Understanding the effects of the U.S. prison boom on rural communities

John M. Eason

The rate of imprisonment in the United States is higher than that of any other developed nation, with communities of color being disproportionately affected (see Western article in this issue for more detail). Although racial minorities are overrepresented among the population of prisoners, they are also overrepresented among the population of corrections officers, and prisons are disproportionately built in rural areas, particularly those with larger African American and Latino communities. In this article, I argue that it is important to understand prison proliferation in the United States, particularly during the prison boom period of 1970 through 2010, when the number of U.S. prisons tripled, because such an examination can shed light on the relationship between racial and economic inequality and punishment. My study contributes to the literature on the prison expansion by exploring the consequences, both positive and negative, of prison-building on rural communities.¹ I address the following research questions:

- How did newly built prisons affect rural towns’ median home values, median family income, poverty, and unemployment?
- How did these effects vary based on when prisons were built, and between periods of national economic hardship and prosperity?

While many states are considering closing prison facilities in order to address budget shortfalls, and some activists and scholars also advocate for prison closures as part of criminal justice reform, closing prisons may have unanticipated negative economic effects on disadvantaged communities, complicating the story in ways often not acknowledged by researchers and policymakers.

Prisons in the United States

As of 2010, there were 1,663 prisons in the United States, each with an average daily population of 758 prisoners and 231 staff. Of these 1,663, roughly 81 percent are state run, 9 percent are federal (including Native American and military prisons), and 10 percent are private. Nearly 70 percent of these facilities are located in nonmetropolitan communities and, as illustrated in Figure 1, nearly half are located in the Southern United States.

The U.S. prison boom

Over two-thirds of U.S. prisons were built during the prison-boom period of 1970 to 2010. In 1970, there were 525 prisons across the United States. Over the following four decades, an additional 1,138 prisons were built (Figure 2). During the first decade of the prison boom, the 1970s, 185 prisons were constructed, and 321 more were built in the 1980s. The 1990s were the peak of the prison boom, with 462 new prisons built—more than a quarter of the total number of U.S. prisons existing in 2010. In the final decade of the boom, building slowed, with only 170 new facilities.
Figure 1. Prisons are disproportionately located in the Southern United States and in rural areas.

Source: Prison Proliferation Project.

Figure 2. Of the 1,663 correctional facilities in the United States in 2010, more than two-thirds were built during the prison-boom period of 1970 to 2010.

Source: Prison Proliferation Project.
Although the rise in imprisonment occurred at the same time as the prison boom, prison-building varied greatly by state and region. Thus, prison proliferation is not simply a function of mass imprisonment. For example, while only 5 percent of all rural towns in the United States received a prison during the height of the prison boom, Southern rural communities were disproportionately likely to receive one. Nearly 70 percent of prison-building during the boom was in rural areas, and Southern towns accounted for at least 45 percent of all rural prison-building during each period. During the peak prison-building period of 1989 to 1998, nearly two-thirds of the 314 prisons built in rural communities were located in the South. Overall, 45 percent of “prison towns” are in the South.²

While providing jobs may be an important motivator for towns seeking to site prisons, other benefits may come through poverty reduction and increases in family income and home values.

Theories of prison effects

Past research on the prison boom has consistently identified negative effects of prison-building on urban communities of color, and on rural communities in general.³ These studies are all based on a theoretical framework that posits the following: (1) politicians exploit crime legislation to win votes; (2) private companies seek profits by building or operating prisons; and (3) rural community leaders see prisons as positive economic development. Under this theory, these interests combine to encourage spending on imprisonment regardless of the actual demand.⁴ From this perspective, prison-building is primarily a profit-generating venture.

My own theory is informed by my Prison Proliferation Project, which for the first time gathered accurate data on all U.S. prisons as of 2010 geocoded to locations classified by rural-urban status.⁵ I argue instead that because Southern rural communities with larger proportions of people of color are the areas most likely to build prisons, a more nuanced approach is necessary to understand the effects of prisons. It also seems likely that if prisons had only harmful effects on the communities in which they were located, there would be less demand for these facilities.

I use an alternate theoretical framework that considers the prison as a complex institution that is linked to the political economy of rural communities, and that can have both beneficial and harmful effects on those towns. While providing jobs may be an important motivator for towns seeking to site prisons, other benefits may come through poverty reduction and increases in family income and home values. Understanding how prisons may benefit the towns in which they are located can better explain why disadvantaged areas might use their limited resources to acquire such a stigmatized institution.

Effects of the prison boom on rural communities

My study looks at how prisons affect rural communities by measuring how newly constructed prisons, across different periods of the prison boom, affect changes in median family income, median home value, poverty, and unemployment.

Methods

As mentioned above, the data for my analyses come from my Prison Proliferation Project. These data build on existing directory data (which sometimes use mailing addresses that
are far from the actual prison facility) to geocode the physical locations of all U.S. prisons. Prison locations were designated as rural (nonmetropolitan) or urban (metropolitan); only rural locations are included in these analyses.6

The outcomes used to measure the effects on towns of newly constructed prisons from 1970 to 2000 are: (1) change in median value of homeowner property; (2) change in median family income; (3) change in poverty rate; and (4) change in unemployment rate. Each of these is measured at three points in time: 1980, 1990, and 2000.

Prison-building is assessed over four time periods: prior to 1969; during 1969 through 1978; during 1979 through 1988, and during 1989 through 1998. These time periods reflect the assumption that it will take a minimum of two years for a prison to affect the outcomes measured at the beginning of each decade. So, for example, the decade of prison-building considered in 1980 is 1969 through 1978, rather than 1970 through 1979.

I control for several place-level demographic variables, including population, education level, proportion African American, proportion Latino, proportion of housing units that are owner-occupied, and the proportion of residents that resided in the same town during the prior census. I also control for the prior decade’s outcomes; for example, when measuring unemployment in 1990, I control for the percentage unemployed in 1979 through 1988.

The primary analysis is a state-level fixed effects regression measuring for state-level variation in prison effects at the local level.7 Outcomes are presented as a comparison between prison towns and other similar towns nationally and in the South.

In earlier periods, prison towns tended to have higher median home values than other towns, but beginning in the second decade of the prison boom, the reverse was true.

Prison towns compared to other rural communities

Prior to 1969, compared to other rural communities, prison towns tended to be poorer, had larger total populations, and more Latinos. Towns that built prisons between 1969 and 1978 (roughly the first decade of the prison boom) had, on average, higher median home values and larger populations than did other towns. The difference in population was even more pronounced in the South, with Southern prison towns having, on average, twice the total population of other rural Southern towns. In this period only, the proportions of African Americans and Latinos were lower in towns that built prisons compared to towns that did not.

During the period of 1979 through 1988, the characteristics of towns that constructed prisons resembled the characteristics of towns that did not build prisons more than in any other period. The most significant change during this period was a reversal in relative median home values; in earlier periods, prison towns tended to have higher median home values than other towns, but beginning in the second decade of the prison boom, the reverse was true. This change was most notable in the South where, on average, median home values increased by 38 percent from the prior period for all rural Southern towns, compared to a 24 percent increase for rural Southern prison towns. While poverty increased in all rural towns from the first to the second decade of the prison boom, the increase was larger in towns that built prisons. Southern towns building prisons experienced, on average, nearly an 8 percent increase in the poverty rate from the prior
period, compared to only a 2.5 percent increase among Southern towns that did not build prisons.

The racial composition of all rural towns—particularly those that built prisons—changed during the period of the prison boom, with decreases in white populations and increases in African American and Latino populations. The rise in the proportion of Latinos in prison towns was particularly large; it tripled from 4 percent in the first decade of the prison boom to 12 percent in the third decade, compared to a rise from 6 percent to 7 percent over the same time period for rural towns as a whole. There was a similar, though less dramatic change in the proportion of African Americans from the first decade to the third decade of the prison boom, rising from 14 percent to 20 percent in prison towns, and from 15 percent to 18 percent for all rural towns.

Estimating the effects of prison-building on rural communities in 1980

Table 1 shows the estimated effects of prison-building during 1969 through 1978 (the first decade of the prison boom) on home values, family income, poverty, and unemployment in 1980. For each outcome, the table shows the difference in value between prison towns and similar non-prison towns. Prison-building had a positive and statistically significant association with median home values; prison-building was associated with an increase in median home values of over $2,500 for rural towns as a whole, and over $3,500 for Southern towns. I also find largely positive associations of prison-building with median family income; in particular, recent prison-building was associated with an increase of over $1,200 in median family income in rural Southern towns. The bottom two rows of Table 1 show the estimated effects of prison-building on poverty and unemployment; neither of these is statistically significant. Unlike previous research, which found a large, positive, and statistically significant relationship between prison-building and increases in the unemployment rate, my results suggest that even when prisons have negative effects on rural communities, those effects are relatively small.

### Table 1. Prison-building before 1980 is associated with higher median home values and higher family income in 1980.

<table>
<thead>
<tr>
<th></th>
<th>Difference in all towns</th>
<th>Difference in Southern towns</th>
</tr>
</thead>
<tbody>
<tr>
<td>Median home value</td>
<td>$2,560*</td>
<td>$3,529*</td>
</tr>
<tr>
<td>Median family income</td>
<td>$659</td>
<td>$1,233**</td>
</tr>
<tr>
<td>Poverty rate</td>
<td>-0.21%</td>
<td>-1.71%</td>
</tr>
<tr>
<td>Unemployment rate</td>
<td>0.05%</td>
<td>0.04%</td>
</tr>
</tbody>
</table>

**Notes:** Table shows outcomes in 1980, comparing towns that built prisons during 1969 through 1978 with similar towns without prisons. These are state-level fixed-effects estimates of rural property value, family income, poverty, and unemployment in 1980 as a function of previous prison-building, controlling for total population, percentage of residents residing in town from prior census, poverty rate, percentage African American, percentage Latino, owner occupancy, and prison-building in prior periods.

* p < 0.05; ** p < 0.01.

**Source:** Prison Proliferation Project.

Estimating the effects of prison-building on rural communities in 1990

Table 2 shows the relationships between prison-building during 1979 through 1988 (the second decade of the prison boom) and towns’ economic outcomes in 1990. Towns that acquired prisons during the decade immediately prior to 1990 found little economic reprieve; in particular, prison-building in that period was associated with a significant
increase in the poverty rate of rural towns of nearly 2 percent, and with a significant decrease in median home values. In contrast, towns that built prisons prior to 1979 had higher median home values in 1990 (not shown in table). Towns that acquired a prison during the second decade of the prison boom appear to be more economically challenged, on average, than other rural towns, and prison-building did not improve their situation.

Table 2. In 1990, towns that built prisons during the 1980s had higher poverty rates and lower median home values compared to similar towns without prisons.

<table>
<thead>
<tr>
<th></th>
<th>Difference in all towns</th>
<th>Difference in Southern towns</th>
</tr>
</thead>
<tbody>
<tr>
<td>Median home value</td>
<td>-$278</td>
<td>-$2,487*</td>
</tr>
<tr>
<td>Median family income</td>
<td>-$35</td>
<td>-$339</td>
</tr>
<tr>
<td>Poverty rate</td>
<td>1.67%*</td>
<td>1.01%</td>
</tr>
<tr>
<td>Unemployment rate</td>
<td>0.62%</td>
<td>-0.12%</td>
</tr>
</tbody>
</table>

Notes: Table shows outcomes in 1990, comparing towns that built prisons during 1979 through 1988 with similar towns without prisons. These are state-level fixed-effects estimates of rural property value, family income, poverty, and unemployment in 1990 as a function of previous prison-building, controlling for total population, percentage of residents residing in town from prior census, poverty rate, percentage African American, percentage Latino, owner occupancy, and prison-building in prior periods.

* p < 0.05.

Source: Prison Proliferation Project.

Estimating the effects of prison-building on rural communities in 2000

Finally, Table 3 shows the estimated effects in 2000 of prison-building during 1989 through 1998. Towns that built prisons during this later period did see a small decrease in unemployment in 2000, both in towns overall, and in Southern towns. This suggests that prison-building during this later period had a more protective immediate economic effect compared to the immediate effects of prison-building prior to 1980 (shown in Table 1), which was associated with an increase in the unemployment rate. There were no other statistically significant associations in 2000.

Conclusions and policy implications

Table 3. Prison-building during the 1990s was associated with slightly lower unemployment in 2000.

<table>
<thead>
<tr>
<th></th>
<th>Difference in all towns</th>
<th>Difference in Southern towns</th>
</tr>
</thead>
<tbody>
<tr>
<td>Median home value</td>
<td>-$681</td>
<td>-$35</td>
</tr>
<tr>
<td>Median family income</td>
<td>-$304</td>
<td>-$358</td>
</tr>
<tr>
<td>Poverty rate</td>
<td>0.89%</td>
<td>0.94%</td>
</tr>
<tr>
<td>Unemployment rate</td>
<td>-1.01%*</td>
<td>0.49%*</td>
</tr>
</tbody>
</table>

Notes: Table shows outcomes in 2000, comparing towns that built prisons during 1989 through 1998 with similar towns without prisons. These are state-level fixed-effects estimates of rural property value, family income, poverty, and unemployment in 2000 as a function of previous prison-building, controlling for total population, percentage of residents residing in town from prior census, poverty rate, percentage African American, percentage Latino, owner occupancy, and prison-building in prior periods.

* p < 0.05.

Source: Prison Proliferation Project.
Overall, prisons provided a short-term economic boost for some rural communities, particularly those that built prisons in the early part of the boom, but these effects did not persist over the long-term. When economic conditions were unfavorable, prison-building appears to have somewhat insulated communities against adverse effects. When economic conditions were more favorable, prisons reduced unemployment, but again, this effect did not persist over time. This lack of long-term positive effects may be related to broader downward economic shifts in rural communities. However, my estimates should be considered lower-bound estimates of the positive economic effects of prison-building as my research looks at outcomes two or more years after a prison is built and benefits could begin to accrue years earlier, during the planning and building phases of new prisons.

Significantly reducing the number of prisons in rural communities, or even discontinuing future prison-building, may have unintended consequences, including increasing poverty in rural communities of color.

When considering the prison boom, prior work has overwhelmingly claimed that prison-building is bad for communities of color. However, these studies did not have access to national data in which all prisons were properly assigned to their location, nor did they consider the importance of geographical region in their analyses. I adjust for these issues and use a fixed-effects model that allows for more nuance in detecting effects.

My findings have implications for research around mass incarceration in general and prison-building in particular. I suggest that it is necessary to rethink not only what and when we measure, but also the theoretical framework used to understand prison-building. The traditional framework oversimplifies the dynamics of race and class, and is predisposed to identify negative consequences of prison-building. The more neutral perspective that I use in this study allows scholars to explore both the challenges and the opportunities that prison-building offers. It can also assist policymakers in minimizing the unintended consequences of reversing the prison boom, as it allows for an assessment of both positive and negative effects of prison-building to rural communities.

Note that I am neither advocating for prison-building as a poverty-reduction or economic-growth strategy, nor calling for the continuation of mass incarceration at current rates. I am, however, cautioning that significantly reducing the number of prisons in rural communities, or even discontinuing future prison-building, may have unintended consequences, including increasing poverty in rural communities of color.

To characterize prisons as potentially beneficial may seem counterintuitive. However, given the degree of economic disadvantage and the lack of development options faced by many rural communities, town officials may view a prison as the best choice among a poor set of options. In the future, we must both increase the development options available to these communities...
and change the incentives associated with prison-building, to provide towns with more definitively positive economic options.

This article draws from J. M. Eason, “Prisons as Panacea or Pariah? The Countervailing Consequences of the Prison Boom on the Political Economy of Rural Towns,” Social Sciences 2017, 6, No. 1: 7. doi:10.3390/socsci6010007

The Southern United States, according to the U.S. Census Bureau, includes Alabama, Arkansas, Delaware, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, Missouri, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia, and the District of Columbia.


See http://www.johneason.com/prison-proliferation/ for more information on the Prison Proliferation Project.

Sites are classified as metropolitan (urban) or nonmetropolitan (rural) using Rural-Urban Continuum Codes that distinguish metropolitan counties by the population size of their metro area, and nonmetropolitan counties by degree of urbanization and adjacency to a metro area.

The full paper also uses a propensity score analysis as a robustness check. See: Eason, “Prisons as Panacea or Pariah?”


Type of analysis: Cross-sectional analysis with a fixed-effects model.

Data source: The Prison Proliferation Project. Data on all U.S. prisons as of 2010 geocoded to locations classified by rural-urban status and merged with U.S. Census demographic and economic data and U.S. state-level economic and program transfer data maintained by the University of Kentucky Center for Poverty Research.

Type of data: Geocoded-location, housing, economic, political, and demographic data.

Unit of analysis: Rural communities (towns).

Sample definition: Rural communities with new prison-building between 1970 and 2000. “Rural” is defined as towns designated by the 1974 Rural-Urban Continuum Codes as nonmetropolitan.


Limitations: (1) There are data limitations given the sources of data used and the process used to geocode prisons within counties. (2) The study uses town rather than county as the unit of analysis. While county-level analyses have provided better and more reliable data over time, town-level analyses make it possible to assess prisons’ impact on extremely disadvantaged rural towns. (3) The use of cross-sectional analysis means that comparisons cannot be drawn between the communities most likely to build prisons.