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**Patterns of Crime and Criminal Justice in
Trempealeau County, Wisconsin**

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Executive Summary

This report is intended to provide background information for the Trempealeau County Law Enforcement Committee, the County Board, and interested citizens for deliberation over the potential construction of a new county jail. Overcrowding of the county jail has resulted in significant costs to the county including direct costs of \$390,096 (for 2008) through a contract with Chippewa County and indirect costs of between \$26,672.33 and \$32,026.75 through jail staff time involved in processing of prisoners and transport costs of \$6,753. This represents a total out-of-county housing cost between \$423,521.33 and \$428,875.75. This accounts for a little more than 23 percent of the total jail administration levy request for 2008. The direct and indirect costs of out of county housing do not capture socioeconomic costs that may be accruing to the community.

While the crime rate in Trempealeau County remains significantly below both the US and Wisconsin average, recent increases have placed additional strain on the County's jail system. As the County's population has grown, the absolute number of prisoners which the County must handle has increased. Federal and state policies aimed at "getting tough on crime" such as drunk driving, domestic disturbances and enforcement of parole violations have placed significant pressure on the County jail.

Trempealeau County has experienced a slight downward trend in crimes reported to law enforcement over the past few years, but the decline has not been as rapid as at the national level. The County's admissions data suggest the majority of incarcerations are for crimes that are directly observed by law enforcement officers which are not captured in the national crime data.

As Trempealeau County grows in population and income, we would expect to see significant changes placed on the County jail. Based on our analysis population is the driving factor in terms of jail admissions. While other factors such as income and age profiles are important they are not as important as simple population growth.

The fiscal analysis using the G.R.E.A.T. software indicates the county does have additional taxing capacity. Pursuing debt financing, however, may be a challenge in a fiscally conservative county. At the same time, out-of-county housing costs, construction costs, and labor costs will continue to rise. Aggressive pursuit of sentencing alternatives can help ease the pressure on the jail, but it will not eliminate the need for a jail.

Background

Jail overcrowding has become a significant political and policy challenge for the Trempealeau County Board of Supervisors and other players in the local criminal justice system. The current facility opened in 1983 and in just a few years the jail reached capacity. A short-term plan to alleviate overcrowding included, but was not limited to, “double bunking.” Continued prisoner population growth over the years since the jail was built has required prisoners to be housed out of the county. This latter policy option was adopted in 1995. Over the last decade, the out-of-county housing population has grown. In an effort to guarantee the availability of beds at a set price, the Sheriff contracted with the Chippewa County jail in mid-2007.

The County has wrestled with trying to find an appropriate long-term solution to jail overcrowding for nearly a decade. The County created a Jail Study Committee in 1998 who selected Voorhis Associates, Inc. to conduct a comprehensive jail needs assessment including design issues, pre-architectural program, and critical issues analysis. Griffin, Kubik, Stephens, and Thompson, Inc. (GKS&T) were retained to complete a jail project tax impact analysis. The recommendation was a “state-of-the-art” facility with a correspondingly high estimated cost. This recommendation of a “Cadillac jail” and correspondingly “Cadillac price” resulted in a significant anti-jail movement that stopped the County’s efforts to build a new jail.

The issues surrounding the need for a new jail, unfortunately, have not gone away and in many ways have become worse. The Department of Corrections (DOC) continues to note deficiencies in the jail with every annual inspection. One example is the lack of a negative pressure room where prisoners with highly contagious diseases can be isolated from other prisoners and jail staff. This exposes not only prisoners to risk of diseases but also jail staff and others located in the building which houses the jail. Double bunking continues. Out-of-county housing costs have increased dramatically. These direct costs went from \$35,000 in 1995 to a budgeted \$390,096 for 2008, an increase of over 11 times. The 2008 budgeted costs do not include the indirect costs associated with person hours and transportation.

Like many other counties throughout Wisconsin and indeed, across the nation, the County has implemented a number of alternatives to incarceration to try to reduce overcrowding pressures.

These include electronic monitoring, Intoxicated Driver Program, Drug Court, and Community Service among others. While these programs have been successful many are in their early stages and have not significantly alleviated overcrowding pressures. In the meantime the larger issue of an overcrowded and outdated jail has not been adequately addressed.

To further study and offer possible solutions the county board chair appointed a Criminal Justice System Task Force in late 2006. The Task Force has been charged with examining the County's existing criminal justice system and developing an educational program to inform the County Board as well as the public about the issues and challenges that the local criminal justice system is facing. In the summer of 2007, members of the Law Enforcement Committee began to explore the costs associated with the "out-of-county housing" agreement the County has with Chippewa County. The Committee approached the University of Wisconsin-Extension, Cooperative Extension, to consider documenting the direct (i.e., contract with Chippewa County) and indirect (i.e., Trempealeau County staff and transportation) costs of the "out-of-county housing" agreement. This report represents the University's attempt to document the total costs of the out-of-county-housing option as well as providing additional background information about trends in criminal behavior and incarceration rates. The intent of the latter analysis is to provide up-to-date information about current crime and criminal justice system patterns across Wisconsin and how these may influence demands placed on the Trempealeau County jail. The intent of the report is to provide basic information to the Law Enforcement Committee and the County Board and to help them in their decision-making process. This report does not reflect the opinions of the University and is not intended to provide an action plan for the County.

This report is composed of four parts beyond these introductory comments. Part one is an analysis of the direct and indirect costs of "out-of-county housing" of overflow County prisoners. In part two, we outline changes in crime rates for the County compared to the US and Wisconsin. In part three we review changing County demographics with an emphasis on how these changes relate to crime rates. In part four we provide an overview of County fiscal trends with a focus on law enforcement.

Out-of-County-Housing Cost Analysis

A critical question asked by the Law Enforcement Committee, the County Sheriff, and the Jail Administrator is “What is out-of-county housing costing the county?” A long-term contract was signed with Chippewa County this past summer. The contract guaranteed 25 beds at a rate of \$42/day. The amount budgeted for 2008 is \$390,096 for direct housing costs.

There are, however, costs above and beyond the daily rate charged by Chippewa County. To help the Law Enforcement Committee better understand the actual costs to the County, UW-Extension was approached and asked to develop an estimate of these “soft” costs. These costs range from staff time transporting inmates to Chippewa County to the fuel used by County vehicles. Jail administration and support staff were asked to collect data on transports, time involved in transports, and wage data for the individuals involved in transporting prisoners.

Transport data for 2007 was used to conduct the analysis. The mileage round trip to the Chippewa County jail is 104.8 miles. The county currently pays \$0.485/mile. Projecting current out-of-county transports to the end of the year results in an estimate of 132.86 trips for overcrowding transports for 2007. Vehicle costs associated with out-of-county transports is \$6,753 (104.8 miles times 132.86 transport trips times \$0.485/mile). Of course the actual cost fluctuates in direct proportion to the cost of gasoline. In addition, the reimbursement rate most likely is an underestimate of the costs associated with fuel, insurance, maintenance, and depreciation. As a result, the vehicle costs of \$6,753 are on the low side.

Salary and benefit data was provided for the key categories of personnel involved in prisoner transport. For any given transport, a minimum of six county employees are involved in preparing and executing the transport. These individuals include the transport officer, the deputies, a part-time officer, the jail administrator, jailers, the jail nurse, the receptionist, and the traffic lieutenant.

The receptionist is responsible for the preliminary scheduling and recording each transport. She estimates that she spends about 10-15 minutes for each overcrowding transfer (32.175

hours/year). If the scheduling becomes more complex and starts to involve overtime, the traffic lieutenant takes on scheduling officers to complete the transfers. He estimates that he spends 15 minutes per transport.

The transport officer is charged with the responsibility of performing prisoner transports. These transports are not limited to overcrowding transports. They also include regular, on-going transports to medical appointments, prisons, and so on. When the transport officer is delivering a prisoner, other officers are called in to complete prisoner transports as needed.

The jail administrator plays a key role in identifying prisoners for out-of-county housing and preparing the administrative paperwork. A jailer is responsible for physically preparing the prisoner for transport. This includes gathering personal items, shackling the prisoner, and moving them to the vehicle. The jailers and the jail administrator both spend 45 minutes per transport. Some transports actually require two officers or an officer and a jailer. The jail nurse reviews the medical records and prepares medication and medical paperwork the prisoner will need at his/her destination. He plays a key role in coordinating the on-going physical and mental health care of inmates housed out-of-county. He spends about 30 minutes on each transfer.

All of these individuals have responsibilities above and beyond overcrowding transfers. When a deputy is called in to conduct an overcrowding transfer, he/she is not available for patrol, investigations, or other activities until they return to the county. The number of overcrowding transfers the transport officer is making limits the time he has available for his evidence responsibilities. For the other individuals involved, their regular responsibilities take additional time to complete and overall departmental productivity is decreased.

Total indirect costs for overcrowding transports range from **\$26,672.33** to **\$32,026.75**.

This range is a result of using two assumptions. Assumption one used the number of hours the officers logged as “transport hours.” Assumption two used the projected number of trips and a two hour travel time for the transport officer. All other time estimates were based on information provided by county employees directly involved in moving prisoners.

Assumption one (logged transport hours).

[Transport Officer's logged hours times hourly wage and benefit rate]

plus

[Deputies logged hours times weighted average of hourly wage and benefit rate]

Plus

[Part time officers' logged hours times hourly wage]

Plus

[132.86 trips (projected annual out-of-county trips) times .75 (jailer estimate) times weighted average of hourly wage and benefit rate]

Plus

[132.86 trips times .75 (jail administrator estimate) times hourly wage and benefit rate]

Plus

[132.86 times .5 (jail nurse time estimate) times hourly rate paid]

Plus

[Receptionist's annual time estimate times hourly wage and benefit]

Plus

[132.86 trips times .25 (lieutenant's time estimate) times hourly wage and benefit]

Plus

[Mileage costs (number of trips times mileage to Chippewa County times county mileage reimbursement rate)] **EQUALS \$32,027.**

Assumption two (two hours per transport to Chippewa County).

[Projected trips (132.86) times 2 hours times hourly wage and benefit]

Plus

[132.86 trips (projected annual out-of-county trips) times .75 (jailer estimate) times weighted average of hourly wage and benefit rate]

Plus

[132.86 trips times .75 (jail administrator estimate) times hourly wage and benefit rate]

Plus

[132.86 times .5 (jail nurse time estimate) times hourly rate paid]

Plus

[Receptionist's annual time estimate times hourly wage and benefit]

Plus

[132.86 trips times .25 (lieutenant's time estimate) times hourly wage and benefit]

Plus

[Mileage costs (number of trips times mileage to Chippewa County times county mileage reimbursement rate)] **EQUALS \$26,672.**

These numbers were added to the contract costs to determine the range of costs. Based on these estimates, the county can project a total out-of-county housing cost that ranges between \$423,521 to \$428,876 for 2008. This is 23.4 to 23.7 percent of the total 2008 levy for jail administration.

This is an estimate of the contract costs, labor costs, and mileage costs associated with the county's strategy of housing inmates out-of-county. These costs are not the only expenses that are incurred. Unfortunately, many of these other costs are difficult if not impossible to quantify. These costs may include the following:

- Lack of contact time with public defenders hinders adequate representation.
- Inmates housed out-of-county may be more disconnected from their family. This impacts the family's ability to maintain family ties and imposes additional costs on family members. This disconnect may also increase recidivism rates.
- Jail construction costs are increasing at an average of 8% per year and delays can accelerate costs. Estimates developed in 2005 for Trempealeau County by Venture Architects ranged from \$10.5 million to \$13 million to construct a new jail.
- State of the current jail may expose the county to inmate lawsuits.
- State of current jail does not provide a safe work environment for jail staff.

We can now use these total indirect costs to get a cost/day for each inmate. These estimates are based on an analysis prepared by jail staff for 2006. Total 2006 jail operating costs were \$1,216,124.71. The 2006 ADP housed in county was 39.38 (Total ADP of 50.25 less out-of-county ADP of 10.87). The ADP multiplied by 365 gives us total prisoner days of 14,373.70.

Dividing the jail operating costs by the total prisoner days ($\$1,216,124.71/14,373.70$) equals \$84.61 per prisoner per day housed in Trempealeau County jail in 2006.

Using the calculations prepared in the first part of our analysis we can develop an estimate of the cost per prisoner per day for both inmates housed in county and out of county. We will use the ADP for 2007 to date. While the 2008 ADP is unknown, it is not unreasonable to assume that it will be similar to, if not greater than, the 2007 ADP. Total jail operating costs levied for 2008 (less the \$390,096 budgeted for out of county housing) are \$1,419,761.70. The total prisoner days projected to be housed in county are 12,661.85 (ADP of 34.69 multiplied by 365). This equals \$112.13 per prisoner per day housed in the jail in 2008. Looking at the cost per prisoner per day for inmates housed out of county, we have a cost of \$52.53 per prisoner per day to \$53.19 per prisoner per day (total out of county housing cost divided by total out of county prisoner days). This indicates that the cost per prisoner per day beyond the contract costs of \$42 is \$10.53 to \$11.19. The total prisoners days projected to be housed both in and out of the county are estimated to be 20,713.75 (ADP of 56.75 times 365). When you divide the total jail operating costs levied for 2008 by the total prisoner days, you are looking at an average prisoner cost per day of \$87.37.

While these results might suggest that all prisoners be housed out of county, that conclusion ignores the fact that jails have strong economies of scale. Housing prisoners out of county does not decrease the average cost per day of all prisoners housed at the County's expense. As the number of prisoners increases (a likely scenario with continued population growth), average prisoner housing costs will increase as the County moves up the right side of the average cost curve.

Changing Patterns of Crime

The primary objective of this study was to provide the Law Enforcement Committee and the County Board an estimate of the actual cost of their policy to house inmates out of county. While this information is important, informed policymakers can benefit by increasing their knowledge

changing crime patterns in Wisconsin and the County and the factors that are associated with not only crime but also incarceration rates.

After decades of consistently rising crime rates, the past two decades have seen a remarkable reversal in crimes as reported to the FBI (Federal Bureau of Investigation) (Figure 1). This data reflects the national crime reports, and while it has been argued that it is seriously lacking it represents the best data available to both researchers and policymakers.¹ Of course county specific information is superior to the FBI data but if we are interested in comparing Trempealeau County to other counties, the FBI data is the best available. The analysis compares the County to national and state level trends. While it is imperative that some type of benchmark for comparison be used (in our case the nation and Wisconsin), it is equally important to keep in mind that each county is unique and reflects the policy choices made over the years by previous county boards, judges, sheriffs, and district attorneys.

The total crime rate has declined by almost 34 percent at the national level since its 1991 peak. Wisconsin has experienced a slightly larger decline at 35 percent. Trempealeau County's total crime rate actually peaked in 2001 but it has experienced consistent declines since that peak. From 1988 to 2005 the crime rate for Trempealeau County has declined by 9.6 percent. Two additional important trends are revealed in Figure 1. The first is that the overall crime rate in Trempealeau County is significantly lower than either the US or Wisconsin. But, perhaps more importantly, the difference between the US, Wisconsin and Trempealeau County is becoming smaller. In other words, crime rates are converging to a common average.

Trempealeau County is not unique in the overall patterns observed in Figure 1. From a national perspective, the decline in the crime is predominately an urban phenomenon. Rural crime rates have stagnated or increased slightly. Why rural America has not experienced the same decline in overall crimes is not well understood despite the numerous studies attempting to shed light on these trends (e.g. Deller and Deller 2005).²

¹ For a more detailed discussion of the limitations see Steven Deller and Melissa Deller. "Shifting Patterns in Wisconsin Crime" Department of Agricultural and Applied Economics, University of Wisconsin – Madison Staff Paper 491. December 2005. <http://www.aae.wisc.edu/pubs/sps/pdf/stpap491.pdf>

² Please see Deller and Deller.(2005) <http://www.aae.wisc.edu/pubs/sps/pdf/stpap491.pdf>

If we break total crime as reported to and compiled by the FBI into its two primary components, violent and property crime, we can gain additional insights into the changing crime patterns of Trempealeau County. First, property crime, including burglary, larceny and motor vehicle thefts for example, dominates the total crime index. In 2005 property crime accounted for 91.7 percent of all crime in Wisconsin, and larceny accounted for 68.7 percent of total crime. Larceny includes theft from cars, shoplifting, and bicycle theft to name a few. For Trempealeau County property crime accounted for 92.5 percent of all crime in 2005 with larceny theft accounting for 63.4 percent of all crime. If we compare property crime rates (Figure 2) and total crime (Figure 1) the two move in near perfect unison.

Violent crime (Figure 3), however, paints a slightly different picture. Violent crime includes murder, rape, assault and forcible robbery. In Wisconsin it accounts for 8.3 percent of total crime, and for 7.5 percent of crime in Trempealeau County. As with total crime, violent crime has been steadily declining at the national level from its peak in 1991 with a 38 percent decline. Violent crime in Wisconsin trended slightly downward from 1995 but ended the study period at about the same level as the beginning of the period. Trempealeau County, however, experienced very little violent crime during the early to mid 1990s, but a large increase in 1997 has remained throughout the remainder of the study period. While violent crime can be considered a small share of total crime, it is the type of criminal behavior that can pose a significant challenge to the county. First, these crimes are not eligible for alternative to incarceration programs. Second, inmates who have committed these crimes can present the most difficult cases for County jail staff.

It is important to keep in mind that these crime trends are based on the Unified Crime Reports (UCR) compiled by the Federal Bureau of Investigation (FBI). They represent crimes that are reported to local law enforcement agencies. While academic researchers have challenged the quality of this data it represents the best data available, it is widely reported in the media, and it is used to help allocate special federal funds.³ What this FBI data does not reveal is the demands placed on local jail systems. Arrest rates, or more specifically jail admission data, may be more

³ Again, for more information see Deller and Deller (2005) as referenced above.

reflective of jail overcrowding issues. For example, the FBI Uniform Crime Reports focuses on crimes reported to law enforcement and do not reflect criminal activity that is directly witnessed by law enforcement. Two examples of this latter type of criminal activity would be OWI (operating while intoxicated) violations or persons who are arrested for drug possession after a traffic stop.

For Trempealeau County, jail admission levels have averaged just above 1,000 arrests per year with 1302 bookings in 2006. Depending on the nature of the crime for which the arrest was made most are processed and held, if even for a short period of time, at the Trempealeau County Jail. The single highest category of arrest is for OWI with 267 charges in 2006 followed by parole/probation violation holds with 220. The highest category that would overlap with the FBI data is battery with only 88 charges in Trempealeau County in 2006. Where the admissions data and FBI data are not consistent is in the area of parole violations. Here the county is responsible for housing parole violations in the short term and many parole violators are of a higher risk than “typical” county jail inmates. The responsibility of the County jail with respect to state parole violations remains a source of conflict.

What we can conclude from the analysis on crime trends in Trempealeau County is that crimes reported to law enforcement has been trending slightly downward over the past few years, but the County has not experienced the same rapid decline that has been occurring at the national level. There has been, however, a modest increase in the number of violent crimes; but violent crimes represent a very small percentage of total crimes. Admissions data for the County jail suggest that a large majority of incarcerations are for crimes that are directly observed by law enforcement officers such as OWIs and/or parole/probation violations. The latter, indeed, has been identified as a particular problem for the County as state mandates in this area create direct costs to the County.

Changing County Demographics and its Relation to Crime

To fully understand the demands placed on the Trempealeau County jail it is important to understand the changing demographics of the county as well as historical crime patterns. There

is a wealth of academic literature to draw upon when focusing attention on demographic trends and crime that can help guide our discussion.⁴ The first and perhaps most relevant demographic measure is population growth. A simple correlation between population and jail admission for Wisconsin counties in 2005 reveals that there is a strong direct correlation (Figure 4). If we evaluate the correlation slope coefficient (slope = 34.1537) at the mean of the Wisconsin county data, we have what is called an “elasticity” of the relationship equal to 0.8096. This suggests that for a ten percent increase in the population of the county we would expect to see an 8.1 percent increase in jail admissions. This is a fundamentally important result as the County and its municipalities promote economic growth and development and in particular residential development. The revenue limits placed on municipal and county governments provide a strong incentive to promote growth and development. With this growth, there are indirect pressures placed on all county services including the county jail.

Consider the growth in Trempealeau County population (Figure 5). By using simple growth indices we can see that Trempealeau County population grew by 9.7 percent from 1988 to 2005 compared to 14.6 percent for Wisconsin and 21.3 percent for the US. This translates into an average growth rate of 0.55 percent for Trempealeau County. If this population trend continues for the next five years we would expect to see the County’s population increase by 2.7 percent. Couple this estimated increase in population with the “elasticity” captured in Figure 4, and we would expect jail admissions to increase by 2.2 percent. Given 2006 Trempealeau County jail admissions of slightly above 1300 the increase in admissions associated with normal population growth would be about 30 new admissions. Given that the County jail is already beyond capacity and is “out-sourcing” prisoners this increase in new admissions would place greater pressure on the jail.

One must be careful with the analysis presented in the previous paragraph. Admissions data does not speak to the length of stay in the county jail. Admissions range from an overnight stay for an OWI to several months depending on the nature of the offense. For 2006 the average length of stay, as reported by Jail Administrator, Tonya Niederkorn, was 14 days. If the estimated increase of 30 new admissions in five years due to natural county population growth stays the

⁴ See Deller and Deller (2005) for a review of this literature with a focus on Wisconsin.

average of 14 days this translates into 420 days of new demands placed on the county jail. Given the current contract of \$42 per day, per inmate with Chippewa County, this natural increase in jail population would cost the County \$17,600 plus the cost of administrative and officer time in transporting the inmates.

A review of the academic literature that examines the relationship between criminal activity and demographics and socioeconomic variables, three items rise to the top: age profiles with a focus on young adults, income with a focus on poverty, and racial profiles. If we examine these relationships and explore how Trempealeau County is changing over time, we can gain valuable insights into the changing demands placed on the County jail. We will explore each factor in turn.

Consider age structure first. Examining the national arrest data shows that the vast majority of arrests occur with younger people with a peak at age 18 (Figure 6). The reasoning for such a pattern is commonly attributed to “youthful exuberance” but it can be more directly tied to drug and alcohol violations. Some academics have argued that the national war on drugs has disproportionately impacted youth and this is reflected in the arrest data presented in Figure 6. If we look specifically at Wisconsin jail admission data we find that the national pattern applies to Wisconsin (Figure 7). Based on a simple correlation analysis, a ten percent increase in the share of the county population that is under the age of 18 would result in a 42.5 percent increase in the number of admissions. This large “elasticity” (4.252) points to sensitivity of jail admissions to the age profile of the county. But for Trempealeau County, where the average age for an inmate in 2006 was 30, the percent of the county population under the age of 18 has been declining over the study period and now stands at 23.1 percent (Figure 8). Trempealeau County is not unique in this trend that is a reflection of the aging of America. If we look at the absolute number of persons under age 18 we also see a decline in both Wisconsin and Trempealeau County (Figure 9). This trend would suggest that the pressure placed on the county jail should be declining.

A second important demographic change that is occurring in many parts of Wisconsin, including Trempealeau County, is the growing Hispanic population. Some have expressed concern that a growing Hispanic population may be contributing to the pressures being placed on law

enforcement and the jail system. In Trempealeau County the Hispanic population has grown by over 600 percent from 1988 to 2005 (Figure 10) Indeed, in Trempealeau County of the 1302 admissions into the county jail, 209, or 16.1 percent, were classified as Hispanic despite the fact that Hispanics account for 1.6 percent of the County's population (Figure 11).

Such patterns give the perception that a growing Hispanic population does indeed place increased pressure on law enforcement and the jail system. A simple correlation between the percent of the population that is classified as Hispanic and county jail admission levels reveals a strong positive relationship (Figure 12). Again evaluating the correlation at the mean of all Wisconsin counties used in the analysis provides an "elasticity" of 0.701. This means that a ten percent increase in the share of the county population that is Hispanic will in all likelihood increase jail admissions by about seven percent. While there is a positive relationship it is significantly lower than the corresponding increase with the share of persons under the age of 18 discussed above.

While there is evidence that higher concentrations of Hispanics results in a higher level of admissions, a look at the relationship between Hispanic populations and crime reported to local law enforcement paints a different picture. By plotting the percent of the population classified as Hispanic and the total crime rate from the FBI data discussed above, there is a strong negative relationship (Figure 13). Again using the slope coefficient and evaluating it at the means of the Wisconsin county data, the elasticity is -0.2032 which suggest that a ten percent increase in the share of the county population that is Hispanic will result in about a two percent decline in the total crime rate. This raises a very important question: how do we reconcile the patterns observed when comparing admissions data and the FBI data? The most obvious possibility is that law enforcement officers are more likely to arrest and hold Hispanics than whites.⁵ Another possibility speaks to the inherent differences in the FBI crime data and arrest or admissions data.

⁵ There is strong evidence offered by Professor Pamela Oliver at the University of Wisconsin – Madison that such an argument can be made for African-Americans in the US and Wisconsin. She argues that this pattern is not due to growing crime rates, but to greater use of incarceration for lesser offenses and drug offenses. Indeed, the recently created US Sentencing Commission is focusing attention on the vast differences in sentencing guidelines for crack cocaine, a predominately African-American user group, and powder cocaine, a predominately white user group. Much smaller amounts of crack cocaine result in much longer sentences than powdered cocaine (Time Magazine, Nov 19, 2007 p.60). For a detailed discussion of these arguments along with a range of data analysis, please see Professor Oliver's website at <http://www.ssc.wisc.edu/~oliver/RACIAL/RacialDisparities.htm>

As noted above, many arrests are the result of direct observation by law enforcement officers such as OWI offenses and do not reflect crimes reported to law enforcement. Alternatively, Hispanic may be more likely to violate probation and must be readmitted to jail. It might simply be the case that the relationship between Hispanics, crime and admissions to county jails is more complex than what is captured in this simple analysis. A complicating factor that we can not address with the data that we have available to us is that of illegal Hispanic immigrants. The Hispanic population data that we use here reflects only legal immigrants and US citizens of Hispanic heritage. In addition, as discussed immediately below, because of the income profile of Hispanics in the US and Wisconsin it is not clear if income patterns or race is the driving factor.

The third demographic variable that has been found to be an important factor in crime is income. Those that study criminology and the criminal justice system argue that income, but more importantly poverty and income distribution, plays an important role in understanding crime. In general it is argued that crime is inversely related to income; as income goes up, crime tends to decline. The different theories of crime speak to lower social norms making criminal activity more acceptable as well as some criminal activity such a robbery being a viable economic alternative to work. Again, for a detailed discussion of these theories see Deller and Deller (2005).

A simple scatter plot and correlation between the total crime rate and mean household income for Wisconsin counties confirms this negative relationship (Figure 14). Using the slope coefficient evaluated at the mean of the county data yields an elasticity of -1.748. This result suggests that a ten percent increase in mean household income will result in a 17.5 percent decline in the total crime rate. An examination of county jail admissions, however, reveals a very different picture (Figure 15). Logic would suggest that higher income leads to lower crime and lower crime in turn would lead to lower admissions. We do not find this. Rather the combination of the slope coefficient and the mean of the county data suggest that a ten percent increase in mean household income results in a 25.5 percent increase in jail admissions. This is comparable to the pattern we observed with the percent of the population that is classified as Hispanic.

One possible explanation for this perhaps counter-intuitive finding is that the demand for strict enforcement of the law is higher in high income areas. It is possible that in higher income communities people are more likely to involve law enforcement and be willing to press charges. Another possibility is that counties with higher income levels are likely to be willing to fund and build larger county jails allowing for higher admission rates. Again, our simple scatter plot analysis, while insightful, may be masking more complex relationships.

For Trempealeau County, mean household income has been growing steadily over time. It increased 37.4 percent from 1988 to 2005 (Figure 16). This is “real” income growth in that the data has been adjusted for the effects of inflation. Over the same time period Wisconsin mean household income has increased by 28.6 percent and by 27.5 percent for the US. Despite the growth in mean household income for the county, when absolute levels for Trempealeau and Wisconsin are compared to the US we see that absolute income remains relatively low (Figure 17). In 2005 Trempealeau County income was 76.7 percent of the national average and this has changed little over the study period. Given the patterns observed in Figures 14 and 15 we would expect to see the crime rate declining for the county but admissions to the county jail are increasing. Given our discussion on the dominating role of population on admissions, it is not clear if increasing income will directly or indirectly drive admission levels.

To complete the demographic analysis and how it relates to crime and jail admissions consider the percent of households with incomes below \$20,000. We would expect to find that a higher share of households that are low income to be associated with higher crime rates as well as higher levels of jail admissions. As revealed in Figure 18, our analysis indicates that there is indeed a positive relationship between low income households and total crime rates. If the percent of households that have income below \$20,000 declines by ten percent we would expect that the total crime rate would also decline by just over 16 percent. This result speaks directly to the idea that reducing poverty should reduce crime. Yet again we find evidence that as the share of households that are classified as low income declines, there are higher levels of admission to county jails (Figure 19). Using the slope coefficient from our analysis and the means of the data a ten percent decline in the share of households with income below \$20,000 would see a 22.8 percent increase in the admissions rate. This result complements and confirms the findings

between mean household income and crime and admission rates discussed above. For Trempealeau County the share of low income households has been steadily declining over the 1990 to 2005 study period (Figure 20). Again, as the share of low income households in Trempealeau County declines, we would expect to see declining crime rates, but we would also see increased admissions that would continue to place pressure on the County jail.

To summarize we find that as Trempealeau County grows in terms of population and income we would expect to see significant changes in the demands placed on the County jail. Of the demographic variables that we examined, the primary ones include population and youth. While the share of the population that is Hispanic and low income are important they are minor when compared to total population and youth.

The one consistent set of findings that is counter intuitive is the apparent contradictions between our findings on crime rates and admissions to county jails. While we generally find the results we expect with respect to crime rates, the results with respect to admissions are counter-intuitive. What we may be uncovering in this analysis is a more complex relationship. If we reconsider the relationship between population and jail admissions (Figure 4) we found a strong positive relationship; larger counties as measured by population had significantly higher levels of jail admissions. Mean household income and share of population classified as low-income, as well as the percent of the population Hispanic, are all positively related to population. The results of our analysis may be explained by the size of the county as measured by population. In other words, population is the driving factor in terms of jail admission levels.

Fiscal Analysis

The third part of our analysis focuses on the fiscal trends facing Trempealeau County with a focus on law enforcement expenditures. Unfortunately, our data is not sufficiently detailed to separate out jail specific expenditures from total law enforcement. While we have detailed data for Trempealeau County we lack the same detail for other Wisconsin counties making jail expenditure comparisons impossible at this time. We examine three areas of fiscal trends;

changes in overall levels of county expenditures, changes in law enforcement expenditures and finally changes in the property tax.

Before proceeding with the analysis it is important to review the source of the fiscal data. For this part of our study we used the UW-Extension, Cooperative Extension program entitled Graphing Revenues, Expenditures and Taxes (GREAT).⁶ The data in the program is drawn from the Wisconsin Department of Revenue's (DOR) annual report titled "County and Municipal Revenues and Expenditures." The DOR annually compiles local revenue and expenditure data from statutorily mandated financial reports. While the data are audited and therefore comparable across counties and municipalities there can be significant misinformation generated by directly comparing two units of government. Local governments in Wisconsin are allowed flexibility in how local institutions (e.g., the county sheriff office) are structured and budgeted. For example, in some rural counties local municipalities contract with the county sheriff for complete law enforcement services while in others individual municipalities have independent police departments. In the first case the county sheriff's budget will appear much larger than in the latter county. Direct comparisons of those two counties may lead to erroneous conclusions about the financing of the two distinctly different sheriff offices. Despite these serious limitations the data can provide very powerful insightful into overall fiscal trends and can be used to refine and focus discussion about public policies. Our intent here is to provide such an overview as background information for the County's discussions about the jail.

Trempealeau County spent about \$925 per person in 2005 compared to \$960 for the typical Wisconsin county and \$956 for counties that are of similar size as Trempealeau County (Figure 21). For the County this represents an increase of 432 percent over the 1988 to 2005 time period in real or inflation adjusted dollars. This is a faster rate of growth than the typical Wisconsin county which experienced an increase of 333 percent as well as similar sized counties that increased by 346 percent. Other than a few years of fluctuation, Trempealeau County expenditures have generally tracked the patterns of other Wisconsin counties. But looking at aggregate spending does not provide any insights into what is driving the growth in spending.

⁶ Please see the GREAT web-page at <http://www.uwex.edu/lgc/finance/great.htm> for additional information.

To gain these insights we now break spending into its main categories with a focus on protective services that counties are predominately responsible for funding.

The county spends the bulk of its resources in the area of health and human services which accounts for 43.7 percent of all county spending (Figure 22). Trempealeau County is not unusual in this regard. In Wisconsin the county is an “arm of the state” in the sense that the county is charged with delivering state services to the citizens. For Wisconsin this translates into providing social as well as health services.⁷ Funding for these services is generally provided directly by the state and provides a minimum level. Counties have the discretion to provide higher level of services through their own funding (e.g., property and/or sales taxes, fees and charges, etc.). It should be noted that of all local governments in Wisconsin, counties have the lowest degree of flexibility in the services offered and revenue structures available for use. When compared to other counties, the share of total spending on health and human services tends to be high as well as per capita expenditures. Specifically, Trempealeau County spent \$412 per person on health and human services compared to the typical Wisconsin county that spent \$384 per person as well as similarly sized counties with an average spending per person of \$354. This can be explained in part by the relatively low income levels within the county (Figure 17).

Turning our attention to protective services (law enforcement, fire protection, ambulance services) expenditures, in 2005 Trempealeau County spent an average of \$158 per person, or a total of 16.8 percent of the total county budget, compared to \$179 per person for the typical Wisconsin county and \$192 per person for similar size counties as measured by population (Figure 23). If we focus more narrowly on law enforcement a slightly different picture emerges. In 2005 Trempealeau County spent an average of \$100 per person compared to \$89 for the typical Wisconsin county and \$95 for counties that are similar in size to Trempealeau. If we look over time, however, Trempealeau County law enforcement expenditures per person have historically been below the Wisconsin average (Figure 24).

⁷ Health and Human Services includes operating expenditures and capital outlays for health officers, health inspections, mental health programs, general relief, cemetery, humane shelter, institution care, social programs, animal control, aging and veterans programs.

The spike that occurred in 2005 is the result of a county policy decision to separate the dispatch center from the jail. Prior to this time, jailers/dispatchers did double duty. They responded to 911 calls and maintained the usual operations associated with jail management – booking, transfers, among other functions. The dispatch center was moved to another location in the courthouse and additional personnel were hired (about 5 or 6) to serve strictly as emergency dispatchers. This “spike” that appears for Trempealeau County speaks to the sensitivity of the DOR/GREAT data and points out that care must be taken. Drawing too strong of a conclusion on this type of fiscal analysis should be avoided. Still, other than for this institutional change concerning the location of the dispatch center, law enforcement expenditures in Trempealeau County have been below the state-wide average and counties of similar size.

We complete our analysis by considering trends in property taxes. If the County were to elect to build a new jail it is likely that the majority of the funding would need to be generated through the property tax. Specifically, the County would need to incur debt through bonding in which future streams of the property tax, plus other funding sources (sales tax, etc.), would secure the debt. In 2005, the county collected \$288 per person in property taxes, compared to \$340 for the typical Wisconsin county and \$349 for counties of similar size as Trempealeau County (Figure 26). This suggests that, relative to other Wisconsin counties, Trempealeau County’s property tax burden is reasonable. The relatively large amount of “other state aid” is composed primarily of aids targeted at health and human services. If we track the property tax over time we can see that the property tax has paralleled other counties except for the mid 1990s where there was a slight drop in the County’s property tax collection levels. This dip can be directly attributed to the county sales tax that was adopted in 1995. Based on 2005 property tax levels Trempealeau County could increase property taxes by 18 percent and still remain slightly below the typical Wisconsin county.

Conclusions

This study has accomplished three objectives. First we were able to document with reasonable certainty the “indirect” costs associated with out-bedding inmate over-flows from the county jail. Second, we provide a detailed profile of the County and socioeconomic trends associated with

crime reported to law enforcement as well as admissions to county jails. Finally, we provide a brief overview of County fiscal trends related to law enforcement expenditures and broad sources of revenues.

Although there may be room for the county to increase property taxes through debt financing, the political will may or may not be there. The county, as a general policy, has run below its levy rate limit since the caps were passed in the '90's. The county's increases in equalized value have been modest, and the board has used the increase to help meet the annual budget. The last two years have been challenging in terms of developing the county's operating budget. The extra "cap" put on by the governor squeezes the county more and more since Trempealeau is not a big growth county. While the county's debt load could be considered fairly modest (\$581,000 budgeted for 2008), the board is very fiscally conservative. The revenue caps may not impact our debt financing, but any increases in operating expenditures may squeeze the county even further.

This study provides local policymakers additional information to inform their decision making process as they consider whether or not to replace the jail. It also provides valuable insight as the County takes steps to be more pro-active in coordinating their entire criminal justice system. Ultimately, the jail issue does not stand alone. Decisions made by the state legislature, rulings by the circuit court judge, and choices to prosecute made by the District Attorney all impact the jail. It is a system, not an isolated agency.

Appendix
 Graphs of Fiscal and Crime Rate Analyses

Figure 1. Total Crime Rate

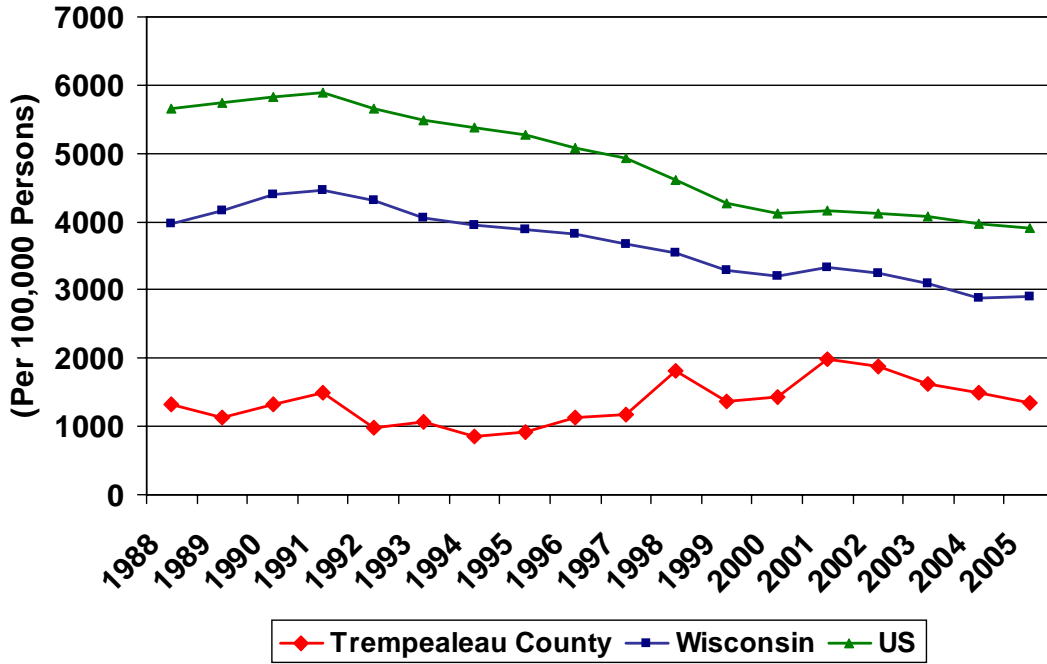


Figure 2. Property Crime Rate

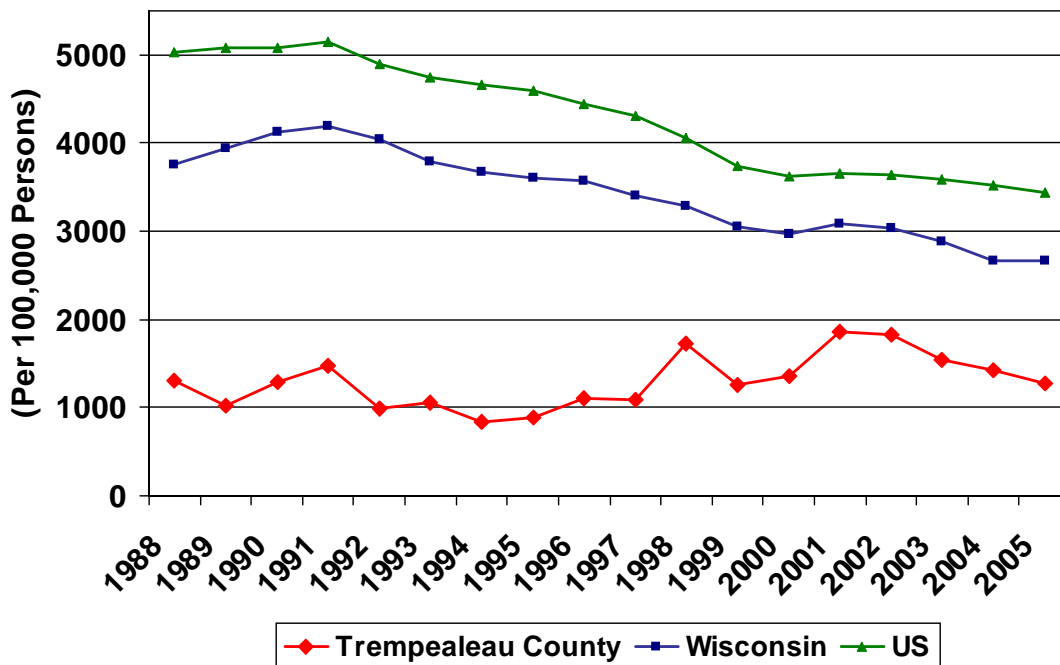


Figure 3. Violent Crime Rate

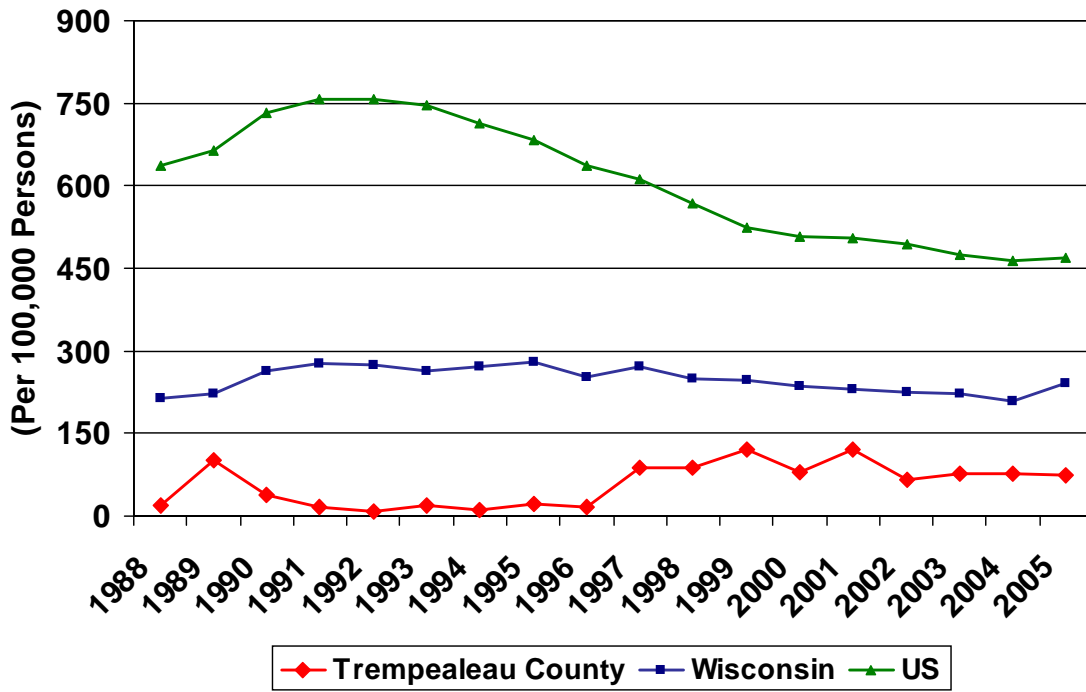


Figure 4. Simple Correlation 2005:
Jail Admission and Population

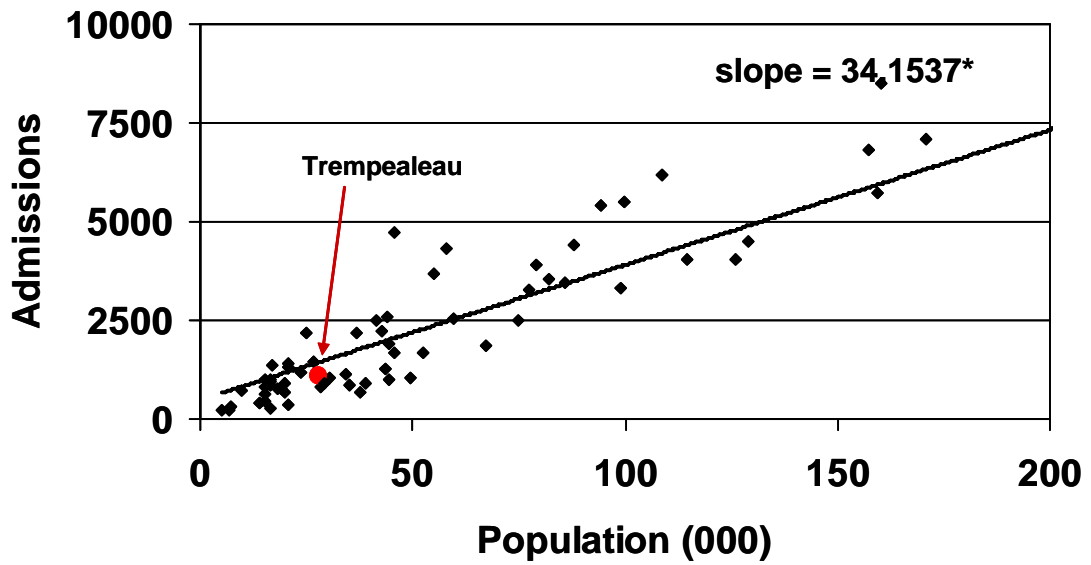


Figure 5. Population Growth Index

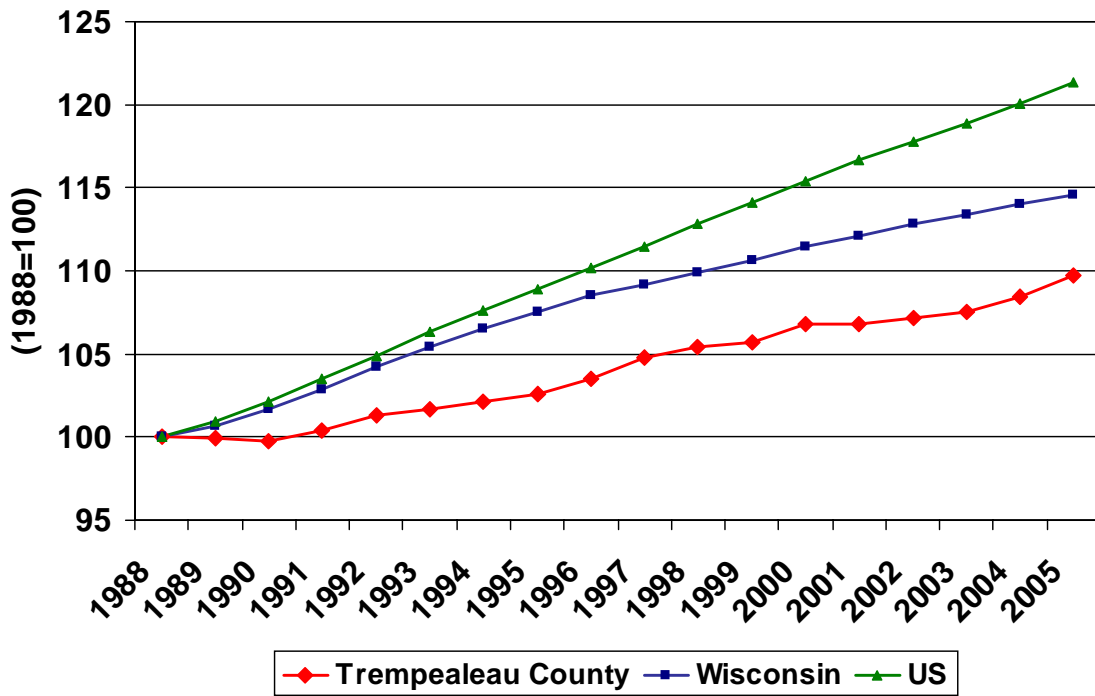
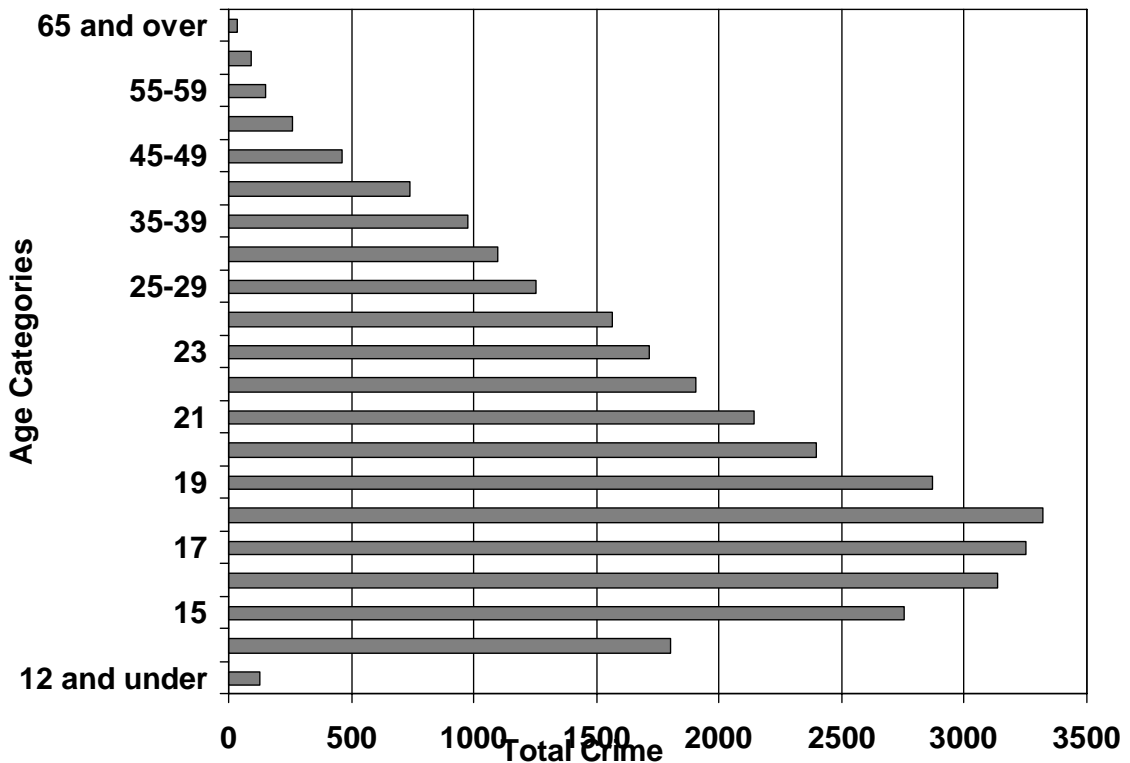


Figure 6. National Arrests by Age in 2001



**Figure 7. Simple Correlation 2005:
Jail Admission and Percent of Population Under
Age 18**

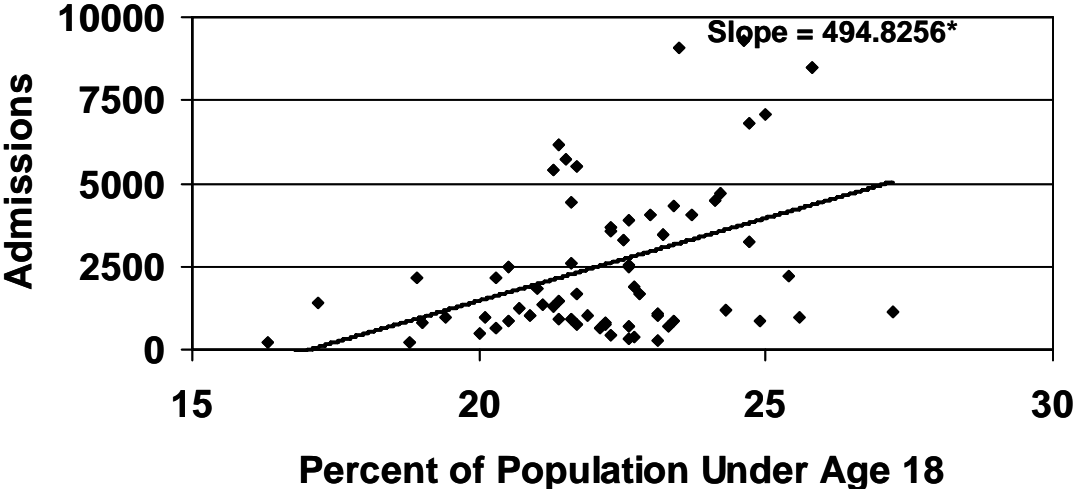


Figure 8. Percent of Population Under Age 18

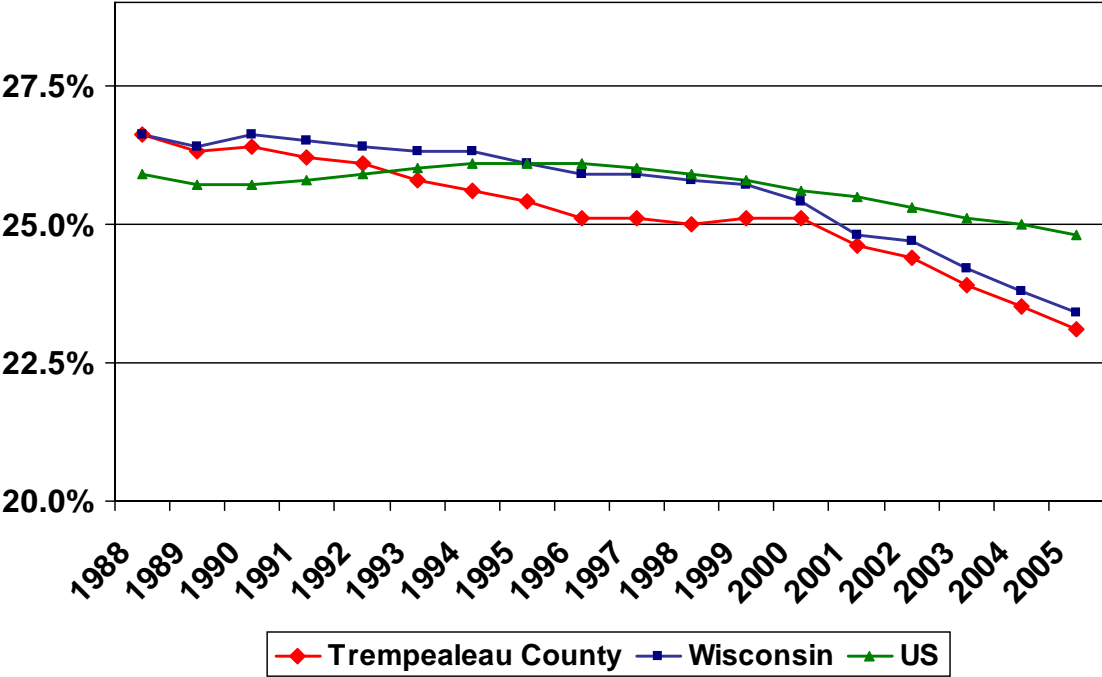


Figure 9. Population Under Age 18 Growth Index

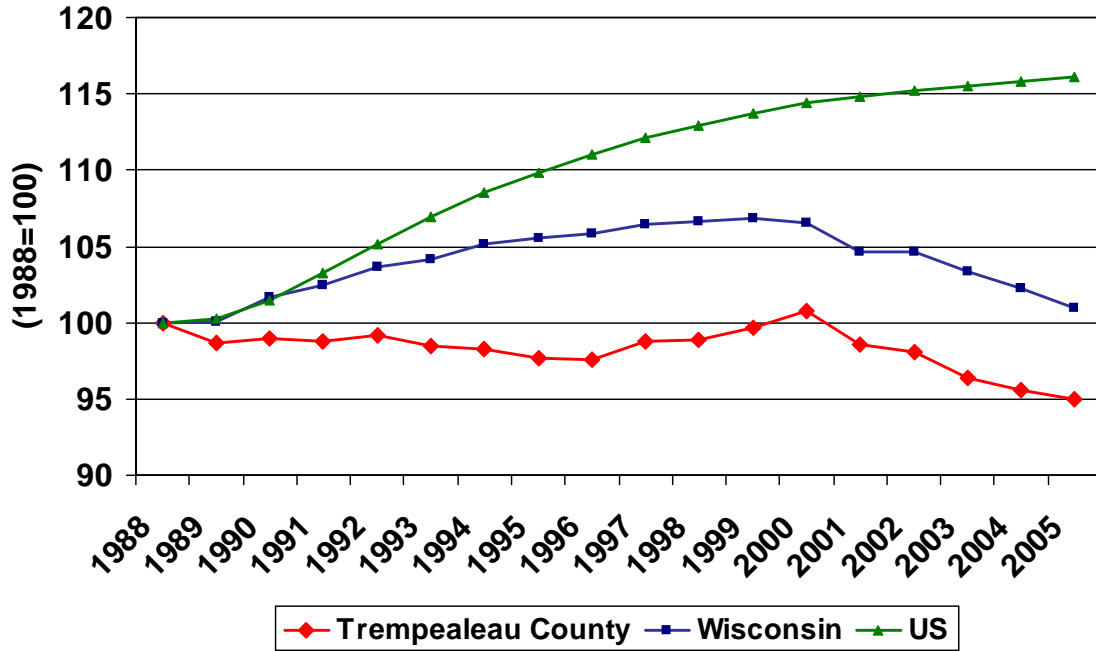


Figure 10. Hispanic Population Growth Index

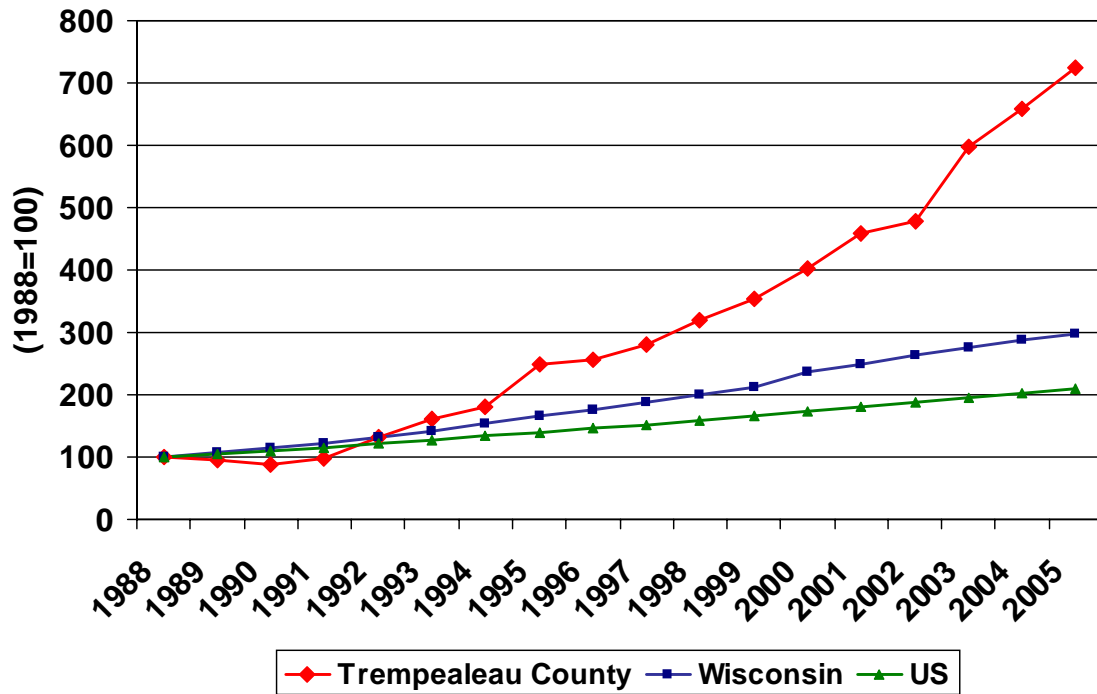


Figure 11. Percent of Population Hispanic

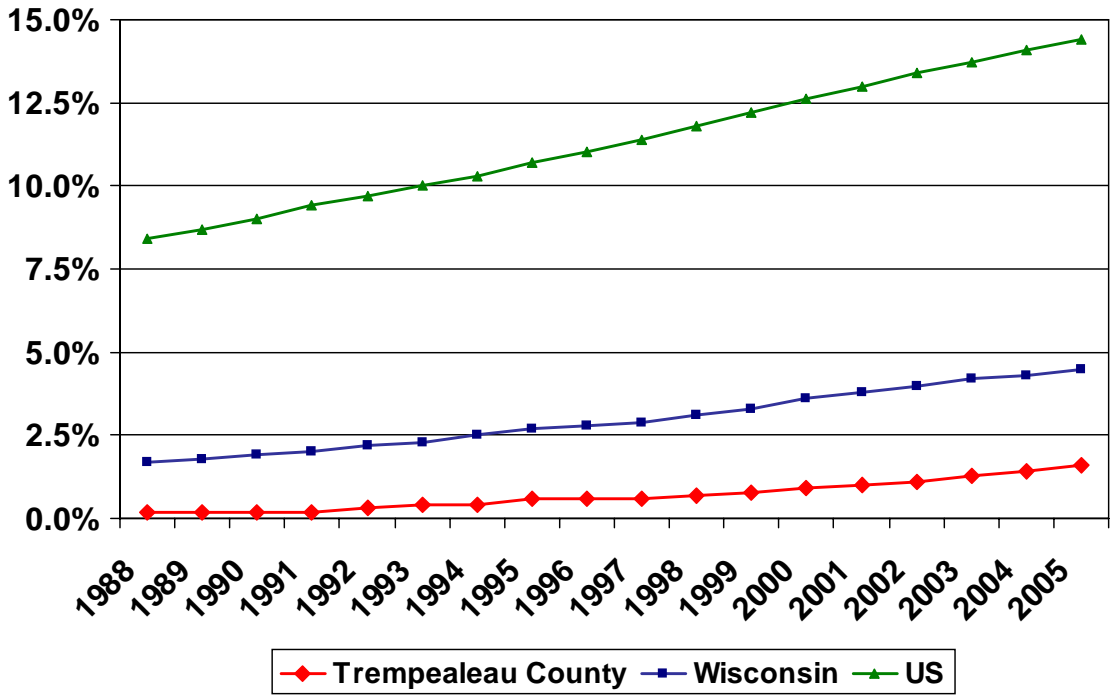


Figure 12 Simple Correlation 2005:
Jail Admission and Percent of Polulation
Hispanic

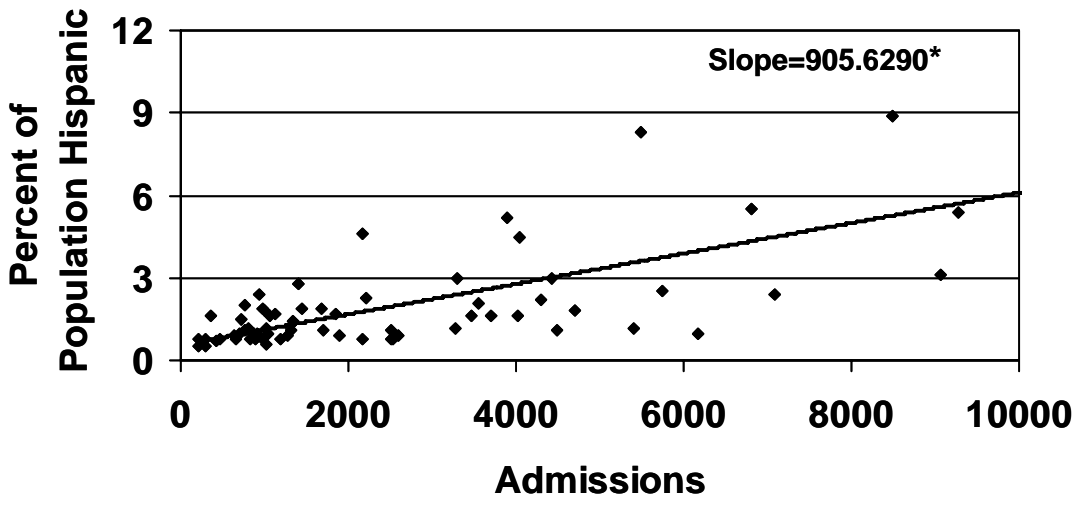


Figure 13. Simple Correlations Percent of Population Hispanic on Total Crime

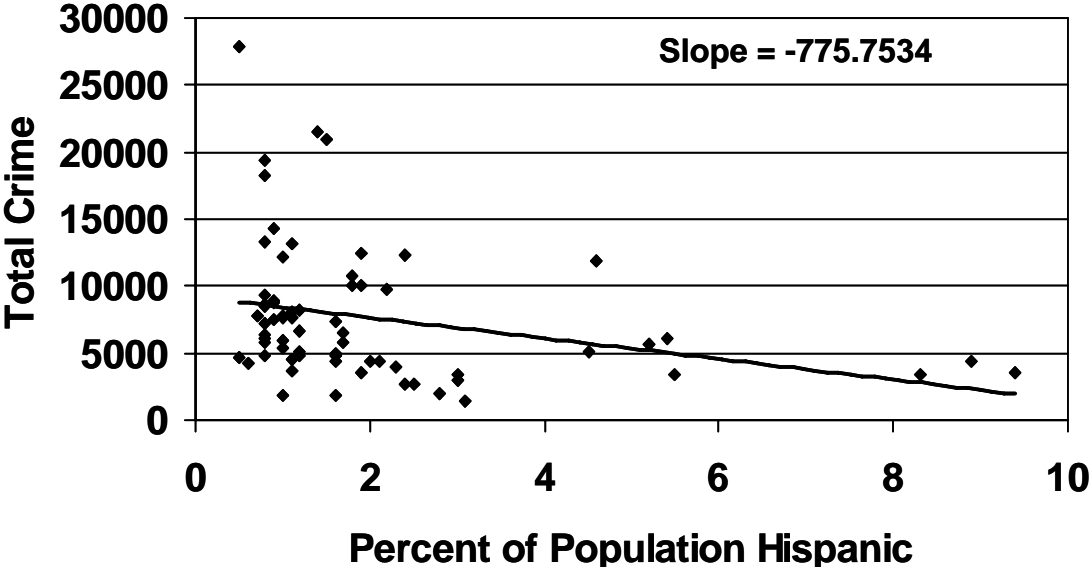
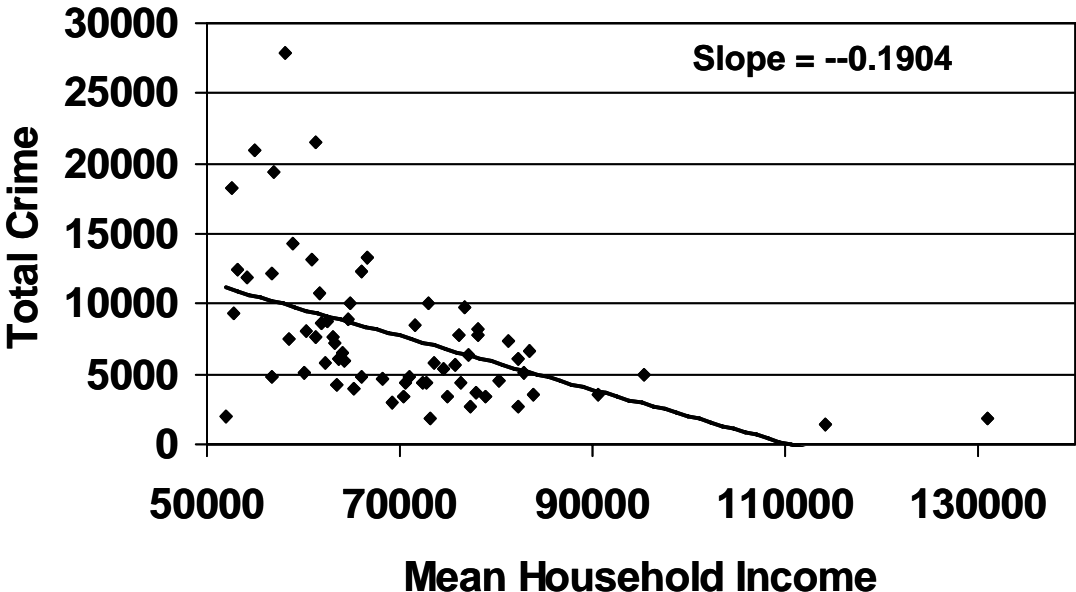
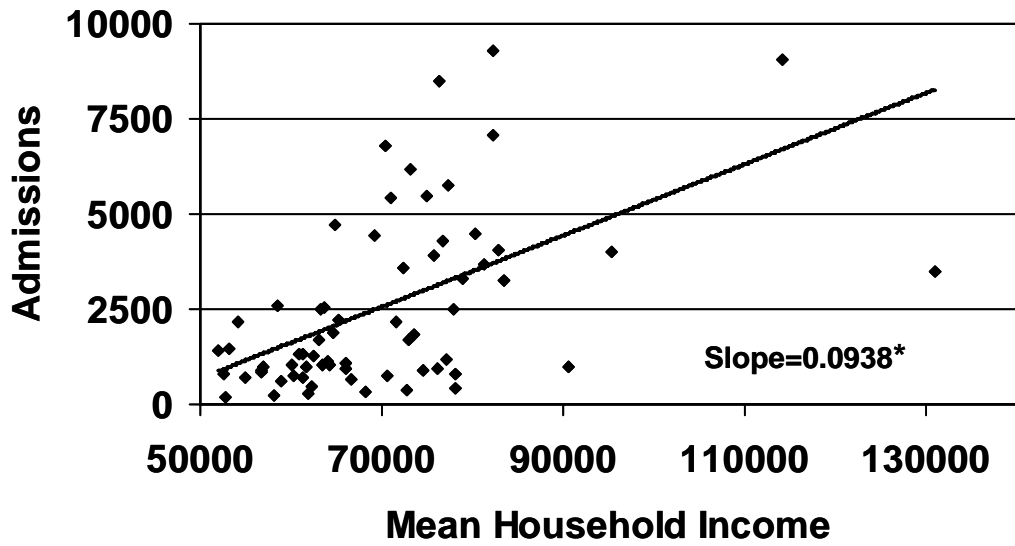


Figure 14. Simple Correlations Mean Household Income on Total Crime



**Figure 15. Simple Correlation 2005:
Jail Admission and Mean Household Income**



**Figure 16. Mean Household Income Growth Index
(in 2004\$)**

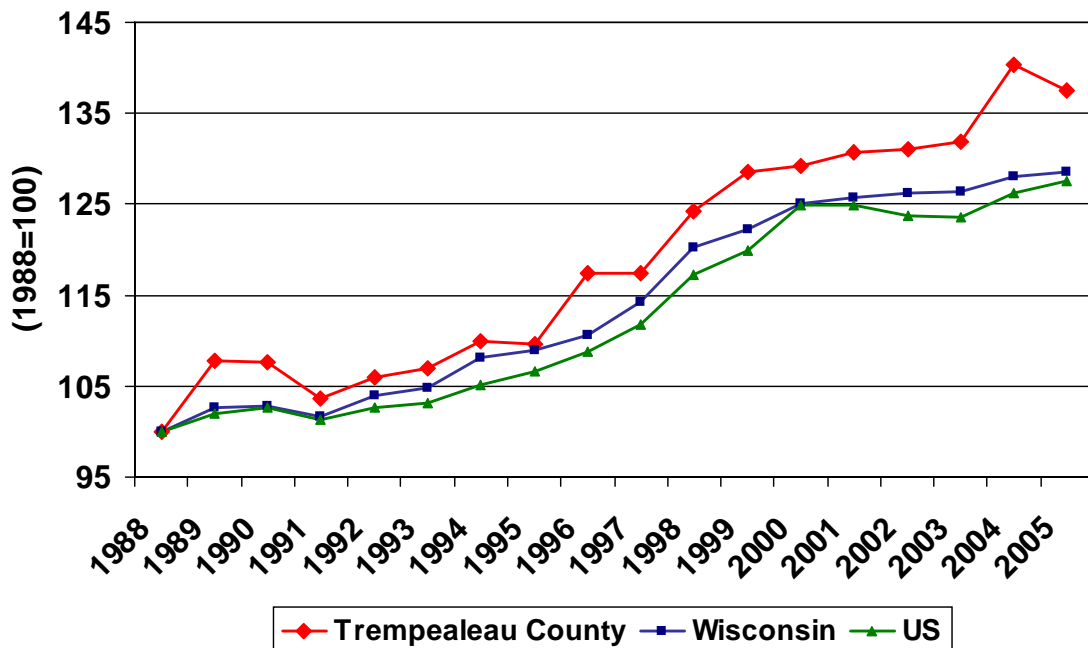


Figure 17. Mean Household Income as a Share of US

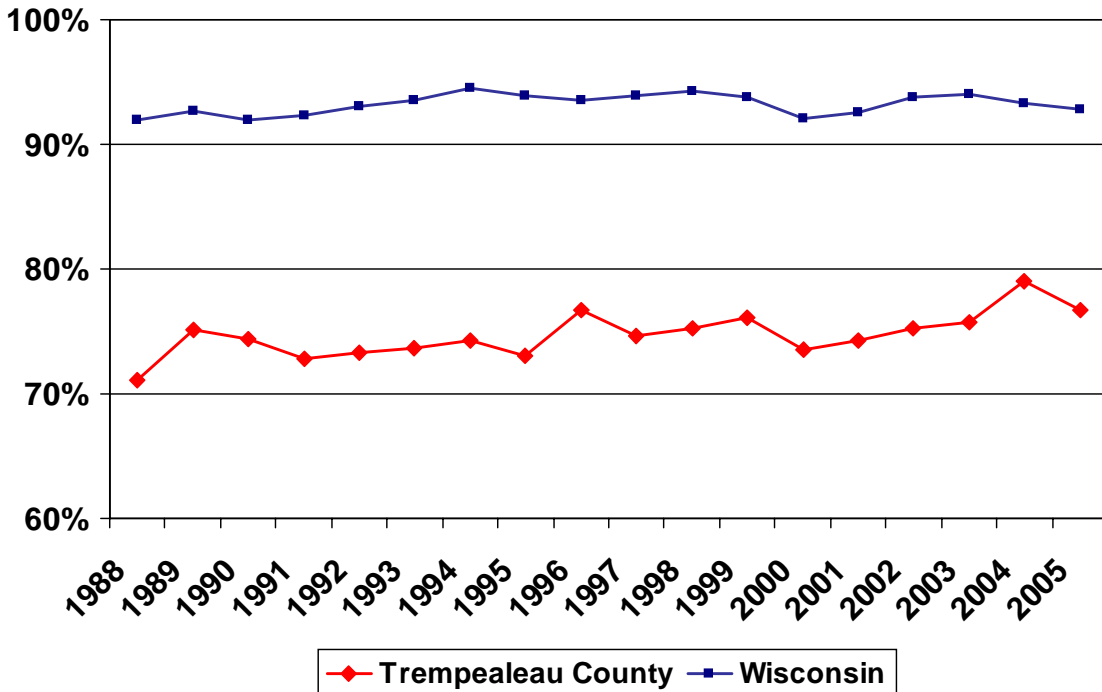
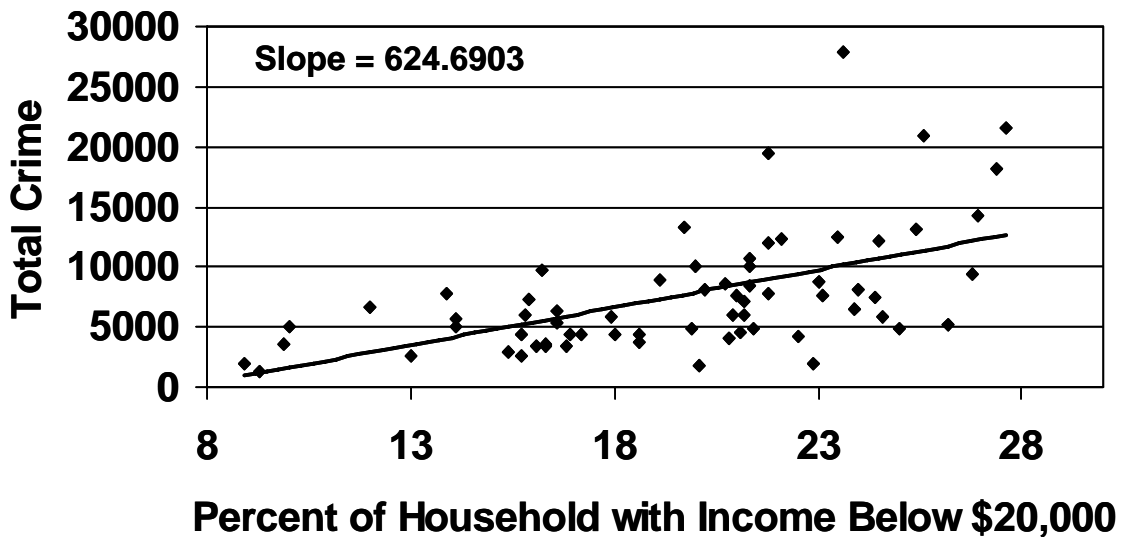
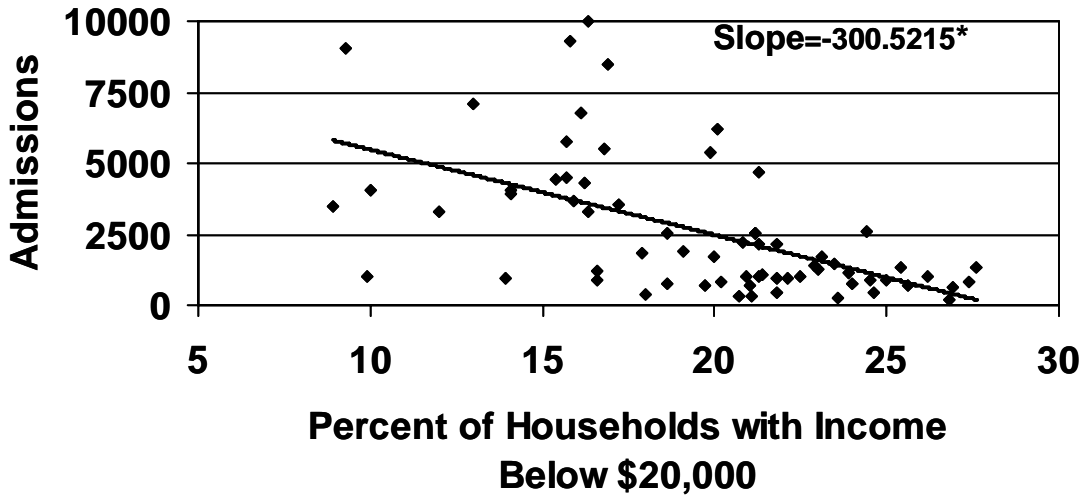


Figure 18. Simple Correlations Percent of Households With Income Below \$20,000 on Total Crime



**Figure 19. Simple Correlation 2005:
Jail Admission and Percent of Households with
Income Below \$20,000**



**Figure 20. Percent of Households with Income Below
\$20,000 (2000\$)**

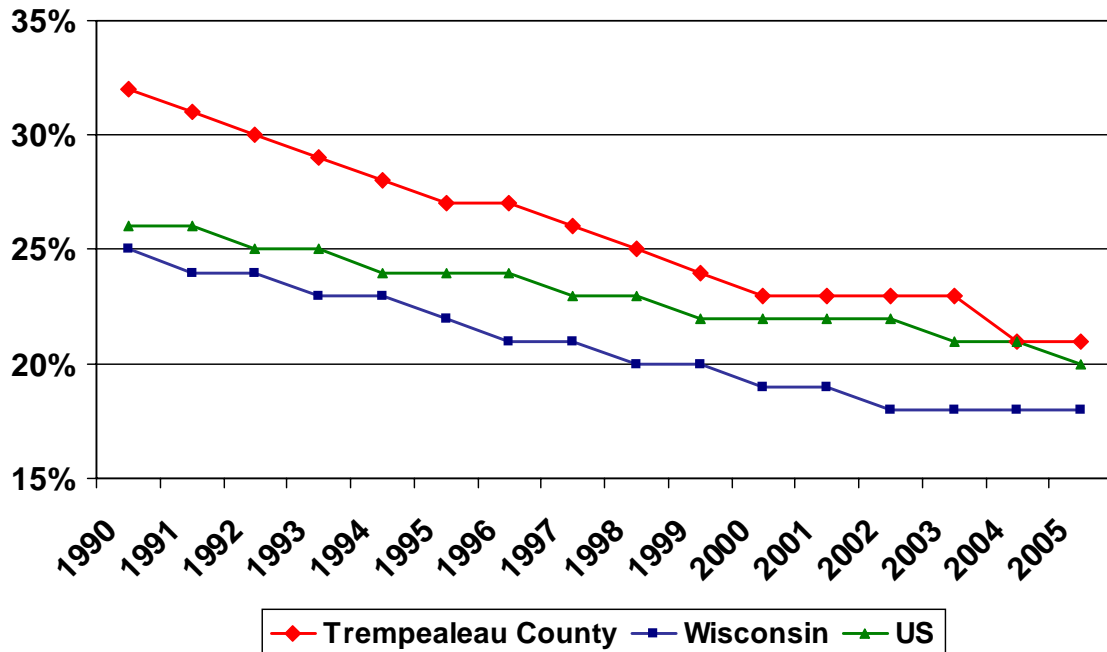


Figure 21. Per Capita Total County Government Expenditures

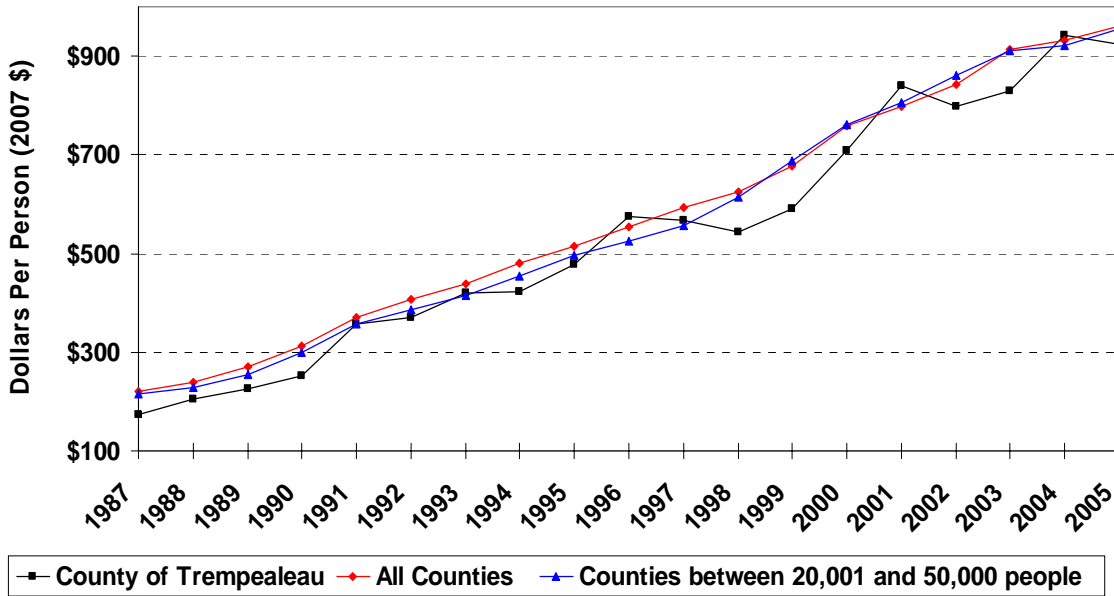


Figure 22. Expenditure Shares - 2005
TREMPEALEAU County

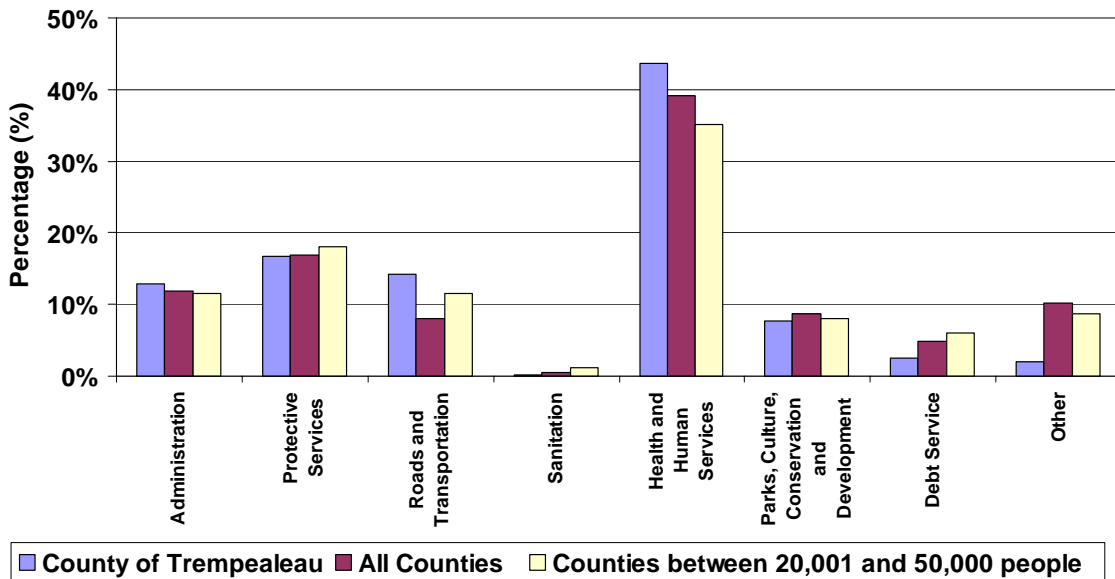


Figure 23. Per Capita Expenditures - 2005
TREMPEALEAU County

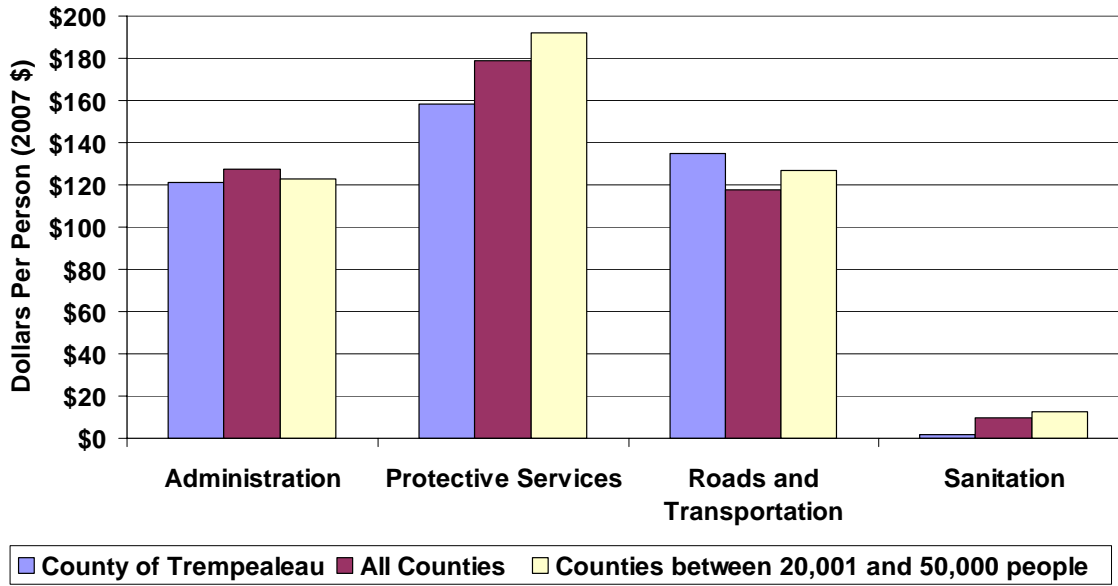


Figure 24. Per Capita Expenditure on Law Enforcement
TREMPEALEAU County

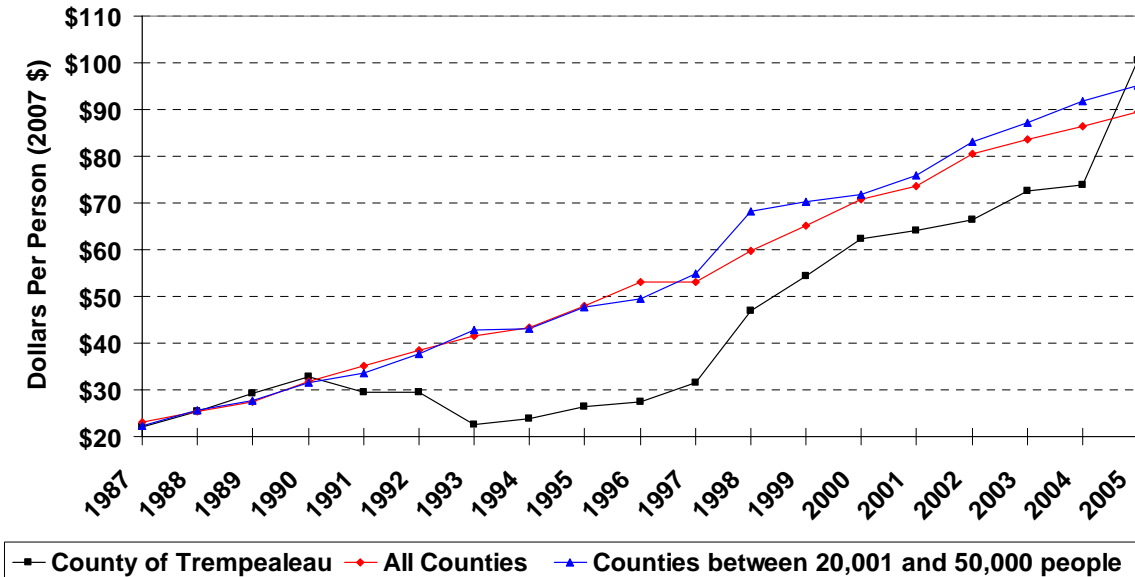


Figure 25. Per Capita Revenues - 2005
TREMPEALEAU County

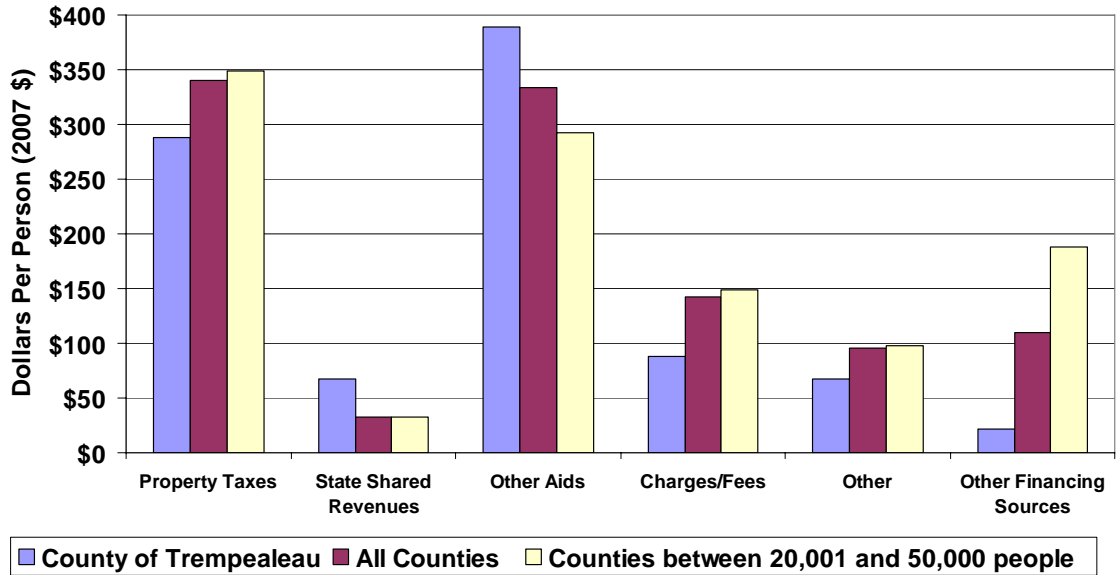


Figure 26 Per Capita General Property Taxes
TREMPEALEAU County

