

The Impacts of Natural Gas Development on the Cost, Availability, and Quality of Housing

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Introduction

This chapter will discuss the impacts of Marcellus Shale natural gas drilling activities on the cost, availability, and quality of housing for residents in surrounding areas. The purpose is not to make a statement about whether drilling is ‘good’ or ‘bad’ for housing in a region, but rather to describe and characterize some of the observed effects in regions where natural gas drilling is already taking place and, based on these effects, to identify potential implications for communities in New York State. In contrast to many other aspects of drilling activities, issues related to housing will largely be considered at the local government level (county/municipal) in New York State. It is thus particularly important that local lawmakers, leaders, organizations, citizen groups, etc. be informed about the effects of drilling activity on housing to help them plan for foreseeable effects in their area and to allow them to respond appropriately as new and untested scenarios develop. It is our hope that this report will serve this end.

Assumptions and Methodological Challenges

The goal of this report will be not only to characterize housing impacts, but also to identify and suggest mitigation strategies for some of the potentially negative impacts. This is not meant to imply that all or most impacts on housing will be negative ones – this could easily have been a report about how to capture benefits of changes in housing. Instead, we hope to suggest ways that local governments might approach protecting the most vulnerable members of their communities.

Although much remains unclear about how drilling may (or may not) take place in New York State, this report assumes that there will be many similarities between the way drilling development has taken place elsewhere and the way it will take place in New York. Case studies of Pennsylvania are considered to provide the most accurate image of natural gas development in New York because of the relative similarities in landscape and geological features, population distributions, land uses, etc. compared to those of Wyoming or Texas. That said, it is vital to appreciate the significant role that context will play on any housing impacts. A population change of 1,000 people in one year, for example, might have huge impacts on a smaller community, but have a relatively small impact in a larger urban area like Binghamton or Syracuse. Similarly, the availability of vacant housing, the proportion of owners to renters, the income distributions of the community, and many other contextual factors in addition to the degree and length of time of the development, will collectively determine the magnitude and character of any housing-related impacts experienced by a community or region. For this reason it is important to consider not only the observed impacts themselves, but also the context in which they occur so that more accurate comparisons might be drawn and more desirable outcomes may be achieved. (For a general comparison of some of the above mentioned factors for New York and Pennsylvania, see Figures 9-11 in Appendix A).

One of the greatest challenges in assembling this report has been the lack of available information related to housing in regions where drilling activities are taking place. This is a result of several factors - the lack of current census data, the unfortunate absence of concerted or formal studies of housing in drilling areas, the speed with which the gas drilling companies operate and change operations, and of course the relatively small time frame that constitutes the window of study. Because of this lack of availability, the information contained herein represents a collage of sources from interviews with local residents and leaders, to the work of journalists, to a state senator-led hearing in Pennsylvania, to the emerging scholarly work on the matter. Wherever possible, sources were cross-checked and corroborated with one another, but in some cases no corroborating sources were available.

Understanding the "Boomtown" Economy

Impacts of natural gas development activities on housing occur largely because of rapid shifts in local population, income, and demand for goods and services. The trends observed in Pennsylvania and other recent natural gas plays are similar to the energy "boomtown" communities studied in previous decades. The influx of workers, both permanent and transient, the jobs created by the energy development activity, and the revenue generated from the resource itself are enough to overwhelm many small or rural communities. The unpredictable and seemingly uncontrollable nature of the developer-driven energy development process can leave local governments with little power to capture benefits or mitigate negative consequences in this environment.

Although all of these changes may seem like positive economic impacts at first glance (for some communities they certainly will be) case studies indicate that whether the changes result in a net positive or negative impact may be less a matter of the *kind* of changes taking place, and more an interaction between the *rate* at which they occur and the ability of local governments to respond to the change. Estimates place the maximum tolerable population growth rate for most communities at around 5-6% annual growth, with rates exceeding 15% to result in "institutional breakdowns in the labor market, the housing market, and the system for financing local public facilities."ⁱ Of course this maximum rate will vary with the specific characteristics of the community (e.g. available vacant housing units, labor market profile, local governance practices, etc.).

Jeffrey Jacquet, a PhD student at Cornell University whose research focus concerns energy development, characterizes the potential impacts of the boomtown economy on local governments as follows:

“Local governments are often caught unprepared by the waves of new growth and are at a disadvantage to mitigate potential growth problems. Some of these disadvantages include a lack of information, growth volatility, lack of jurisdiction, conflict between long-term residents and new residents, resistance to new government policy or planning strategies, shortage of staff or expertise, and a lack of or lag in sufficient revenue.”ⁱⁱⁱ

Most, if not all, of these impacts will be of areas of concern for governments in southern New York State.

Another important aspect of the boomtown economy is the growth that occurs, while rapid and of a significant magnitude, is almost all temporary, whether the period of growth is 5 years or 50 years – the *boom* period has a corresponding *bust* period. This further complicates matters for local governments, particularly in areas that require long-term investment, such as housing or infrastructure used to support housing.

Boomtown communities, unless they happen to have an already available supply of surplus housing, are often challenged with housing shortages. With a rapid influx of population, existing housing is quickly inhabited and new housing is slow to develop. There are a number of reasons that new housing options are delayed, including high labor costs, labor shortages, high supply costs, supply shortages, and regulatory obstacles. With limited housing availability and high demand, housing prices can increase dramatically. Those individuals who do not own property, who rent, or who are on a fixed income are especially impacted by the rising housing costs. Extreme housing shortages can push housing prices out of the range of even many energy workers.ⁱⁱⁱ

Patterns of Growth Impacts

The intensity of population growth across a region will largely be determined by the intensity of development - a function of the overall number of gas wells being drilled/hydraulic fractured, the number of pipelines being built, etc., and the rate at which they are being developed. Yet the impacts on a given community are much harder to predict. Drilling occurring at more remote sites, for example, may create demand for a large workforce in an area where meeting the workforce's housing, food, and other needs is not feasible. Workers may therefore take up residence in nearby communities or choose to travel longer distances to work in order to live in a more desirable community. Robin Smith, a township supervisor and secretary in Athens, PA, notes that the majority of workers in Bradford County choose to live an hour away or less from the well sites they are working on. The long (up to 12 hour) shifts they are required to work preclude longer commute times.^{iv} Factors that influence worker housing location choices other than commute time may include cost and availability of housing, the worker's own income, the status of their position (temporary/transient or permanent), the locations of other wells they may be assigned to by the company they work for, the choices of their coworkers, and their lifestyle choices. (see Figure 1 for examples of observed worker housing types^v)

This unpredictability of housing locations relative to development locations can have the effect of dispersing or intensifying the growth rate and impacts on a given community. A city like Athens, PA, for example, has attracted a large number of workers from all over Bradford County because it has a large enough population to support services that workers may find attractive, is a short driving distance from many well sites in the area, and is relatively distant from other similarly-attractive cities that might act as opposing gravitational centers. On the other hand, another city with similar characteristics and a similar proximity to drilling activities may experience only moderate growth if a second small city is nearby or very little growth if more affordable options are available in rural areas.

Worker's housing choices are, thus, dependent upon a variety of factors that are difficult to predict, even given complete knowledge of drilling development patterns. It should also be

Examples of Worker Housing

- **Dedicated Worker Dormitories:** also known as ‘man camps’; e.g. Athens Township, Bradford County, PA, built by Chesapeake Energy Corporation houses 280 workers, also serves as a training facility.
- **Previously Owner-Occupied Housing, Vacated for Rental to Workers:** A residential house being leased by the company with tenants in the house changing as the company needs change—One week executives are in the house, the next week rig workers are occupying the same house.
- **Worker-Owned Housing**
- **Dedicated RV Parks** (contracted to or built by a drilling company)
- **Appropriated RV Parks:** camper-style mobile homes
- **New House/Apartment Construction:** 2 hotels being built in Tunkhannock, but also a new townhouse development in Bradford County.
- **Hotel Room Rental:** e.g. Valley Inn in Athens, PA
- **Retrofitted, Repurposed Structures:** Commercial leasing of warehouses for the company to operate out of and then constructing a 1000 sq ft housing area for employees to sleep in.
- **Innovation on Farming Fields:** Fifth wheel camper trailers in a farmer’s field. They have water and electric hookup and a septic pumper trucks pump-out the self-contained campers as needed.

Figure 1: Examples of Worker Housing.

noted that growth patterns may not (and often will not) coincide with jurisdictional boundaries. Communities in southern tier New York, for example, have already begun to experience some growth impacts, due to workers choosing to live in New York communities. This is, of course, despite the fact that no development is actually occurring in New York counties. The same may be true of cross-county impacts. The fact that development could occur in Tompkins County does not necessarily mean that Ithaca can expect to experience the impacts (positive or negative) of growth in the area. Workers may, for example, be deterred by already high rent prices caused by market saturation by student populations. As Jacquet notes, most attempts to model or predict housing trends or economic impacts of energy development in rural areas have had "limited success, at best."^{vi}

Recent Economic and Physical Development in PA Marcellus Counties

With natural gas development comes not only increases in population, but also more employment opportunities and more money being spent in the local economy, from leases and royalties, to surges in local business, to new real estate development. The Bradford County unemployment rate has fallen from roughly 10% to 7.4% from March 2009 to 2010 according to the Center for Workforce Information and Analysis. Bradford County has also seen an increase

of 2,000 new jobs over the previous year.^{vii} Chesapeake Energy, alone, employs over 1,000 Pennsylvania residents as of November 2010, which is up from around 200 last year.^{viii}

One of the issues associated with an increase in spending and population in the region is the competing need for developable land for commercial, industrial, and residential development. Without the proper infrastructure in place throughout PA counties, development is limited in its type and placement.^{ix} New construction is beginning due to a need for commercial and residential properties, but without adequate infrastructure, developers are hesitant and limited in pursuing their development plans.

The Central Bradford Progress Authority is sponsoring Recovery Zone bonds to financially support the development of two new hotels and additions to two existing hotels to help with the housing shortage.^x Chesapeake is constructing a residential facility in northern Bradford County to provide housing for workers and to serve as a training facility for new local hires. The opening of this facility will address, in part, local residents' fears that the Towanda Motel might not be available for tourists during the hunting season, due to constant occupation by drilling employees. Chesapeake has also invested \$50,000 in improvements to a local hotel to accommodate housing needs for their workers. In addition, many gas companies are investing in commercial space. Chesapeake, for example, has allocated \$600,000 for the upgrading of office space and storage facilities in Towanda.^{xi}

Small local businesses have been challenged by the sudden increased demand for their services and products from restaurants, retail, to repair shops, businesses throughout the counties. Many businesses that have some connection to the natural gas industry such as pipeline companies are trying to relocate within the counties experiencing Marcellus Shale drilling.^{xii} This causes an even greater increase in the local population and can put more pressure on housing needs. Small business owners and medium to large land owners have seen their incomes increase over the past few years from gas company spending and royalties associated with leasing land for drilling. Owners of properties with sizeable acreage are holding onto their properties with the hope of future royalties.^{xiii}

Aside from these individuals, the general population in Bradford and Susquehanna Counties is benefiting from the increased employment opportunities that have come along with the natural gas drilling. The Penn College Marcellus Shale Work Force Needs Assessment indicates that many local people are being hired by the drilling companies.^{xiv} There is, however, controversy over the employment data and economic benefits of gas drilling. While studies published by Broome County and Penn State have suggested positive economic benefits for the region, a paper by Jannette M. Barth, president of J.M. Barth & Associates, Inc., an economic research and consulting firm in Croton-on-Hudson, says these benefits may be underwhelming.^{xv} This is especially true with respect to the significant burdens on the region mentioned above.

Housing Availability in Pennsylvania Marcellus Counties

There is a serious need for housing in Bradford and other PA Marcellus Counties due to a shortage of available and affordable housing. With an increased need for housing, the lack of available and affordable rentals has challenged "local residents, low to moderate income families, senior citizens and some single income oil and gas industry workers."^{xvi} Prior to

natural gas development, renters had more power with their landlords because there was not a large demand for rental housing. Rentals now seem to be the preferred housing type in Bradford and its surrounding counties among locals looking for affordable housing options and for gas workers.^{xvii} According to Brent M Fish, president of Fish Real Estate in Williamsport, only a small percentage of gas employees want to purchase homes.^{xviii}

Local residents are feeling the effects of the shortage of rental homes and apartments in the area. Landlords are not renewing their current leases with tenants or are evicting tenants that cannot afford the increased rental fees. Evicted tenants or those that could not renew their leases have been moving to other areas or moving in with family.^{xix} Some families are doubling and tripling up when they face eviction while others are living in mobile homes and tents, according to James Meehan from Futures.^{xx}

D.J. Rees from The Main Link, which focuses on housing, transition age youth, and forensic mental health complexities, supports these statements by indicating some of the primary challenges in housing individuals and families. These challenges included: evictions from landlords looking for higher rents, nonrenewal of rental leases by landlords, lack of available rental units in the price range of the people The Main Link serves, and a lack of crisis shelter for homeless individuals/families due to non vacancies in hotels and motels in the area.^{xxi} In general, it is local residents with children, industry workers with their families, and senior citizens who are seeking housing.^{xxii}

Bradford County Median Household Income (1999)

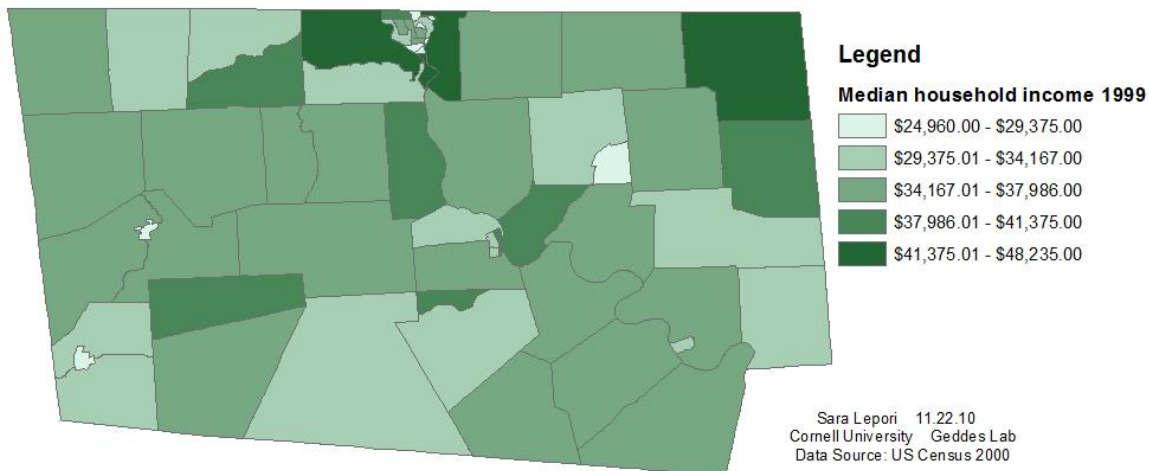


Figure 2: Map Showing Median Household Income by Census Tract

According to Shannon Clark, although rents appear to have stabilized in price, they are well above fair market price (see Figures 7 and 8 in Appendix A).^{xxiii} Although the actual change in price varies greatly according to the location and the source of the information, the consensus seems to be that they are roughly 2 to 3 times higher in price than they were when development began. “When a house would typically rent for \$600/month, it is now renting for \$1200 to \$1500 month...Apartments that typically rent for \$375/month are now renting for \$800/month.”^{xxiv}

Some homes that used to rent for \$475 per month, now rent for close to \$3,000 a month. Jim Meehan also suggests that the accepted standard that affordable housing should cost approximately 30% of a family's income no longer applies to the housing market in the Marcellus region.^{xxv} Families that were used to allocating 30% of their income for housing now need to allocate over 60% and sometimes up to 90%. (To put this in perspective, see Figure 2).

The last Census (2000) shows that median incomes in Bradford County were around \$34,000 to \$37,000—equivalent to some rental prices that have been reported. Although the incomes are slightly higher than those in 2000, the price of housing is beyond not only those who were considered below poverty level, but also of middle income families who are in the rental market. It is also evident that this is affecting a large portion of residents. The map below (Figure 3) shows the percentage of rental properties by census tract in Bradford County. Areas with intense drilling, have between 10% to 24% rental housing options, indicating that rental property increases are negatively impacting roughly a quarter of the residents. However, it is important to note that gas drillers may rent in many areas which are far from the active drilling sites including Wilkes-Bare, Scranton, Binghamton and Elmira. Indeed, some New York counties are already experiencing the spillover effects from the PA development boom.

Efforts By Trehab in Pennsylvania

Trehab is a nonprofit organization who has been at the forefront of housing issues in northern Pennsylvania. In January 2010, Trehab conducted a survey of real estate agents from Susquehanna, Bradford, Wyoming and Tioga Counties. 80% of respondents said they saw an increase in people seeking to rent properties in 2009 and 95% of respondents stated that gas drilling has contributed to the increase in demand. About three-fourths of respondents said that the price of rent for rental units significantly increased in 2009 and 95% thought that gas drilling had significantly contributed to the increase in rent.^{xxvi}

Bradford County Rental Housing Stock

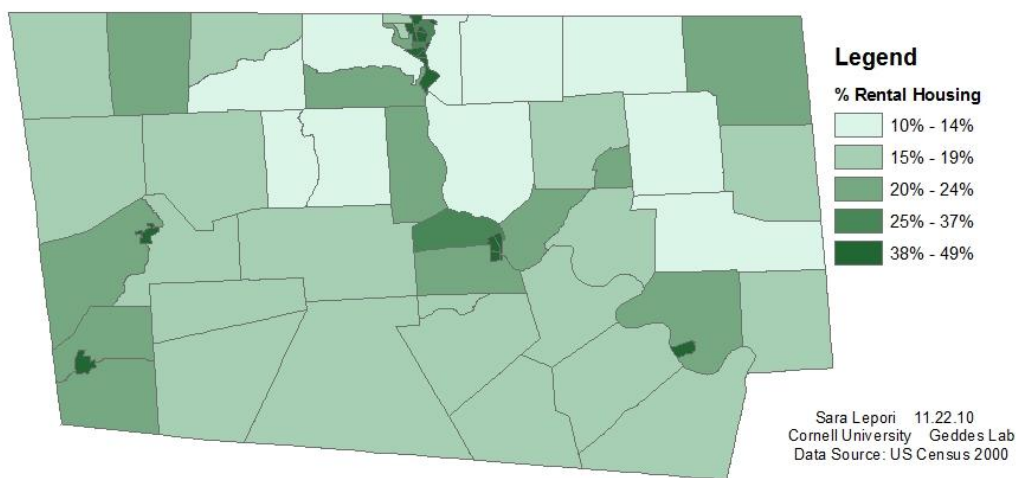


Figure 3: Map Showing Bradford Country Rental Housing Stock by Census Tract

While new development has been fairly limited (see Figure 5 in Appendix A), Trehab is currently in the process of developing an affordable housing community in each of the 5 counties that have the highest social impacts associated with natural gas drilling. Working with the Pennsylvania Housing Finance Authority, they are developing proposals that may be able to alleviate the shortage of affordable housing in the next few years. They believe that once these units go on the market, they will be full in less than 6 months

In Susquehanna County, Trehab is planning to build Tiffany Pines, an affordable housing development. There is a demonstrated need for this type of housing because of very limited conventional rental stock in the county and age restrictions limiting it to senior citizens. Trehab also notes that natural gas drilling in the county has impacted the local market rate rental market as rents are rising due to demand from temporary gas workers.^{xxvii}

Stress on Hotels and Local Tourism

With limited rental property, temporary housing options have become popular among gas drilling workers. Gas companies are not only renting out entire hotels, but have in some cases even purchased entire hotels in places like Tioga County.^{xxviii} Brian Driscoll, Economic Development Manager at the Progress Authority in Bradford County noted that the hotel market has been saturated for close to two years.^{xxix} While this provides support for local business and fills hotels during times of typical vacancy, it has its own drawbacks. Temporary emergency shelter in hotels is nearly nonexistent at this point. Hotels also have a room tax that is no longer applicable after a room has been rented for 30 days, since the individual staying in the hotel room is then deemed a “permanent resident.”^{xxx} With gas companies renting out entire hotels for extended periods of time, this poses an additional problem to tourism efforts in the area that are dependent on the money from the room tax and room availability at local hotels.^{xxxi} This is especially true for seasonal tourism in the area, such as hunting and other outdoor recreation.

Vulnerable Demographic Groups

The increased costs of and demand for housing described above do not affect all demographic groups equally. Some may realize these changes as net benefits, while others may find themselves worse-off. A homeowner who had been planning to sell her home, for example, may capture additional value from the overall increase in property/home values. A homeowner who had not been planning to sell his home, on the other hand, may experience only increased property taxes without being able to capture any benefit in the long run. Still another might see the changes as an opportunity to capitalize on the increased demand by temporarily relocating and renting her house to a drilling company during peak activity. Although there will certainly be individuals experiencing a range of positive and negative impacts, a few demographic groups are particularly vulnerable to these rapid increases in housing costs. This section will attempt to characterize impacts on those groups who may require specific protections in order to ensure an acceptable quality of life.

Users of Section 8 Housing Vouchers

Kristen Lunger, the Section 8 Coordinator for the Susquehanna County Housing and Redevelopment Authority states that because of gas drilling activities, it is increasingly difficult for section 8 voucher holders to be accepted by landlords. Landlords are able to get double and sometimes triple the standard section 8 amount from gas workers, so many have chosen to withdraw from HUD's section 8 rental assistance program. This is leaving section 8 holders in a position where they have government subsidies, but no landlords in the area accepting the vouchers. Lunger states that many are staying in their cars as shelter, and others are moving in with other families while still receiving assistance from the Housing Authority. Bradford County also has a Section 8 Rental Assistance program with 256 households currently using it. In 2009 there was a waiting list of 490 individuals, with a waiting period of about 2 years.^{xxxii}

The problem is twofold - first, the lack of section 8 housing; second, the unbalanced budget caused by unused vouchers. If section 8 vouchers are not able to be used, the following year's budget may be cut. So while there is an unusually great need for housing assistance, there may also be unusually small Housing Authority budgets in future years. Jim Meehan, the Regional Housing Coordinator for Futures Community Support Services has observed similar trends across Pennsylvania.

Homeless Population

Homelessness has also increased. Pennsylvania counties' ability to offer long term housing for the homeless population has dropped significantly. Jim Meehan states that counties that have had natural gas development have also watched their homelessness rates increase by up to 20%. Small counties without homeless shelters would normally rely on hotels as temporary housing resources, but these resources are also unavailable because hotels within the region have been booked for gas industry workers. Homeless assistance programs therefore have no shelter to offer to those families and individuals.^{xxxiii} While there is a homeless shelter in Bradford County called the Endless Mountains Mission, it does not have enough capacity to meet the increased demand.^{xxxiv} The state funded Homeless Assistance Program (HAP) provides individuals and families with utility assistance, rental assistance, and emergency shelter. Futures Community Support Services runs the HAP and recently has had to send away individuals and families with no resources because there is no available location to place them.^{xxxv}

Elderly and Fixed Income Groups

Affordable housing for the elderly population is proving to be a great challenge with increased housing market rates in Marcellus Play communities. According to Bill Farley at the Area Agency on Aging, there is a large population of senior citizens, accounting for 22% of the total population. Furthermore, the 85-plus segment of the population is the fastest growing in northern Pennsylvania (see Figure 4). Further, about 1/3 of the senior population lives in homes that were built before 1950 and are facing safety and accessibility issues as they age. Because fixed incomes generally do not allow flexibility to accommodate increased property values or rental rates, shifting resources toward housing costs often require significant sacrifices in other necessities such as food, medical care, transportation, etc.^{xxxvi}

Bradford County Aging Population

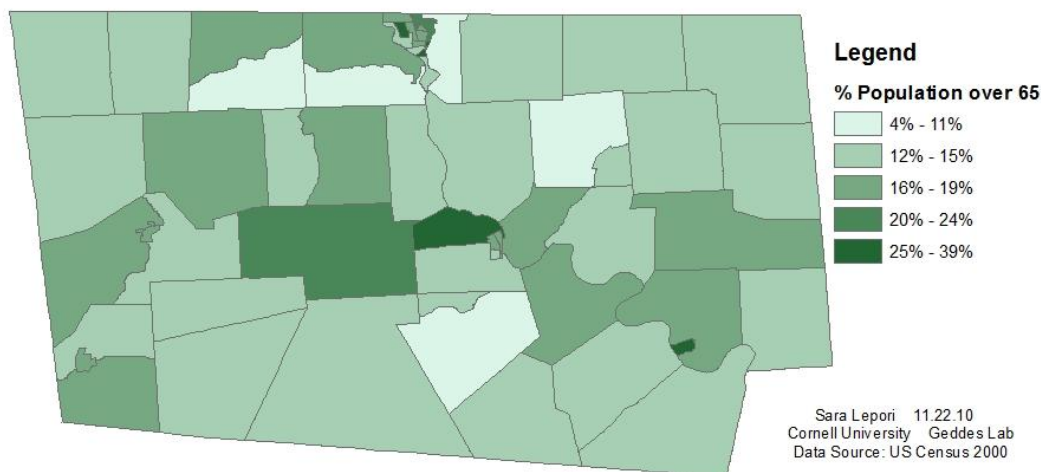


Figure 4: Map Showing Bradford County Population over the Age of 85 by Census Tract

Youth and Children

Bradford County Children Services recently reported a 10% increase in placements as a result of families being unable to find safe and affordable housing. Children Services stated that these placements were not due to abuse or neglect, but rather families unable to find housing and support their children. The lack of affordable housing has, in some cases, split up families because of caretakers' inability to find housing. This is also creating additional strain on social services, which are already operating at a lower capacity than is necessary to meet demands.^{xxxvii}

People with Disabilities

The increased cost of and demand for housing are also affecting those suffering from various physical and mental disabilities. Effects include evictions, non-renewal of leases for higher rents, lack of available rental units (and particularly those that suit special needs residents), and lack of crisis shelter. These individuals often do not have the capacity or the network to find alternative living locations. Services for the disabled are sometimes having to turn away people who are seeking housing aid, risking placing an extremely high need population on the streets.^{xxxviii}

Conclusions and Recommendations for Counties/Municipalities in New York State

The above analysis demonstrates that natural gas drilling can have significant impacts on the cost, availability, and quality of housing options for residents in the region. From economic development, increasing rents, to homelessness as seen in Pennsylvania, understanding these

impacts is important to plan for future drilling that may occur in southern tier New York. The following are general recommendations for county/municipal governments in New York:

- I. **Collect and share information:** Share information between government agencies, NGO's, and across geographic boundaries. Contact officials in similar positions in Pennsylvania to see what challenges they have faced and what solutions they have come up with. It is particularly important to identify vulnerable populations (i.e.: elderly disabled, renting population, low-income). These groups will be most affected by volatile housing prices. It is also important to analyze the existing housing stock (i.e. rental properties, section 8 housing, vacant housing). Understanding the types of housing stock which exists will help communities evaluate if there is an access of housing issue anywhere or identify threatened housing markets.
- II. **Create a regional task force** Housing organizations tend to focus on specific populations and the needs of these populations. It is important to identify and bring together these entities and the information they possess to better understand the collective needs of the area and how these needs can be met through collaboration. Bringing together real estate agents, housing nonprofits, local government officials, and other groups and players that have a stake in housing not only to share information, but also to participate in decision-making and advisory processes. It will not only aid the organizations in serving their constituency, but also produce better outcomes for the region.
- III. **Be aware of development scenarios** Many studies have been completed looking at boomtowns throughout the south and intermountain west where there has been gas drilling for over 30 years. These areas have long term impacts of gas drilling on housing, and can serve as an example from which to learn. In doing so, be sure to pay attention to specific contextual factors that may be important in the application of these scenarios.
- IV. **Create projections and mitigation strategies** Population projections are not always accurate, even when projecting for stable regions with trends of growth or decline. When looking at boomtowns which are experiencing extreme growth due to energy industries, it is nearly impossible to accurately measure population change. It is imperative to look at trends in other regions with a history of natural gas development to establish a baseline of growth expectations, but to not count too much on population estimates in Pennsylvania, for example, which may or may not include temporary and transient workers. Develop mitigation strategies as far in advance as possible. Will your community solve potential housing problems by building new structures, appropriating old structures, or find other solutions? Does the infrastructure already

exist to support these activities, or will investments need to be made now to support future mitigation?

- V. **Plan for the long term.** Natural gas drilling can create volatile economies and housing markets. It is important to remember that the Marcellus Shale is an extremely extensive gas reserve that will be developed for years to come. Attempting to “wait-out” the impacts of the development process is not a viable option. Many areas will require more housing than is currently available, both affordable options and housing for an influx of gas workers. It is important to pair forward looking land use strategies with current housing plans in order to ensure long term housing stability for the region.

Appendices:

Appendix A: Additional Figures and Maps

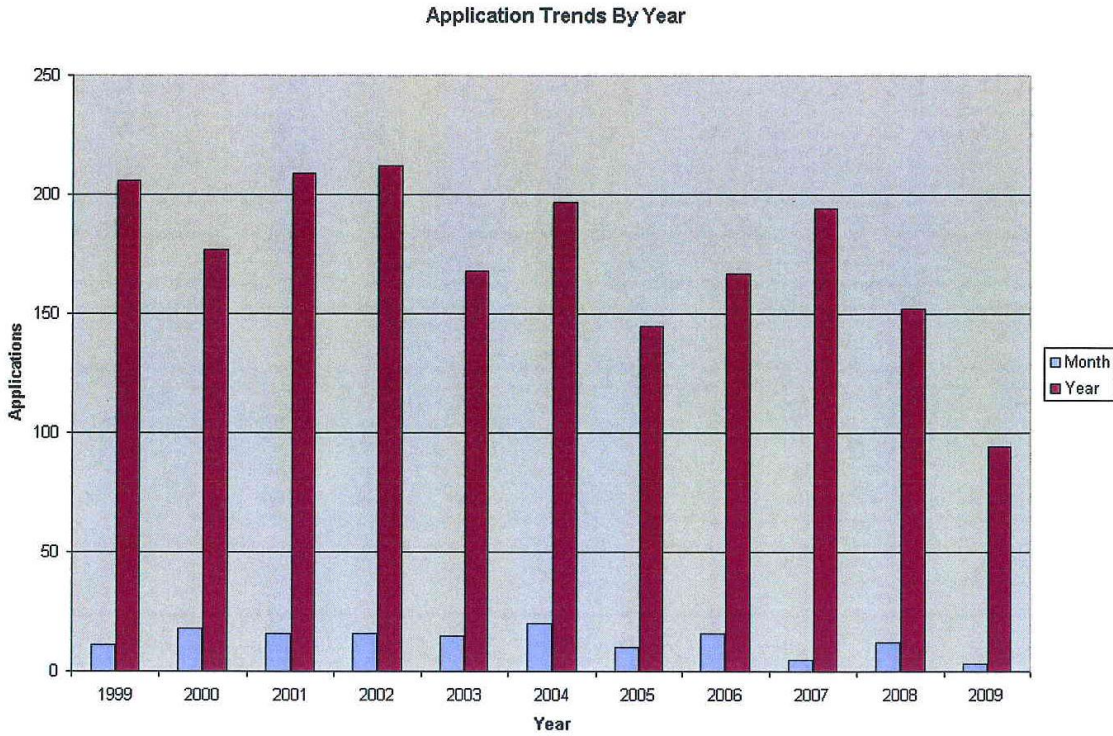


Figure 5: This graph shows the number of subdivision applications in Bradford County has declined as landowners hold on to property.^{xxxix}

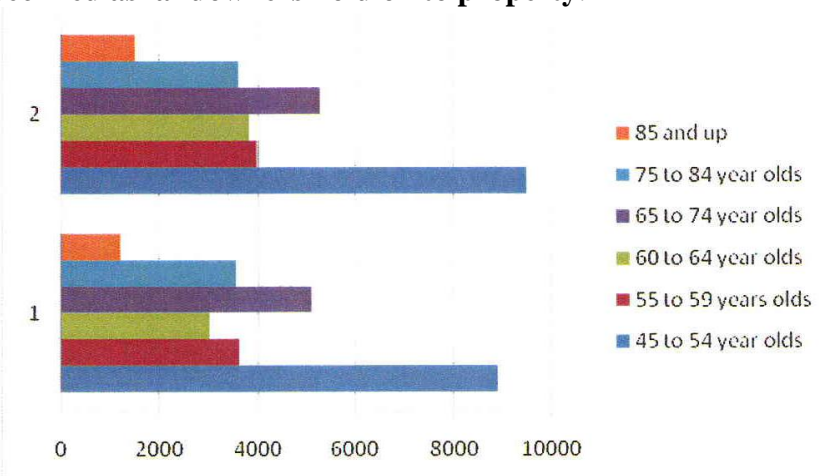


Figure 6: These graphs show Census data from 2000 in the bottom graph labeled 1 and data from 2006 to 2008 in graph 2.^{xl}

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Apartments For Rent 1531

CANTON- 3 bedroom apartment... Stove & refrigerator included. Washer & dryer hook up. \$1,000/month + utilities. Deposit required. 570-673-8388

SAYRE-
110 1/2 Spring St. 2 bedroom. Air. Coin operated laundry. \$650 + security & utilities.
112 Spring St. 2 bedroom, coin operated laundry. \$550 + security & utilities.
Nice units. Non-smoking. No pets. Close to hospital & Rt. 1786.
570-888-2364

SAYRE- Hopkins Commons - Affordable elderly housing (62 years old & up). 1 bedroom apartments. Wall/wall carpet. Kitchen/dining, living room. Full bath. Appliances furnished. Must meet Federal Program requirements. HUD accepted. For more information call 1-800-135-3068, TDD 711.

This Institution is An Equal Housing Opportunity Provider And Employer

TOWANDA AREA: Fully furnished 1 1/2 bedroom. \$1,250. All utilities electric, heat, TV & wireless internet included. Available now. Good parking. Will do short term lease. Call 570-364-5246 or 570-814-6017

TOWANDA Third Floor Apartment for rent. Off street parking 5pm-8am. Completely furnished. Internet and Direct TV included. \$1000. per month. Call 570-268-7587

TOWANDA. 1 BEDROOM apartment. Utilities included. No pets. \$800 a month, plus security. 570-265-7152.

TROY. 2 bedroom. No Pets. \$550 + utilities & security deposit. 570-297-2729.

Houses For Rent 1541

NEW TODAY!

ATHENS- 2 bedroom. Appliances included. Off street parking. No pets. \$975/month + utilities & security deposit. 570-888-7320

COLUMBIA CROSS ROADS- Completely furnished. Includes washer & dryer. 3 bedroom, 2 bath, finished basement. No Pets/non-smoking. In House! \$1600/month + utilities. Call 1-215-669-5861.

TOWANDA- 3 bedroom, 2 bath. Recreation room with pool table. Fully furnished. All utilities. Cable, wireless Internet, & house cleaning included. \$2,250/month. 570-637-4047.

Figure 7: This figure shows rental ads from the classified section of the Daily Review for 9/24/10.^{xli}

Proposed FY 2011 Fair Market Rent Documentation System

The Proposed FY 2011 Bradford County FMRs for All Bedroom Sizes

The following table shows the Proposed FY 2011 FMRs by unit bedrooms.

Proposed FY 2011 FMRs By Unit Bedrooms					
	Efficiency	One-Bedroom	Two-Bedroom	Three-Bedroom	Four-Bedroom
Adjusted FY 2011 FMR	\$382	\$512	\$587	\$734	\$899
Final FY 2010 FMR	\$377	\$505	\$579	\$724	\$887
Percentage Change	1.3%	1.4%	1.4%	1.4%	1.4%

The remainder of this page provides complete documentation of the development of the Proposed FY 2011 Fair Market Rents (FMRs) for **Bradford County, Pennsylvania**. This page provides a summary and details of how the Proposed FY 2011 FMRs were developed and updated starting with the formation of the FY 2011 FMR Areas from the [metropolitan Core-Based Statistical Areas \(CBSAs\)](#) as established by the Office of Management and Budget and incorporating newly available 2008 one and three year American Community Survey (ACS) Data. FY 2011 FMRs include information from local Random Digit Dialing (RDD) surveys conducted during 2009. Aspects of the derivation of Proposed FY 2011 rents exclusive to FY 2011 are made explicit in the following text. Aspects unchanged from FY 2010 can be reviewed by clicking on the associated link.

Note that Bradford County, Pennsylvania is assigned the [State Minimum 2-bedroom FMR for Pennsylvania](#) of \$579 and the other FMRs are derived from this base. The following sections of this page indicate how the unadjusted 2-Bedroom FMR for Bradford County, Pennsylvania is derived, while the final section shows how the FMRs for other unit sizes are derived from the state minimum base.

The following defines a summary of the steps taken to generate the Proposed FY 2011 FMR:

Bradford County, PA Proposed FY 2011 FMR Calculation Summary	
Process Step	Step Result
1. Begin with Final FY 2010 2 Bedroom FMR	\$579
2. Remove Trending and CPI Updates from Final FY 2010 2 Bedroom FMR	\$520

Figure 8: This figure shows 2011 HUD Fair Market Rents for Bradford County.^{xlii}

Number of Non-seasonal-use Vacant Housing Units by Census Tract in the Marcellus Shale Play

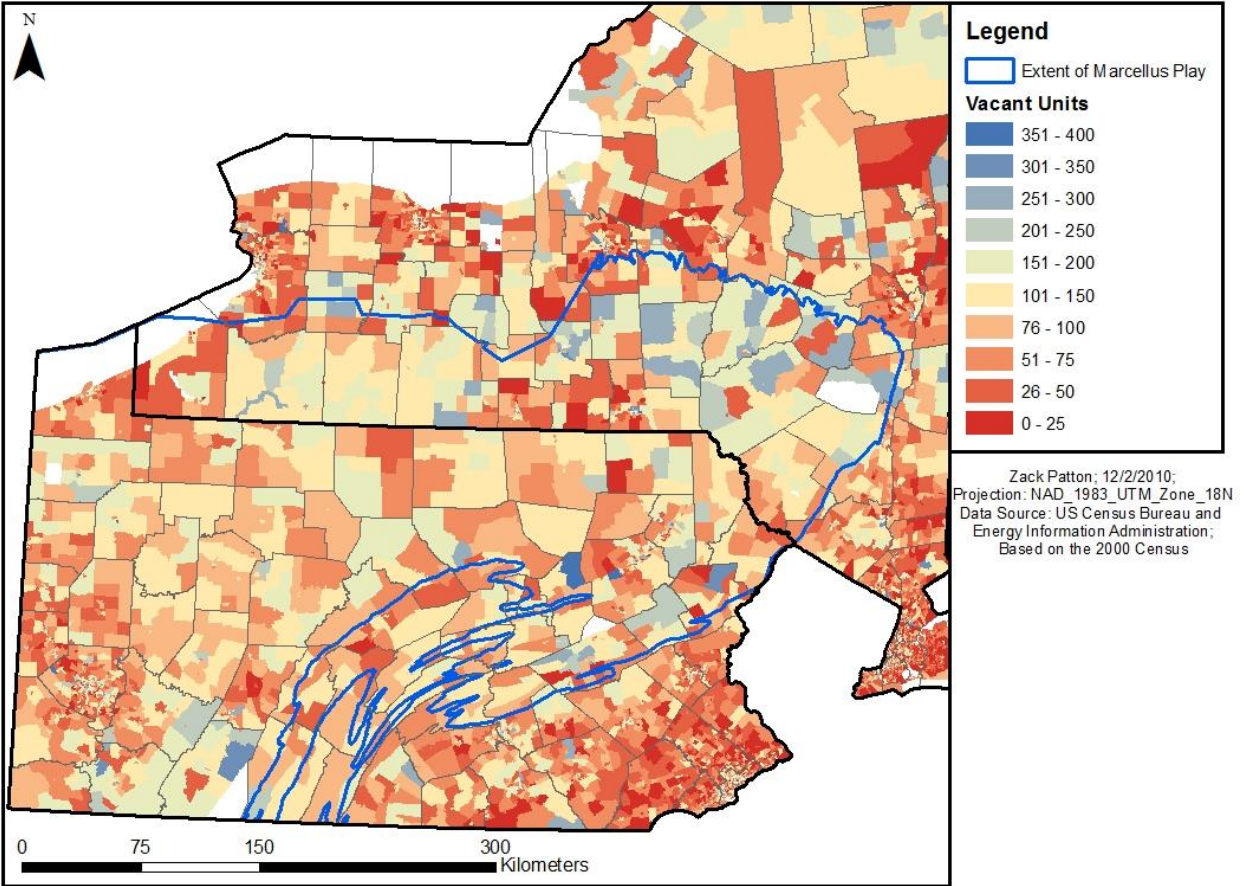


Figure 9: This GIS map shows the number of non-season-use vacant housing units in the Marcellus Shale formation.

Percentage of Renter-Occupied Housing Units by Census Tract in the Marcellus Shale Play Area

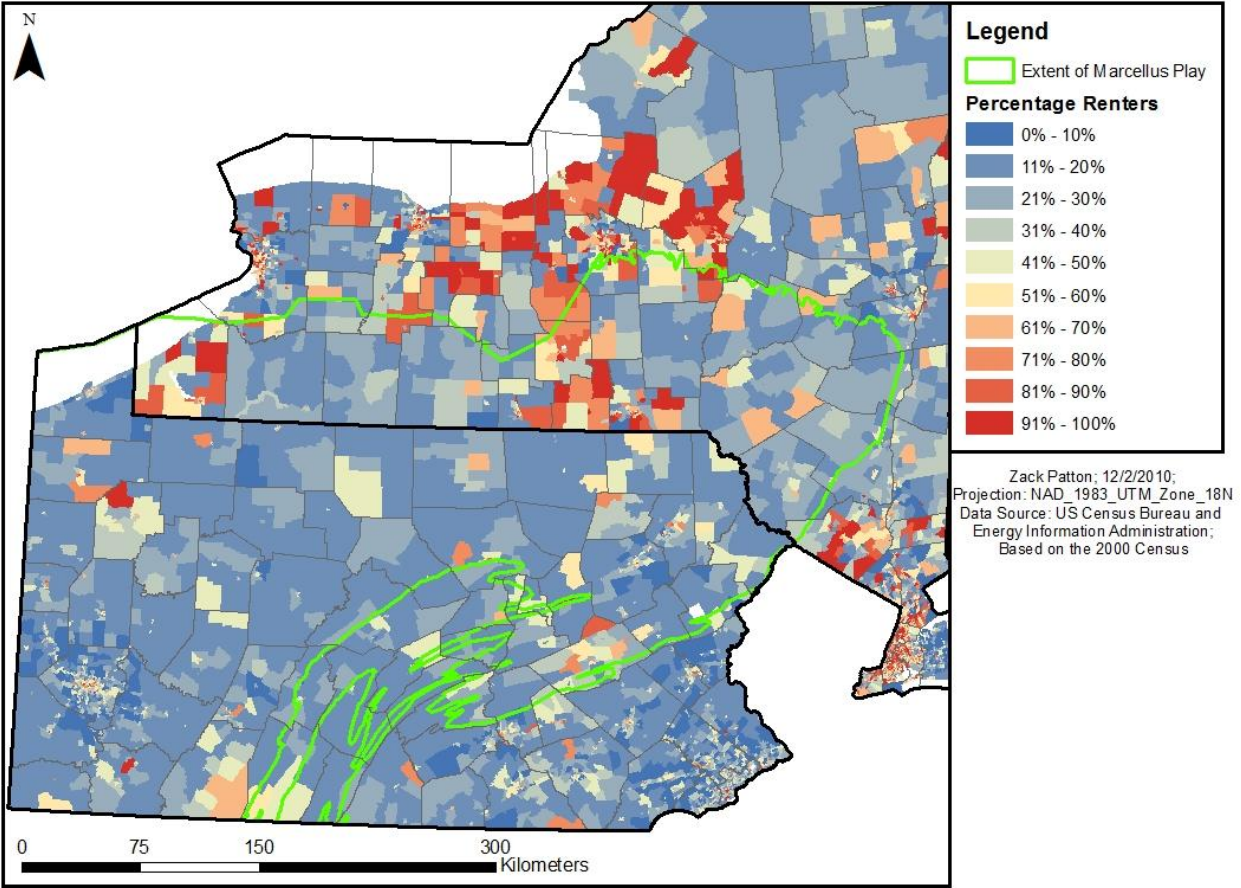


Figure 10: This GIS map shows the percentage of renter-occupied housing in the Marcellus Shale formation.

Population Per Square Kilometer by Census Tract in the Marcellus Shale Play Area

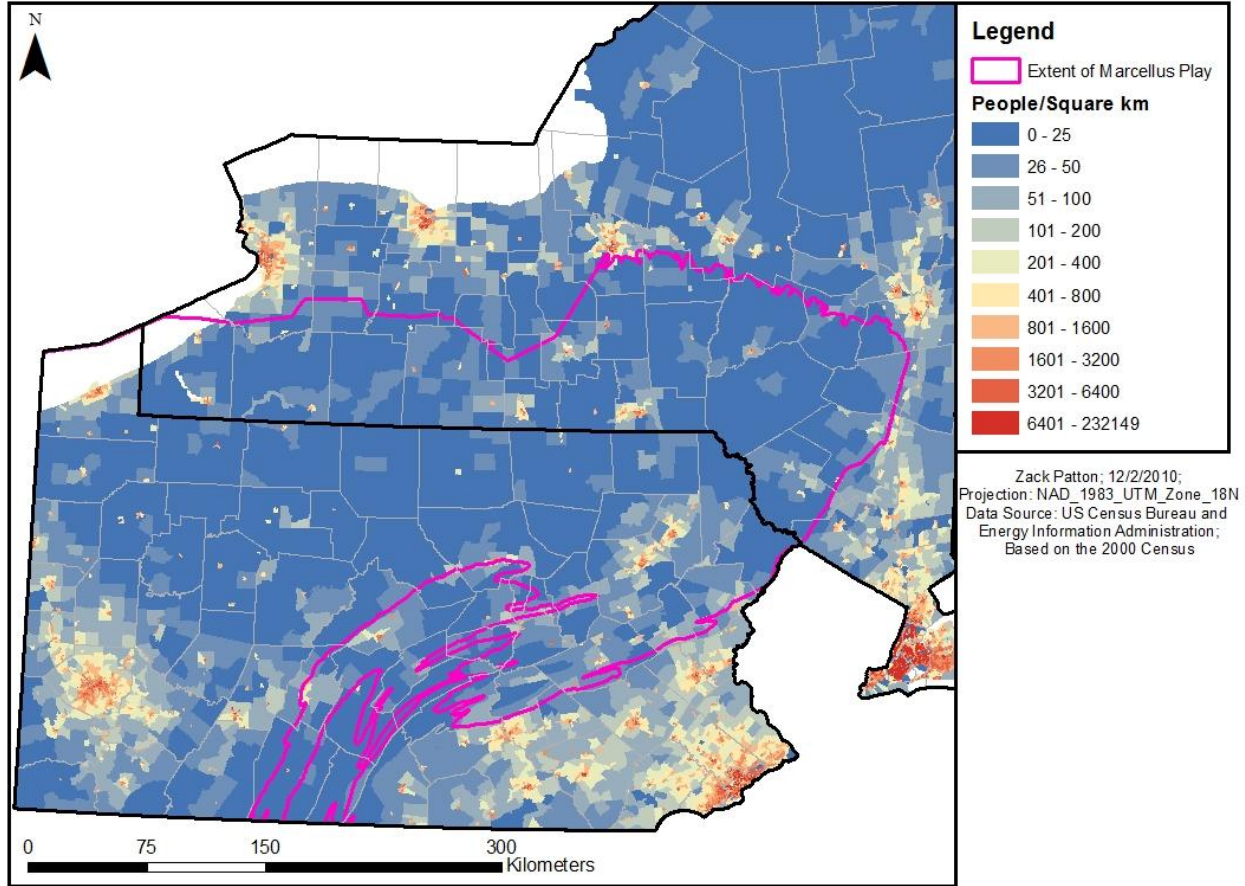


Figure 11: This GIS map shows the population per square kilometer in the Marcellus Shale formation.

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