Prisons used as economic development in rural communities

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Analysis of economic and other effects of prison hosting has been slow in coming and results are mixed. The present study gathered community perceptions and compared Ohio rural communities with prisons to themselves, the state, and their urban counterparts on three select indicators of economic benefits: unemployment, population, and per capita personal income. Qualitative data was collected from key informants for a subset of rural communities with prisons to identify community perceptions regarding prison hosting and its perceived impact on the communities. Themes were identified, analyzed, and presented for discussion. Quantitatively, it was hypothesized that jobs would grow, thereby lowering unemployment in hosting counties. In addition, it was hypothesized that people would follow the jobs and that the jobs would reduce outmigration, thus stabilizing or increasing populations of the hosting counties. Further, it was hypothesized that the prison-hosting jobs would replace income people lost in the dismantled manufacturing and farming industries, thereby increasing per capita personal income in hosting counties. Trend data and statistical analyses painted the typical picture of rural, including lack of population growth and lower per capita personal income. However,
rural communities with prisons did experience a significant reduction in unemployment, lowering it from pre to post hosting. No differences were observed in comparisons to the state or their urban counterparts. Conclusions include lessons learned as well as caveats for researchers examining economic benefits of replacement industry such as prisons.
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Chapter 1

Introduction

Prisons, prisons everywhere, even in the least likely of places—rural areas. Their primary mission was to keep prisoners safe, in line, busy, healthy, and confined, and to do it as fairly and efficiently as possible without causing undue suffering (Logan, 1991). More important, though, prisons have become big business in the United States. Over the last 40-50 years, prisons have become very familiar landscape in this country, with their greatest growth occurring between 1980 and 1998. During this time period, the prison population in the United States evidenced a 400 percent increase (Chang & Thompkins, 2002; Hooks, Mosher, Rotolo, & Lobao, 2004). At the federal level, the prison population doubled. The corollary was the opening of three 500-bed prison facilities every week, on average, during the early 1990s. Similar results occurred at the state level. For example, the state of California constructed 21 new prisons to accommodate an eight-fold increase in prisoners during this time period. New York demonstrated a 456 percent increase in its prison population, from 12,500 to 69,000 inmates (Hooks et
A report by the Justice Policy Institute (2000) indicated that in 1995 states were actually spending more money building prisons than they were on the higher education of their citizenry.

Prisons were becoming commonplace in this country because we were incarcerating people at a continually rapid pace. Around 1972, the increase of inmates in U.S. prisons was steady and closely paralleled growth rates for the general population (Pew Center, 2010). In fact, the combined jail and prison population that year consisted of only about 330,000 inmates (Mauer, 2004). However, a precipitous rise in the prison population began to manifest in 1973 (Pew Center, 2010). Between 1987 and 2007 the U.S. prison population tripled. By 2008, we were the world’s leader in prison incarceration, housing almost 2.3 million inmates, which translates into one in every 100 adults behind bars. China, our closest competitor, incarcerated 1.6 million people.

Ironically, the United States incarcerates one fourth of the world’s inmates but only five percent of the world’s population. China’s population, on the other hand, is nearly four (4) times that of our country (Pew Center, 2008).

Criminologists tend to attribute increases in the U.S. inmate population to a myriad of factors that include income inequality, racial conflict, political conservatism, poverty, and unemployment rate. They further contend that these factors work independent of the crime rate. It appears that criminologists operate on the assumption that higher unemployment rates lead states to incarcerate more individuals, thereby absorbing the surplus labor and suppressing social unrest associated with economic deprivation (Chang & Thompkins, 2002). Other sources, however, have attributed increases in the U.S. prison population to tougher sentencing laws resulting from the war
on drugs. The average length of a sentence for a drug offense was five (5) years (Petteruti & Fenster, 2011). Numerous states have hopped on this “tougher sentencing for drugs” bandwagon.

The state of New York, for example, enacted what is known as the Rockefeller drug laws back in 1973. These laws established mandatory sentences of 15 years and life for certain drug offenses. Michigan followed with a “650 Life Law” in 1978 that established a mandatory minimum penalty of life without parole for 650 grams of cocaine or heroin, along with mandatory sentences for lesser drug amounts (FAMM Foundation, 2005). The ante was raised in 1984 with the passage of the Comprehensive Crime Control Act. Established by the United States Sentencing Commission and sometimes referred to as the ‘tough-on-crime-policy’ paroles were phased out and mandatory sentences were set for crimes involving guns (Che, 2005). Two years later, the Anti-Drug Abuse Act created new federal mandatory minimum sentences for drug offenses. A companion act, the Omnibus Anti-Drug Abuse Act, was passed in 1988 that added mandatory minimum sentences for the possession of crack cocaine and conspiracy convictions (FAMM Foundation, 2005).

The mandatory sentencing policies were applied primarily to crimes involving drugs. Judges were required to sentence offenders to fixed prison terms irrespective of individual circumstances. Add to that the fact that half of the states adopted ‘three strikes and you’re out’ policies, requiring a life sentence upon conviction of a designated third felony offense. In California, for example, an inmate’s third offense involved stealing videotapes worth less than $200. He was sentenced from 50 years to life (Mauer, 2004).
It was further possible that increases in violent crime rates played a minimal role in increasing the number of inmates leading to greater prison growth. Violent crime rates are based on offenses involving threats of force/force and consist of murder, nonnegligent manslaughter, robbery, forcible rape, and aggravated assault (Johnson, 2010). Some of the highest violent crime rates manifested during the 1960s and 1970s, though, in advance of the prison boom. However, homicides, the most serious of the violent crimes, rose to its highest level in 1980 (Flynn, 1983). Many homicides were drug related and linked to the distribution of crack cocaine which was primarily a gang-led trade in the late 1980s. Gangs would typically resort to violence against rival gangs in competition to sell the drug (Levitt, 2004). Thus, violent crime’s association through drugs caused researchers to assign it a mediating role in prison growth, thereby attributing a greater proportion of the variance to stricter sentencing laws (Johnson, 2010; King, Mauer, & Young, 2005).

The country’s aggressive “get tough on crime” policy resulted in sentencing policies and laws that became much more punitive (Farrigan & Glasmeier, 2003; Tootle, 2004). Supposedly the tougher prison sentences would act as a deterrent to crime. Without a doubt, these policies effected exponential increases in the prison population and the concomitant need for more prisons.

Politics played a prominent role in the boom in prison construction as well. Overcrowding of state prisons gave politicians an opportunity to have an impact in their own backyards. Prison hosting could mean jobs to community residents that had either been laid off their manufacturing job, for example, or could no longer survive by trying to live off the revenue from their small farm (Avidon, 1998). Leading the campaign for
prison construction gave politicians visibility and the chance to demonstrate their commitment in promoting economic development in the communities they served. Local leaders typically promoted the economic benefits of locating prisons for their depressed, small town communities (Hooks, Mosher, & Lobao, 2004).

Clearly there was a serious need for more prisons in this country. Prisoner population growth was rampant due to increases in incarceration for drug-related offenses, increases in parole revocation, and longer sentences for those convicted of crimes (Levitt, 2004). Soon prison expansion became a way of positively dealing with the issue of accelerated incarceration, providing new capital and jobs (Che, 2005). Communities then sought to host prisons which were being touted as a catalyst for economic growth (Hoyman & Weinberg, 2004; King, Mauer, & Huling, 2004; Martin, 2000).

Texas, Florida, California, New York, Michigan, Georgia, Illinois, Ohio, Colorado, and Missouri, ranked from highest to lowest growth, were the top 10 states with the fastest prison growth from 1979 to 2000. While as few as 19 new prisons were built in Missouri, as many as 120 prisons were constructed in the state of Texas. As a group, these 10 states operated more than three times as many prisons in 2000 as they did in 1979—increasing to 604 facilities from 195. Moreover, prisons in these states represented 63 percent of the overall growth in prison facilities during this time period. The sheer number of prisons across the 10 states increased more than 100 percent during this time period. Nearly one-third of all counties across the 10 states had hosted either a federal or state prison in 2000, compared to 13 percent of all counties in 1979. Hence,
197 more counties in these states hosted prisons by 2000 (Lawrence & Travis, 2004). Prison expansion experienced a slow down after 2000.

1.1. History of Prison Hosting in Rural Areas

The expansion of prisons occurred all over America—in large states, in small states, in metropolitan areas, in rural areas. However, prisons did not always receive a “yes” vote, especially in rural communities. In fact, they were often resisted and considered what has been termed NIMBYs (Not in My Backyard) [Besser & Hanson, 2004; Huling, 1999; Tootle, 2004]. Factors beyond the control of the rural communities resulted in a change in mentality about prisons from the rural communities.

Economies in rural communities started to undergo severe decline (Huling, 1999). These communities suffered extreme reductions in the number of farms due to the technological revolution that caused many farmers to be pushed off their land. Rural farm employment underwent a 26.9 percent reduction from 1975 to 1996, from 2.5 million to 1.8 million respectively. In addition, rural areas experienced substantial erosion of their manufacturing economic base. According to Rafter (2007), “The turn of the 20th century in America saw steel mills thriving, mass production methods churning out automobiles and a boom in innovation that gave rise to revolutionary items like the telephone and electric light bulb. But this industry that helped America grow into a superpower continues its precipitous decline. From 2000-2004, three million good paying U. S. manufacturing jobs were lost” (p.1). Huling (2002) attributed the manufacturing shift to factory closings, corporate downsizing; substitution of major national and regional chains for local, main-street businesses; and the farm crises.
Poverty too was devastating across the country, but particularly debilitating in rural communities. Income inequality was evidenced more in rural than in urban areas. For instance, states like West Virginia and Iowa witnessed declines in their overall poverty rate in the 1990s, but comparisons of urban to rural regions identified tremendous gaps and continued, harsh devastation in rural counties (King et al., 2004).

Losing farming and manufacturing jobs was particularly detrimental to rural workers. Their residents, more often than not, had lower educational levels and job training than their urban counterparts. Many rural dwellers did not even possess a high school diploma and demonstrated weak job skills. If employed, rural workers were not earning sustainable living wages. Not only would it be difficult to attract high-paying industry, it would be a challenge to attract decent-paying industry to rural areas (King et al., 2004).

Rural communities had to change their thinking about certain industry, the prison industry in particular. Their faltering economies required that they restructure (Che, 2005; Tootle, 2004). Rural communities were encouraged to seek available industry, including prisons, following the plunge of agricultural revenue, heightened bankruptcy filings by farmers, and the loss of manufacturing jobs. Rural areas needed a way to maintain their financial solvency. Even farm subsidies were solely temporary treatments for their economies. Rural America needed an impetus for sustainable growth, some strategy that might reverse the trajectory of the downward economic trend (King et al., 2004). So these impacted communities were asked to pursue industries to which they formerly said “no” (Besser & Hanson, 2004). The decline of rural economies occurred around the same time that large amounts of public money was being infused into the
construction of prisons, making prison hosting an attractive alternative for economically depressed rural areas (Blankenship & Yanarella, 2004; Huling, 1999). According to Carlson (1995), “Prisons [became] strategies for rural development by default rather than choice: community leaders opt for them in the absence of other viable alternatives for economic improvement” (p. 2). Besides, many rural communities had already experienced a myriad of failed redevelopment plans (King et al., 2004). Therefore, large numbers of rural communities switched from being NIMBYs to joining the ranks of YIMBYs (Yes In My Back Yard) [Lawrence & Travis, 2004; Turner & Thayer, 2004].

So during the 1980s, prison hosting in rural areas began to take on a life of its own. This period has been referred to as “the prison-construction boom”. During this time, on average, 16 new prisons were built each year in rural communities (Huling, 2002). The expectation was that prisons would bring in 35 new jobs for every 100 inmates that were incarcerated (King et al., 2004). By the 1990s, rural communities were experiencing an increase of 25 new prisons a year, on average. In fact, it was said that a new prison opened up somewhere in rural America every 15 days during the latter time period. For example, rural counties in Texas acquired 11 prisons during the 1990s where only one prison existed previously. The Mississippi Delta hosted seven new prisons and south central Georgia constructed 14 in their rural communities during this time frame (Huling, 2002). Getting community buy in, especially from the leadership was an extremely important factor in prison hosting by rural areas.

Prison officials often demonstrated as much aggressiveness as communities in securing the prison hosting, taking tremendous time, energy, and expense promote the economic benefits of prisons. A typical scenario might involve local officials sponsoring
a town meeting at which prison officials and their supporters were the invited guests. They would basically “sell their product”. Local media might also get involved, running articles in the local paper and segments on television and radio that report on the grand economic claims associated with prisons. Then there might be “flyers, flyers everywhere!” No location was off limits—local general stores, mini-marts, coffee shops, even churches displayed information provided by prison officials for community consumption (Huling, 2002).

These now YIMBY communities also became competitive in seeking to host prisons. In fact, the level of competition exerted by local, rural areas to pursue prisons took on a momentum that might be considered unprecedented. For example, a small town in Illinois produced a rap song and purchased television time as part of a media blitz to persuade state legislators to consider their community for the location of a new prison. Religion even got into the act in one small Texas town where it was reported that students in a Sunday school class fell to their knees and prayed that a new prison would open in their neighborhood (as cited in Hooks, Mosher, Rotolo, & Labao, 2004). In many instances, prison hosting by rural communities resulted in “bidding wars”. Communities would offer economic incentives in the form of infrastructures subsidies such as sewers and roads, free land, and tax breaks (Glasmeier & Farrigan, 2007). Hence, prisons have become one of the leading rural economic enterprises, along with huge animal confinement units for raising or processing poultry and hogs and gambling casinos (Huling 2002).

The rural Texas county in which Abilene is located went all out to compete for a prison hosting. It offered an incentive package to the state worth over four million
dollars that included 316 acres of land for the location of the prison plus over 1,100 acres of farmland adjacent to the facility. The adjacent farmland was reported to be capable of generating nearly one half million dollars in cotton per year. Also included were the promises of roads leading to the facility, housing for prison administrators and officers, the use of a private plane and hangar for state officials, computers, and upgrades to public works and communications infrastructures (King et al., 2004).

For the state of New York, hosting a prison seemed “…like a sensible investment with guaranteed long-term payoffs” (King et al., 2004). It was estimated that the construction of one upstate correctional facility would bring in $56 million in wages. A total of 367 jobs were expected to be available in the facility and another 55 jobs were anticipated in the community, all estimated to result in an annual prison-related payroll of close to $13 million. The hosting city would additionally reap the benefits of almost $11 million in upgrades to its water and sewer systems. Expenses would be incurred by the department of corrections, not the city (King et al., 2004).

Prisons were also perceived as an ideal political fix for the spiraling downward economies in rural communities. It was reported that one Pennsylvania commissioner told constituents to view prison hosting as an opportunity for the economic health of the community that should under no circumstances be bypassed (Che, 2005). Since prisons were nonpolluting enterprises, they eventually garnered less resistance from communities than the traditional unwanted industries such as trash dumps and nuclear power plants. Additionally, prisons were location specific and could not be moved offshore. There was also the appearance of growth potential as evidenced by the exponential increases in budgets of state departments of correction (King et al., 2004).
Prison hosting strategies followed the model of industrial recruitment, with a primary impetus on providing more income and jobs to the community. Communities also wanted to increase revenues for public services and improve their local tax bases, all possible outcomes from prison hosting. Therefore, competition for prison hosting among communities became fierce, each community seeking to stimulate its economy (Tootle, 2004).

1.2. Prison Hosting in Ohio Rural Areas

The “get tough on crime” movement impacted Ohio in much the same way it did the rest of the country. Back in 1974, prisons in Ohio held less than 8,000 prisoners. However, the late 1970s brought with it the enactment of compulsory sentence for certain drug offenses. By the 1980s, the Ohio General Assembly also mandated longer terms for high level ‘aggravated’ felons, especially repeat offenses, and for individuals that wielded guns while committing felonies. In addition, the General Assembly invoked longer mandatory terms to misdemeanors, particularly those involving impaired drivers. The crack surge of the late 1980s and early 1990s further added to the increased prison population through both intake and length of stay. Thus 10 years later, the Ohio prison population more than doubled, exceeding 18,500 prisoners though there were only sufficient prisons at the time to accommodate 13,000 inmates (Diroll, 2011).

The 1990s also brought new mandatory terms for sex offenders. These sentences carried with them increased sentence lengths which impacted the prison population, keeping Ohio prisons overcrowded. For example, in 1995, the average sentence for first degree felons was 7.4 years. The sentencing average jumped to nine years in 2001 and
10.5 years by 2004. Therefore, the state had to work diligently to significantly expand its prison system during this “get tough on crime” era (Diroll, 2011).

Wilkinson & Unwin (1999), staff of the Ohio Department of Rehabilitation and Corrections (ODRC) at the time, reported that many of the correctional facilities in Ohio were located in rural areas. Census data coupled with state corrections’ figures also placed most of Ohio’s prisons in outlying areas rather than its major cities. However, most of the prisoners came from metropolitan areas (Prison Policy Initiative, 2011).

Figure 1-1 below shows the location of prisons in the state of Ohio.

Source: ODRC website

Figure 1-1: Location of Prisons Operated by the Ohio Department of Rehabilitation and Corrections (ODRC)
By 2007, 21 counties had prisons operating under the auspices of ODRC, 12 (57%) of which could be considered rural per a cut score based on Cleland’s Rurality Index. (See discussion on defining rurality in Chapter 2.) These counties were host to 15 prisons actually serving inmates on a full-time basis, which means that some rural counties hosted more than one prison. Pre-release centers and medical facilities for prisoners were excluded from the count. From 1975 to 2000, for example, the number of inmates in Ohio’s prison system increased from 11,000 to 48,000 (Hallett & Hanauer, 2001), most of whom were being housed in prisons in rural areas (Case, 2009; Wagner & Heyer, 2004).

1.3. Problem Statement

Prison growth has mushroomed, particularly in states such as Ohio. While some prison hosting has occurred in metropolitan areas, rural communities have too been the beneficiaries of prisons. Existing research further suggests that there are presumably many economic benefits that should result from prison hosting by rural communities with the primary expected benefit being jobs in the hosting community (King, Mauer, & Huling, 2003).

Prison hosting carried with it the assumption that the bulk of the jobs in prisons would be filled by persons currently residing in the hosting community. Jobs would additionally mean increased incomes in the hosting community (King et al., 2003). Prison jobs were not only expected to result in decreased unemployment rates, but additional income for the community. The increased incomes would then lead to an increased demand for goods and services (Groot & Latessa, 2007). People with jobs and
better incomes now would have more money to spend. It was further assumed that rural communities would experience population growth, wanted or unwanted, because ‘people follow jobs’ (Mojica, Gebremedhin, & Schaeffer, 2009). The “unwanted” population likely to invade the prison-hosting communities would be family members of inmates that desired to be closer to their family member during the incarceration period. Persons outside of the community filling local jobs might also be viewed as “unwanted” (Courtright, Hannan, Packard, & Brennan, 2007).

Simply put, it was not surprising that rural communities became YIMBYs that sought prisons as economic development. These communities still needed to thrive, despite the fact that their agricultural and manufacturing economies of the past were no longer viable. They continued to have a responsibility for the safety, development, and well being of the citizenry. These communities needed to continue to be able to meet payrolls for government officials like mayors, alderman, council persons, police, fire personnel, and teachers, among other groups. Individuals and families in rural communities needed to be able to put bread on the table, clothes on their back, and have money in their pocket. However, tax bases and quality of life had become diminished in these communities due to the loss of farms, few to no manufacturing jobs, and poverty, just to name a few culprits. Therefore, buying into the prison industry as an economic booster seemed like a risk worth taking.

Regardless of the promises, there has been very little solid empirical evidence that prisons result in economic growth (Myers & Martin, 2004). Most “evidence” takes the form of rhetoric promulgated prior to prison hosting. Moreover, not much research on prisons as economic development addressed more than the underlying reasons for prison
expansion, coupled with how dramatically incarceration rates had soared (Hooks et al., 2004). Much of the “hard” evidence began to appear after 2000, when the prison boom, i.e., rapid growth in building prisons that took place from 1980 to 2000 or thereabouts, was over.

Analysis of economic and other effects of prison hosting has been slow in coming and results are mixed. For example, Hooks et al. (2004) examined the impact of prisons on employment growth, including earnings, across all counties in the contiguous United States and found no significant relationships for metro counties. For rural communities, however, they did note increased state and federal funding due to inmate counts in census data. A study in Colorado also found that two rural prison-hosting communities showed higher increases in per capita income than their neighbors (cited in Whitfield, 2008). Other researchers tried to answer questions about increased jobs in rural areas with prisons based on whether their unemployment rates in rural communities hosting prisons are significantly lower (King et al., 2003).

Clearly, previous research has focused on numerous variables that represent growth and been designed to answer questions such as ‘Did the community gain a wealth of new jobs from hosting a prison?’ or ‘Did incomes in the prison-hosting community soar?’ Yet, practically speaking, benefits for one community might not adequately describe benefits of prisons in another community. Hence, this research was planned to provide further and much needed study on the economic benefits of prisons in rural communities.

First, the research would add to the body of much needed evidence about any economic benefits brought on by prison hosting, especially as it relates to communities in
Ohio that have met a definition of “rural”. Second, the study would lend assistance to leaders at state and local levels in making informed decisions regarding prison hosting. Budget shortfalls have forced many entities, public and private, to re-evaluate their mission and service offerings, including which services will be provided and how they will be delivered. Third, this research would allow rural Ohio counties with prisons to tell their own story about the economic benefits of hosting prisons, qualitatively and quantitatively.

The present study examined 37 years of data for Ohio rural communities with prisons, as well as comparisons to state and urban counterparts, on three select indicators of economic benefits. A mixed approach was employed, incorporating both qualitative and quantitative data collection and analyses. It was expected that citizens of rural communities would have positive perceptions of prison hosting and that the communities would fare well on indicators of unemployment, population, and per capita personal income.

Results from this study should be useful to local rural communities, residents, policy makers, and planners, as well as state officials, in developing or refining the processes they utilize to make future decisions about the hosting of prisons or similar industry for economic gain. Conclusions from this study should be especially helpful as Ohio, in particular, and other states shut down and/or privatize prison industries as a cost-saving measure. Reversing prison hosting could leave affected communities economically stripped, so informed decisions as required by the current state of affairs should be based on data.
Chapter 2

Literature Review

2.1. Defining Rural

This study focused on rural counties, but “rural” is not as straightforward as it appears. There are numerous ways in which the concept can be defined. Actually, there are more than 24 definitions of rural that are used by Federal agencies (Cromartie & Bucholtz, 2008). Moreover, different researchers likely employ different definitions of rural. In reviewing the literature for this study, this researcher found at least two studies addressing prison growth in Ohio that described counties differently in terms of rurality. Three definitions were considered for the purpose of this research.

According to the United States Bureau of the Census, rural areas include open settlements and country that contain fewer than 2,500 residents. Urban areas, on the other hand, constitute larger places in conjunction with the densely settled areas around them. These urban areas are basically densely settled territories as they might look from aerial views, and therefore do not necessarily follow municipal boundaries. Counties
then, whether metropolitan (metro) or nonmetropolitan (nonmetro), comprise a combination of urban and rural populations.

Urban areas are further subdivided into two types—urbanized areas and urban clusters. Per the Census Bureau, an urbanized area must contain an urban nucleus of at least 50,000 people. Individual cities containing this number of people may or may not be included. However, the core of urbanized areas must have a population density of 1,000 people per square mile and may also contain adjacent territory with, at minimum, 500 persons per square mile. Urban clusters contain at least 2,500 but fewer than 50,000 people. Rural areas then constitute all territories located outside of urban areas, both urbanized areas and urban clusters. In 2000, 59 million people (21%) were considered rural population. This number was less than the rural population of 62 million persons based on the 1990 census.

Researchers that focus on conditions in “rural America” often refer to conditions in nonmetropolitan areas that are based on counties. Counties, i.e., active political jurisdictions, are typically referenced as metropolitan (metro) or nonmetropolitan (nonmetro), the definitions for which come from the Office of Management and Budget (OMB). Using 2000 census data, OMB defined metropolitan and nonmetropolitan counties thusly in 2003:

- Metropolitan counties – Constitutes central counties with at least one urbanized area in addition to outlying counties that are economically tied to the core county through the work commuting variable. For outlying counties to be included in the definition, at least 25 percent of the workers living in a county must commute to the central counties or at least 25
percent of the employment in the county consists of workers that commute from the central counties.

- Nonmetropolitan counties – Comprises territories located outside the boundaries of metropolitan areas. These counties are further subdivided into two types: micropolitan areas that are centered on urban clusters of at least 10,000 people and all remaining counties that are designated as “noncore” (Cromartie & Bucholtz, 2008; Economic Research Service, 2007).

*Source: Federal Financial Institutions Examination Council website (n.d.)*

Figure 2-1: Metro/nonmetro counties for the state of Ohio: 1990 and 2000.
Metro/nonmetro counties for the state of Ohio for 1990 and 2000 are shown in Figure 2-1 above. These designations were based on results from the decennial census for those years. While some states may have experienced changes in metro and nonmetro counties from 1990 to 2000, it should be noted that Ohio counties remained unchanged based on the metro/nonmetro designations. The same 48 Ohio counties were classified as nonmetro or “rural” in both 1990 and 2000.

The United States Department of Agriculture (USDA) employs a classification scheme that distinguishes metropolitan (metro) counties based on the population size of their metro area and nonmetropolitan (nonmetro) counties by the degree of urbanization and the extent to which they were adjacent to a metro area(s). This scheme created Rural-Urban Continuum Codes. The categories resulted in a nine-part county codification due to subdividing the metropolitan and nonmetropolitan categories into three metro and six nonmetro groupings. The Rural-Urban Continuum Codes gave researchers more flexibility in working with county-level data. They were would be able to examine county-level data in finer groupings beyond the simple metropolitan-nonmetropolitan dichotomy. These codes are particularly useful if researchers were interested in analyzing trends in nonmetropolitan areas that might be related to the degree of rurality and proximity to metropolitan areas.

Rural-Urban Continuum Codes are developed by applying population and worker commuting criteria to identify metropolitan counties from decennial census results. Metropolitan counties were distinguished by population size of the Metropolitan Statistical Area (MSA) of which they were part. Similarly, nonmetropolitan counties were distinguished according to the aggregate size of their urban population. Within the
three urban size categories, nonmetropolitan counties were further distinguished by whether they had some functional adjacency to a metropolitan area(s). For nonmetropolitan counties, adjacency was indicated if a county physically adjoined one or more metropolitan areas and had two or more percent of its employed labor force commuting to central metropolitan counties. If the nonmetropolitan county did not meet these criteria, they were classified as nonadjacent.

The 2003 Rural-Urban Continuum Codes were not fully comparable with those of earlier years because the Census Bureau changed the way in which rural and urban were measured. The OMB made major changes to its metro area delineation procedures for the 2000 Census. These changes increased the number of metropolitan areas by eliminating the requirement that a metro area have at least 100,000 population when its urbanized area had no place of at least 50,000 persons. Changes to the worker commuting criteria that determined outlying metropolitan areas had the effect of increasing new outlying counties to metro status while removing a fewer number that were previously metropolitan. In theory, however, 2003 codes were comparable with those of earlier decades (Cromartie & Bucholtz, 2008; Parker, 2004).

Codes of 1, 2, or 3 distinguished a county as metropolitan based on the rural-urban continuum. Code values of at least 4 constituted nonmetropolitan counties. The coding scheme was based on the work of David Brown, Fred Hines, and John Zimmer that was done back in 1975. These researchers worked for the Economic Research Service at the time of code development (Parker, 2004).

Using the rural-urban continuum codes for the state of Ohio provides a slightly different outlook of rural for the state of Ohio. For example, Figure 2-2 below shows
counties that would be considered rural or nonmetropolitan based on the 1990 decennial census. By 2000, there were slight changes in rural-urban county classifications using the continuum codes. (See Figure 2-3 below.)

Source: Economic Research Service, 2004

Figure 2-2: 1993 Rural-urban continuum code: State of Ohio
Five counties classified as rural using the metro/nonmetro system were re-classified as metropolitan through the rural-urban continuum codes. Those counties were Erie, Morrow, Ottawa, Preble, and Union.

This last definition of rural is based on a rurality index developed by rural sociologist, Dr. Charles Cleland (personal communication, October 17, 2003; September 1, 2011). The index was primarily based on 2000 census data. Cleland identified 11 items that were deemed to be associated with the relative isolation of residents from centers of influence and power on the living and lives of residents in counties across the country. The measures included in the index were, in no particular order, as follow:
1. Population Density – Despite the fact that rural areas tend to be less densely populated than urban areas, the extent of urban sprawl clouds this distinction for many areas. However, various modes of transportation, good highways, and more effective means of communication increase the opportunities to reside at a distance from place of business and other services.

2. Percent Government Workers – There are a couple of assumptions operating here. One assumption is that paying jobs in rural areas are more scarce than in more urbanized areas. The other assumption is that persons employed by government at all levels will make up a somewhat larger percentage in rural areas. These assumptions will not hold true in selected urban centers which contain large governmental installations or agencies, but where they apply these assumptions are expected to be exceptions.

3. Education Ratio – This ratio is formed by comparing the number of individuals over 25 years of age that have completed at least a bachelor’s degree to the number of persons that have not been formally schooled beyond the eighth grade.

4. Percent Population Change – Examines 2000 population figures in relation to 1990 population numbers. It is expected that total population numbers in rural areas will either remain stable or exhibit a decline in spite of historically higher birth rates in rural areas.

5. Median Household Income – Household income was used because it was more inclusive than family income.
6. Percent of Families in Poverty – The poverty classification, provided by the US Census, is used on the assumption that wealth is concentrated in urban centers and the rural-to-urban migrants do not bring with them individuals of lower incomes.

7. Percent Retail Employees – All persons in retail trades are included in this calculation. It is assumed that specialized retail services require a certain minimum population base to be economically successful and the relatively sparse populations of rural areas cannot support a high proportion of jobs in this area.

8. Percent Professionals Employed – It is expected that rural areas have fewer highly skilled professional workers. Included in this classification are administrators, management personnel, scientists, licensed professionals, and waste management personnel.

9. Percent Employed in Agriculture – For this measure, agriculture was broadly defined. In addition to individuals engaged in farming, the measure incorporates persons in hunting, fisheries, forestry, and mining, as these occupations clearly tend to be identified with rural.

10. Percent of Population 65 years or older – Internal migration patterns in the United States lead to the implication that younger residents are more likely to leave rural areas seeking better opportunities for employment in more populated centers, thus leaving a top-heavy age structure.

11. Metropolitan Access via Interstate – This constructed measure categorizes counties according to the proximity of access to urban centers. The numbered categories range from one to six, with the lowest number indicating that the county contains a substantial urban center. At the other extreme are the counties
which are non-contiguous to counties with urban centers and do not have an interstate highway going through them. Individuals must pass through another county to reach a county that has an interstate going through it.

Only the “Metropolitan Access via Interstate” factor was not obtained solely from 2000 census data. Information for this indicator was obtained from the Rand-McNally Road Atlas, 1993.

Source: C. L. Cleland (personal communication, October 17, 2003; September 1, 2011)

Figure 2-4: Cleland’s 2000 rurality index: State of Ohio

Cleland’s index provides finer gradations than even the rural-urban continuum codes. Lower values represented more urban areas while higher values were indicative
that a county was more rural or isolated. The scale ranged from 0 to 21, with 21 being most rural. No Ohio counties scored at the top of the scale.

This definition of rural provides another way to distinguish rural and urban/metro counties. Researchers can establish their own cut score.

2.2. Economic Benefits of Prisons in Rural Communities

The number one benefit of prisons for rural communities was jobs. Jobs could revive an economy, and rural communities were short on employment opportunities. Rural economies had to be restructured due to the extreme changes in agricultural and manufacturing jobs (Tootle, 2004). Additionally, prisons became a targeted governmental enterprise in this country (Sechrest, 1992) and, for rural communities, they were among the top three economic enterprises (Huling, 2002).

A discussion of prisons as economic development cannot ignore the work of Calvin Beale, a demographer at USDA who is cited in the literature by numerous sources (e.g., King et al., 2004; Hoyman & Weinberg, 2006; Tootle, 2004). Beale highlighted the unprecedented growth of prison hostings in rural regions of the country from the 1980s to the late 1990s. He noted that more than half of all prisoners in America resided in newly constructed prison facilities located in rural areas from 1980 to 1991. Beale also shared that most states build prisons in these areas to a greater extent than expected.

Carlson (1992) reported the perceived benefits of prison hosting in the local, rural community of Clallam Bay (WA). This community’s large timber company had closed
its local operations, prompting the community to host a prison to help fill the “jobs” void. To this community, the prison was viewed in an extremely positive light. Not only did Clallam Bay’s population increase, but school enrollments blossomed and the local economy improved substantially with a less seasonal flair. Many of the residents were skeptical and increased crime rates did occur, yet benefits to the community’s economy appeared to outweigh any drawbacks.

A rural area in the state of New York that hosted two public prison facilities boasted about the economic benefits. Most of the prisons’ contributions to the communities came in the form of purchases of food, fuels, clothing, maintenance supplies, school supplies, medical supplies, and goods and services because, as public entities, they were tax exempt. For example, prison employees often frequented convenience stores and bars in the area near the prisons. Commuter trains and taxis were also used to transport staff and visitors to and from the prison facilities, as well as to other businesses in the community. Housing demands, especially rentals, increased too (Avidon, 1998).

The rural Forest County, Pennsylvania, needed economic development to replace hundreds of lost high-paying manufacturing jobs. The result was the hosting of a 1,000-bed, medium-security prison. More experienced transfers than local residents were hired for the prison jobs, but around 10 percent of local applicants were employed. More important, the prison hosting led to the opening and/or expansion of businesses in the community. In particular, the county saw the construction of its first daycare center, as well as its first chain hotel (Che, 2005).
Preventing the exodus of young adults from the community has been another economic benefit of rural prison hosting. Rural prison facilities provided a relatively decent salary and package of benefits that were appealing, especially when this group of individuals is among those that lack college degrees or hi-tech skills. Keeping these young adults in the community helped the community stay afloat—businesses continued to thrive and indications of increase in the demand for goods and services, along with other positive benefits (Yanarella & Blankenship, 2008).

An unexpected economic benefit of prison hosting in rural communities was the fact that the strategy succeeded in reversing the long-standing trend of population loss (Huling, 2002). Prisoners were being counted in the population of the communities in which the prisons were hosted rather than in the communities from which the prisoners resided upon arrest. Consequently, these hosting communities benefited from increased federal funding and greater political influence stemming from the legislative apportionment formulas associated with the population count (Yanarella & Blankenship, 2008). This phenomenon resulted in the rural communities hosting prisons being eligible for increased federal anti-poverty funds that were distributed on a per capita basis. Because the prisoners earned little or no money, their count in a community’s population census sent the median income downward which then, in turn, helped the community receive more funding from the Department of Housing and Urban Development (HUD). Some communities sought to annex these prison communities merely to get their slice of the federal funding pie (Huling, 2002).

The state of New York touted prisons as their ‘anchor for development in rural’ communities. Within the 20-year period between 1980 and 2000, New York constructed
38 new prisons, almost a 120 percent increase over the period between 1817 and 1980 when the state had only 32 prisons (King et al., 2004).

Some researchers such as Turner & Thayer (2004) obtained the community’s voice as evidence of the economic benefit of rural prison hosting. These researchers surveyed local elected officials in 28 rural counties in New York to examine economic and social impact of prisons. In short, they wanted to know why these rural communities were YIMBYs with respect to the idea of hosting prisons for economic development. Respondents were asked how the prison hosting had impacted 12 difference economic and social conditions. Among the positive findings from officials was the mention of increased real estate values (63.7%), increased number of good jobs (47.8%), and decreased unemployment (34.3%). Only about one percent felt that crime had decreased. In fact, more than 20 percent reported a perception of increased crime. The researchers concluded that the political leadership in these rural communities were satisfied that prison hosting had produced modest economic improvement.

Another community perspective study on the impact of hosting a new prison in a rural community was conducted by the Pennsylvania Department of Corrections. They distributed surveys in the community during prison construction and immediately preceding the opening of the prison. The Community Attitude Survey was used as the survey tool. Among the variables assessed were perceptions regarding economic impact and quality of life. Overall, 75% of the respondents believed that the new prison would not negatively impact property values, 52% believed that the prison would be good for the economy, and 84% believed that the prison would not result in a cost of living increase for the community. It was identified that these findings were stronger for
respondents that had fewer concerns about safety when hosting a new prison. It should also be noted that more positive responses regarding the prison’s impact on cost of living were evident to a greater extent for persons residing in the intermediate locale from the prison site than for individuals living farther away (Myers & Martin, 2004).

A later study was carried out by the Pennsylvania Department of Corrections with residents of four rural prison hosting communities. It was designed to assess community perception of hosting impact on local tax rates, job creation, local property values, the prison as a consumer of local goods and services, and the overall economic effect of the prison. In general, responses, especially those related to the prison’s role in the local economy, were positive. However, it was also determined that many residents actually lacked knowledge regarding the true impact of prisons on the community’s economy. For example, respondents could and did report relational knowledge such as running into prison employees in their communities and having good relations with them, but could not provide solid evidence of positive economic impact since the prison hosting (Courtright et al., 2007).

Hoyman & Weinberg (2006) observed that rural communities generally did not have sole responsibility for prison hosting. These researchers studied the state of North Carolina that had 24 prisons recruited by rural communities. Local communities had to purchase the land and provide sewage for the new prisons. However, the state assumed responsibility for both the construction and operation of the prisons. Eligible communities were required to either meet certain technical conditions or be next in line on the waiting list.
2.3. Concerns about Prison Hosting in Rural Communities

Yes, there is research to support economic benefits associated with prison hosting in rural communities, but there are also associated concerns that can either be categorized as financial or safety. These concerns are usually put forth by opponents of prison hosting to discourage the community from hosting. The concerns can further be used to downplay benefits.

2.3.1. Financial Concerns

Financial concerns linked to prison hosting in rural communities generally focus on infrastructure, cost of living, property values, and environment (Groot & Latessa, 2007). Jobs, usually an expected benefit, can also be a concern.

Prison hosting during the prison boom typically results in the building of new facilities in hosting communities. These additional buildings might necessitate expansions in sewers, waste, roads, water, and other services because existing infrastructure cannot accommodate the increased demand posed by the new prison services. The expansions carry a cost which creates worry for community residents in relation to increased taxes and other burdens that might be placed upon them due to prison hosting. Political leaders do their best to plan for infrastructure issues during the prison hosting discussions. The literature points out that states often step in and cover the cost of the necessary improvements, thus preventing any strain on the local budget (Blankenship & Yanarella, 2004; Shichor, 1992)
Research tends not to support increases in cost of living for the hosting prison community either. Opponents spread this fear through their efforts to block the prison hosting. Their propaganda is designed to strike fear that prices for food, rent, gas, and other commodities will increase if the community opts to host a prison (Groot & Latessa, 2007).

Research dealing with the impact of prison hosting on property values is mixed. Opponents frequently focus on declining property values in an effort to create fear and apprehension from community members about of hosting a prison. Unwanted facilities like nuclear plants or landfills tend to result in lowered property values, but such outcomes do not necessarily become a reality when prisons are built in a community. Research does point to the fact that strong, vocal opposition to building a prison can be linked to declines in a community’s property values. This intense vocal opposition is usually found through media coverage, which, in turn, negatively impacts investors and potential homeowners (Groot & Latessa, 2007).

The opposition steadily harps on the lack of jobs for existing residents/businesses of the community as a surefire way to discourage prison hosting. In some instances, the majority of prison jobs might go to outsiders. It is especially likely that the higher-paying management and correctional officer jobs might go to outsiders because of the educational and experiential requirements for those jobs that are not possessed by locals. Also, just having available jobs tends to create a kind of “job competition” and cause people from outside communities to make application, as well as drive over for interview (Huling, 2002).
A study by Ruth Gilmore of prison towns in California, for example, showed that fewer than 20 percent of jobs at new prisons went to persons currently living in a hosting rural community. In some prison towns, the percentage was as low as five percent. Delano, CA, boasted more than 1,500 new prison jobs, with barely more than 70 going to community residents. New employees for California prisons typically came from regional and statewide applicant pools. As a consequence, the majority of prison jobs went to persons outside of the local labor force. Further, many of the new hires chose not to relocate to the prison community, choosing instead to commute to work and never become part of the “local” labor force. Despite increases over time, the percentage of local hires for all rural California prison towns failed to reach 40 percent (Gilmore, 2007; Pyle & Gilmore, 2005).

Yanarella & Blankenship (2008) examined the reality of jobs in the community in the Commonwealth of Kentucky where two major federal prisons were hosted. Less than a fourth of the prison jobs were filled by local residents. Many of the residents lacked the necessary skills to make them competitive for the prison jobs and less than a third made the attempt, even when training programs were provided. Neither did local businesses fare well from the prison hosting. Workshops were scheduled but few businesses participated, even though the workshops were designed to help them in qualify for service contracts for prison food supply, personal necessities and other consumables. As a consequence, contracts were awarded to large companies outside the local area that had proven track records for meeting the service and supply needs of these larger prison facilities.
“Limited job boost” was the story for rural Freemont County in Colorado as well. A few local contractors received construction contracts, but the largest, most financially profitable awards went to outside contractors with the capabilities and expertise. Services and maintenance contracts also were given primarily to outside contractors (Blankenship & Yanarella, 2004; Yanarella & Blankenship, 2008).

2.3.2. Safety Concerns

Equally troubling to rural communities planning to host prisons was the safety of its residents following the hosting. Such issues are serious considerations especially if they materialize. Safety concerns often include 1) increased crime rates, 2) relocation of prisoners’ families to the hosting community, and 3) the threat of escapes. Opponents of prison hosting push these issues to the forefront and introduce substantial fear in communities where personal safety is perceived as high and crime rates have traditionally been low (Groot & Latessa, 2007).

The most frequently raised safety concern about prison hosting is increased crime rates. People assume that bringing criminals to a community, though housed in a prison, will bring more criminal activity to the community. Opponents feed this fear to the community via the media and other information outlets. Yet, research findings do not support this concern. A study by Abrams & Lyons (1987), for example, not only demonstrated that crime rates do not increase in prison communities, but, for one community, the rates actually decreased. It is believed that communities might even be safer following prison hosting due to the increased presence of prison guards, state police, sheriff’s deputies, and other law enforcement personnel. There are also reports
that some states require that released prisoners be taken back to their community of arrest for official processing out of the system (Groot & Latessa, 2007). In many instances, prisoners are not residents of the communities in which they serve their sentences. Therefore, releases to the home community would make it less likely that inmates would take up residence in the prison-hosting community.

Concerns about ‘camp followers’, i.e., people that relocate to the hosting community to be closer to a prisoner, have also appeared in the literature (Courtright et al., 2007). Of course, communities are likely to view this relocation, particularly of inmates’ family members, as an unwanted consequence of the prison hosting. Besides the obvious link between criminal tendencies in the prisoner and his/her family member, concerns extend to the burden on schools and social services as a consequence of these “unplanned for” community residents. Most studies, however, disconfirm this concern. Family members are typically unwilling or financially unable to relocate to be nearer their incarcerated family member (Grott & Hansen, 2007). In fact, according to the Pennsylvania Corrections Secretary: “They come by bus, they stop in (the) local cafe, they will stay in your motels, (and) they will spend money in your town” (Che, 2005, p.821). However, “moving in” did not appear to be a typical behavior of prisoners’ families. Sechrest (1992) also cited studies dispelling the notion that relocation by ‘camp followers’ was a founded occurrence.

Several studies have addressed community concerns about the safety of its residents if prisoners escape from the facility. The prevailing assumption was that all prisoners were dangerous, regardless the type of inmates housed by the facility. For
example, inmates in a minimum security prison would be deemed just as dangerous as inmates in a maximum security prison hosted by the community.

The Abrams & Lyons (1987) study, conducted on behalf of the National Institute of Corrections, evaluated hosting on numerous variables, including escapes. Data were gathered from communities where jails as well as prisons were hosted. The researchers observed no harm to citizens when prisoners escaped. In some cases, escapees committed minor thefts, like stealing cars, in order to flee the area following their escape, but there were no reports of physical harm to the community residents.

Grott & Hansen (2007) supported the Abrams & Lyons (1987) finding that fear of escapees a danger to the community is an unfounded concern. They further contend that prisoner escapes are low-incidence events. Safety nets such as warning systems and community education have helped to minimize the negative consequences that might result from a prison escape.

2.3.3. Other Unintended Concerns

There are data to support changes in population composition in rural prison-hosting communities, a phenomenon that community residents might perceive more of a curse than a blessing. Many rural communities have largely white populations while many inmates in the hosted prisons are minorities so residents might not be pleased with a change in the community’s culture. Another point of contention involves the count of inmates in the population of the hosting county. Some community officials have used this finding as way to promote the benefits of prison hosting. A huge chunk of federal dollars are distributed to counties and local communities through states based on
population numbers. Prisoner counts add to population numbers and increase federal aid through the states to local communities. When inmate population counts are removed, however, Besser & Hanson (2004) observed that state prison towns experienced less growth than non-prison towns. Huling (2002), on the other hand, contends that prisons have reversed the long-standing trends of population in rural counties.
Chapter 3

Methodology

This study explored the economic benefits of prison hosting in rural communities. As originally promoted, prison hosting in rural areas would result in tremendous economic benefits. Rural areas had lost population, especially its young people, and some of their most profitable industries such as farming and manufacturing. So around the 1980’s and beyond, many rural communities sought to host prisons to bolster economic recovery.

Research for this study centered on the state of Ohio, one of the top 10 states in terms of prison population in the country (Lawrence & Travis, 2004). Overall, the state had 31 correctional facilities when this research began. Two of those facilities were privately operated, one was sold in 2011 to a private company, and four facilities housed women only (ODRC, 2011). Of the state correctional facilities, 29 were public facilities operated by the Ohio Department of Rehabilitation and Corrections (ODRC).
3.1 Sample

Sample selection began with the researcher geographically identifying the degree of rurality of prison-hosting communities in Ohio using counties as the unit of analysis. Counties were preferred because, as noted by Chang & Thompkins (2002), cities/towns ignore traditional rural commuting patterns and fail to adequately take into account the reality that many prison staff do not reside in the prison-hosting community. Degree of rurality was defined by Cleland’s rurality index that classified most rural as a score of 21. Counties could score as low as 0, which was indicative of most urban. For counties to be considered rural for this study, they had to demonstrate a Cleland rurality index score of at least seven. Cleland’s index incorporated the following 11 variables: 1) Population density; 2) Percent of government workers; 3) Education ratio; 4) Percent of population change; 5) Median household income; 6) Percent of families in poverty; 7) Percent of retail employees; 8) Percent of professionals employed; 9) Percent employed in agriculture; 10) Percent of population 65 years or older; and 11) Metropolitan access via interstate.

Initially 12 Ohio prison-hosting counties were identified as possible participants. The initial county list is shown in Table 3.1 below.
Table 3.1: Initial rural prison-hosting county selection: State of Ohio

<table>
<thead>
<tr>
<th>Hosting County</th>
<th>Prison</th>
<th>Year Hosted</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Allen</td>
<td>Allen Correctional Institution</td>
<td>1987</td>
</tr>
<tr>
<td>2. Ashtabula</td>
<td>Lake Erie Correctional Institution</td>
<td>2000</td>
</tr>
<tr>
<td>3. Belmont</td>
<td>Belmont Correctional Institution</td>
<td>1995</td>
</tr>
<tr>
<td>4. Hocking</td>
<td>Hocking Correctional Institution</td>
<td>1983</td>
</tr>
<tr>
<td>5. Madison</td>
<td>London Correctional Institution</td>
<td>1924</td>
</tr>
<tr>
<td>7. Mahoning</td>
<td>Ohio State Penitentiary</td>
<td>1998</td>
</tr>
<tr>
<td>8. Marion</td>
<td>Marion Correctional Institution</td>
<td>1954</td>
</tr>
<tr>
<td>9. Montgomery</td>
<td>Dayton Correctional Institution</td>
<td>1987</td>
</tr>
<tr>
<td>11. Richland</td>
<td>Mansfield Correctional Institution</td>
<td>1990</td>
</tr>
<tr>
<td>13. Scioto</td>
<td>South Ohio Correctional Institution</td>
<td>1972</td>
</tr>
</tbody>
</table>

However, after evaluating the year when the first prison was hosted, it became abundantly clear that the hosting year for three of the counties fell well outside the range of the prison boom, which was primarily between 1980 and 2000. In total, these three counties hosted four prisons. Moreover, it would be nearly impossible to obtain pre-prison-hosting data on any indicator of economic benefits for two of those counties; they hosted their first prisons as a time for which data measurements were not available. A decision was then made to include only eight of the rural prison-hosting counties initially
identified. Counties hosting only inmate reception centers or medical facilities were excluded from selection. The final composition of rural prison-hosting counties is shown in Table 3.2.

Table 3.2: Final rural prison-hosting county selection: State of Ohio

<table>
<thead>
<tr>
<th>Hosting County</th>
<th>Prison</th>
<th>Year Hosted</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Allen</td>
<td>Allen Correctional Institution</td>
<td>1987</td>
</tr>
<tr>
<td>2. Ashtabula</td>
<td>Lake Erie Correctional Institution</td>
<td>2000</td>
</tr>
<tr>
<td>3. Belmont</td>
<td>Belmont Correctional Institution</td>
<td>1995</td>
</tr>
<tr>
<td>4. Hocking</td>
<td>Hocking Correctional Institution</td>
<td>1983</td>
</tr>
<tr>
<td>5. Mahoning</td>
<td>Ohio State Penitentiary</td>
<td>1998</td>
</tr>
<tr>
<td>6. Montgomery</td>
<td>Dayton Correctional Institution</td>
<td>1987</td>
</tr>
<tr>
<td>7. Noble</td>
<td>Noble Correctional Institution</td>
<td>1996</td>
</tr>
<tr>
<td>8. Richland</td>
<td>Mansfield Correctional Institution</td>
<td>1990</td>
</tr>
</tbody>
</table>

It should be noted that one rural prison-hosting county was home to two prisons operated by the ODRC.

Descriptive statistics and other comparative analyses would be performed on prison-hosting communities designated as urban as well. These communities obtained a score of six or lower on Cleland’s rurality index. Furthermore, it was required that each selected urban community host prisons within the boom years, i.e., from 1980-2000. If
the urban county only hosted reception centers or medical facilities for inmates, it was excluded from analysis. Table 3.3 below shows the urban counties identified and analyzed in this study.

<table>
<thead>
<tr>
<th>Hosting County</th>
<th>Prison</th>
<th>Year Hosted</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Fairfield</td>
<td>Southeastern Correctional Institution</td>
<td>1980</td>
</tr>
<tr>
<td>2. Lorain</td>
<td>Grafton Correctional Institution</td>
<td>1988</td>
</tr>
<tr>
<td>3. Lorain</td>
<td>Lorain Correctional Institution</td>
<td>1990</td>
</tr>
<tr>
<td>4. Lucas</td>
<td>Toledo Correctional Institution</td>
<td>2000</td>
</tr>
<tr>
<td>5. Pickaway</td>
<td>Pickaway Correctional Institution</td>
<td>1984</td>
</tr>
<tr>
<td>6. Trumbull</td>
<td>Trumbull Correctional Institution</td>
<td>1992</td>
</tr>
</tbody>
</table>

As in the case of rural Ohio counties hosting prisons, one of the urban counties hosted two prisons during the years of the prison boom.

### 3.2 Research Design

A mixed method design was employed for this study, drawing from both qualitative and quantitative research methods. Such data collection strategies serve to validate one form of data with the other, i.e., qualitative data with the quantitative (Driscoll, Appiah-Yeboah, Salib, & Rupert, 2007). The design allowed for the collection and analysis of perceptions regarding various aspects of prison hosting, including any perceived economic benefits. Mixed methods research also provided for the use of
multiple approaches to answering research questions rather than constraining or restricting this researcher to a single method. The method is eclectic, expansive, and complementary (Johnson & Onwuegbuzie, 2004).

3.2.1 Qualitative Approach

The qualitative approach for this study involved the use of personal interviews with a small subset of prison-hosting communities. Three different counties representing four different prison communities were included in the data gathering. Communities were selected according to the following criteria: 1) They were all identified as rural; 2) They were all located in proximity to the same metropolitan center; and 3) They represented a range of population sizes. All except one of this subset of communities hosted at least one prison during the “boom” years of prison growth — between 1980 and 2000.

For the purposes of this study, the interview data were collected from key informants. This strategy gives researchers the ability to learn from well-positioned persons in the community who have and can provide useful information on the issues of interest (Berkwits & Inui, 1998). All interview questions were open ended, which provided each respondent with the opportunity to answer in his/her own words (Kumar, 2011). Attempts were made to conduct interviews with a diverse group of key informants from each of the four prison-hosting communities. Mayors, community leaders, city council persons, and/or business leaders were contacted, but not all types of key informants consented to participate in the study. Neither did each selected community have participants in the interviews. One selected prison-hosting community
did not participate because identified key informants held part-time positions. The part-time status created an inability to coordinate phone interview times with the researcher and further hampered attempts at contact via email.

Even so, the following questions, approved the University of Toledo’s Institutional Review Board (IRB), were posed to each participating key informant:

1. What was the economic status of the community during the 1980’s agricultural and manufacturing decline?
2. During the process of the opening of the new prison, was the general public heavily involved?
3. During the process of the opening of the new prison, how much did the community have to “give up” for the selection (incentives)?
4. What has been the general attitude toward the new prison?
5. How is the relationship between the prison and community?
6. Has the prison helped stabilize the community’s economy outside of just employment?
7. What other economic developments have been introduced since the prison has been added?
8. What are some of the major positives the community has seen since the introduction of the prison?
9. What are some of the major negatives the community has seen since the introduction of the prison?
10. What is the current status of the community since the addition of the prison?
In most instances, interviews were conducted over the phone. On occasion, responses were emailed back to the researcher due to time constraints and/or preference of the key informant. Interview data were collected from a total of 15 key informants from three prison-hosting communities.

3.2.2 Quantitative Approach

The prime expectation from prison hosting in rural communities was economic recovery that would bring jobs to the hosting community (King et al., 2003). It was further believed that this expectation would be supported by interview data of key informants.

So how would economic benefits be measured for this study? The literature provided a wealth of information regarding indicators of economic benefits for prison-hosting communities that might be collected. However, a main consideration was the fact that the prison hosting had already occurred at the time of the study. As a consequence, any measure would need to be available both pre- and post-prison hosting.

Since communities had already hosted prisons, corroborating data on economic benefits should have been collected and available through various sources, especially government databases. Thus, this researcher sought to identify and obtain appropriate secondary data for analysis.

Secondary data are data that have previously been collected by another person or data source for a purpose that may or may not have been related to the research under study. Besides being less intensive financially and quicker to collect, using secondary data sources can prevent researchers from involving themselves in unnecessary data
collection (Johnson, 2010). Secondary data are particularly useful when an intervention is in progress or completed and “ex post facto” evidence of impact is desired, as is the case for this study. Kumar (2011) further noted that secondary data are considered appropriate methods of data collection for both qualitative and quantitative research.

In general, data from government databases are considered to be valid and reliable sources of secondary data, especially when the data come from entities such as the Census Bureau, Bureau of Labor Statistics and similar agencies. Moreover, governmental sources maintain a large number of indicators that can be used to demonstrate impact as needed to determine the economic benefits of prisons.

Selected indicators would need to be available across a 37-year time span, from 1970 to 2007. For sure, indicators of choice would need data for the years between 1980 and 2000, the time period of the prison boom, but a longitudinal data series before and after the hosting would also be necessary. Multiple data points would help establish existing patterns for selected indicators pre-hosting and evaluate post hosting patterns (England, 2003; Glass, 1997; Lagarde, 2011). Indicators would require at minimum data points for 10 years before prison hosting and not less than seven years following hosting. This researcher avoided data beyond 2007 because of the national economic downturn.

One of the most frequently mentioned indicators of economic benefits of prisons in the literature is unemployment rate. Jobs are a constant theme in discussions of prison hosting and unemployment rate is one measure used to indicate the extent to which people have jobs. The indicator was also among the variables under study by researchers examining the economic benefits of New York prisons (King et al., 2003), for example.
Therefore, the indicator was selected as a primary indicator of impact for this study of Ohio rural prison-hosting communities.

Another prominent indicator of economic benefits found in the literature is population growth, which was also selected as a variable of interest for this study. Mojica et al. (2009) demonstrated that ‘people follow jobs’ so that increases in population were an indication of increases in the number of jobs in a community. Population growth is a particularly useful economic-benefits indicator when associated with decreases in unemployment rates in the community. The linkage of population growth to unemployment rules out population growth or decline merely as a function of births or deaths.

A third indicator of economic benefits, especially as it relates to prisons, that is often cited is per capita personal income. This indicator too was examined by King et al. (2003) in their analysis of economic benefits of New York prisons, as well as by Mojica et al. (2009) in their examination of economic growth. Thus, the quantitative indicators utilized in this study included unemployment rate, population, and per capita personal income. All indicators were representative of annual estimates, collected cross-sectionally across time.

Unemployment rates were obtained from the Bureau of Labor Statistics and the Ohio Department of Job and Family Services websites. All data were available by county. Unemployment rates are unemployment as a percentage of the civilian labor force which comprises civilians aged 16 years and over that either are working or seeking work. Military personnel, retired persons or those unable to work, those keeping house full-time or studying, persons in institutions, and volunteer workers are excluded from the
civilian labor force number. The entire civilian labor force represents the sum of unemployment and employment, based on unrounded data.

Population data by county were obtained from the Ohio Department of Development website. Data included census population counts as well as estimates of the intercensal population by county. Estimates for Year 2001 and beyond were based on data collected through the American Community Survey through the Census Bureau.

The United States Department of Commerce’s Bureau of Economic Analysis (BEA) website was the source of per capita personal income data. Available by county, this indicator was based on individuals’ personal income which is defined as income that persons receive from all sources. Included in income are wage and salary disbursements, supplements to wages and salaries, personal dividend income, personal interest income, proprietors' income with inventory valuation and capital consumption adjustments, rental income of persons with capital consumption adjustment, and personal current transfer receipts, less contributions for government social insurance. These sources of income are then summed and divided by the resident population for the area of interest. For example, if the area of interest is the county, then the summed income values are divided by the resident population for the county. The BEA uses the Census Bureau’s annual mid-year population estimates to compute per capita personal income.

For growth rate comparisons, unemployment rate, population numbers, and per capita personal income were converted to percent change. The base year for calculating pre-prison growth was 1970, which allowed for a minimum of 10 years of observations before any rural community hosted a prison. (The year 1980 was designated as the beginning of the prison boom.) Observations on each of the three economic-benefit
indicators were collected through 2007. This ceiling meant observations post prison-hosting would include at least seven years. Though data for each indicator were available for 10 years from the end of the prison boom in 2000, efforts were made to exclude observations that might be more indicative of the economic downturn year affecting the nation than prison hosting. Hence, this study captured 37 years of data for unemployment rate, population, and per capita personal income for each rural prison-hosting county in the state of Ohio. Statewide data for each indicator were collected as well.

Percent change was initially calculated by year, from 1970-71, 1971-72, and so on through 2006-07 for each of eight rural counties under study and the state. Then average growth rates were computed for pre and post prison-hosting. For example, the mean pre-hosting growth rate for a county hosting a prison in 1980 would include percent change data for 1970-71, 1971-72 … up to 1979-80. Post-hosting growth rates would be demonstrated by the mean of percent change data for 1980-81, 1981-82 … up to 2006-07. This method was used to calculate change by researchers in a large-scale study of economic benefits of prisons conducted by Hooks et al. (2004). It was deemed better than the simple change-score method because it moderates influences of any exceptional beginning or ending year by the trends for all years across time.

Calculations of post-hosting growth rates were computed differently when the county hosted two or more prisons. In the case of two prison hostings, the post-hosting growth rate was the average for the years between the hosting of the first and second prison and the years following the second hosting through 2006-07. This study included
one rural county for which two prisons were hosted. There were no instances in which more than two prisons under ODRC were hosted by any rural counties under study.

Employing percent change was a better way to ensure “apple to apple” comparisons within and between county groups. For example, some prison-hosting counties had small populations and others had large populations. Percent change allowed for all counties to be evaluated based on equivalent units.

Economic benefits of prisons in rural communities in this study were measured by the variables unemployment rate, population, and per capita personal income. These variables have been defined previously. The following hypotheses were tested:

H1. Residents of rural counties with at least one prison demonstrated increased employment, as measured by lower percent change in unemployment rate from pre to post prison hosting, given a baseline year of 1970 and a ceiling year of 2007.

H2. Residents of rural counties with at least one prison demonstrated increased population growth, as measured by percent change from pre to post prison hosting, given a baseline year of 1970 and a ceiling year of 2007.

H3. Residents of rural counties with at least one prison demonstrated increased income, as measured by percent change in per capita personal income from pre to post prison hosting, given a baseline year of 1970 and a ceiling year of 2007.

H4. Percent change in unemployment for rural counties with at least one prison did not differ from the statewide average across the years 1970-2007.

H5. Percent change in population for rural counties with at least one prison did not differ from the statewide average across the years 1970-2007.
H6. Percent change in per capita personal income for rural counties with at least one prison did not differ from the statewide average across the years 1970-2007.

Hypotheses for the rural/urban comparison included the same three variables employed for rural prison-hosting counties alone: unemployment rate, population, and per capita personal income. The rural/urban comparative hypotheses were as follow

H7. Residents of rural and urban counties with at least one prison did not differ in employment gains, as measured by lower percent change in unemployment from pre to post prison hosting, given a baseline year of 1970 and a ceiling year of 2007.

H8. Residents of rural and urban counties with at least one prison did not differ in population gains, as measured by percent change in population from pre to post prison hosting, given a baseline year of 1970 and a ceiling year of 2007.

H9. Residents of rural and urban counties with at least one prison did not differ in gains in income, as measured by percent change in per capita personal income from pre to post prison hosting, given a baseline year of 1970 and a ceiling year of 2007.

Data for the five counties identified as urban through Cleland’s rurality index would be presented along with data for the eight rural prison-hosting counties of focus for this study. All counties, whether rural or urban, further had to meet criteria of prison hosting previously specified.
3.3 Data Analysis

Rural prison-hosting communities in the state of Ohio were the focus of this study and the question of economic benefits was explored. Qualitative data was collected from key informants for a subset of rural communities with prisons to identify community perceptions regarding prison hosting and its perceived impact on the communities. Themes were identified, analyzed, and presented for discussion. Quantitatively, it was hypothesized that jobs would grow, thereby lowering unemployment rates in hosting counties. In addition, it was hypothesized that people would follow the jobs and that the jobs would reduce outmigration, thus stabilizing or increasing populations of the hosting counties. Further, it was hypothesized that the prison-hosting jobs would replace income people lost in the dismantled manufacturing and farming industries, thereby increasing per capita personal income in hosting counties. Descriptive statistics and a comparative analysis involving urban counties were provided as well.

Descriptive data reflected trends in unemployment rate, population, and per capita personal income as well as trends in percent change, for rural and urban prison-hosting counties and the state over a span of 37 years. Trend plots were used for the graphic displays, with all data shown in the aggregate. Trends showing percent of state per capita personal income over time for rural and urban prison-hosting county were also featured as descriptive data, in addition to means and standard deviations for the data in standard format and in percent change format.

Paired samples t tests were conducted to compare the rural counties with prisons from pre to post hosting. Longitudinal observations were summed, then averaged for pre and post hosting values. Hence, analysis was framed as a pre-post measurement using
the same counties. Dependent variables consisted of percent change in unemployment rate, population numbers, and per capita personal income. Using paired or correlated t tests allowed for the analysis of any observed differences in obtained means at Time 1 and Time 2 (Dunn, 2001). In this study, Time 1 was represented by “pre-hosting” means and Time 2 corresponded to means at post hosting. One sample t tests were employed to determine if means for rural counties with prisons differed from statewide averages for each of the three variables under study. Such tests are typically utilized when researchers want to determine whether sample statistics, for example, means, deviate from some standard or expected value (Dunn, 2001). Results from the one sample t tests would provide yet another way to explore any economic benefits of prisons for the rural counties.

An analysis of covariance (ANCOVA) statistical test was employed to determine whether any differences existed in unemployment, population, and/or income existed between rural and urban prison-hosting counties. Three kinds of variables are necessary for any ANCOVA analysis: 1) At least one independent variable; 2) a dependent variable; and 3) at least one covariate (Huck & Cormier, 1996). Pre hosting averages in percent change were introduced as covariates. The primary purpose of using ANCOVA for this latter analysis was to control for any existing differences between the urban and rural counties on mean unemployment rate, population, and personal per capita income prior to prison hosting. In fact, Huck & Cormier (1996) acknowledged the usefulness of ANCOVA for the purpose of control. Microsoft Excel and the Minitab statistical package were used for data entry, descriptive charts and statistics, and/or statistical analyses.
Chapter 4

Results

4.1 Qualitative Analyses

Phone/email interviews were conducted with a variety of key informants from a subset of rural prison-hosting communities. They provided an anecdotal perspective regarding the way the communities perceived any benefits of prisons—economic or otherwise. A summary of their responses is provided below.

1. What was the economic status of the community during the 1980’s agricultural and manufacturing decline?

Across the board, key informants emphasized the economic decline in their communities. Most mentioned the loss in manufacturing jobs which they contended created the bleak economy. One informant specifically stated that prisons were the only way to replace manufacturing.

2. During the process of the opening of the new prison, was the general public heavily involved?
Responses were varied even within prison communities. Some informants talked about the openness of the process, involving everyone by holding public hearings. “There was an open comment period. The city was very involved. There were community public hearings (From an informant).” In some cases, there appeared to be strong support not just from the general public but also from labor unions. “There was strong public support—business, labor unions, public (From an informant).” Some informants, though, did not recall opportunities to involve the community in the process of hosting a new prison. On the whole, responses suggested that the community supported the venture because it was a great economic move—an opportunity to reduce unemployment. Community leaders spearheaded the process and, in most instances, encouraged and provided opportunities for the entire community to weigh in.

3. During the process of the opening of the new prison, how much did the community have to “give up” for the selection (incentives)?

In some communities, land was traded but no money exchanged hands. In other communities, the state owned the land. Other amenities that may have been provided by the community included the building or expansion of new sewerage and water facilities to accommodate the prisons.

4. What has been the general attitude toward the new prison?

Several informants reported positive attitudes from the community about the prison hosting. These attitudes appeared to be supported by community perceptions that prisons would bring employment. One informant indicated that the positive attitudes were associated with the fact that the prisoners help with building the community, thereby reducing labor needs. It seems that attitudes became less positive whenever released
prisoners decided to stay in the community rather than return home. Other comments focused on the concern of community residents about jobs that would be lost if the prison initiative was terminated.

5. How is the relationship between the prison and community?

Nearly all responses were positive. Expressions of stronger, positive relationships came from key informants from communities hosting more than one prison, noting that “the community is used to prisons”.

6. Has the prison helped stabilize the community’s economy outside of just employment?

A number of comments addressed new businesses and relationships that have resulted for the community since the prison hosting. For example, one informant noted that local businesses support prison employment and growth. Another reported the development of a police officer academy.

7. What other economic developments have been introduced since the prison has been added?

One community specifically cited the completion of a 900-acre industrial park complex. Additionally, there were reports of 1,400 new jobs that had been created in the area around the prison, an industrial airport, and new jails, one of which was a multi-county facility.

8. What are some of the major positives the community has seen since the introduction of the prison?

There was mention of an increased tax base for the community, as well as grants and other additional monies. Further, when the families visit, it was noted that they spend
money in the community. In fact, having the “new visitors” was hailed by some informants because they help with festivals, fundraisers, get involved with politics, and have created a housing boom.

9. What are some of the major negatives the community has seen since the introduction of the prison?

There were some reports of declining housing values in the community as well as some infrastructure changes by some informants. Others reported increased traffic since the prison hosting. It seems that at least one community did not ensure that the prison hosting expand the community’s tax base, a decision the informant says many community members regret currently.

10. What is the current status of the community since the addition of the prison?

Positive events were still occurring in the communities since the addition of the prison. There was a housing boom taking place across the street from the prison. Others reported the fact that the prison had been a nice buffer, leading to newer schools and improved sewerage systems. Communities have further provided education and information programs, implementing classes for sexual predators and halfway houses. On the whole, informants stated that communities still view prisons as a benefit to their economy.

4.2 Descriptive Statistics

Data analyses began with descriptive statistics. The variables of interest were unemployment rate, population, and per capita personal income for the time period 1970-2007. A first glimpse of trends in economic benefits was displayed via time series plots
across a 37-year period in the aggregate for the rural and urban prison-hosting counties and the state.

Source: Bureau of Labor Statistics and Ohio Department of Job and Family Services website

Figure 4-1: Unemployment rates for rural and urban prison hosting counties and the state of Ohio

As seen in Figure 4-1, unemployment rates, not seasonally adjusted, over a 37-year period for the state and rural and prison-hosting counties followed a similar pattern. A spike in rate appeared around 1975, with a more dramatic spike showing up for 1982 and 1983 for all areas of focus. Spikes for rural prison-hosting counties were much more pronounced than for the state or urban counterparts. A recession was evident from the mid-1980s to around 1990, then an upturn manifested. Another downward trend
occurred in the mid-1990s and continued until 2001. Base year (1970) rates were 4.9, 5.5, and 7.2 percent respectively for the state, urban, and rural counties. By 2007, the rate for rural prison-hosting counties was closer to the state and urban counties at 6.4 percent. State and urban counties reflected 5.6 and 6.0 percent unemployment.

Source: Ohio Department of Development website

Figure 4-2: Population of rural and urban prison hosting counties and the state of Ohio

On average, Ohio’s population reflected slightly more than 11 million people over the 37 years covered by this study. The trend shows a good deal of stability until about the mid-1990s when a barely noticeable upward trend is apparent. For prison hosting counties, this chart gives the appearance of no growth because the points appear stationary. However, there was a substantial difference in the state’s population numbers
and those for the rural and urban counties, which could cause the “flat lined” appearance to be misleading. Rural and urban counties combined, on average, comprised only three percent of the total population for the state of Ohio. Therefore, a separate trend plot showing only rural and urban counties was produced.

Source: Ohio Department of Development website

Figure 4-3: Population of Ohio rural and urban prison hosting counties

Because the number of people in Ohio rural and urban counties with prisons was similar, a better picture of population trends is shown. Population in rural counties appeared to be on a downward trend from the 1970 baseline year through 2007. Conversely, urban counties, despite minor variations, tended to reflect an upward trend from 1970-2007. Trends for both sets of counties demonstrated gradual movement, whether up or down.
Figure 4-4: Per capita personal income of rural and urban prison-hosting counties and the state of Ohio

All areas experienced growth in per capita personal income over the 37-year time period. From the baseline year (1970), per capita personal income for rural prison-hosting counties stayed very close to the state until the early 1980s. Urban prison-hosting counties hung closer to the state average until about the late 1980s. Gaps between the state and the prison-hosting counties widened over time, with greater separation for longer periods of time by the rural counties. Overall, the statewide trend appeared to be much steeper, suggesting that per capita personal income rose at a sharper rate for the state than for either group of prison-hosting counties.
Of course, neither rural nor urban prison-hosting counties had per capita personal incomes equivalent to the statewide average. Figure 4-5 shows trends in the percent of average Ohio per capita income over time for those counties.

![Figure 4-5: Percent of Ohio per capita personal income for rural and urban prison-hosting counties](Image)

Both rural and urban prison hosting counties demonstrated percents of per capita personal income lower than the state average, but the percent was higher for urban counties, 94.0 percent compared to 85.2 percent for rural. Trends also showed that the counties’ percents spiraled steadily downward over time, with the largest gaps between the groups of counties taking place from the late 1990s to 2000. Only rural prison-hosting counties seemed to demonstrate recovery and that trend lasted a mere three years,
from around 2001-2004. The gap in percent of Ohio per capita personal income between rural and urban counties was smaller during the years prior to any prison hosting.

Another way of looking at trends was to calculate percent change. Trends based on percent change for unemployment, population, and per capita personal income can be gleaned from Figures 4-6 through 4-8 below.

Figure 4-6: Percent change in unemployment for rural and urban prison-hosting counties and the state of Ohio

Positive percent change represents increases, which means that positive change in unemployment was indicative of increases in rates. There was a fair amount of fluctuation in Figure 4-6, but, unlike raw values of per capita personal income, percent change values were similar across the years for rural and urban counties, as well as the
state. In no case did any one region dominate the change trend, showing better or worse than the other two. Several spikes were evident, with the most pronounced change occurring around 1975, followed by less dramatic, adjacent spikes in the early 1980s. Smaller peaks formed around 1993 and 2002. Deere, Murphy, & Welch (1995) contend that higher unemployment rates are associated with minimum wage hikes. It should be noted that several spikes in unemployment rate occurred near dates in which nationwide hikes in minimum wage went into effect.

Figure 4-7: Percent change in population for rural and urban prison-hosting counties and the state of Ohio

This figure provided a wealth of interesting information, besides being very busy with lots of lows and highs. Urban prison-hosting counties, on the whole, tended to
demonstrate more positive percent changes in population, i.e., population growth, than the state or their rural counterparts. Conversely, negative percent changes appeared to be associated more with rural counties, especially from about 1981. Percent changes for the state tended to fall between the counties. Over the 37-year time span, very few steep changes were apparent for any region with the exception of a seeming surge in positive percent change in growth in 1997 for rural prison-hosting counties. It is possible that the extreme spike in 1997 reflected the influx of “refugees” from southern Ohio caused by severe flooding. As many as 20,000 people were evacuated from the region during the flood so rural counties with prisons could have become temporary relocations for flood-affected families (Jackson & Vivian, 1997).
Figure 4-8: Percent change in per capita personal income for rural and urban prison-hosting counties and the state of Ohio

Percent change in per capita personal income was positive for all areas across the range of years for the study. Each region appeared to consistently demonstrate percent change in per capita personal income of at least seven percent from 1970 to 1981. The two sets of counties and state showed percent change of at least that magnitude again in 1982, but never returned to that level any time subsequent during the 37-year period. Percent change continually fluctuated, with low values in the 1990s and even lower change amounts in the 2000s.
Table 4.1: Descriptive statistics on indicator values: Rural and urban prison-hosting counties and the state of Ohio for the period 1970-2007

<table>
<thead>
<tr>
<th></th>
<th>Rural Prison-Hosting Counties</th>
<th>Urban Prison-Hosting Counties</th>
<th>State</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unemployment Rate</td>
<td>8.2 (2.7)</td>
<td>7.0 (2.3)</td>
<td>6.4</td>
</tr>
<tr>
<td>Population</td>
<td>162,042 (4,597)</td>
<td>225,608 (4,321)</td>
<td>11,006,501</td>
</tr>
<tr>
<td>Per Capita Personal Income</td>
<td>$14,863 ($7,640)</td>
<td>$16,472 ($8,551)</td>
<td>$17,768</td>
</tr>
</tbody>
</table>

Means and standard deviations on indicator values for rural prison-hosting counties and the state were calculated across the 37 years encompassed for the study. On average, the unemployment rate for rural counties hosting prisons was nearly two (2) percentage points higher than the state while urban counties tended to be within six-tenths of a percentage point. Urban counties achieved the lowest rate during the time period (4.2 percent) compared to lows for rural counties and the state of 5.4 and 5.2 percent. Population for either set of counties was small in relation to the state average. Rural counties were one and half percent of the state’s population and urban counties claimed two percent. Urban counties tended to have larger populations than for rural, however. Each group of counties demonstrated no change in population numbers higher than around 18,000 people while change for the state never exceeded 860,000 people in either direction.

Per capita personal income was lower for both groups of counties than for the state, with urban counties reflecting a value closer to the state mean than rural counties.
Across the years, amounts ranged from $3,604 - $28,604, $3,870 - $31,231, and $4,088 - $35,121 respectively, for rural and urban counties and the state.

Table 4.2: Descriptive statistics on percent change: Rural and urban prison-hosting counties and the state of Ohio for the period 1970-2007

<table>
<thead>
<tr>
<th></th>
<th>Rural Prison-Hosting Counties</th>
<th>Urban Prison-Hosting Counties</th>
<th>State</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unemployment Rate</td>
<td>2.08 (21.78)</td>
<td>2.45 (21.38)</td>
<td>2.26</td>
</tr>
<tr>
<td>Population</td>
<td>0.04 (0.58)</td>
<td>0.55 (0.57)</td>
<td>0.21</td>
</tr>
<tr>
<td>Per Capita Personal Income</td>
<td>5.81 (3.0)</td>
<td>5.87 (3.13)</td>
<td>6.02</td>
</tr>
</tbody>
</table>

On average, percent change in unemployment rate was around two percent for all areas across the 37-year time span, which was indicative of higher rates over time versus lower rates. It should also be noted that there appeared to be a great deal of variability in percent change over the years, as reflected by the very large standard deviations. Population changed very little for either set of counties or the state. Overall, percent change in per capita income across the time period was about the same for rural and urban prison-hosting counties and the state.
Table 4.3: Descriptive statistics on rural and urban counties pre and post prison-hosting.

<table>
<thead>
<tr>
<th></th>
<th>Rural Prison-Hosting Counties</th>
<th>Urban Prison-Hosting Counties</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre</td>
<td>Post</td>
</tr>
<tr>
<td>Unemployment Rate</td>
<td>4.27</td>
<td>0.21</td>
</tr>
<tr>
<td></td>
<td>(2.43)</td>
<td>(2.81)</td>
</tr>
<tr>
<td>Population</td>
<td>0.05</td>
<td>0.10</td>
</tr>
<tr>
<td></td>
<td>(0.66)</td>
<td>(0.85)</td>
</tr>
<tr>
<td>Per Capita Personal Income</td>
<td>7.42</td>
<td>3.62</td>
</tr>
<tr>
<td></td>
<td>(0.85)</td>
<td>(0.64)</td>
</tr>
</tbody>
</table>

Table 4.3 shows descriptive statistics for rural and urban counties pre and post-prison hosting. Both sets of counties demonstrated higher percent changes in unemployment rate before any prisons were hosted, with lower change rates following prison hosting. For rural counties, there was near negligible percentage change in population preceding and after hosting. Percent change in population for urban counties was not much better, but remained constant (0.60) from pre to post hosting. For both sets of counties, the percent change in per capita personal income was higher before ODRC prisons were hosted than subsequent to hosting. A slightly higher percent change was exhibited in per capita personal income for urban compared to rural counties pre hosting, but change was similar for the two groups of counties post hosting.
4.3 Statistical Analyses

Besides providing information on trends in unemployment, population, and per capita personal income for rural counties with prisons, this researcher wanted to answer questions about improvements on those indicators pre and post hosting. Key informants had reported positive outcomes for their prison-hosting communities. These analyses would supply data to confirm or deny their perceptions. Three hypotheses would be tested:

H1. Residents of rural counties with at least one prison demonstrated increased employment, as measured by lower percent change in unemployment rate from pre to post prison hosting, given a baseline year of 1970 and a ceiling year of 2007.

H2. Residents of rural counties with at least one prison demonstrated increased population growth, as measured by percent change from pre to post prison hosting, given a baseline year of 1970 and a ceiling year of 2007.

H3. Residents of rural counties with at least one prison demonstrated increased income, as measured by percent change in per capita personal income from pre to post prison hosting, given a baseline year of 1970 and a ceiling year of 2007.

Three separate paired-samples t tests were conducted to test the hypotheses. Results from each analysis are shown in the table below.
Table 4.4: Mean percent change in unemployment, population, and per capita personal income from pre to post hosting of prisons in rural Ohio counties

<table>
<thead>
<tr>
<th>Hosting Status</th>
<th>n</th>
<th>Mean Difference</th>
<th>T</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unemployment Rate</td>
<td>8</td>
<td>-4.07</td>
<td>-2.42</td>
<td>&lt; 0.05</td>
</tr>
<tr>
<td>Population</td>
<td>8</td>
<td>0.05</td>
<td>0.21</td>
<td>ns</td>
</tr>
<tr>
<td>Per Capita Personal Income</td>
<td>8</td>
<td>-3.81</td>
<td>-14.67</td>
<td>ns</td>
</tr>
</tbody>
</table>

Of three paired t-test analyses, significant effects were found only for percent change in unemployment. There was a statistically significant decrease in unemployment percent change of four percent from pre to post hosting of prisons in rural counties, which was the hypothesized direction. No significant effects were found for percent change in population or per capita personal income in the expected direction. Increases in percent change were hypothesized both for population and per capita from pre to post. Percent change in population was negligible at 0.05 percent. The absolute value of the change in per capita personal income was large, but the change did not occur in the anticipated direction. Percent change declined from pre to post but the hypothesis indicated increase.

Additionally, the researcher explored whether percent change in unemployment, population, and per capita personal income for the rural counties hosting prisons differed from statewide averages across the 37-year time frame. Hypotheses were:

H4. Percent change in unemployment for rural counties with at least one prison did not differ from the statewide average across the years 1970-2007.

H5. Percent change in population for rural counties with at least one prison did not differ from the statewide average across the years 1970-2007.
H6. Percent change in per capita personal income for rural counties with at least one prison did not differ from the statewide average across the years 1970-2007. One sample t tests were employed for these analyses. Results are shown in Table 4.5 below.

Table 4.5: Comparison of percent change in unemployment, population, and per capita personal income of rural Ohio prison-hosting counties to the statewide average for the period 1970-2007

<table>
<thead>
<tr>
<th></th>
<th>Rural Prison-Hosting Counties</th>
<th>State</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Unemployment Rate</td>
<td>2.08</td>
<td>2.26</td>
<td>-0.05</td>
<td>ns</td>
</tr>
<tr>
<td>Population</td>
<td>0.04</td>
<td>0.21</td>
<td>-1.78</td>
<td>0.08</td>
</tr>
<tr>
<td>Per Capita Personal Income</td>
<td>5.81</td>
<td>6.02</td>
<td>-0.43</td>
<td>ns</td>
</tr>
</tbody>
</table>

Percent change averages over time for rural Ohio counties hosting prisons were not different from statewide averages. None of the comparisons for percent change in unemployment, population, or per capita personal income were statistically significant. Though marginal significance (p = 0.08) was found for percent change in population, it can only be said that the overall average change of 0.04 for rural counties came close to being significantly different from the statewide percent change average of 0.21.

Finally, the researcher examined how rural counties hosting prisons fared, compared to their urban counterparts, in unemployment, population, and per capita personal income. Three hypotheses were tested:

H7. Residents of rural and urban counties with at least one prison did not differ in employment gains, as measured by lower percent change in unemployment from
pre to post prison hosting, given a baseline year of 1970 and a ceiling year of 2007.

H8. Residents of rural and urban counties with at least one prison did not differ in population gains, as measured by percent change in population from pre to post prison hosting, given a baseline year of 1970 and a ceiling year of 2007.

H9. Residents of rural and urban counties with at least one prison did not differ in gains in income, as measured by percent change in per capita personal income from pre to post prison hosting, given a baseline year of 1970 and a ceiling year of 2007.

ANCOVA was employed to analyze the data. Dependent variables were the post percent change values for the three indicators of economic benefits; being rural or not was the independent variable; and the covariates were pre percent change values. Each ANCOVA was run separately.

Table 4.6: Tests of homogeneity-of-regression (slope) assumptions

<table>
<thead>
<tr>
<th></th>
<th>Mean Square</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural * Pre-Prison Unemployment Rate</td>
<td>3.167</td>
<td>0.685</td>
<td>ns</td>
</tr>
<tr>
<td>Rural * Pre-Prison Population</td>
<td>0.157</td>
<td>0.385</td>
<td>ns</td>
</tr>
<tr>
<td>Rural * Pre-Prison Per Capita Personal Income</td>
<td>0.372</td>
<td>1.517</td>
<td>ns</td>
</tr>
</tbody>
</table>
Table 4.7: Tests of homogeneity of variance assumptions

<table>
<thead>
<tr>
<th></th>
<th>$F$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post Unemployment Rate</td>
<td>0.202</td>
<td>ns</td>
</tr>
<tr>
<td>Post Population</td>
<td>0.009</td>
<td>ns</td>
</tr>
<tr>
<td>Post Per Capita Personal Income</td>
<td>1.746</td>
<td>ns</td>
</tr>
</tbody>
</table>

Tests for homogeneity-of-regression (slope) were tested first and all assumptions were met, as indicated in Table 4.6. No interaction effects between the covariate and the independent variable (being rural or not) were significant ($p > 0.05$). Next tests for homogeneity of variance assumptions were evaluated. Based on the nonsignificant $F$ tests reflected in Table 4.7, these assumptions were also met.

Table 4.8: ANCOVA Results: Rural-Urban Prison-Hosting County Comparison

<table>
<thead>
<tr>
<th></th>
<th>Estimated Adjusted Means</th>
<th>$F$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post Unemployment Rate</td>
<td>Rural: 0.241 Urban: 0.379</td>
<td>0.138</td>
<td>ns</td>
</tr>
<tr>
<td>Post Population</td>
<td>Rural: 0.205 Urban: 1.110</td>
<td>3.447</td>
<td>ns</td>
</tr>
<tr>
<td>Post Per Capita Personal Income</td>
<td>Rural: 3.617 Urban: 3.590</td>
<td>2.551</td>
<td>ns</td>
</tr>
</tbody>
</table>

The three ANCOVA analyses held constant the effects of percent change in unemployment, population, and per capita personal income pre prison-hosting on post hosting measurements in comparisons of rural and urban counties. However, none of the ANCOVAs were significant, as shown in Table 4.8. These results indicated that there were no differences in percent change in unemployment, population, and per capita income based on whether the hosting county was rural or urban.
Chapter 5

Discussion

This research allowed rural counties with prisons to tell their own story about the economic benefits of hosting prisons, qualitatively and quantitatively. Incorporating a mixed-method approach, the study focused on eight rural counties in the state of Ohio that hosted prisons primarily during the boom period from 1980-2000. Qualitative data involved interviews. Quantitative data included measurements on unemployment, population, and per capita personal income. Prior research typically employed a single focus, either a qualitative or quantitative analysis but not their infusion. Further, results from existing studies were inconsistent. Of course, this research also adds to the body of knowledge about prisons as economic benefits for rural communities.

Qualitative data were based on interviews from key informants for a subset of rural Ohio communities with prisons. Clearly, these “voices of the community” were sold on the benefits of prisons to their economies. A summary of the major themes is provided below:

- Communities did not have to give up much, if anything, to host a prison, unlike rural communities in some studies. (See King et al., 2004, for example). One key informant even reported that the state provided the land.
• Relationships between the prisons and communities were reported to be positive.

• There were reports of additional economic benefits like new airports and jails since prison hosting.

These qualitative findings coincide with those by Courtright et al. (2007) regarding the positive role of prisons on the local economy. The results are further consistent with positive perceptions of prison hosting discussed by Myers & Martin (2004). Moreover, the qualitative results provide added support to studies such as Abrams & Lyons (1987) and Che (2005) that deal with the unfounded concerns about safety that abounds from discussions on prison hosting. Key informants in this study did not report negative concerns—safety, financial, or otherwise—about prisons in their communities.

The quantitative analyses in this study involved looking at trends for rural prison-hosting counties in Ohio, in conjunction with the state and their urban counterparts. Unemployment, population, and per capita personal income data were obtained over a 37-year period, from 1970 to 2007. The prison boom in the state of Ohio ran from 1980 to 2000, so there were ample measurements pre and post hosting. Post hosting measurements ceased in 2007 in an attempt to avoid the impact of the national economic downturn. Statistical analyses were used to determine whether any of the trends were significant.

Trend data exhibited a typical picture for the rural counties with prisons. Rural areas tend to have high unemployment, declining populations, and lower shares of a state’s per capita personal income. (See Cromartie, 2007; Hertz, 2011, for example.) The job losses in manufacturing and agricultural industries, in particular, hurt these
economies. Study data often showed dramatic spikes in unemployment rate, for instance. Yet, for the state of Ohio, these spikes did not discriminate. They were evident for urban counties hosting prisons and for the state as a whole, just not as pronounced. Such a finding should not be surprising given that a large share of Ohio’s economic activity came from the manufacturing sector. Over the last several decades, Ohio’s manufacturing jobs declined more rapidly than the nation’s as a whole, with exceptionally sharp declines in the steel and iron industries in the 1980s (Fee, 2009).

These rural counties with prisons, however, started in a deeper employment hole than their urban counterparts or the state.

Population in rural Ohio communities has not been growing, but that is a usual state of affairs for “rural”. Trend data projected in conjunction with statewide population give the appearance of stationary movement. The line across the 37-year period from 1970-2007 appeared flat lined. However, when projected solely with their urban counterparts, it appears that urban communities with prisons have been gaining population, at least since the late 1990s and 2000s, while rural counties have been sliding downward. The downward trend for rural appeared to have been established well before any prison hosting.

As would be expected, per capita personal income increased for rural prison-hosting counties, like it did for the state and urban counties with prisons. Trend data shows similarities across all three areas until around 1986 when they started to separate and develop wider gaps through 2007. There are reports of a huge recession in the state of Ohio around 1986 that hit the manufacturing industry extremely hard (Center for Community Solutions, 2007). Thus, it is possible rural counties were impacted by that
event to a greater extent than the urban counties or the state. Urban counties with prisons showed wider gaps from the state around the late 1990s, but the gaps never attained the widths for rural counties. Across the 37-year span, per capita income for rural counties was 85 percent of the state’s average, compared to 94 percent for the urban counterparts. Nevertheless, there has been a lot of downward trending in the percent of the state’s average per capita personal income for both groups of prison-hosting counties.

Percent change in unemployment, population, and per capita personal income reflect a somewhat different picture of rural counties with prisons and how they stack up against the state and their rural counterparts. Positive change is reflects increases while negative change is indicative of decreases.

There were several steep increases in percent change in unemployment from 1970 to about 1986, especially for the prison-hosting counties, both rural and urban. For the 20 years between 1987 and 2007, percent change trends were less intense, though a few small spikes were also present. Overall, all areas followed similar trend patterns of percent change in unemployment.

At first glance, trends in percent change in population appear “all over the place”. However, a more focused look shows a distinct pattern for each of the three areas. Urban counties tended to demonstrate more positive change while rural counties reflected more negative change. State trends tended to be “middle of the road”. There were numerous moderate spikes, up and down, with a very pronounced spike in 1997 for the rural prison-hosting counties. It should be noted that the greatest percent change in population for any of the three areas was less than 2.5 percent. These minimal percent changes in population are a reflection of the limited person-growth in Ohio, regardless the area.
Percent change in per capita income too reflected many fluctuations, but it was often difficult to distinguish one region from the other, a pattern also seen for percent change in unemployment. Rural and urban prison-hosting counties, along with the state, demonstrated similar patterns across the time span. During the early years of the 37-year period, percent change in per capita personal income ranged from six to 10 percent and sometimes as high as almost 12 percent. After 1986, percent change values tended not to exceed six percent. By 2000 and beyond a four percent value for percent change in per capita personal income would be exceptional. As expected, all percent change in per capita personal income was positive.

Again, the trends support the picture typically painted about rural. Furthermore, trends show that much of what is happening in rural counties with prisons is also happening in urban prison-hosting counties and at the statewide level in Ohio. Trends, coupled with qualitative data, spoken and unspoken, should lend insight to results from the statistical analyses. All statistical analyses involved data that has been converted to percent change.

Nine hypotheses were tested as part of this study. Economic benefits of interest consisted of decreases in percent change in unemployment, increases in percent change in population, and increases in percent change in per capita personal income.

The first three hypotheses compared the rural Ohio counties with prisons to themselves pre and post hosting. Hence, they served as their own controls. Separate paired-samples t tests were conducted for each of the economic benefits of interest. Mean percent changes from pre to post were compared. Significant findings were
observed only for percent change in unemployment. Findings for percent change in population and per capita personal income were nonsignificant.

The significant finding for percent change in unemployment was particularly favorable. It corroborates the fact that hosting prisons had a positive impact on rural communities, providing jobs that replaced employment losses from the manufacturing and agricultural industries. It is further consistent with views key informants that prison hosting was beneficial to their community. Further research might address the kind of jobs that were available pre and post prison hosting. It is possible that in addition to prison jobs, job expansion occurred in existing as well as new industry in the rural communities. Some key informants mentioned the development of other employment opportunities following prison hosting during their interviews. Exploring the extent to which job expansion occurred post prison hosting could provide even stronger validation of the economic benefits of prison hosting in rural communities.

The fact that people did not follow the jobs and grow populations in rural communities should possibly have been expected, particularly since this study was designed to study economic benefits from a practical perspective. However, expecting population growth rather than decline—the natural scenario for “rural”—was based on expectations found in previous research. Huling (2002) and Courtright et al. (2007), for example, mentioned unwanted people that would invade rural communities hosting prisons. Unwanted or not, the settling of these individuals in the community would result in increases in population. The literature also mentions the “new” jobs that would be created by prison hosting, which also translates into increased population numbers. Is it possible that people did not follow the jobs as Mojica et al. (2009) hypothesized? It
could be that people followed the manufacturing jobs, relocating to other parts of the country, but not the prison jobs.

Population decline following a dramatic event like the closing of a manufacturing plant makes more sense logically than the expectation of population growth. Prisons are replacement industry, not “new” industry. Losing a few people increases the likelihood that replacement jobs will be filled by community residents. Neither do rural communities with prisons want ‘camp followers’ settling in. These communities want to preserve their culture.

The nonsignificant finding for percent change in per capita personal income might best be explained by the fact that those values have experienced reductions over time. Values for percent change in per capita personal income were lower in the 2000s than they were in the 1970s, not just for rural counties, but for the state and urban counterparts. The 1986 recession has been promulgated as one contributor to the decline (Center for Community Solutions, 2007). Of course, incomes are tied to jobs and the state of Ohio has lost many jobs over the years, especially in the manufacturing industry. Some jobs moved from the central counties in the state to suburban counties (Sadowski, 2001). Other jobs relocated to southern states or went overseas as a result of federal trade policies (Feather, 2008).

Moreover, prison jobs did not generate the same type of earnings as manufacturing jobs. Manufacturing jobs were high wage. Prison jobs are not as lucrative (Center for Community Solutions, 2007; Kroll, 2009). A person might have earned $50,000 annually on the manufacturing job, but now takes a new prison job for a salary of $30,000 a year. In the aggregate, manufacturing and other job losses had a significant
negative impact on real job earnings (Center for Community Solutions, 2007). Individuals/families might need up to four to make ends meet (Feather, 2008). In short, prison jobs did not provide the same nourishment for individuals and families as manufacturing.

Each of the last six hypotheses was nonsignificant, but indicative of good news. Hypotheses 4-6 explored whether percent change values in unemployment, population, and per capita personal income for rural counties hosting prisons differed from the statewide percent change averages. The fact that the values were not significantly different says that these counties are performing as well on the economic front as the state. Comparisons between rural counties with prisons to comparable urban counties, the focus of hypotheses 7-9, yielded nonsignificant findings as well. Thus, urban counties with prisons are not necessarily better insulated from losses created by the removal or destruction of an industry than rural counties. The nonsignificant finding suggests that these counties fared equally well economically.

5.1 Limitations

The design for this study was somewhat difficult in that communities had already hosted prisons. This time factor could have severely hampered the researcher’s ability to obtain participation in the qualitative component of the study. Additionally, asking key informants, some of whom were politically connected, to respond to questions about prisons as economic development could have been negatively perceived and thought to be the equivalent of committing political suicide. Those issues were weighed by the researcher and considered in the decision to only contact key informants from a subset of
four prison communities involving three counties in the state of Ohio for interview. Even employing this approach did not result in 100 percent participation across prison communities. Key informants in one of the pilot communities could not be contacted for participation in the interview questions due to their part-time working status. Ultimately, the part-time status of the informants served as a barrier to contact, even via email.

Lack of resources further hindered this researcher’s ability to conduct the interviews face to face, which would have been the ideal interview method. The researcher did not have the support and/or backing of a huge federal grant to conduct the study so key informants were contacted using other acceptable methods, either by phone or via email. The inability to have face-to-face contact, though, may have interfered with the level of cooperation in completing the interviews. For sure, not having face-to-face contact with the key informants meant that the researcher would miss some cues that signaled the need to probe further or drill down during the interviews.

In hindsight, the researcher also recognized that some interview questions may have been better presented as structured items rather than open-ended. For example, the question about the relationship between the prison and the community would likely have garnered better responses if respondents had been given options for response like “poor, fair, good, very good, excellent.” Structured responses would have allowed for the collection of varying “degrees” of perceptions. Certainly having a mixture of structured and open-ended questions would have strengthened the interview instrument.

Quantitative data collection posed other limitations. For example, population data showing trends before and after prison hostings were not directly comparable. Prior to 2000, population estimates were based solely on decennial census data. After 2000, the
Census Bureau had established the American Community Survey which could provide more up-to-date estimates by year until the next decennial census was taken.

While readily available in most cases, there were significant problems using secondary data. Because this study looked backwards in time, it was often difficult to locate and access data as far back as the date of the actual hosting of the prison for some communities. For example, several communities were excluded from the study because of the unavailability of data so distant in time. Not having the data made having identifying the actual economic state of affairs pre hosting of the prison impossible. Furthermore, obtaining economic data at the local community level was not possible. Thus, a decision was made that “county” would be the unit of analysis. King et al. (2003) promoted using “county” rather than “host community” as the unit of analysis. Besides having a focus that was less narrow, they pointed out that using “county” realistically took into consideration the many workers that might commute from nearby towns and otherwise would not be represented in “host community” data.
Chapter 6

Conclusions

Residents in Ohio rural communities with prisons had an opportunity to tell their story in this study. Overall, they reported good relations between the prisons and the community and are satisfied that prison hosting has been beneficial. The data from this study also told a story. Unemployment improved from pre to post hosting for Ohio rural communities that hosted prisons, and despite the lack of significant findings related to increased populations and per capita personal income, the story from that data was quite telling.

Certainly this research adds to the body of knowledge dealing with the economic benefits of prisons in rural communities. Such research is much needed given that answers to this question have only started to amass within the last 10-15 years, though prison hosting became popular around the 1980s. There are several key lessons that have been learned from this research.

Lesson 1: Prison hosting in rural communities reduces unemployment rates following the loss of major industry. Rural counties in this study demonstrated a significant decrease in unemployment, on average, after hosting prisons. Thus, the
prison-hosting met its goal. Prison hosting provided jobs. People in the community were looking to have the employment void left by the manufacturing industry filled. Key informant data also confirmed this expectation from the community regarding prison hosting. Thus, prison hosting was successful in fulfilling the job void. Significantly fewer people in the community were out of work after hosting prisons than before the prisons were hosted.

This finding contradicts a 2003 finding by King et al., researchers that examined the economic benefits of rural prison-hosting counties in the state of New York. However, King et al. (2003) conducted different analyses and used rural counties without prisons as their controls. The present research used the rural prison-hosting counties as their own controls since a before-after design was used and there was no way to adequately match non-prison-hosting counties in terms of their rurality or whether another type of replacement industry had been hosted.

Lesson 2: Prison hosting will not necessarily grow populations in rural communities. There was very little change in population numbers from pre to post prison hosting in the rural counties. In fact, the change was negligible and the trend tended to be downward. Prior to prison hosting, communities registered an average percentage change in population of 0.05%. Following prison hosting, the average percentage change in population was 0.10%. So it appears that the populations in these rural prison-hosting communities tended to remain stable, thus maintaining the existing culture.

Growing the population might not have been one of the goals of prison-hosting anyway, at least not for the rural Ohio communities under study. To grow the population
could possibly change the culture of the community, especially if the growth involved the influx of families of inmates. Such an occurrence would have been viewed negatively, based on reports by some key informants that were interviewed. Other research on prison-hosting outcomes has further addressed safety concerns perceived by communities when people relocate to the hosting community to be closer to their family member who is an inmate at a prison (Courtright et al., 2007). There is an assumption that the relocating family members also engage in criminal activity or have a proclivity to commit crimes. Huling (2002) indicated a concern that prison jobs might be filled by outsiders instead of the people already living in the community. However, the lack of population change from pre to post prison hosting, coupled with reduced unemployment, suggests that jobs in the rural prison-hosting communities were most likely filled by people currently residing in the community.

Furthermore, declining populations define rural. (See Cromartie, 2007; Hertz, 2011). Rural communities tend not to reflect the population gains of urban areas. Trend data also indicate that population growth has been slow, at best, for the state of Ohio.

**Lesson 3: Prison hosting will not necessarily replace income for individuals/families in rural communities following loss of a major industry.** The manufacturing industry, especially in the state of Ohio, was a highly productive, high wage industry. Thus, it is not surprising that U.S. Business and Industry Council researcher Alan Tonelson describes the industry as ‘that sector that, in the history of America, allowed the person with average skills and education to enjoy the middle-class lifestyle’ (Feather, 2008, p.4). A recent earnings example indicates that the mean earning of a manufacturing job in Ohio for the second quarter of 2006 was $48,076. However,
the mean earning of all other jobs outside manufacturing was $34,628 (Center for Community Solutions, 2007), which is only 72 percent of the manufacturing job. Thus, replacing jobs through prison hosting would not necessarily equate to replacing income. As mentioned previously, individuals that formerly had manufacturing jobs and obtained a prison job would now have a lower income.

That fact at least provides partial explanation for the lower per capita personal income for the rural prison-hosting counties. The lower per capita personal income figures also make it highly unlikely that individuals/families in these communities are juggling more than one job. If so, the sum income from those jobs is still not the equivalent of the lost manufacturing job.

Lower per capita personal income in rural communities is further a natural occurrence for “rural”. (See Cromartie, 2007; Hertz, 2011, for example.) Industry in rural communities typically do not pay at the same levels as industry in more urban areas. Trend data in this study showed lower incomes for these communities prior to hosting prisons. Percent change for rural and urban areas, as well as statewide, exhibited shrinkage, starting around the time that a big recession hit Ohio in 1986. Current values of percent change are much smaller than they were several decades ago.

**Lesson 4: Prisons may keep the bottom from falling out when rural communities lose major industry.** Not all indicators under study demonstrated significant findings. Significant results were found only for unemployment. However, data trends across indicators should not necessarily be interpreted as negative.

Trend data across the 37-year period from 1970-2007 showed that rural Ohio counties with prisons followed the state’s pattern in most cases. Unemployment rates
fluctuated at varying points but fluctuations were consistent with those statewide. There were years during the time period covered by this research that unemployment rates were as high as 17 percent. Prior to prison hosting, percent change in unemployment for rural counties, on average, was four percent, but basically held constant the years after hosting prisons. Even though percent change in population trends reflected gradual decreases across the study period for the rural communities, these downward trends were not significant. In fact, it appeared that prison hosting, at the very least, kept the population fairly stable for rural communities following loss of major industry. Percent change in per capita personal income continued to shrink over time for rural prison-hosting communities. They were not on par with their urban counterparts or the state well before prison hosting. Yet across the time period covered by this study, rural communities with prisons managed to stay within 85 percent of the statewide average. Moreover, income declines have been evident for the state of Ohio since the mid 1980s (Center for Community Solutions, 2007).

6.1 Final Observations

But would similar outcomes have been evident if these rural communities had not sought out prisons to replace manufacturing industry losses? Would the outcomes have been better or worse? Future research might seek to identify the types of industry sought to replace lost manufacturing jobs in Ohio rural counties and explore the economic benefits. It is likely that prisons operated by ODRC were not the only growth industry sought by these struggling communities. Nevertheless, the qualitative and quantitative
data from this research suggest that the rural Ohio counties hosting prisons held up fairly well over time.

There are some researchers who would not agree with the conclusions drawn. Because benefits have not been magnanimous, researchers such as Mosher & Hooks (2010) and King et al. (2003) would likely conclude that the economic benefits of prisons for rural communities identified in this study have not been worth the investment. These researchers tend to discourage communities in general, and rural communities in particular, from seeking out prisons as economic development and scold communities that took the YIMBY plunge. Maybe the researchers are proponents of NIMBY. Maybe they are concerned about the money that the state-supported prison economy takes away from other needed services like education. Such researchers often emphasize the lack of substantial supporting data for most indicators of economic benefit of prisons that have been studied. For them, support provided in the form of significant findings has to be overwhelming. The fact that only one of the hypotheses tested in this study demonstrated significance would likely be discounted as a positive return on investment (ROI) by some researchers.

A more compelling focus for researchers, though, might be whether prison hosting in rural communities met expectations. Future research might explore expectations of prison hosting for communities and determine if they were formalized in some way, for example, through contract. Jobs, for instance, have been touted as the primary economic benefit of prison hosting, but has that just been rhetoric or was there specific reference in some formal document? Previous research tends to point to all the “new” jobs that should be expected from prison hosting. However, for many of the
communities that chose to host prisons—the YIMBYs—prison hosting was a replacement industry, not an add-on.

Most prisons in rural communities in this study were built during the boom years following the dismantling of the manufacturing industry. Losing manufacturing jobs meant loss of the ability of residents to provide for self and family, as well as devastation of a community’s economy. So for these communities, it was likely that something (even in the form of prisons) was better than nothing. The people and rural communities in Ohio could only benefit as they did not have to give up anything on the front end to host the prisons. Key informant data and quantitative data support the thesis that prisons were replacement industry in these rural Ohio communities.

However, the fact that prison hosting benefitted Ohio rural communities through decreased unemployment may become a moot point in the future. The boom years of prison growth may be over. States across the nation are examining alternative ways to house prisoners in light of huge budget deficits (Mosher & Hooks, 2010). California released as many as 40,000 inmates in an attempt to alleviate its budget woes while meeting compliance with the federal court regarding overcrowding conditions. Colorado resorted to early parole for 20 percent of its prisoners. Oregon increased the percentage of time off sentences for its prison population by 10 percent and temporarily nullified a ballot initiative that would have required longer sentences for certain property and drug crimes. Michigan prepared to close five prison camps and three prisons (Diroll, 2011).

The state of Ohio has joined the ranks of states that have explored creative ways to provide for its increasing prison population while it reduces costs for prison services. In 2011, the governor of Ohio proposed selling five state-run prisons. The end result was
the sale of a single prison and the reorganization of five others. The sale was made to a private prison corporation. The reorganization involved the closure of one facility, merger of two facilities, and management of two other prisons by a private management firm. The resultant savings were not as much as originally anticipated but reportedly substantial. In addition ODRC added 700 prison beds to the system (Mendoza, 2011), which are much needed given that the Ohio prison population exceeds its capacity by more than 130 percent (Diroll, 2011). Future research should be conducted to assess the benefits of the various alternatives to prison hosting in Ohio and its impact on communities, particularly rural areas.
References


Mendoza, N. (September 2, 2011). Ohio will not sell five prisons as planned, sells only one and reorganizes others. Retrieved from


