutritionally adequate and safe foods, or limited or uncertain ability to acquire acceptable foods in socially acceptable ways" (Anderson 1990\*). The three-year average rate of food insecurity in New York State, from 2004-2006, was 9.8%. Nationally, in 2006 food insecurity was more prevalent in households with children (15.6%) and households with income below 185% of the federal poverty line (27.3%). Poor households with children had particularly high levels of food insecurity (34.6%). Food insecurity was also more common in rural areas than in metropolitan areas (12.0% vs. 10.7%). Research has shown that food insecurity is related to decreased food and nutrient intakes (Kendall, et al., 1996), increased risk of obesity in women (Olson, 1999), compromised cognitive achievement in children (Alaimo, et al., 2001), and decreased ability to follow medically prescribed diets in elders and others with chronic disease (Nelson, et al., 1997).



Sources: USDA's annual food security assessment: Nord M., Andrews M., & Carlson S. (2007) Household Food Security in the US. 2006 (Economic Research Report 49). ERS, USDA 2007; and Rural Families Speak Project, 2000-2003.

#### The Rural Families Speak Project

The Rural Families Speak Project (also known as Tracking the Well-Being and Functioning of Rural Families in the Context of Welfare Policies) is a multi-state, longitudinal study of rural, low-income families in the United States. There were 414 low-income, rural families across 14 states who participated in Rural Families Speak. In New York State, 29 families from two rural counties were interviewed once a year for three years, from 2000-2003. Questions were asked of the female head of household in each family relating to household composition and income, education and skills, transportation, health and well-being, and food security. All families who participated had household incomes below 200% of the federal poverty line, and at least one child less than 13 years of age living in the household.

#### Food Insecurity in the Rural Families Speak Project

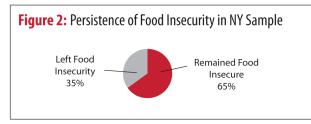
Of the 414 families interviewed in the Rural Families Speak project, 50.5% were food insecure during the first year of the project. In the New York State sample, a somewhat larger proportion, 58.6% (17 of the 29), were food insecure during the same period (see Figure 1). Nationally, food insecurity was a fairly persistent condition with 57.1% of initially food insecure families remaining so across the study period. By the final year of the project, 11 of the 17 (64.7%) initial food insecure New York families were still food insecure. Only six families, or 35.3% of those initially food insecure, became food secure over the course of three years (see Figure 2). Food insecurity is a persistent condition for a majority of these rural, low-income families with children.

#### What Keeps Families Food Insecure?

Several factors have been identified in the multi-state data set of the Rural Families Speak project as being related to food insecurity. These include:

- Lower levels of food skills (shopping for bargains, comparing unit prices, preparing meals) and financial management skills held by the mother: While food and financial skills were high in this sample, 83% of those who were classified as having a low skill level were food insecure, compared to only 42% who had a high level of skills.
- Higher levels of depressive symptoms in the mother: In the NY sample depressive symptoms were related to remaining food insecure throughout the three-year study. In these families, depression interfered with the ability to maintain employment (Lent, et al., 2008).

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Source: Rural Families Speak Project, 2000-2003.

- Difficulty paying for medical care: Families who reported having difficulties paying for medical expenses were three times more likely to be food insecure than families who did not report problems paying for medical care.
- Less than a high school education among non-White participants: Among non-White participants, having some higher education beyond high school was associated with less likelihood of being food insecure compared to Whites and non-Whites with a high school education or less.
- *Not owning a home*: Families who rented their homes as opposed to owning were greater than three times more likely to be food insecure (Olson, et al., 2004).

#### Food Insecurity and Health: The Hunger-Obesity Paradox

Studies have shown that being overweight or obese is more prevalent among women who are food insecure than women who are food secure. What is causing this seemingly paradoxical relationship? Interviews with the New York State women in the Rural Families Speak project provided evidence that growing up in a poor or food insecure household can have long-term effects on eating patterns and body weight. Indeed, 80% of the women who grew up in low SES households were overweight or obese when this project began, compared to 40% of those who grew up in higher SES households.

A variety of poverty-related conditions influence eating patterns for low income women. Cyclical periods of food scarcity and abundance caused by waiting for paychecks or dispersal of food stamps created binge-like eating behaviors. Rural isolation coupled with lack of resources for transportation created boredom-induced eating and barriers to physical activity. Factors identified among our project participants that contributed to being overweight or obese include:

- Disordered eating patterns. Food insecure participants reported changing their eating habits according to the household food supply, which rose and fell with the arrival and depletion of paychecks and food stamps. Participants who had disordered eating patterns were almost three times as likely to be overweight or obese compared to those who did not report symptoms of disordered eating (72.7% versus 25%).
- *Emotional attachments to food*. Six participants described out of control eating habits, bingeing, or obsessing about food. Five of these participants described periods of food scarcity during childhood, indicating that even early life experiences with food insecurity can lead to disordered eating patterns.

- **Boredom**. Some participants described eating as a result of feeling lonely or bored. This was heightened by transportation problems, winter weather, chronic health conditions, unemployment, and geographic and social isolation.
- Transportation difficulties were twice as common among women who were overweight or obese as those who were normal or underweight. When transportation was a problem participants generally spent their days at home, usually located outside the population center and along highways or other roads with no sidewalks or streetlights. The women who lived in remote areas of the countryside were less active in their daily lives than those who lived in or moved to village centers (Bove & Olson, 2006 and Olson et al., 2007).

#### What Are the Policy Implications?

- Food insecurity was very common in this sample of rural, poor New York State families with children, with a prevalence of 58.6%. Furthermore, food insecurity persisted over three years for the majority of these poor rural families with children in New York (65%) and nationally (57%). Current approaches are not moving families closer to the Healthy People 2010 Objective of a six percent national prevalence of food insecurity. Clearly something more and different needs to be done.
- The American Dietetic Association calls for a systematic and sustained action to address food insecurity. Ill-health, both physical and mental, and difficulty paying for medical care (if it is available) are major contributors to the ecology of food insecurity in rural areas. Coherent national and state-level health policies that recognize the unique nature of delivering comprehensive, quality health care to all families in a rural setting are needed. Nutrition education programs that build families' food and financial management skills, and Federal Food and Nutrition Assistance Programs such as Food Stamps, WIC and School Meals should be strengthened and the benefit levels increased, as part of a comprehensive strategy to address food insecurity in rural America.
- Multi-generational and severe poverty in rural America are barriers to achieving food security. Significant investments are necessary to strengthen human capital, social connections, and physical infra-structure (particularly transportation systems) in rural areas. Economic opportunities that allow families to earn a living wage in rural America are needed so families can escape poverty and achieve food security.
- The effects of food insecurity, especially on children, may last a lifetime and may appear to be paradoxical, at least on the surface. The evidence suggests that for some women, the roots of obesity stem from childhood experiences of food insecurity. Ready, steady access to sufficient, nutritious food across the life cycle (food security) appears to be an important component of obesity prevention efforts.



<sup>\*</sup> All references are available on the CaRDI website with this publication.



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## **Retirement Migration in the Countryside**

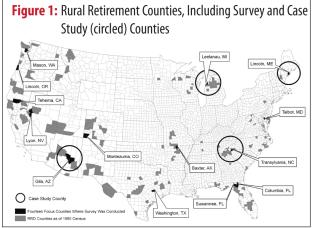
By Nina Glasgow and David L. Brown, Cornell University

#### What is the issue?

Population aging, coupled with the residential mobility of large numbers of older Americans, is having profound impacts on many communities across the country. Almost 10 percent of Americans aged 60+ moved from their county of residence between 1995 and 2000, with a disproportionate share moving to rural communities. This can have a significant effect on destination communities that extends well beyond its impact on overall population growth, shaping community needs, demands for goods and services and economic opportunities, as well as patterns of consumption, lifestyles and social relationships. Our research provides an assessment of factors associated with the development of rural retirement destinations, and of communitylevel impacts linked with attracting older in-migrants. We examine the social and economic dynamics of older in-migration, the process by which older in-migrants establish social relationships in their new communities, and the impacts of their social integration (or lack thereof) for their health and well being.

Between 1995 and 2000, 274 nonmetropolitan counties in the U.S. experienced net in-migration rates of 15 percent or higher among persons ages 60+. The USDA designated those counties as rural retirement destinations (RRD), and we use this categorization in our research as well.<sup>1</sup> As might be expected, most RRDs are located in the South and West, but over one quarter (75 of 274) are in the Midwest (Figure 1). Rural retirement destinations are also found in scattered areas of the Northeast.

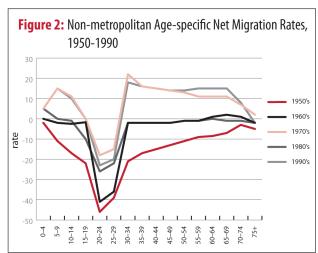
About 12 percent of Americans and almost 15 percent of those residing in rural counties are presently ages 65+, and this share will in-



Source: Cornell Retirement Migration Project

<sup>1</sup>Counties were classified as rural retirement destinations by USDA's Economic Research Service, if they had 15 percent or higher net migration at ages 60 and above between 1995 and 2000. In our research, we focused on "naturally occurrina" retirement communities as opposed to age segregated. comprehensively

crease to about 20 percent as the Baby Boom advances to retirement age. If new cohorts of older persons maintain the migration behavior experienced by current retirees, older in-migration to rural areas will persist into the future. This seems likely, given the fact that nonmetropolitan areas have experienced net in-migration at ages 60+ during three of the last five decades, with the rate of in-migration at these ages being particularly high during the rural growth decades of the 1970s and 1990s (Figure 2). In fact, rural retirement destinations are one of the only types of nonmetropolitan counties to experience consistent population growth during the last 30 years.



Source: Johnson and Cromartie (2006)

#### How was the study conducted?

We used a multi-methods approach to examine the micro and macro aspects of retirement in-migration. We conducted a two wave panel survey in 2002 and in 2005 to examine how older in-migrants become socially integrated in rural destination communities. Our survey was administered in 14 RRDs spread across regions of the country (Figure 1).2 We collected data from matched samples of in-migrants who were ages 60+, and longer term residents who were in the same age group. Our survey included 788 respondents at wave 1 and 603 respondents at wave 2. An approximately equal number of in-migrants and longer-term older resident respondents were interviewed in each county. The survey included a full battery of questions about respondents' social relationships, organizational participation, migration experience, health, and socioeconomic and demographic status. We

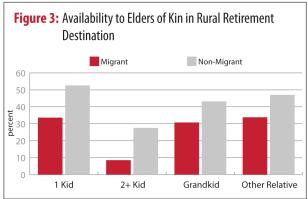
<sup>2</sup>Our first wave was administered before USDA released the list of RRDs based on the 2000 census. Accordingly, we selected our survey counties from the list of 190 RRDs based on the 1990 census. If we had selected our survey sites randomly, most of them would have been in the Southeast and Southwest. But we wanted to examine older in-migration in the diversity of rural contexts in

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used both county-level census data and in-depth case studies to put survey respondents in a macro-level context. Case studies in four selected survey RRDs, one in each major region of the country, were conducted to examine how older in-migration was affecting destination communities.<sup>3</sup> We interviewed more than 60 public officials, business owners, service providers and organizational leaders while also conducting face-to-face interviews with 6-7 older in-migrants in each community who had previously responded to both waves of our survey.

## Are older in-migrants socially isolated in destination rural communities?

Our concern that persons who move at older ages might be socially isolated was unfounded. Our survey showed that older in-migrants became quickly involved in their new communities. They were almost as likely to be socially integrated as similarly aged persons who had lived in RRDs for over 20 years. In-movers have similar levels of social involvement in both primary and secondary realms. We found that over one-third of older in-migrants had at least one adult child living within a one-half hour drive of their new home, while slightly more than 50 percent of longer-term older residents did (Figure 3).



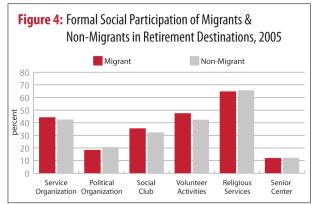
Source: Cornell Retirement Migration Survey, 2005.

Moreover, older in-migrants and non-migrants were equal in the frequency with which they visited friends and neighbors (1-2 times per week). Within 3 years of moving in, more than one of every three in-migrants was involved in at least one local organization. And by the second wave of our survey, in-migrants were even more likely than longer-term older residents to participate in service, social and volunteer activities (Figure 4). Older in-movers are active in a wide range of social, civic, religious and service organizations, and they are especially likely to volunteer. In fact, community leaders reported that through their labor, technical expertise, and financial contributions, older in-movers are a driving force in community activities and organizations.

## What are the community-level costs and benefits associated with older in-migration?

While many studies have examined the economics of retirement migration, few have considered the broader range of social impacts of older in-migration on communities. The local leaders we interviewed spoke of the positive impact on the construction and real estate market. They observed that in-migrants provide financial and technical assistance to a wide array of civic endeavors, and that they

<sup>3</sup>These case studies were conducted in Lincoln County, Maine, Transylvania County, North Carolina, Gila County, Arizona, and Leelanau County, Michigan.



Source: Cornell Retirement Migration Study, 2005.

invigorate the arts and cultural scene. Some benefits of older in-migration, however, were also associated with costs. Rising real estate prices, for example, reduced the supply of affordable housing. Volunteering reduces public-sector costs, but it may diminish the demand for paid professional workers. Older in-migrants who take positions of cultural leadership are sometimes insensitive to traditional ways of doing things and may try to impose their tastes and preferences on the community. Older in-migrants who become politically active may compete for power with the more established leadership.

Contrary to the *developmental theory of older migration*,<sup>4</sup> which predicts that older in-migrants will leave amenity rich RRDs as they advance in age, become ill or disabled, lose their spouse, and/or have to relinquish their driver's license, those with adult children living nearby are less likely to move away – and over 30 percent of older in-migrants in our study have adult children residing nearby. We believe they are likely to remain in the RRD after their contributions to the community diminish in relation to their costs.

### How communities can maximize the opportunities and minimize the costs

Older in-migration should not be seen as a "pensions and care issue" or as a panacea for strapped rural economies, but rather as a source of both challenges and opportunities. With thoughtful planning, older in-migration can benefit rural community development. Specifically, we recommend the following:

- Communities should promote an inclusive environment that encourages high levels of social participation among older residents, which contributes to productive aging and supplies volunteer labor and other types of support to community organizations and activities
- Community decision-making processes should be open and inclusive so that all voices are heard when the public agenda is established and when policy actions are taken. In-migrants' needs and opinions must be balanced with those of longer-term residents.
- Community planning must engage both shorter- and longer-term concerns. While older in-migrants have relatively few immediate needs, they may require public transportation, health care and other forms of assistance in the future. As communities take on a more diverse age composition, this will result in a complex mix of costs and benefits to be planned for. The "grey gold" that older in-migration represents in the perceptions of some public officials and community leaders in RRDs needs to be considered from a broad vision of the community.

<sup>4</sup>The developmental theory of older migration was proposed by Litwak and Longino (*The Gerontologist*, Vol. 27, no.3, 1987)





## **Information Access and Preferences Among Private** Forest Landowners in New York State<sup>†</sup>

by **Shorna Broussard**, **Nancy Connelly, Tommy Brown**, and **Peter Smallidge**, Cornell University

#### What is the Issue?

In order to encourage sustainable management of private forest lands, outreach programs need to establish effective communication with forest owners, but this can be a challenge. Research has shown that many forest owners are disengaged from educational assistance.1 Forest owners operating without adequate knowledge or assistance may degrade water systems, reduce the sustainable productivity of forests, and impair the ecological functioning of forest ecosystems. Forest owners in New York State and in the northern region of the U.S. are becoming increasingly distinct from the traditional image of forest owners2 with respect to their strategies of gathering information to make decisions.3 Learning how forest owners access and utilize information about forestry can help reduce mismanagement and minimize the negative consequences such as lost revenue and reduced environmental services. This knowledge can also enhance outreach programs.

#### Data and Methods

To explore the views and decisions of private forest owners in NYS, a questionnaire was mailed to 2,200 forest owners.<sup>4</sup> A rural sample consisted of 1,100 forest owners who resided in the same county as their property and whose property was in a county with less than 150 persons per square mile ("rural private forest owners" or "rural owners"). An urban sample consisted of 1,100 owners who resided in different counties than their property and who lived in a county with over 500 persons per square mile ("urban private forest owners" or "urban owners"). The samples were drawn from the 2006 Assessment Rolls of the NYS Office of Real Property Services and included parcels of 25 acres or more and property classified as likely wooded and not in public or industrial ownership. Many forest landowners own both wooded and non-wooded land, but to be eligible for this survey, landowners had to own at least 25 acres of wooded land.

#### What are Forest Landowner Information Needs?

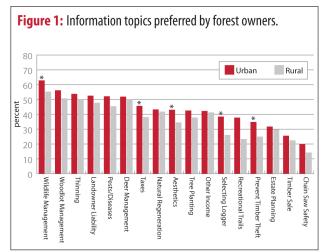
Landowners were asked what forestry topics they would like to know more about (Figure 1). The most popular topics among all landowners were wildlife management, woodlot management, thinning, landowner liability, and deer management. Compared to their rural counterparts, urban residing forest landowners were significantly more likely to desire information about improving wildlife management, timber income and tax liability, enhancing the aesthetic qualities of woodland, selecting a qualified profesTo determine information sources forest landowners are likely to seek out in the future, respondents were asked to rate a broad range of sources (Figure 2). Popular sources of forestry information that all NYS forest owners are likely to use were brochures and fact-sheets, NYS Department of Environmental Conservation (DEC) Foresters, Internet and websites, periodic newsletters, consulting foresters, special mailings, and Cornell Cooperative Extension (CCE) personnel. Urban residing forest owners were significantly more likely than their rural counterparts to indicate that they would go to workshops, utilize non-profit organizations and

e-mail list serves, and listen to podcasts for forestry information

in the future. Results also show that urban forest owners were sig-

nificantly more likely to use a DEC Forester, a website, newsletters, a consulting forester, and special mailings as sources of forestry

sional forester and trained loggers, and how to prevent or report timber theft. Rural forest owners expressed lower levels of preference for all topics than did urban residing forest owners. It is unclear whether this means that urban residing owners have a greater interest in forestry topics than do rural owners or if rural owners already have a greater level of knowledge in these areas and do not see themselves needing additional information.



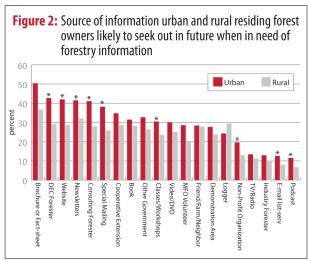
\*statistically significant difference at the p<.05 level.

information in the future.

#### What Information Sources are Owners Likely to Use in the Future?

<sup>1</sup>All footnotes and citations are provided in a separate document posted on our website along with this publication.

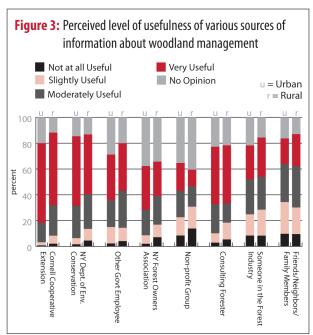
#### **BRIEF/ISSUE NUMBER 19/JULY 2008**



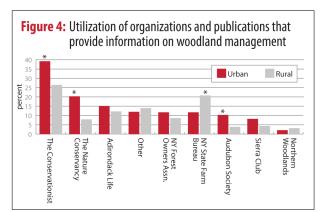
\*statistically significant difference at the p<.05 level. Source: see Connelly et al., 2007<sup>†</sup>.

#### Which Information Sources do Owners Perceive to be Most Useful?

Respondents were asked to rate the usefulness of woodland management information from eight potential sources (Figure 3). Cornell Cooperative Extension (CCE) and DEC were viewed as the most useful sources of forestry information, with a majority of both urban and rural owners rating CCE as very useful and 47% of rural owners and 54% of urban owners viewing the DEC as very useful. Somewhat lower ratings were given to consulting foresters (45% of both rural and urban owners), other government employees (37% of rural owners and 36% of urban owners), the New York Forest Owners Association (NYFOA) (27% of rural owners and



Source: see Connelly et al., 2007



\*statistically significant difference at the p<.05 level. Source: see Connelly et al., 2007<sup>†</sup>.

34% of urban owners), and friends, family, and neighbors (25% of rural owners and 20% of urban owners).

#### What Publications and Organizations are Utilized?

From which publications and organizations do forest owners actually receive information about woodland management? Respondents were asked about a select group of organizations and publications in NYS (Figure 4). The Conservationist, published by DEC, was accessed by 39% of urban residing owners and 27% of rural owners, making it the most regularly accessed of the group. The Nature Conservancy and Adirondack Life were the 2nd (20%) and 3rd (15%) most accessed organizations/publications for urban forest owners, while the NYS Farm Bureau and Northern Woodlands held those positions for rural owners (21% and 14%, respectively).

#### **Policy Implications**

Communicating with private forest owners has become a growing challenge due to turnover in land ownership, the increasing number of forest owners, and the competing demands on landowner time and information-seeking behavior. While many forest owners actively seek out information on forestry, a large proportion of both rural ( $\sim$ 63%) and urban owners ( $\sim$ 49%) do not seek out any information.

Outreach programs for private forest owners should consider the diversity of sources of information about forestry. While the traditional sources (Cooperative Extension, DEC, government, industry, consulting foresters) remain important for both types of owners, it is important to note that many owners obtain forestry information from sources beyond these—especially forest owners who live in urban areas.

Topically, outreach programs that focus on wildlife (Figure 1) will have the most currency with woodland owners, particularly with urban residing forest owners. In addition to rural forest owners, urban owners are a key constituency for those involved in forest outreach.

<sup>†</sup>This Research & Policy Brief serves as a companion piece to the March 2008 issue (#15) which examines management activities of private forest owners in NYS. Please see the full report, *An Assessment of Family Forest Owners in New York State*, 2007. by N.A. Connelly, T.L. Brown, and P.J. Smallidge. HDRU Publication, 07-6. Department of Natural Resources, College of Agriculture and Life Sciences, Cornell University, Ithaca, NY. This report can be accessed at www.dnr.cornell.edu/hdru.





## Sense of Place: A framework for land use planning

By **Richard C. Stedman** and **David L. Kay** (Cornell University)

#### What is Sense of Place?

Land use change affects people's sense of place. Sense of place is a framework that can provide insights useful to planners, researchers and a public concerned about the social and psychological effects of land use change and sustaining healthy places.

At its simplest, sense of place asks—and answers—questions about, "What kind of place is this?" and "What kind of place do I want it to be?" At its most basic it includes the individual and/or collective descriptive meanings ascribed to places ("What kind of place is this?"); and the evaluations (good/bad, important/unimportant) that rest on these meanings. For both residents and visitors, these meanings and evaluations are constructed in part through direct experience with the place in

question. They are the foundation on which "attachment" to place is built.

Both the natural and built features of the place and the experiences one has there shape these meanings and evaluations, prompting behaviors that include political attempts to protect desired qualities of place and even abandonment of the place if important meanings are no longer supported. In practical terms, sense of place factors are part of what a homebuyer or renter considers when weighing the kind of neighborhood

and community they want to move to or remain in. Sense of place also affects the shared ideals communities define through community planning processes like visioning and comprehensive land use planning.

Nowhere is the framework more useful than in high amenity rural landscapes in transition; for example, second home and retirement migration destinations characterized by new people and uses of land. These changes often bring important new opportunities and resources to rural areas, but can also pose challenges such as: value clashes; changing service demands; increased land values and taxes/tax base; and many other potential tensions. In policy and planning terms, sense

of place questions represent very real political struggles over the future of these landscapes: what activities are promoted and discouraged, and whose interests are served.

#### Implications for planning & land use management

Planning and land use management techniques engage a set of practical and flexible tools that can be used to create, preserve, and advance communities that foster a sense of place among both residents and visitors. Comprehensive planning, which is designed to "set the stage" for the rest of the community planning process, addresses at least three questions that are rooted in sense of place: (1) What kind of place is this?; (2) What kind of place do I/we want it to be?; and (3) Which tools

and processes are most appropriate to manage/inhibit change in this community?

The essential premise is that land use planning should seek to enhance attachment to place while facing the multiplicity of forces that drive change everywhere, especially where rural, suburban, and urban places and people come together. Comprehensive planning prompts people to reflect on and articulate their sense of place. However, attachment has

multiple public expressions in a planning process. For some, attachment is primarily to things as they are, for others to the vitality of the past, and for still others to unrealized potential. Comprehensive planning represents a way of trying to steer towards a publicly acceptable balance between preservation of tradition and adaptation to changing realities.

Communities that commit to comprehensive planning search for agreement on a sense of place. An effective comprehensive plan will embody a shared vision and use it to create a framework for policy and decision making. The best plans emerge out of a multi-tiered series of interactions between a wide variety of citizens, politicians and experts. The vote on



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plan adoption is preceded by a mix of transparent, public dialogues involving idea generation, visioning, presentation, reaction, debate, recalibration, and consensus building. Depending upon how it was developed, a comprehensive plan has the ability to both reflect and shape sense of place.

The comprehensive planning process aggregates, in effect, each participating individual's sense of place into a collective statement about a subtly different version of the questions "What kind of place is this" and "What kind of place do we want it to be". Dan Kemmis, the former mayor of Missoula Montana, draws attention to the public politics inherent in these questions. In "Community and the Politics of Place" he wrote, "But what 'we' do depends upon who 'we' are - or who we think we are. It depends in other words upon how we choose to relate to each other, to the place we inhabit, and to the issues which that inhabiting raises for us. All of those 'we' questions are about our way of being public." Kemmis is drawing on his experiences with the politics of place, with the familiar clashes in high amenity rural places in transition: seasonal v. year round resident, newcomer v. oldtimer, hunter v. animal rights advocate, blue v. red, etc. He is interested not only in the raw political question of whose "sense of place" finds voice and carries through to policy, but also who is seen as deserving to take part in the conversation.

#### Sense of place research in the field

An example of sense of place insights can be taken from a study conducted by the lead author in a northern Wisconsin landscape similar in many respects to the NYS Adirondack region. Both regions have a relatively pristine rural landscape within a few hours drive of millions of people; a strong regional identity; struggling rural communities with legacies of traditional resource dependence; a strong and increasing presence of second home development; and great economic and social disparities between year round residents and visitors/second home owners.

The research focused on Vilas County, Wisconsin, an area rich in lakes (1300 in the county), second homes (67% of all housing units in 2000, 10th highest in the United States), and one that has experienced rapid population growth. The study employed a mail survey focusing on the place meanings and attachment of 1000 property owners, revealing differences between second home owners and year round residents in key meanings: second home owners emphasized "escape" meanings and regional symbolic importance: e.g., "up north". Year-round residents were more likely to emphasize meanings centering on "home" and "community". Compared with year round residents, Vilas County second home owners had owned their property for the same length of time, were just as likely to have social relationships with others in the local area, were more strongly attached, and were more likely to engage in place-protective behavior such as becoming involved in quasi-political bodies such as lake associations. We interpret these findings as evidence that Vilas County has already transitioned into being a "second home place".

#### Lessons for planning in NYS's high amenity places

What lessons might we draw from the Vilas County work for NYS's high amenity places and in particular the Adirondacks? How might a sense of place framework apply to the practice of land use planning in the Adirondacks? Based on the increasing presence of second homes and associated issues, the Adirondacks and northern Wisconsin appear to face some fundamentally similar issues. However, some fairly stark contrasts exist in the landscape and in the policy landscape, which seem particularly relevant for both sense of place and the practice of planning and land use controls. Most notably, dominant place meanings are explicitly present in New York's state/regional policy mechanisms (e.g., the "Forever Wild" constitutional authority over the Forest Preserve, the Adirondack Park Land Use and Development Plan) that institutionalize "what kind of place" the Adirondacks are supposed to be (an inhabited wilderness!). These meanings are layered on top of those that have emerged, as in Vilas County, in a more localized, piecemeal fashion. Further, state agencies in NY such as the Department of State and the Adirondack Park Agency, along with multiple nonstate organizations like those involved in the recently formed Common Ground Alliance, are actively involved in planning and place-making processes among diverse sets of actors. In the Adirondacks attachment has thus been concretized through a statewide planning and political process into uniquely regionalized and historically rooted institutions controlling land use. It is quite unusual that an executive branch of state government (the Adirondack Park Agency) would in effect be given regional zoning authority, especially in the context of New York as a home rule state which usually assigns great authority to local governments. In sum, a sense of place framework applied to the Adirondacks would be expected to reflect the differences as much as the similarities with Vilas County.

#### **Conclusions**

The sense of place framework represents a useful research tool for understanding what is important about transitional rural landscapes, why, and to whom, in particular as it clarifies whose place attachment is threatened by what kinds of changes. Sense of place research pertains to and can be used to improve comprehensive planning processes as well by making more explicit the "attachments" of community members involved in the process and helping them to understand how they relate to each other as a community of place. Past research in a high amenity second home landscape increased understanding of social and environmental change in northern Wisconsin. Though some of the particulars will differ, this approach can do the same for high amenity regions of NYS like the Adirondacks.





### The Economic Importance of the Child Care Sector

By Mildred E. Warner, Cornell University\*

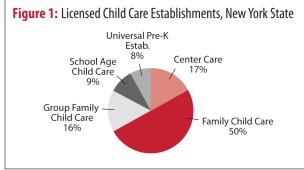
#### What is the Issue?

While quality child care has long been recognized as an important social good, states, counties, and municipalities have increasingly begun to understand how it contributes to the local economy. In 2004 the NYS Child Care Coordinating Council partnered with Cornell University's Department of City and Regional Planning to conduct an economic impact analysis of the child care sector (including early child care and education) in New York State.¹ We present results from this study and show how the economic development community in New York State is responding to this issue.

#### **Economic Analysis of the Child Care Sector**

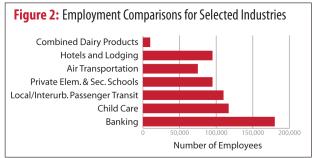
The child care sector is important for two reasons. First, it is composed of many small businesses. Second, it is an important infrastructure that enables parents to enter the workforce. While providing quality care for children, child care broadens New Yorkers' economic opportunities. Data on the child care industry reveal the economic importance of this sector.

✓ 22,000 small businesses. Child care is an important small business sector in New York State. The sector includes not-for-profit and for-profit centers, Head Start and Pre-kindergarten programs and 11,000 family child care providers. Family providers are an especially important source of care for rural New Yorkers.



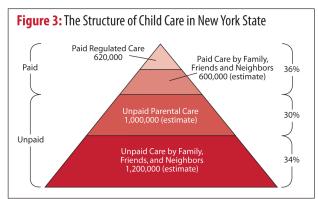
Source: OCFS Licensing Data, New York State Education Department, 2003

✓ 119,000 workers. Child care teachers, aides and staff represent one of the fastest growing employment sectors in the economy. The child care sector employs four times more people than the dairy sector and is comparable in size to the local/interurban passenger transit system and the hotel and lodging sector (see Figure 2).



Source: IMPLAN based on ES 202 employment data, 2000; Child Care expansion based on NYS OCFS estimates, 2002

- √ 4.7 billion dollars. The early care and education sector generates \$4.7 billion dollars annually in New York State. This includes parent fees and government investments in early education programs.
- √ 750,000 parents. Child care is part of the social infrastructure that keeps New York working. By caring for children, the sector enables 750,000 parents to go to work. These parent workers are estimated to collectively earn more than \$30 billion dollars.
- ✓ 622,000 children. Licensed early care and education in New York State provides care for 622,000 children. However, there are 3.4 million children in NYS with working parents. Child care is a complex sector that includes formal regulated paid care, informal paid care, and informal unpaid care either from childrens' own households or other relatives and friends. 1.2 million children are estimated to be in paid care in NYS. With only 620,000 regulated spaces statewide, the other half of the children in paid care are in informal settings. The remaining 2.2 million children are not in market based care, but are cared for by unpaid family, friends or neighbors. (Figure 3).



Source: Cornell 2006. Labor Force Trends and the Role of Child Care in New York, Issue Brief prepared by Cornell University Department of City and Regional Planning: Ithaca, NY.
Available at: http://government.cce.cornell.edu/doc/reports/childcare/research.asp

<sup>1&</sup>quot;Investing in New York: An Economic Analysis of the Early Care and Education Sector," 2004.

M. Warner et al. Prepared for NYS Child Care Coordinating Council and NYS Office of Children and Family Services. Available at http://economicdevelopment.cce.cornell.edu/doc/pdf/NewYorkCornellReport.pdf

#### **BRIEF/ISSUE NUMBER 21/SEPTEMBER 2008**

## Investments in Child Care Are Important for Future Economic Development

Just like roads and bridges, a high quality child care system is part of the infrastructure for economic development by enabling working parents to work, as well as investing in the future labor force (children) Early care and education is important for human development and increases school readiness. Attention needs to be given to the full Early Care and Education system, not just preschool, as children learn in all settings and all settings can be developmental. Investments in brain development are important for the long term future of New York State, because they produce skilled future workers.

#### Cost of Child Care is a Challenge

Unlike other infrastructural services, child care receives little public subsidy. Thus, the sector depends primarily on parent fees to cover costs. This creates a price structure too low to support quality and too high for many parents to afford. The average cost to families for child care depends on the age of the child, the type of care, and where they live. In New York State, the average price of full-time center care is \$9,542 (in New York City the cost averages \$11,279). Family and group family care in the state averages \$6,700 - \$7,600 per year. The most expensive child care option tends to be day care centers, the cost of which varies widely depending upon location. (see Figure 4).

Figure 4: Average Child Care Cost Estimate for NYS, 2002  Rest of State New York City New York State				
Day Care Center	\$ 8,185	\$ 11,279	\$ 9,542	
Family Day Care	\$ 6,788	\$ 6,578	\$ 6,692	
Group Family Day Care	\$7,778	\$ 7,410	\$ 7,641	
School Age Child Care	\$ 3,002	\$ 3,284	\$ 3,168	

Source: Data was collected from Market Rate Data, OCFS and DOB May, 2003. from 2004 Investing in New York Study

Although New York State is a leader in the knowledge economy, most of the job growth is in the service industry. These sectors face global competition that maintains a downward pressure on wages. For the average worker in retail trade earning about \$20,000 a year, the average annual cost of licensed care represents too large a burden. Figure 5 exhibits the top three industries in terms of job growth in both low and high wage categories (either below or above the state average payroll of \$44,850). Taken together, the health care industry, retail trade, and accommodation and food services created nearly 300,000 jobs in five years. These three sectors hire roughly 37% of all New Yorkers, but are relatively low wage, making the cost of child care prohibitive to many of those parent workers. While a few highend industries also experienced job growth, the job expansion of these high wage industries reached 160,000, barely exceeding half the growth of low-wage jobs. Clearly, these trends indicate a growing challenge for NYS employees who have to pay the high cost of child care with increasingly lower wages. This also represents a challenge for employers who need to attract and retain parent workers.



Source: US Census Bureau, Country Business Patterns 1998 and 2003 (NAICS)

## Child Care is part of New York's economic development strategy

In 2006 Cornell's Department of City and Regional Planning conducted a survey of economic developers and chamber of commerce leaders in New York State. The survey found:

- 83% agree that childcare should be a part of economic development policy.
- 82% recognize that a lack of affordable, quality, convenient child care reduces worker productivity.
- 67% feel that businesses' ability to attract and retain workers is hurt by lack of quality child care.
- 58% acknowledge an inadequate supply of quality child care in their community.<sup>3</sup>

## Investments in the Child Care Sector Promote Regional Economic Development

Regional economic impact analysis shows that in New York State each additional dollar invested in child care generates a total of \$1.52 - \$2.00 in the state economy as a whole. This is higher than other sectors (retail, manufacturing, education) that are more typical targets for economic development or state investment. In addition, each dollar of state spending on child care leverages more than \$3.50 in federal funds. These federal dollars in turn have a linkage effect of \$2, resulting in a \$2.7 billion regional economic impact. The combined impact of these leverage and linkage effects is more than \$7 for every state dollar spent.

Child care is becoming a key part of New York State's economic development plans. New York is one of a handful of states that has a refundable child and dependent care tax credit. In addition, New York supports roughly 180,000 low wage working parents through the child care subsidy program. Some employers also help through tax-free flexible spending accounts. But more investment is needed. The American Planning Association recently called child care a "critical community infrastructure" and challenged both planners and economic developers to incorporate support for child care into their work. Investment in child care will benefit the state's economy, support businesses and workers, improve the quality of life in our communities, and prepare our future workforce.



<sup>&</sup>lt;sup>2</sup> Morrissey, Taryn and M.E. Warner 2007. "Why Early Care and Education Deserves as Much Attention, or More, than Prekindergarten Alone" Applied Developmental Science, 11(2): 57-70.

<sup>&</sup>lt;sup>3</sup> Cornell 2006a NYS Survey of Economic Development and Child Care, Issue Brief prepared by Cornell University Department of City and Regional Planning: Ithaca, NY. Available at: http://government.cce.cornell.edu/doc/reports/childcare/research.asp.

<sup>4&</sup>quot;Investing in New York: An Economic Analysis of the Early Care and Education Sector," 2004.
5 Warner, M.E., Kristen Anderson and George Haddow, 2007. Putting Child Care in the Picture:
Why this service is a critical part of community infrastructure," Planning, (June 2007): 16-19.
7 Professor Mildred Warner co-directs the national Linking Economic Development and
Child Care Project which is supported in part by the W.K. Kellogg Foundation. Resource
materials on the linkage between child care and economic development can be found at
http://economicdevelopment.cce.cornell.edu.



## **Community Attitudes Toward Scientific Research\***

by Katherine A. McComas (Cornell University), John C. Besley (University of South Carolina), and Zheng "Janet" Yang (Cornell University)

#### What is the Issue?

Attracting new technologies to a region can provide an economic boost; however, not all communities may want to become the "next Silicon Valley." Community residents' views about local scientists and their research may affect their support for several areas of emerging scientific technology. In the larger context of economic growth related to these technological developments, questions of fairness and justice (who benefits) and at what cost seem key to address. Information disclosure, community involvement, and treatment of community members also need to be considered.

#### Data and Methods

The data for this research were collected in 2006 via a mail survey exploring residents' attitudes toward scientific research. Cornell's Survey Research Institute sent introductory letters and eight-page questionnaires to 2,500 randomly selected individuals in both Tompkins and Ontario counties. Approximately 10% (N=495) of the mailings were returned as undeliverable, leaving a usable sample of 4,505. Of these, 29% (N=1,305) completed their questionnaire. The tables below\* provide means and standard deviations to key survey questions.

#### Perceptions of fairness or justice

Views about local scientists and their research may affect community support for several areas of emerging science, including agricultural biotechnology, agricultural nanotechnology, and gene therapy. Levels of public trust, as well as broader attitudes towards scientific research, are influenced by perceptions of justice and fairness. To determine how the perceived justice or fairness (we use these two terms interchangeably) of local scientists' research might relate to respondents' attitudes toward research, we asked respondents to react to various statements that examined four measures of justice: distributive, procedural, interpersonal, and informational. Survey respondents indicated their relative level of agreement (1 = strongly disagree, 5 = strongly agree) with these measures.

Distributive Justice. Distributive justice refers to whether individuals
believe they have received a fair outcome from a decision (Adams,
1965; Adams & Freeman, 1976; Deutsch, 1975). We examined
distributive justice in terms of whether people perceived that
they received a fair allocation of the risks and benefits from local
scientific research. The results suggested that most respondents
view scientific research as a beneficial thing that helps people and

the local natural environment more than it hurts. Almost half of the respondents are not sure about the share of risks their community receives.

Distributive Justice	MEAN	SD
<ol> <li>Members of my community receive a fair share of the benefits of scientific research.</li> </ol>	3.50	.85
Scientific progress helps more people in my community than it hurts.	3.90	.83
3. Scientific research in my community has been bad for the local natural environment.	2.33	.87

• Procedural Justice. Procedural justice focuses on the importance of unbiased and correctly enacted procedures, including individuals' ability to have a voice in a decision-making process that affects them (Folger, 1977; Lind, Kanfer, & Earley, 1990; Tyler, Rasinski, & Spodick, 1985). We examined procedural justice in terms of whether people believed they shared some control over the decisions made about local scientific research. Most respondents have reservations about their capacity to influence decisions regarding controversial scientific research in their community, but they do believe they can express views to the scientists in charge if necessary.

MEAN	SD
3.53	.89
2.87	94
3.05	.74
3.24	.90
3.27	.75
	3.53 2.87 3.05

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• Interpersonal Justice. Interpersonal justice highlights the need for authorities (here, scientists) to treat individuals with dignity and respect (Tyler, Degoey, & Smith, 1996; Tyler & Lind, 1992). In general, respondents believe that local scientists are likely to treat them with respect.

Interpersonal Justice	MEAN	SD
<ol> <li>If I were to speak with a scientist in my community, he or she would treat me in a polite manner.</li> </ol>	3.80	.77
If I were to speak with a scientist in my community, he or she would treat me with respect.	3.87	.70
3. If I were to speak with a scientist in my community, he or she would treat me with dignity.	3.73	.74

• Informational Justice. Informational justice focuses on the degree to which individuals feel that authorities have provided appropriate explanations and disclosure during decision-making processes (Colquitt, 2001; Coyle-Shapiro, 2002; Greenberg, 1993). On average, respondents are divided about whether or not the information they receive on local scientific research is accurate; but respondents were somewhat more likely to agree that local scientists would communicate potential impacts about their research in a candid and timely manner.

Informational Justice	MEAN	SD
Local scientists are usually candid in their public communication about potential impacts of their research on communities like mine.	3.30	.83
Procedures are in place to ensure that communities like mine have accurate information about local scientific research that might affect them.	3.03	.80
Scientists working in my community would communicate potential public health or environmental hazards in a timely manner.	3.42	.80

#### Satisfaction with local research

We conducted further analysis to examine whether respondents' perceptions of justice were related to their satisfaction with local research. The results\* showed that all four justice measures were statistically associated with the degree to which local residents said that the research was appropriate for their communities and their willingness to support plans to attract more scientific research to their communities. These results suggest that support for research in these two counties is contingent on respondents' beliefs that (a) the research benefits the community, (b) they are being adequately informed by scientists about the impacts of their research, (c) there are unbiased procedures in place that would allow them to have

some influence over the research that is being conducted in their community, and (d) local scientists would treat them with dignity in interactions and be respectful of their rights as citizens.

#### Concerns about technology

In comparison, only distributive justice consistently predicted concerns about technology, including whether residents believed the risks outweighed the benefits or the technology posed a public health risk. That is, local residents who believed that their communities received a fair share of the benefits of local research also expressed less concern about the risks of biotechnology, nanotechnology, and gene therapy. For biotechnology and nanotechnology, informational fairness also predicted technology concern, meaning that respondents who believed local scientists were candid and forthcoming in their communication about the potential impacts of their research were also less concerned about the technologies. Procedural justice (whether or not scientists were perceived as giving voice to residents in the decision-making process) and interpersonal justice (whether or not scientists were perceived as treating local residents with respect and dignity) did not significantly relate to technology concern.

#### Conclusions

In sum, our findings suggest that community residents care about the fairness of outcomes, procedures, treatment, and explanations in relation to local scientists' behavior and these perceptions relate to satisfaction with local research. Further, the perceived fairness of the distribution of outcomes (benefits vs. risks) was related to technology concern. That is, respondents were less concerned when they perceived a favorable share of the benefits. When evaluating the riskiness of hosting new technologies, residents may consider whether the research will give a fair share of its benefits to their community, minimize adverse impacts on the environment, and do more good than harm in their community. The degree to which explanations about the science and its potential impacts are considered to be forthright, timely, and accurate, is also important. In the larger context of economic growth related to technological development, these findings suggest that universities and/or industries should discuss their plans with the public before they seek to expand technology in their communities and regions. In particular, questions of who benefits and at what cost seem key to address, as well as issues related to information disclosure, community involvement, and treatment of community members.

\*References and supporting data tables are available on the CaRDI website with this publication. For more information on this research, readers can request a copy of McComas, Besley, and Yang, (2008), "Risky Business: Perceived Behavior of Local Scientists and Community Support for their Research," *Risk Analysis*, by sending an email to kam19@ cornell.edu. This research was supported by funds from the National Science Foundation (0551047), the Joint Institute for Food Safety and Applied Nutrition, and Cornell University Agricultural Experiment Station federal formula funds, Project No. NYC-131457 received from Cooperative State Research, Education and Extension Service, U.S. Department of Agriculture.





### **Community Response to Immigrants in New Destinations\***

by Max J. Pfeffer and Pilar A. Parra, Cornell University

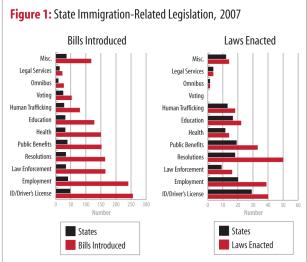
#### What is the Issue?

Immigration brings a variety of challenges to local communities. These challenges are often articulated in national immigration policy debates, but the consequences of immigration are most intensely experienced at the local level. Even the best conceived national level policies cannot deal with the diverse needs of communities attempting to better integrate immigrants into local social and economic life (Pfeffer 2008).

In new destination areas with a small and relatively new immigrant community, assistance provided by the immigrants' own ethnic community is more limited, and conditions in the host community are more consequential for immigrant integration (Pfeffer and Parra 2008; 2004). But opportunities to satisfy these needs can vary considerably depending on the local context. Localities may differ in the receptivity of the host community and the degree of competition between immigrants and local residents for housing, employment and other resources.

#### State and Local Response to Immigration

In response to the continued rapid growth of the unauthorized population in recent decades and the failure of federal policies to effectively regulate such immigration, many state and local governments have recently begun to develop their own immigration policies. In 2007, state legislatures nationwide introduced more than 1,500 immigration-related bills on education, health, access to public benefits, law enforcement, employment and personal identification among other areas (as a result, 240 laws were enacted across 46 states - see Figure 1).



Source: National Conference of State Legislatures 2008

In addition to state legislation, in recent years localities (i.e. counties, towns and villages) were active in proposing restrictive ordinances. Some observers claim that local ordinances are often more restrictive than state legislation (Broader 2007). For example, a large number of the proposed ordinances attempted to regulate the employment of unauthorized workers or relations between landlords and undocumented immigrants (see Table 1). Many of these ordinances also empowered local police to work with immigration authorities and mandated English as the locality's official language. As indicated in Table 1, only a small number of the identified local ordinances (14%) were supportive of immigrants.

**Table 1:** Proposed Ordinances Specifically Regulating Immigrants or Relations with Immigrants Since 2006

Content of Ordinance	Ordinance	
	Restrictive	Supportive
Employer Sanctions	45	-
Sanctions Against Landlords	31	-
English as Official Language	28	-
Police Support Immigration Authorities	25	5
Restrictions on Day Labor	9	-
Other	7	18
Total	145	23

Source: Web Search by Pilar A. Parra and Michelle Leveillee, April 2008

The largest numbers of restrictive local ordinances were in the South and Northeast. These ordinances have been proposed by many communities that until recently have not been concerned with immigration. But with the dispersal of immigrants across the American landscape, immigration has become a salient issue outside the immigrant gateway cities in small town America (Lichter and Johnson 2006; Capps et al., 2003; Fix and Passel 2001; Foner 2001; Kraly and Miyares 2001; Duchon and Murphy 2001). Many of the proposed local ordinances have focused explicitly on unauthorized immigrants, e.g. sanctions against employers who hire unauthorized workers or landlords who rent to unauthorized immigrants.

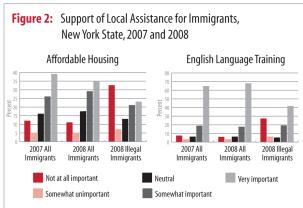
#### The Case in New York State

New York is an interesting state in which to gauge the opinions of people living outside large centers of immigration like the New York City metropolitan area. Each year Cornell University fields the Empire State Poll, surveying 1,100 people across the state, and in recent years the poll has included a series of questions about immigration. The poll included several questions relevant to the questions of local support for immigrants: 1) If immigrants settled in your community, how important is it for the city or township you live in to help immigrants find affordable housing? 2) If immigrants settled in your community, how important is it for the city or township you live in to provide English language training for immigrants? 3) If immigrants without immigration documents, or illegal immigrants, settled in your community, how important is it for the city or township you live in

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to help these immigrants find affordable housing? 4) If immigrants without immigration documents, or illegal immigrants, settled in your community, how important is it for the city or township you live in to provide English language training for these immigrants?

Between 2007 and 2008 there was little change in New Yorkers' opinions about their city or town providing assistance to immigrants in finding affordable housing or learning English (see Figure 2). Almost two-thirds of survey respondents said it was important for localities to provide immigrants with assistance in finding affordable housing. By 2008, 9 out of 10 respondents thought that their city or town should provide English language training for immigrants. But when asked about such assistance for unauthorized (or illegal) immigrants, they were more likely to say that the assistance is unimportant. In particular, most New Yorkers considered local assistance to help unauthorized immigrants find affordable housing to be unimportant. Fewer New Yorkers considered it important for their city or town to provide English language training for unauthorized immigrants, but still a majority of respondents considered such assistance to be very or somewhat important.

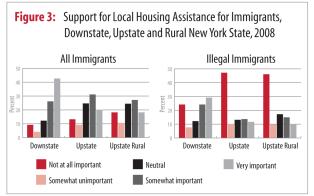


Source: Empire State Poll, Cornell University 2007, 2008

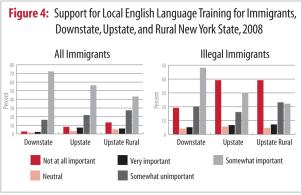
The findings for NYS are highly influenced by the New York City (NYC) metropolitan area where 37 percent of the population is foreign born, and 3 out of 4 persons report that they personally know an immigrant that they are not related to. This contrasts significantly with Upstate New York where only about 5 percent of the population is foreign born, and only about half of survey respondents report personally knowing an immigrant. Upstate respondents are much less likely to think that their city or town should assist immigrants, although more people think that such assistance is important than think it is unimportant (Empire State Poll 2008; Fiscal Policy Institute 2007). However, the majority of respondents living outside the NYC metropolitan area feel it is unimportant for their city or town to provide affordable housing for unauthorized immigrants (see Figure 3), and almost half think that it is unimportant for their city or town to provide English language training to unauthorized immigrants (see Figure 4). Survey respondents living outside the NYC metropolitan area appear to be divided about how important it is for their city or town to provide English language training to unauthorized immigrants.

#### What Should Be Done?

Community efforts to promote language and certain types of technical training can play an important part in furthering the social and economic integration of immigrants into the community. English language proficiency helps immigrants to be more self-reliant, and this ability is especially important in the context of federal, state and local legislation that limits immigrants, especially unauthorized immigrants, access to public services. Our research in upstate New York indicates that most immigrants and other community residents



Source: Empire State Poll, Cornell University 2008



Source: Empire State Poll, Cornell University 2008

lack ongoing interactions with one another. Interactions not only improve other community residents' understanding of immigrants, they also help immigrants become integrated into the social and economic life of the community in some material ways such as the purchase of a car or home (Pfeffer and Parra 2005). Immigrants benefit materially from social ties to non-immigrant residents, and English language proficiency is a cornerstone in the formation of such ties.

#### What Can Be Done?

English language ability is clearly related to immigrant self-reliance and success. Programs that provide English language training can play a critical role in helping immigrants become integrated into the social and economic life of communities. Indeed, the wave of local ordinances proposed in recent years has called for immigrants to speak English, and our assessment of public opinion in NYS indicates that there is fairly strong support for local programs providing English language training. Assuming that immigrants are more likely to make positive contributions in these communities if they are self-reliant, providing English language training seems logical.

Many churches already provide English language training programs, and various schools and colleges offer English as a second language classes. Workers sometimes find it difficult to attend classes due to work-related time constraints and expense. Employers can play an active role in adjusting work schedules and providing other forms of support (e.g. transportation, tuition, etc.) to facilitate immigrant English language training.



<sup>\*</sup> Based on a paper prepared for the conference on Immigration Reform: Implications for Farmers, Farm Workers, and Communities Washington, D.C. May 9, 2008. The full paper, along with references, is available on the CaRDI website with this publication.



## Using the American Community Survey (ACS) for Rural or Small Area Research & Policy.

By Richard Rathge, Karen Olson, and Ramona Danielson, North Dakota State University

#### What is the Issue?

While the decennial U.S. Census is referred to by many as the "gold standard", data that are collected only once per decade soon become outdated. However, conducting a more frequent national census is cost-prohibitive. The American Community Survey (ACS) was developed to respond to the need for affordable, up-to-date data on U.S. communities. However, while it accomplishes these goals it also presents challenges, particularly with regard to coverage of rural and small areas across the U.S.

#### What is the ACS?

Historically, the Census Bureau has used a decennial census as its primary means of data collection. The census was conducted in two parts: the short form which enumerated the population and the long form which examined the population's socioeconomic structure. The short form was distributed to all housing units in the nation. It is mandated by the Constitution for political redistricting of the states and reapportionment of the congress. In 2000, the short form contained six population questions (e.g., age, sex, and race) and one housing question related to tenure. The long form contained additional questions on a wide range of social and economic issues. It was distributed to a 1-in-6 sample of addresses. These data provided an empirical basis for many government decisions, functions and policies.

While the Census Bureau will conduct a full count of the population in 2010 as mandated by the Constitution, it will no longer collect information on social and economic characteristics as part of the decennial census. The annual ACS is the Census Bureau's new program that replaces the long form of the decennial census, motivated by the nation's increasingly rapid pace of change, and a corresponding demand for more timely data. The ACS is based on a continuous sampling design with roughly 250,000 monthly surveys which are sent to addresses in the U.S. and Puerto Rico for a total of about 3 million addresses over the calendar year. In order to provide the more timely ACS data, the Census Bureau needed to lower costs by reducing sample size. The ACS's overall annual sampling ratio is about 1-in-40 compared to 1-in-6 for the census long form that was conducted through the year 2000.

#### **Period versus Point Estimates**

One of the fundamental differences between the ACS and the census long form is the nature of the data they produce. The census captures a snapshot of the characteristics of people and housing units at one point in time (i.e., a point estimate), typically April 1st of the beginning year of each decade. In contrast, since

the ACS is designed for continuous data collection, it pools responses from 12 months of data collection into one period estimate. These period estimates include changes that occur during the previous 12 months.

For example, in the ACS, persons who are surveyed in January 2007 are asked to report their income over the past 12 months. This means that most of the income they report was obtained in 2006. In contrast, a person who is surveyed in December 2007 would report income generated in 2007. These monthly income responses are pooled together to derive the period estimate for all of 2007 and adjustments are made for inflation. This is very different from a point estimate calculated from the census long form, where data are based on respondents' income earned during the previous calendar year. Hence while census responses refer to the same calendar year period, the ACS may pool data spanning parts of two different calendar years.

The issue of ACS period estimates is further complicated because differential time periods are needed to collect the data. Since it is not financially feasible to collect a large enough sample of addresses in a given year to produce reliable estimates for smaller geographic areas, the ACS has a three-tiered data collection process. Geographic areas of at least 65,000 people are large enough to produce reliable period estimates after 12 months of data collection. In contrast, geographic areas of 20,000 to 65,000 people require 36 months of data collection, and areas smaller than 20,000 people require 60 months of continuous data collection to produce reliable estimates.

The first national release of data from the ACS was in 2005. The first three-year period estimate for places between 20,000 and 65,000 people is scheduled for release in December of 2008. These estimates will represent the 2005-2007 period. Similarly, the three-year period estimate for these places released in 2009 will represent 2006-2008. Table 1 provides a list of geographic units delineated by the Census Bureau and their corresponding period estimates. Researchers using counties as their unit of analysis can see that only 761 of the nation's 3,141 counties will have annual one-year estimates. More than half of counties will have three-year period estimates while the remaining 42 percent which have a population of fewer than 20,000 persons will rely on five-year period estimates. Similarly, only 476 of the nation's 25,161 incorporated places (or designated places) will have oneyear period estimates. Researchers conducting neighborhood analysis utilizing tracts or block groups will be restricted to fiveyear period estimates.

#### **Interpreting Period Estimates**

An important challenge for researchers who focus on social and economic change in rural and small areas is to interpret

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**Table 1:** Major Types of Geographic Areas for Which One-Year, Three-Year, and Five-Year Data are Available from the American Community Survey

	Number of Geographic Areas		
Type of Geographic Area	One-Year Period (12 Months): Geographic Areas with a Population of 65,000 or More <sup>1</sup>	Three-Year Period (36 Months): Geographic Areas with a Population of 20,000 or More <sup>1</sup>	Five-Year Period (60 Months): All Geographic Areas <sup>1</sup>
United States	1	1	1
States (and D.C.)	51	51	51
Counties	761	1,811	3,141
Places	476	1,983	25,161
American Indian/Alaska Native Areas	15	41	768
Metropolitan/Micropolitan,			
Statistical Areas	561	905	923
Congressional Districts	436	436	436
School Districts	879	3,290	14,505
Census Tracts	-	-	65,443
Block Groups	-	-	208,790

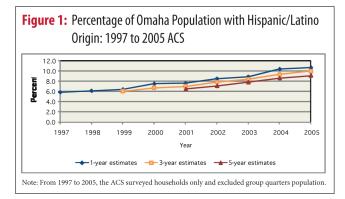
<sup>&</sup>lt;sup>1</sup>The numbers are for geographic areas within the U.S. and do not include areas within Puerto Rico. Also, the numbers shown in the table are based on the latest sources available and may change slightly.

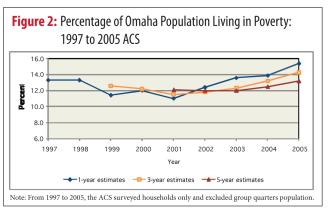
period estimates correctly. They need to remember that these data capture events that occur over the period of the estimate, one, three, or five years, rather than a single point in time (i.e., April 1st) as was previously the case when using data from the census long form. If the characteristic being estimated is very dynamic, the length of the period estimate can be problematic. Two figures using data from the city of Omaha, Nebraska, help illustrate this point<sup>1</sup>. In Figure 1, we present the one, three-, and five-year period estimates for the percentage of the population with Hispanic/Latino origin, capturing the systematic gains in each period estimate. A dampening effect appears in the longer period estimates. As a result, using a longer period estimate would likely underestimate the proportion of Hispanic/Latino population.

A greater challenge occurs when the characteristic is both dynamic and fluctuating, such as with poverty rates, as illustrated in Figure 2. Annual estimates show a general decline in the proportion of individuals in poverty from 1997 to 2001, and then an upward swing extending to 2005. The three-year estimate dampens the fluctuation in poverty rates, but still captures the upward swing beginning in 2001. In contrast, the five-year period estimate indicates that the upward swing in poverty commenced in 2003, much later than indicated by the shorter estimates. The differences reflect a significant challenge for data interpretation, especially when the data are used to inform policy decisions and/or to administer public programs.

#### Consequences of Sample Size

Regardless of the length of the period estimate, sample size is another key issue which affects the margin of error (MOE) of ACS estimates. The MOE is the range in which an estimate may actually lie given the confidence level, which, for ACS data, is typically 90 percent. For example, data from the 2007 ACS (i.e., one-year period estimates) for poverty in the Fargo-Moorhead,





ND-MN Metropolitan Statistical Area, show an estimated family poverty rate of 8.4 percent, with a 2.3 percent MOE. However, the proportion of families with related children under 5 years of age in poverty (a smaller sample size) is 22.8 percent with a MOE of 11.2 percentage points. This means that there is a 90 percent chance that the true estimate ranges from 11.6 percent to 34.0 percent. Statistics with this magnitude of error will not be useful to legislators attempting to determine whether the prevalence of poverty in their areas is a large and growing problem. Their skepticism of the data will be an important challenge for social scientists using the ACS to overcome.

#### Implications for Researchers and Policymakers

These issues illustrate just a few of the challenges posed for social scientists planning to use the ACS in policy analysis. The most daunting may be how researchers and policymakers use and interpret the data, not only for themselves but for the broader audiences and constituents they serve. The research community often sets the standards for data use and interpretation, and therefore must determine the conventions they wish to encourage regarding the use of ACS period estimates especially for smaller places where estimates represent multiple years of data collection. The Census Bureau is assisting in this task by providing educational materials (located at http://www.census. gov/acs/www/UseData/Compass/compass\_series.html). Users need to appropriately and effectively use ACS data and avoid the skepticism that may arise because of limitations. One possible solution is to encourage triangulation of longer period estimates with other administrative records. This will increase confidence in the accuracy of ACS estimates and/or it will alert users when ACS estimates are unreliable.



<sup>&</sup>lt;sup>1</sup> The data for the city of Omaha were made available by Dr. Jerry Deichert, Director of Nebraska's State Data Center. We appreciate his willingness to share this information with us.