

**“Reducing Crime and Disorder in Rental Properties: An Evaluation of the State College
Nuisance Property Ordinance”**

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SUMMARY

State College Borough is located in central Pennsylvania. State College is often associated with being home to the Pennsylvania State University. Penn State is the largest university in Pennsylvania, and the 11th largest in the United States with approximately 44,000 students. Conversely, State College Borough is only five square miles and has a population of approximately 40,000; half of which are students mostly residing in rental housing. State College Borough geographically surrounds Penn State University. Consistent with the social disorganization literature (Kubrin & Weitzer, 2003; Sampson & Groves, 1989), there is a high correlation between crime and rental units in State College. Additionally, since at least 1970, there have been a disproportionate and growing number of rental units in State College Borough, and this trend has continued to present day with nearly 80% (9,717) of all housing units in State College Borough as renter-occupied.

In response to the high correlation between crime and rentals, the growing complaints at the neighborhood level regarding quality of life issues, outward migration of owner occupied residents, and diminishing resources, the State College Borough Council revised their Nuisance Property Ordinance in November, 2004. The revision to the State College Nuisance Property Ordinance allows for suspension of rental permits for continued ordinance and/or criminal violations. The revision is directed at the rental property managers and essentially holds them accountable for violations with the threat of rental permit suspension, thereby not allowing the property to be rented. An interrupted time series design was utilized to assess the effectiveness of the State College Nuisance Property Ordinance. Analysis of the data revealed that the Ordinance was extremely successful in reducing crime and disorder in nuisance rental properties.

SCANNING

The State College Police Department, State College Department of Ordinance Enforcement and Public Health, Centre Region Code Office, and neighborhood groups within State College all identified the negative impact of crime and disorder in rental units on quality of life within State College. The illegal activity identified by these groups ranged from lower level ordinance offenses such as trash on the property and an overall dilapidated property appearance, through mid-level offenses (loud noise and disorder, underage drinking, minor fights, and drug possession), and all the way up to serious offenses such as drug dealing, rape, and aggravated assaults. In addition to the immediate impact that the crime and disorder were having on quality of life in the State College Neighborhoods, the crime and disorder seems to have had an outward migration impact on owner-occupied housing over the past 40 years. In 1970, approximately 30% of housing in State College was owner occupied. Presently, owner occupied housing has been reduced to 20% of the housing in State College. In addition, the overall population of State College dropped a little over 1% between 1990 and 2000, while adjoining areas have experienced significant growth in owner-occupied housing. The population of State College did increase between 2000 and 2010, although not to the extent that the surrounding areas did.

ANALYSIS

Many of the rental properties are inhabited by students who live in them for a few years and then leave. These tenants are mostly younger adults, do not have ties to the community, and often have different expectations with regard to daily lifestyle than their owner-occupied neighbors. For example, some tenants host loud and large parties late at night, fail to take care of their property by maintaining the yard and sidewalk, or even engage in more serious forms of crime such as drug dealing and serious assaults. Unfortunately, the penalties (such as minimal

fines) for the lower level offenses were largely unsuccessful in deterring that behavior. With regard to the more serious offenses (drug dealing and physical and sexual assaults) the traditional methods of policing largely only had a specific deterrent impact, which is not helpful from a neighborhood standpoint in such a transient population as new, undeterred offenders continually move in. While it is important for the police to continue with traditional policing methods such as investigations and enforcement, there was a need for an added and more immediate supervision of these tenants who created nuisance properties. This additional and immediate supervision could be achieved by the rental property manager. The relationship between the rental property manager and the tenant is civil in nature. It may seem ironic that civil avenues are being sought for solutions to criminal issues; however the practice of civil remedies for crime prevention has a long history in our country and abroad. Civil remedies for crime prevention are advantageous for several reasons. Civil remedies or sanctions are easier to apply than criminal sanctions due to either a diminished or complete lack of due process rights normally afforded to a defendant in criminal cases (Cheh, 1991). Along the same lines, civil laws require a lower burden of proof (preponderance of the evidence) than criminal laws (beyond a reasonable doubt) which increases the probability of a verdict in favor of the plaintiff (Cheh, 1991). Engaging the rental property manager in a crime prevention role is part of a growing practice known as third party policing. A meta-analysis on over 70 third party policing programs aimed at a variety of issues (drugs, violent crime, public disorder, juvenile crime, and property crime) found that these programs are effective (Mazerolle & Ransley, 2005).

RESPONSE

In November, 2004 State College Borough revised their Nuisance Rental Property Ordinance that created a point system for certain ordinance and criminal violations occurring at rental units in State College. As of December, 2009, there were 9,717 rental permits in State College. The points assigned to a rental permit vary based on the severity of the offense. The following points are assessed for various violations:

One point: refuse; sidewalk obstruction; grass and weeds; and dog violations;

Two point: disorderly conduct; alcohol possession or consumption by a minor; drug possession; simple assault; harassment; open lewdness; and indecent exposure.

Three point: furnishing alcohol to a minor; aggravated assault; rape; statutory sexual assault; involuntary deviate sexual intercourse; sexual assault; aggravated indecent assault; and possession with intent to deliver controlled substances.

Points accumulate on the date of the offense and are removed one year after being assessed.

Points can also be removed if the accused is found not guilty. Additionally, the maximum number of points that can accumulate in a 24 hour period is three. When complaints are made by the rental property manager or tenants of the premises that result in prosecution against another person at the rental these violations are excluded and points are not assigned. The rationale for this exception is to encourage the rental property manager and tenants to take more responsibility for crime at their rental unit. A Nuisance Property Report including the rental unit address, specific violations, and points assessed is updated weekly and available online, or by telephone

to rental property managers. Upon accumulation of five points, the rental property manager receives written notice indicating that the rental unit has five points, the unit is creating a nuisance in the neighborhood, and that the property manager shall submit a written corrective action plan within 30 days of notification to the Borough identifying how the ongoing problems will be addressed, e.g., eviction, meeting with tenants. If the property manager fails to submit a written corrective action plan and the rental unit subsequently accumulates 10 points, a rental permit suspension is likely. Upon accumulation of 10 points, the rental permit may be suspended for six months to one year, at the end of the current lease. A rental permit in suspension causes the corresponding rental unit to be ineligible for rental, resulting in significant pecuniary loss to the property owner.

In addition to the Ordinance, a Nuisance Property Task Force was organized. The Task Force is comprised of representatives from the State College Police Department, State College Department of Ordinance Enforcement and Public Health, State College Zoning Department, Penn State University Police Department, Centre Region Code Enforcement, Penn State Office of Judicial Affairs, Penn State Office of Student Affairs, and the Penn State Off-Campus Student Union. The Nuisance Property Task Force meets regularly to identify nuisance properties and discuss solutions. Personal contact by a police officer and other representatives on the task force is often made with the rental property manager and tenants of a nuisance property. The nature of the contact is specific to the nature of offenses that are occurring. The goal of these contacts is to gain compliance through education, not enforcement; however tenants are made aware that citations and arrests are likely if compliance is not achieved. Similarly, rental property managers are encouraged to take more responsibility for their property and are provided with effective suggestions such as lease conditions including the provisions of the Nuisance Property

Ordinance, regular inspections of the property, regular contact with the tenants, checking the nuisance property report for point accumulation, and reporting violations at their rental units.

ASSESSMENT

The main objective of the State College Nuisance Property Ordinance was to reduce the specified ordinance and criminal violations at rental properties. In order to assess the impact of the Ordinance on reducing these violations an interrupted time series (ITS) design was employed, examining five years of pre-ordinance offenses against five years of post ordinance offenses. An interrupted time series design is an accepted and widely applied method for determining the impact of an intervention on a social process (Shadish, Cook, and Campbell, 2002; McDowall, McCleary, Meidinger, & Hay, 1987). In addition, one of the most common applications of the ITS has been specifically in the area of legal impact studies. For example, ITS designs have been used to examine a wide range of phenomena in criminology, to include the impact of three strikes sentencing legislation, as well as hotspots in policing, and increased penalties for driving under the influence (Briscoe, 2004; Lawton, Taylor, & Luongo, 2005; Ramirez & Crano, 2003).

The ITS can be diagrammed as:

...O O O O O O O O O O X O O O O O O O O O O...

With “O” as observation points and “X” denoting the intervention, thus separating the time series into two sections: pre-intervention and post-intervention (McDowall, et al., 1987). It is necessary to know the specific point in the time series when the treatment occurred in order to determine the impact (Shadish, et al., 2002). If the treatment had an impact, there would be an interruption in the series, which would be indicated by a change in the slope of the regression line and/or as a discontinuity in the y intercept. There are several different elements of impact that can occur in

an ITS: 1.) form of effect (changes in drift, trend, or slope); 2.) permanence of effect (continuous effect vs. decaying over time); and 3.) immediacy (immediate vs. delayed effect) (Shadish, et al., 2002). The level and type of impact is important for determining if, and to what extent, the Ordinance has been successful in reducing ordinance and/or criminal violations in rental units.

Independent Variable

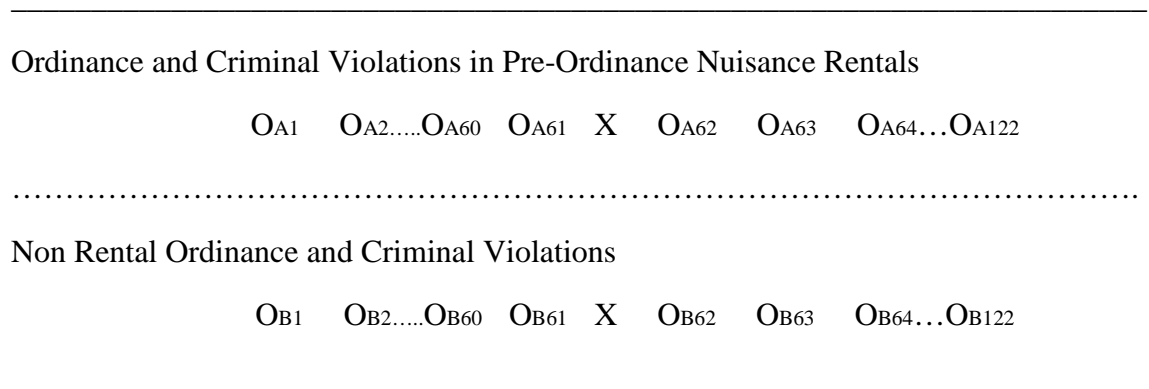
The independent variable is the State College Nuisance Property Ordinance. The Ordinance contains a point system for specific ordinance and criminal violations. As mentioned earlier, if a rental unit accumulates five points in a 12 month time period the rental property manager is contacted and notified that the property is a nuisance and that a corrective action plan is needed. If the rental unit accumulates 10 or more points in a 12 month time period the rental permit can be suspended for a period of six to twelve months, thereby not allowing the rental property manager to rent the unit which results in monetary loss.

Dependent Variable

The dependent variable is *Ordinance and Criminal Violations for Pre-Ordinance Nuisance Rental Properties* and included all of the violations listed in the Ordinance during the research period (November, 1999 through November, 2009), however, was restricted to rental units that would have received at least a five point letter during the pre-ordinance or pretreatment period if the Ordinance's point system had been in place (November, 1999 – November, 2004). In order to receive a five point letter a rental unit would have accumulated at least five points during a rolling 12 month period. Some of these units would have been suspended if the Ordinance had been in effect during the pre-ordinance or pretreatment period (November, 1999 –

November, 2004). This variable will be reported by summing the violations for all of the identified pre-ordinance nuisance rental units and reported on a monthly basis. This dependent variable is ratio level with the potential range of value for zero and above. For the ITS model, “O₁” through “O₆₁” represent the pre-treatment months of November, 1999 through November, 2004. “X” represents November, 15th, 2004, which is the date that the Ordinance was revised to include the point system and rental permit suspension. “O₆₂” through “O₁₂₂” represent the post-treatment months of December, 2004 through November, 2009.

A non-equivalent dependent variable was used in the ITS model to enhance validity. Specifically, Shadish, et al. (2002) point out that the construct validity can be strengthened and the probability of many of the threats to internal validity in a times series can be examined by collecting time series data on a non-equivalent dependent variable that the treatment should not impact, but would be expected to react in a similar fashion as the research dependent variable to an applicable validity threat. The non-equivalent dependent variable, *Non-Rental Ordinance and Criminal Violations*, was a monthly total of all ordinance and criminal violations in State College not covered by the State College Nuisance Property Ordinance. This ITS model can be diagrammed as:



The addition of the nonequivalent dependent variable to the ITS allows for the examination of threats to internal validity such as history, instrumentation, and statistical conclusion (Shadish, et al., 2002). Internal validity is particularly important when assessing an intervention such as a new law or program. When assessing an intervention such as the Nuisance Property Ordinance it is preferable to have the ability to conclude that it was in fact the intervention that caused the observed impact, not some other factor. The internal validity is enhanced when examining a nonequivalent dependent variable that is conceptually related and susceptible to the same internal validity threats as the research dependent variable. The nonequivalent dependent variable chosen (Non Rental Ordinance and Criminal Violations) is conceptually identical from a law enforcement standpoint to the primary research dependent variable. The only difference between the two dependent variables and violations covered is where the violations occur. The ordinance and criminal violations require the same standard of proof (probable cause) for an arrest or citation. The place where these violations occur is neither a mitigating nor aggravating circumstance. Additionally, the same police officers and ordinance officers are enforcing all of the laws for both of the dependent variables. Because of this, if the research finds an impact in the violations covered by the Ordinance and at the same time find a different or zero impact for the violations not covered by the Ordinance a strong argument can be made that the impact on the violations covered by the Ordinance was a result of the Ordinance.

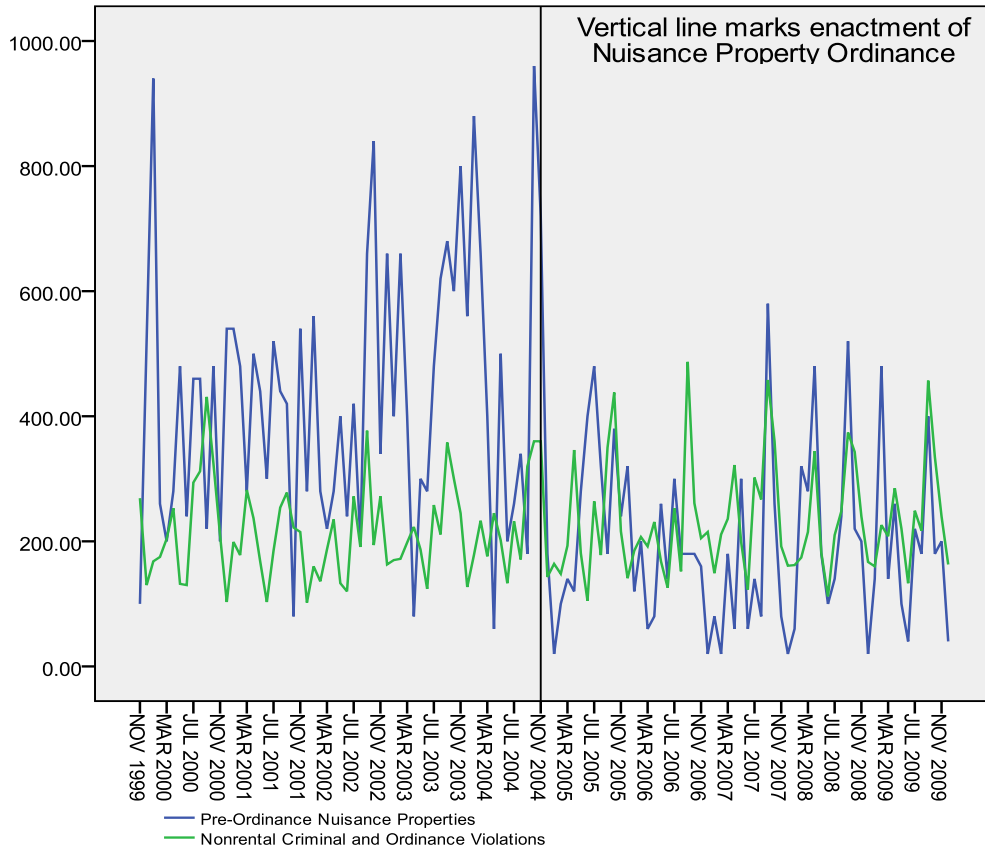
The first step taken in assessing the impact of the ordinance was an examination of the pre-ordinance mean versus the post ordinance mean for both variables through independent sample T tests. The table includes the primary research dependent variable (Ordinance and Criminal Violations in Pre-Ordinance Nuisance Rentals) and non-equivalent dependent variable (Non-Rental Ordinance and Criminal Violations).

Variable	Pre Ordinance Monthly Mean	Post Ordinance Monthly Mean	Mean Monthly Difference	% Change
Pre Ordinance Nuisance Rental Violations	21.57	9.86	-11.71*	-54.29%
Non Rental Ordinance and Criminal Violations	216.08	232.67	16.59	+7.67%

p < .01*

Ordinance and Criminal Violations in Pre-Ordinance Nuisance Rentals decreased an average of 11.71 offenses per month in the post-intervention time period, representing a near 55% reduction. During the same period, the non-equivalent dependent variable, Non Rental Criminal and Ordinance Violations, increased by 16.59 offenses monthly, representing a 7.67 % increase. The Pre-Ordinance Nuisance Rentals included 96 rentals that were identified in the pre-Ordinance time period (November, 1999- November, 2004) as rental units that would have received a five point warning letter (i.e., the unit would have accumulated five points under the current Ordinance). This significant reduction is a key finding as the Nuisance Property Ordinance was directly aimed at rental units with this amount of violations. Interestingly, and of importance, during the same period the non-equivalent dependent variable, Non Rental Criminal and Ordinance Violations, increased by an average of 16.59 offenses per month, representing a 7.67 % increase.

The ITS model examined the dependent variables *Ordinance and Criminal Violations in Pre-Ordinance Nuisance Rentals* and *Non Rental Ordinance and Criminal Violations*. A total of 96 rental units were identified under this criterion. These 96 rental units accounted for 1,307 citations and arrests during the five year pre-ordinance time period. The 1,307 citations and arrests in the 96 rental units accounted for nearly half (47%) of all citations and arrests (2,761) in all of the nearly 10,000 State College Rental Properties. The *Ordinance and Criminal Violations in Pre-Ordinance Nuisance Rentals* was operationalized as the total number of ordinance and criminal violations in the 96 rental units in a month. *Non-Rental Ordinance and Criminal Violations* was operationalized as the total number of non-rental ordinance and criminal violations in a month. The figure below displays a sequence plot of violations. The vertical line marks the point when the Nuisance Property Ordinance was revised to include the point system. The blue line represents the *Ordinance and Criminal Violations in Pre-Ordinance Nuisance Rentals* and the green line represents *Non Rental Criminal and Ordinance Violations* (Violations in Pre-Ordinance Nuisance Rentals multiplied by 15 for scaling purposes to better depict the impact in the corresponding figure). The *Ordinance and Criminal Violations in Pre-Ordinance Nuisance Rentals* experienced an immediate, abrupt, and permanent decrease in the post ordinance months. *Non Rental Criminal and Ordinance Violations* experienced a fairly immediate, gradual, and permanent increase during the post ordinance months.



Sequence plot of Pre-Ordinance Nuisance Properties and Non-Rental Ordinance and Criminal Violations.

Since autocorrelation was not identified as an issue in any of the models, ordinary least squares (OLS) regression was used in the analysis. The table below is the results of the OLS regression analysis for *Ordinance and Criminal Violations in Pre-Ordinance Nuisance Rentals*. The r-square of .302 reveals that the State College Nuisance Property Ordinance explained approximately 30% of the variance in *Ordinance and Criminal Violations in Pre-Ordinance Nuisance Rentals* during the post ordinance time period. The data indicate that rental ordinance and criminal violations in the identified pre-ordinance nuisance rentals decreased on average by 11.705 offenses monthly after the ordinance was enacted.

SPSS OLS Regression output for Pre-Ordinance Nuisance Rentals.

Variable	B	SE	Beta	t
Constant	21.57	1.147		18.801
Ordinance	-11.705	1.623	-.550	-7.213***

Note: $r^2 = .302$, $F = 52.028$, $p < .001$ ***

The table below is the results of the OLS regression analysis for *Non-Rental Ordinance and Criminal Violations*. The r-square of .01 suggests that the State College Nuisance Property Ordinance explained 1% of the variance in ordinance and criminal violations for *Non-Rental Ordinance and Criminal Violations* during the post ordinance time period. The data indicate that non-rental ordinance and criminal violations increased on average by 16.59 offenses monthly after the ordinance was enacted.

SPSS OLS Regression output for Non-Rental Ordinance and Criminal Violations.

Variable	B	SE	Beta	t
Constant	216.08	10.59		20.391
Ordinance	16.590	14.986	.101	1.107

Note: $r^2 = .010$, $F = 1.226$

The State College Nuisance Property Ordinance was successful in significantly reducing crime and disorder in nuisance rental properties. While the 96 identified nuisance rental properties only accounted for less than 1% of rental properties in State College, they accounted for nearly half of the crime in rental properties. The significance of this impact is enhanced by the data which showed that ordinance and criminal violations were increasing during the same time period in offenses not covered by the Ordinance, and that the Ordinance had very little impact on offenses outside of rental properties. The State College Police Department continues to work with other enforcement agencies and rental property managers to maintain and improve

the prevention and control of crime in State College rental housing with the goal of maintaining a high quality of life for State College residents.

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