

612 North Main Street
Suite 300
Rockford, Illinois 61103
P 815 968 5400
F 815 968 5878
www.unitedwayrrv.org
www.wevolunteer.com

A Report Prepared for
United Way of Rock River Valley

By: The Center for Governmental Studies
Northern Illinois University, August 2007

**Secure Jobs,
Sustained Economic Growth,
and Reduced Crime:**

HOW TRUANCY IS CHEATING OUR FUTURE.

Executive Summary

This report examines the rate of chronic truancy among students enrolled in Rockford School District 205. The report then develops a series of conservative estimates of the short-term and long-term social costs incurred by this behavior. Some of the costs are experienced directly by the students who engage in chronic truancy, and others are experienced by other residents and businesses of the region.

A brief summary of our findings includes the following:

- In regard to the rate of chronic truancy in the District:
 - The rate of chronic truancy among students enrolled in District 205 is high.
 - This pattern is not new. Chronic truancy rates have been high for many years.
 - The high rates of chronic truancy are found at all grade levels, reinforcing the notion that a “culture of chronic truancy” has emerged in the area.
- In regard to the social costs of this behavior:
 - Most of the short-term costs are borne by the broader society. A conservative estimate ranges from \$25.2 million to \$37.9 million in calendar year 2006.
 - The long-term costs are experienced both by students and the broader society. In calendar year 2006, we estimate that the income loss experienced by individuals who were chronically truant between 1998 and 2006 was between \$15.2 and \$24.4 million. The present value of this income stream since 1998 ranges between \$73.6 and \$117.8 million.
 - The loss of this stream of income to local workers over the last eight years has “cost” the region between 830 and 1,329 additional jobs.
 - The net present value of the stream of income that will not be earned by these students over the next 20 years (and additional students who will continue to be chronically truant) ranges between \$390.8 million and \$784.0 million.
 - The loss of this stream of future earnings translates into a range of 4,406 to 8,839 additional jobs that will not be created in the area over the next twenty years.
 - A conservative estimate is that continued chronic truancy over the next two decades could reduce the overall economic performance of the Rockford area between 2.7% and 5.5% of the area’s current Gross Metropolitan Product.

While these estimates are very rough, their large scale clearly raises concerns. The costs of not addressing this issue are large enough over the long-term to become a significant drag on the region’s ability to improve its economic performance. Yet these costs can be transformed into equally large benefits through a sustained initiative to reduce the rate of chronic truancy. Furthermore, those who invest in reducing chronic truancy will not need to wait patiently to see long-term benefits of that investment since even the short-term costs of this problem are so high. Immediate investments are very likely to yield very large short-term benefits.

Introduction

Mandatory school attendance laws have been an integral part of public schooling for more than a century in the U.S. Mandatory school attendance for young people was first enacted in Illinois in 1883. Current Illinois law requires students to attend some form of approved schooling until they reach age seventeen. Even in a nation that prides itself on individual liberty and preserving the rights of people to make their own choices, a limited number of laws recognize that the social benefits of some behaviors are so large that people can – and should – be compelled to behave in specific ways. Mandatory school attendance laws are among the least controversial laws that fit into this category. The deep support that these laws have among the general public is evidence of a broad and enduring consensus within the American public about the long-term benefits – both economic and social, and both individual and collective – that come from a basic education for all residents.

Yet despite the strength of our convictions regarding the value of mandatory schooling for young people, every school system in the nation faces some level of truancy among students. Indeed most students, at one time or another in their school years, engage in occasional unexcused absences from school. This happens with and without parental approval.

Chronic truancy, however, is a very different kind of behavior. Chronically truant students are those who regularly miss multiple days of school through unexcused absence. There is no national standard that distinguishes occasional unexcused absence from chronic truancy. The federally enacted No Child Left Behind Act (NCLB) requires states for the first time to set uniform standards within each state, and to collect and publish comparable statistics on this issue. In Illinois, chronic truancy is defined by at least 18 days of unexcused absence within the previous 180 days of schooling. Using this measure, the average rate of chronic truancy within Illinois public schools was 2.2 percent in school year 2005-2006.

The social costs of chronic truancy are too easily overlooked for at least two reasons. First, the relatively small proportion of students who are chronically truant are sometimes dismissed as those who are the least likely to benefit from schooling anyway. Truancy rates are usually higher among students who face multiple barriers to economic success in American life: those with poor grades, children who live in poverty, inner-city minorities, isolated rural minorities, those with limited English-language skills, and those with serious behavior problems. The actual social costs of chronic truancy among these segments of the population, it is sometimes argued, are relatively small since expectations for their success are low to begin with.

This line of thinking is not new. Indeed, supporters of mandatory public education in the U.S. have always faced this argument. Opponents of public funding for schools in the 19th century, for example, often argued that public resources would only be squandered on poor, immigrant children who were not able to benefit from a “proper education.” School segregationists echoed this argument prior to the landmark 1954 *Brown v. Board of Education* ruling by the U.S. Supreme Court.

Although public discourse about chronic truancy today rarely makes these arguments as explicitly as in the past, it remains nonetheless too easy to translate low expectations for some students into complacency about the problem of chronic truancy in our public schools. Yet several generations of social science research reveal that schooling creates widespread benefits for all students, regardless of the barriers they face in life.

1.0

A second reason for overlooking the social costs of chronic truancy is that these costs are very difficult to specify. Chronic truancy among students generates many different types of costs.

- Short-term costs experienced by chronically truant students;
- Short-term costs to others related to chronically truant students;
- Long-term costs experienced by chronically truant students;
- Long-term costs to others generated by the continued pattern of chronic truancy;
- Long-term macroeconomic costs to the region associated with chronic truancy.

This report is an initial effort to estimate the social costs of chronic truancy in the Rockford region. The report begins by examining the available data that describe the patterns of chronic truancy in Rockford School District 205. The report then describes a variety of models we have created to estimate costs in the last four of the five categories listed above.

The first category, short-term costs experienced by chronically truant students themselves, is not examined in depth because one of the difficult features of this social problem is that students themselves don't experience many of the short-term costs that are created by their behavior. Many of those immediate costs fall on others to pay. The costs that they realize often do not materialize for many years. Consequently, those costs rarely affect the behavior of young people who are chronically truant.

A Note On Methods: This type of analysis is not easy. We make no assertions that this report covers every possible social cost. We fully expect others to suggest ways to refine our methods, identify other costs, and improve the accuracy of each of our estimates. We also do not argue that the "total social cost" of chronic truancy can be derived by simply adding up all of the costs that are described in this report. There are issues of potential double-counting, cause-and-effect relationships, and data accuracy that are always inherent in this type of analysis. Each needs to be addressed to understand the potential effects on the final estimates. Throughout our project, however, we have chosen assumptions and dealt with issues of data reliability with a consistent eye toward choosing options that would under-estimate the social costs at every step.

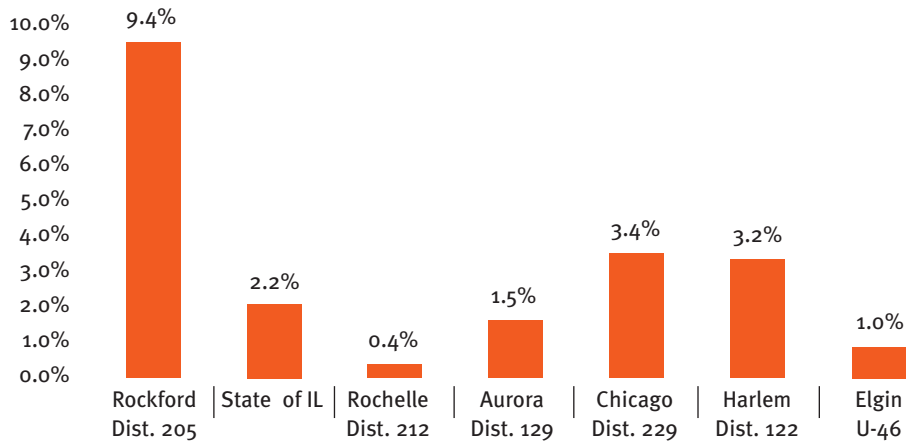
Yet despite these efforts, our conclusions reveal the large scale of social costs that are associated with persistent chronic truancy in Rockford School District 205. We hope that this report prompts many groups throughout the region to undertake their own analyses of these issues.



The Patterns of Chronic Truancy in Rockford District 205

The rate of chronic truancy in Rockford School District 205 is very high. During the school year 2005-2006, 9.4 percent of all students enrolled in District 205 were chronically truant at some time during the year. With a total enrollment of 27,456 students in grades K-12, this rate translates into 2,580 students who were absent from school at least 18 days during the previous 180 school days without a valid excuse. This rate is more than four times the overall truancy rate of all public school students in the State of Illinois, and 2.7 times higher than the rate in Chicago public schools. Table 1 below compares Rockford's truancy rate to selected comparison school districts.

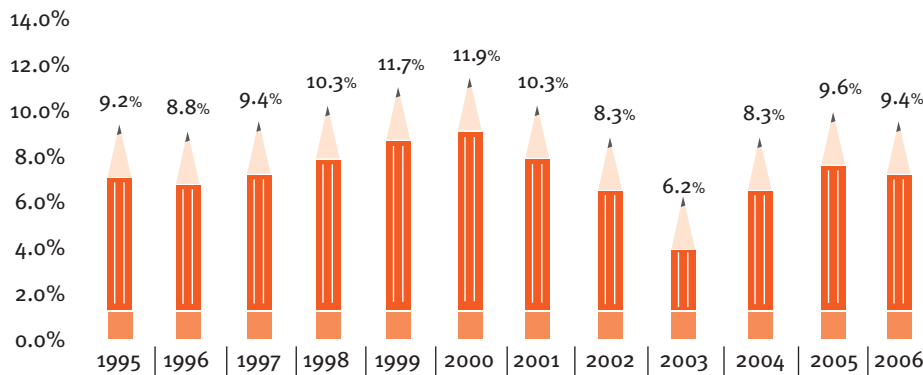
Figure 1
Total Rate of Chronic Truancy K-12 by School District



Source: Illinois State Board of Education Note: Chicago District 299 covers the entire City of Chicago

Rockford's high rate of chronic truancy is not new. Table 2 shows the District's chronic truancy rate from 1995 to 2006. During those twelve years, the average annual rate of chronic truancy in Rockford District 205 was 9.45 percent, virtually the same rate as 2006. Rockford's schools have an unusually persistent pattern of large scale chronic truancy. This pattern exists in very few school districts in Illinois.

Figure 2
Chronic Truancy Rate in Rockford School District 205, 1995 – 2006



Source: Illinois State Board of Education

2.0

Chronic truancy rates in the District are very high in all grade levels. Table 3 presents data on chronic truancy at the elementary, middle, and high school levels. Specific data for each high school and middle school are included. These data reveal wide variations in specific rates from school to school. But they also reveal that most schools in the District experience rates of chronic truancy that are much higher than the average rates experienced elsewhere in the State. Although the rates increase as students become older, they are very high even among the youngest students in the system.

Table 3

**Estimated Rates of Chronic Truancy, By School Level
Rockford District 205, All Grades
January 3 – April 15, 2007**

SCHOOL	ENROLLMENT	CHRONIC TRUANCY RATE	NUMBER OF CHRONICALLY TRUANT STUDENTS
High Schools			
Auburn	1,733	13.5 %	234
Guilford	2,187	8.8 %	192
Jefferson	1,964	23.1 %	454
East	1,603	22.9 %	367
All High Schools	7,487	16.6 %	1,247
Middle Schools			
Lincoln	943	7.6 %	72
Flinn	907	9.2 %	83
Eisenhower	917	2.6 %	24
Kennedy	697	12.7 %	88
West	779	6.1 %	48
Wilson	364	18.2 %	66
All Middle Schools	4,607	8.3 %	381
All Elementary Schools	15,362	6.2 %	952

Note: Individual chronic truancy rates among elementary schools range from 0.0% at the Montessori Magnet to 16.6 % at the Stiles Investigative Learning Magnet.

More detailed data regarding the characteristics of the 2,580 chronically truant students are difficult to obtain. Individual records are confidential, and detailed summaries are not routinely reported.

Estimating The Social Costs of Chronic Truancy

As described above, this section summarizes our effort to estimate the social costs of chronic truancy in District 205 in the following four categories:

- Short-term costs to others related to chronically truant students;
- Long-term costs experienced by chronically truant students;
- Long-term costs to others generated by the continued pattern of chronic truancy;
- Long-term macroeconomic costs to the region associated with chronic truancy.

3.1 Short-Term Costs To Others

We estimated the short-term, direct costs of chronic truancy in four different settings. These settings are not exhaustive, but they do reflect most of the direct costs incurred by the social institutions that interact with young people who are engaged in chronically truant behavior. The categories are:

- Lost state revenue to the school district caused by reduced average daily attendance figures;
- The cost of enforcing truancy laws and administering the system that processes cases of chronic truancy;
- The cost of administering juvenile justice in cases where delinquent behavior is associated with chronic truancy;
- The cost of lowered productivity in instructional activities associated with disruptions in instruction caused by chronic truancy.

3.11 The Short-Term Loss of State Revenues to the District

Current state education policies provide a broad array of formula-based and targeted grants in aid to public school districts. In school year 2005-2006 Rockford School District 205 received \$53,360,159 in general state aid and an additional \$36,943,501 in other state funding. Eligibility for these funding sources, and the specific methods used to calculate them, are too complex to be examined fully in this report. But many of these funding streams, and especially the core state funding streams, are based on average daily attendance data, not official enrollment data.

Chronically truant students reduce a school district's average daily attendance data, and thereby reduce the amount of state funding that is received. Total enrollment in Rockford District 205 in 2006 was 27,456. The district's overall rate of chronic truancy was 9.4 percent, which means that at least 2,580 kids fall into this category.

Determining the exact amount that state funding is reduced by chronic truancy would require a full examination of all state sources of funding, and developing a series of specific models based on the complex funding formulae and the even more complex discretionary policies that are used to allocate state grants to school districts. This would be beyond the scope of this report. It is possible, however, to estimate the effect of chronic truancy on average daily attendance, and then use that estimate as a reasonable proportion to estimate the overall loss of funding received. The logic for doing this in regard to general state aid is strong, since much of that aid is indeed based on measures of attendance. The logic for using this method for other state funding sources is less strong; but still an objective way to develop a conservative estimate.

Estimating the effect of chronic truancy on average daily attendance can be done in the following way. By definition, each chronically truant student is missing at least 18 days over a period of 180 days. The actual number of days that each student is truant is not available. But we can make a reasonable estimate of the distribution. Most will likely be

3.0

bunched at the lower end of the scale (which would begin at 18), with fewer cases as the number of days increases, and very few cases at very high numbers (the highest being 180). If this is the case, the average number of days truant among those who are chronically truant will fall much closer to 18 than to 180. For the purpose of this estimate, we will pick a conservative figure of 25 days for the average. This would conservatively assume that the vast majority of chronically truant kids miss between 18 and 25 days in a 180-day period.

Using this estimated average, we multiply 25 days truant by 2,580 chronically truant students and come up with an estimated 64,500 days of schooling missed by chronically truant kids in Rockford School District 205 over a 180 day period of time. If all enrolled students attended school every day during that same period, that would yield 27,456 times 180, or 4,942,080, possible days of instruction. Dividing 64,500 into 4,942,080 reveals that chronic truancy reduces the total possible figure for school attendance by at least 1.3 percent.

That figure can then be used to develop a conservative estimate of how state funding would have been larger if chronic truancy was lower. If, for example, chronic truancy in Rockford was at the state average of 2.2 percent, the calculations described above would estimate that average daily attendance would be reduced only 0.3 percent. The 1 percent difference in average daily attendance, therefore, is the net effect of Rockford's higher-than-average rate of chronic truancy.

If this is accurate, the amount of general state aid received by Rockford in 2006 (\$53,360,159) represents only 99% of what the district would have received had Rockford's chronic truancy rate matched the state's average. This implies a loss of \$538,992 in general state aid. Applying the same logic to other state funding would imply a loss of an additional \$373,166. The result is an estimated loss of state funding of \$912,158 in 2006 due to Rockford's above-average rate of chronic truancy.

3.12 The Short-Term Cost to the Schools of Administering Truant Behavior

Costs that are associated with this topic are very difficult to extract from existing financial information compiled by District 205. Among these costs are items such as the salaries and benefits of District staff who interact with truant children and their parents, the costs of developing, operating, and upgrading the management information system used by District 205 to keep track of the number of students who are chronically truant, the amount of building space that is needed for truancy intervention staff members, and other costs that are incurred. Rather than ask the District to incur additional expenses to specify these costs, we are noting them here, but not estimating them directly.

3.13 Related Short-Term Costs in the System of Juvenile Justice

The administration of juvenile justice is very complex and involves costs throughout the system that are sometimes difficult to isolate. In order to develop a conservative estimate of these costs, therefore, we obtained data regarding the flow of young people as they are processed through the juvenile justice system in Winnebago County. We then obtained data regarding the direct costs of each step, where data were available. We did not estimate many of the unspecified costs unless there was a very reasonable method for doing so. These data were supplemented by interviewing key individuals who are familiar with the complexities of the system. The result is a deliberately conservative estimate of the costs involved with juvenile justice in Rockford and Winnebago County.

Once that analysis was conducted, we then had to develop an estimate of what percentage of these costs can be associated with individuals who also have engaged in chronic truancy. There is no nationwide analysis that systematically measures the link between chronic truancy and delinquent behavior among young people. There are, however, several good analyses of this linkage in specific metropolitan areas and in specific cities. These case studies are rare because they require the creation of

3.0

specialized databases that track the experiences of many young people over many years. Such research is very expensive to conduct, and it requires elaborate measures to safeguard the confidentiality of data regarding minors. Among the studies that have been conducted, delinquent behavior among young people is most often described as the end result of a multi-year process of other negative behaviors. Chronic truancy is widely cited as one of the most powerful predictors of subsequent juvenile delinquency. One study, for example, estimates that chronically truant students are twelve times more likely to be charged with serious assault as a juvenile and sixteen times more likely to use marijuana regularly than students who are not truant.

Our informal discussions with officials in Rockford and Winnebago County concur with this association. There is currently no database to track the experiences of individual young people in the area. Consequently, there is no specific measure of how many individuals who pass through the juvenile justice system have also experienced chronic truancy. But most officials within the juvenile justice system who we interviewed agree that virtually all of the young people they encounter in the course of their duties are, or have been, chronically truant students. Their day-to-day experiences also reinforce the idea that truancy is a vital step in the process that leads young people to engage in delinquent behaviors.

For the purposes of this report, however, we are reluctant to relate all of the costs of juvenile justice to young people who have been chronically truant. In order to take account of other factors, and to be conservative in our estimation methods, this report estimates all of the costs of the juvenile justice system, then proposes a range of proportions that can be attributed to young people who were chronically truant before engaging in other delinquent behaviors. We calculate these costs at the rate of 50% (the most conservative estimate) and 80% (a less conservative estimate).

Figure Three describes the flow of young people through the juvenile justice system in Rockford and Winnebago County.

Figure 3
Flow of Young People Through
The Juvenile Justice System
Winnebago County, 2006



Specific Outcomes:

Diverted From the Juvenile Justice System:

1. Released/referred to local officers (86)
2. Released/referred to other jurisdictions (149)
3. Referred to other agencies (25% of 2,936)
4. Placed in custody of other agencies (institutions/foster care) (319)

Kept in the Juvenile Justice System:

5. Standard probation adjustments (1,383)
6. Formal juvenile probation cases (396 new cases, total caseload of 855)
7. "Continued under delinquent" informal supervision (78)
8. Sent to detention center (1,165)
9. Committed to IL Department of Juvenile Justice (96)

Note: totals do not add to 2,936 due to multiple outcomes in some cases

The interaction that occurs between young people and the juvenile justice system begins with some form of delinquent, or potentially delinquent, behavior on the part of young people. In the vast majority of cases, these behaviors do not attract attention from authorities. But when they do, there arises some degree of interaction between young people and police officers who serve in a specific community. Most of these interactions result in no formal engagement with the juvenile justice system. Police officers routinely deal with many situations in the field, and have both formal and informal ways of achieving desired outcomes without the need for any formal actions.

3.0

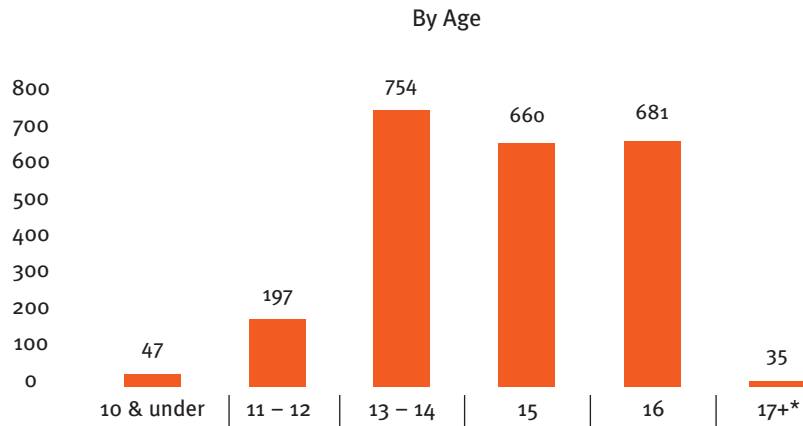
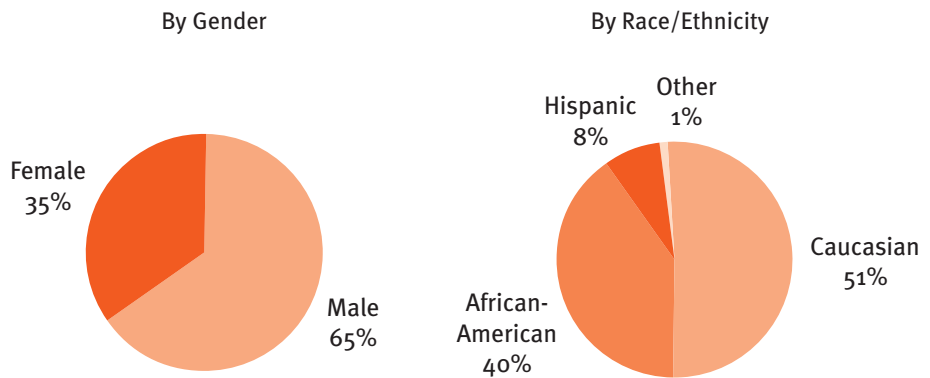
But sometimes formal action is required. During 2006 in Rockford and Winnebago County 4,607 formal juvenile offenses were filed by police officers. In addition, another 666 non-delinquent juvenile cases were identified, most of which were crisis intervention situations such as runaways, lock-outs, and other situations.

In all, there were a total of 2,936 individual cases of juvenile behavior, involving 2,388 individual minors during that year. Chart 1 provides summary information about the individual minors who were charged with formal offenses in 2006, and the offenses they were charged with committing.

Summary of Formal Offenses Committed by Young People Through The Juvenile Justice System, 2006

Total Number of Minors: 2,388

Chart 1



* this number is disproportionately low since most 17 year olds are tried as adults in Winnebago County

Offenses:	Violence Toward Persons – Weapons Related:	1,122 (24%)
	Burglary – Theft:	633 (14%)
	Other Property-Related	478 (10%)
	Drug – Alcohol Related	547 (12%)
	Probation Violations – Warrants	269 (6%)
	Other (i.e. disorderly conduct, resisting, traffic, etc)	1,558 (34%)

The costs associated with these offenses vary widely. They are borne by victims directly, and they are borne by the public agencies that provide services and compensation to victims of crime, and they include the costs of administering the system of juvenile justice that interacts with young people. Table 6 uses some established benchmark figures to estimate the costs of these offenses.

Table 6

Estimated Costs to Victims of Offenses, 2006

OFFENSE	FREQUENCY	ESTIMATED COST PER	ESTIMATED TOTAL COST
Violence Toward Persons – Weapons Related:	1,122	\$22,000	\$24,684,000
Burglary – Theft	633	1,725	1,091,925
Other Property-Related	478	764	356,588
Drug – Alcohol Related	547	2,941	1,608,727
Probation Violations – Warrants	269	0	0
Other (i.e. disorderly conduct, resisting, traffic, etc)	1,558	0	0
Estimated Total Costs to Victims			\$ 27,741,240

Sources: Cost estimates taken from *Crime in the United States, 2005* and *Preliminary Report for 2006*, Federal Bureau of Investigation and from the National Center for Victims of Crime.

Once formal cases are identified, and prior to any court processing, each case is reviewed by the Intake Unit of the County’s Juvenile Assessment Center. This Center has operated since 1997. The Center provides a professional assessment of each case of behavior among juveniles and diverts as many cases as possible away from the official justice system in favor of more flexible and customizable social service providers. This strategy is less costly, and many studies suggest it is more effective at reducing future delinquent behaviors among young people. The Intake Unit examines each case, assesses the individual circumstances, and develops a plan of action that results in a variety of different outcomes. The cost of assessing cases has been estimated by the Center at approximately \$380 per case. Since the Intake Unit of the Assessment Center handled 2,936 cases during 2006, this cost an estimated amount of \$1,115,680.

A variety of outcomes is possible for each case that is reviewed by the Intake Unit of the Assessment Center. Each outcome has its own set of costs associated with it. Outcomes that divert cases away from the official juvenile justice system include:

- **Release/Referral to Local Probation Officers:** 86 cases in 2006. These cases tend to be minor offenses that result in informal intervention by local police departments within Winnebago County. Our estimates do not include any costs associated with this outcome.
- **Release/Referral to Other Jurisdictions:** 149 cases in 2006. These cases cover many different offenses, but the minors reside outside of Winnebago County and the individuals are transferred to authorities in their place of residence. The most common examples are minors transferred to Cook County and/or the City of Chicago as well as minors transferred to authorities in Wisconsin. Our estimates do not include any costs associated with this outcome.
- **Referrals to Other Social Service Providers and Informal Monitoring:** 25% of cases, or 734 cases in 2006. This category includes a wide variety of referrals within the social service network that serves Rockford and Winnebago County. The Assessment Center estimates that it costs approximately \$50 to process each referral. No cost

In 2006, estimated costs to victims of juvenile crime exceed \$27 million.

3.0

data on the follow-up services that were provided by other agencies is available, so our estimates do not include these costs. In addition the process of informal monitoring of these cases on the part of Assessment Center staff uses about three full-time-equivalents (FTEs) in professional staff time. These outcomes generated the following estimated costs during 2006:

- o 734 referrals at \$50 per: \$36,700
 - o Follow-up services n/a
 - o Three FTE probation officers at \$60,000 each \$180,000
- Total \$ 216,700 + services**

- **Placements Outside The Minor’s Natural Home:** 298 cases in 2006. These cases are diverted from the formal justice system, but they are referred to other social service agencies because it is determined that the welfare of the minor requires separation from their natural home. Individual minors are placed in the custody of one of a network of social service agencies that provide specialized services, depending on the needs of each individual. This outcome generated the following estimated costs during 2006:

- o Supplemental Funding From Non-County Sources: \$3,843,186
 - o Social Security Funds 20,156
 - o Parental Payments 16,706
 - o Direct County Funding for Institutions 564,421
 - o Direct County Funding for Foster Care 57,319
 - o Direct County Funding for clothes, medical/dental, etc. 63,528
- Total \$4,565,316**

Outcomes that keep individuals within the formal juvenile justice system include the following:

- **Standard probation adjustments:** 1,383 cases in 2006. Most cases that go through the Intake Unit result in informal outcomes overseen by probation officers in the Assessment Center. These informal outcomes include conferences that include probation officers, minors, and parents, written sanction letters, and assignment of public service activities. These outcomes are brokered and monitored by the Center and they account for about 3 FTEs over the course of a year.

- o Three FTE probation officers at \$60,000 each \$180,000

- **Juvenile Probation:** 396 new cases, caseload of 855 at end of 2006 and “Continued Under Delinquent” informal supervision: 78 cases in 2006. A full-time staff of seventeen juvenile probation officers handle a case load that ranges between 800 and 950 cases at any one time. Although most of these cases are formal probation cases, some are managed on the basis of informal supervision when that is deemed helpful. The costs associated with these outcomes are:

- o Seventeen FTE probation officers at \$60,000 each \$ 1,020,000
- o Estimated salaries for management & support staff 200,000
- o Office Space (est. 6K s.f. @ \$20 per) 120,000

Estimated Total \$1,340,000

- **Transfer to Juvenile Detention Center:** 631 cases in 2006. A total of 12,884 days of detention in the County’s secure juvenile detention center occurred during the year 2006. The County estimates that it costs about \$100 per day to hold a juvenile in its secure center.

- o 12,884 days @ \$100 per day \$1,288,400



- **Transfer to IL Juvenile Justice Department:** 96 cases in 2006. More severe cases of juvenile delinquency result in minors being transferred to the custody of the Illinois Juvenile Justice Department (formerly part of the Illinois Department of Corrections). Although there are no data that track the length of detention for minors transferred from Rockford and Winnebago County, overall data from the IL Juvenile Justice Department estimates that in 2004 it cost \$64,406 per individual who is incarcerated in one of their facilities.

o 96 new cases @ \$64,406 \$6,182,976

Table 7 provides a summary of costs in the system of juvenile justice in Rockford and Winnebago County that have been described. All data are for the year 2006.

Table 7

**Summary of Juvenile Justice Costs
2006**

Costs to Victims	27,741,240
Assessments	1,115,680
Releases/referrals to local officers and/or other jurisdictions	n.a.
Referrals to Other Services	216,700 + service costs
Placements	4, 565,316
Probation Adjustments	180,000
Juvenile Probation	1,340,000
Juvenile Detention	1,288,400
IL Juvenile Justice Dept.	6,182,976
Total Estimated Costs 2006	\$ 42,630,312

As discussed above, we propose using three proportions to relate these costs to students who have been engaged in chronic truancy before coming into contact with the juvenile justice system.

Most Conservative Estimate (50%)	\$ 21,315,156
Less Conservative Estimate (80%)	\$ 34,104,248

3.14 Short-Term Productivity Loss in Instructional Costs

There are no easily accessible studies of how chronic truancy creates costs by lowering the productivity of instructional time in schools. But it would be unreasonable to assume that there is no effect, especially in a school system that is experiencing prolonged high rates of chronic truancy.

Several studies estimate the amount of time that teachers spend on different activities over the course of an average day, but none isolate the time devoted to customizing curricula, organizing assignments to help truant students catch up, and/or reestablishing contact with students each time they return to school after an unexcused absence. All of this time, however, is time taken away from other instructional activities.

Earlier in this report, we reported that 2,580 students in the Rockford schools were chronically truant in 2006. The district employs a total of 1,721 full-time equivalent teachers, so each teacher, on average, encounters at least 1.5 chronically truant students in their classes. While not all chronically truant students are absent on any given day (indeed this report earlier estimated that the net effect of the 9.4 percent chronic truancy rate is a 1 percent reduction in average daily attendance), the lag on instructional productivity caused by chronic truancy is experienced every day since chronically truant students require more than average resources and attention from teachers.

Chronically truant students require more resources and attention from teachers.

3.0

Without solid data on which to calibrate an estimate of the net effect of these issues on instructional productivity, but reluctant to remove this factor from the analysis, we propose to estimate the lost productivity on instructional time based on the assumption that the 9.4 percent of students who are chronically truant (2,580 students) each require 20% more time from a teacher than they would if they attended regularly in order to manage the teaching and learning challenges created by frequent absences. In 2006, District 205 spent an average of \$5,771 on instruction for each pupil. If chronically truant students cost 20% more than this average, that amount would be increased by \$1,154. Using this method, therefore, the estimated additional costs of instructing all chronically truant students in the District would be \$2,977,320.

3.15 Summary of Short-Term Costs

Our estimates of the short-term costs during 2006 to the institutions and some of the people who interact with chronically truant young people are summarized in the table below. As described in the sections above, these estimates use conservative assumptions where data are available, and do not attempt to account for expenses where there is no reasonable method of making estimates.

Table 7

Summary of Estimated Short-Term Costs, 2006

Loss of State Revenues	912,158
School Adm. Costs	n.a.
Related Juvenile Justice Costs	21,315,156 to 34,104,248
Loss of Instructional Productivity	2,977,320
Range of Estimated Totals	\$ 25,204,634 to \$ 37,993,726

3.2 Long-Term Costs Experienced by Chronically Truant Students

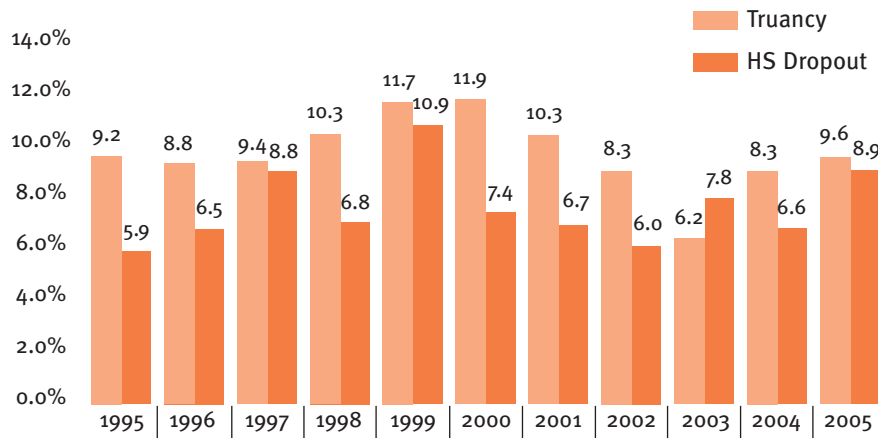
Chronic truancy in school is a powerful predictor of later choices of students to drop-out before earning their high school degrees. As with the relationship between chronic truancy and juvenile delinquency, however, there are no national data that can specify the relationship with precision. Most studies of the tie in specific communities, and in specific segments of the population, suggest that at least half of younger workers in the U.S. labor market who do not have high school degrees dropped out of school after engaging in chronic truancy. A recent study of Denver is a good example. In this study, where both chronic truancy rates and drop-out rates were only somewhat higher than state averages, the authors concluded that 50% of drop-outs were chronically truant prior to dropping out.

Figure 7 below displays the relationship over time between Rockford District 205's chronic truancy rate and its drop-out rate. In Rockford's case, where rates of both chronic truancy and dropping out are much above state averages, the data suggest a stronger relationship between truancy and dropping out. For this reason, this section will estimate the long-term effects of truancy on the subsequent labor market experiences of students by using three different scenarios. The first will assume that 50% of workers without a high school degree were chronically truant. The second will assume 80%.

The estimated additional costs of instructing all chronically truant students in District 205 is almost \$3 million.

Figure 7

Comparison of Rates of Chronic Truancy and Drop-Outs;
Rockford District 205; 1995 – 2005



3.21 Estimating the Current Loss of Income From Persistently High Rates of Chronic Truancy

Competing in the labor market without the benefit of a high school diploma has a long-lasting negative effect on the ability of a worker to earn income. All people in any region relate to the labor market in one of four ways at any given time. Each person is either:

- Not in the labor market – this is a person who is not looking for employment and would not take a job if one were offered.
- Discouraged worker – this is a person who has been looking for a job unsuccessfully, and has given up actively searching, but who would take a job if one became available. Official data do not systematically track this category, but most analyses have concluded it accounts for about 1/3 of adults who are officially not in the labor market
- Unemployed – this is a person who does not have a job, but who has actively looked for employment at some time in the last three weeks.
- Employed – this is a person who currently has at least one job. Data from the Rockford MSA collected as part of the U.S. Department of Labor’s Current Population Survey’s March 2006 supplement identifies the following distribution of people in the MSA who do not have a high school diploma:

Not in the Labor Market	32.1 %
Unemployed	13.6 %
Employed	54.3 %

Using a standard assumption to estimate the number of discouraged workers, (i.e. about 1/3 of working-age adults not in the labor market are discouraged workers) this would split that category into 21.5% not in the labor market and 10.6% discouraged workers.

The same CPS March 2006 supplement also identifies that the average income earned by a worker in the Rockford MSA without a high school diploma is \$18,092. This is \$4,000 less than the average income earned by a worker with a high school diploma (but without any further degree).

Table 8

Average Income By Educational Attainment, 2006

	ROCKFORD MSA	STATE OF ILLINOIS
No High School Diploma	\$ 18,091	\$ 19,986
High School Diploma Only	\$ 22,090	\$ 29,671

Source: U.S. Department of Labor, Current Population Survey, March 2006 Supplement.

These labor market data allow us to estimate the income effect experienced by workers who have dropped out of high school in Rockford over the last several years, and who now compete in the region’s labor market without benefit of a high school degree. For the purpose of this report, we chose to use only the last eight years of student drop-out behavior to illustrate the magnitude of the current loss of income experienced in the region.

Over the last eight years, the drop-out rates in Rockford District 205 have produced an average of 508 drop-outs each year. This figure includes those who dropped out for all reasons, including chronic truancy. After eight years of this level of dropping out, there are 4,064 people in the working-age population in this category. If we apply the percentages from above about their labor market status, we obtain the following table:

Not in the Labor Market	21.5 %	874 people
Discouraged workers	10.6 %	431 people
Unemployed	13.6 %	553 people
Employed	54.3 %	2,206 people

People who are not in the labor market do not experience any loss of income. But discouraged workers and unemployed workers experience a loss of the wages they could otherwise earn. In this case, those wages can be estimated by using the average wage of those who are employed, and who have only high school diplomas (i.e. \$22,090 as of March 2006 in the Rockford MSA).

Those who are employed experience a loss of income because they dropped out of school and did not therefore earn a high school diploma. The most conservative estimate of this loss would be to assume that they would otherwise compete in the labor market with only high school diploma, i.e. by assuming that none of these people would have gone on to further education after high school graduation. For our purposes, then, we will use the conservative estimate of a loss of only \$4,000 in annual income for each of these individual workers. This is the loss of annual income they experience because they are currently employed without a high school diploma.

The following table calculates the current loss of earning power in 2006 experienced by drop-outs from Rockford District 205 over the last eight years.

Table 9

**Estimated Current Loss in Earning Power
High School Drop-Outs, 2006**

LABOR MARKET STATUS	NUMBER OF PEOPLE	EARNINGS LOSS PER	TOTAL EARNINGS LOSS
Not in Labor Market	874	\$ 0	\$ 0
Discouraged Workers	431	\$22,092	\$ 9,521,652
Unemployed	553	\$22,092	\$ 12,216,876
Employed	2,206	\$ 4,000	\$ 8,824,000
Total	4,064		\$ 30,562,528

3.0

As discussed above, not all of these earnings losses can be associated with chronic truancy. Using the two different levels of association produces the following range of estimates:

50% of drop-outs related to chronic truancy	\$15,281,264
80% of drop-outs related to chronic truancy	\$24,450,022

These figures are for the year 2006 only. They do not account for the accumulated loss of income experienced by these people throughout the eight years we are using as an example.

The current value of this stream of lost income experienced by drop-outs over just the last eight years can be determined by calculating the lost income as if it were a series of payments over time that would have grown in value. In the first year of our eight year example, only 508 individuals would have dropped out and faced reduced earning power in the labor market (according to the distribution of categories shown above.) In the second year another 508 would be added to that pool, and so the pool would grow in each of the eight years in the example until the eighth year when the loss would equal that calculated in the table above. If, for example, the value of the income lost in each year grew at the average annual rate of general inflation over that same eight year period (approximately 2.62%), the current value of this stream of lost earning power would be approximately \$147,325,850. Different assumptions about how many of each year's drop-outs are tied to chronic truancy yield the following estimates:

\$ 73,662,925	assuming a 50% rate
\$ 117,860,680	assuming an 80% rate

Our estimates, therefore, are that in 2006, between 2,032 and 3,251 workers who entered the labor market over just the last eight years suffered reduced earning capacity because they chose to engage in chronic truancy while enrolled in District 205 schools, and later dropped out of school without earning a high school diploma. During the year 2006, these workers experienced a reduced earning capacity somewhere in the range of \$15,281,264 and \$24,450,022.

The current value of the stream of reduced earnings experienced by these workers over the last eight years is somewhere in the range of \$73,662,925 and \$117,860,680 in current dollars.

An important issue to consider when assessing the consequences of these estimates relates to geography. Americans are very mobile. Many students who drop-out of school in one community move to other communities. They experience losses in earning capacity, but the consequences of those losses may not be felt directly by the community in which they grew up. These estimates, therefore, measure the net loss in earning capacity of the students who were chronically truant and dropped out of District 205 schools. But not all of those losses are felt in the Rockford region.

3.22 Projecting Future Losses of Income To Workers If The Current Rates of Chronic Truancy Continue

If no changes are made in Rockford's high rates of chronic truancy, it is reasonable to assume that the rates of dropping out will continue into the future. If this is true, District 205 will continue to produce at least 508 additional high school drop-outs each year. (This is a low estimate since enrollments are expected to increase over time.) These individuals will continue to accumulate in the working-age population – in the Rockford region and elsewhere – and they will continue to experience substantial losses in earning power when they participate in the labor market as jobholders, unemployed individuals, or discouraged workers. The scale of this income loss can be projected with some accuracy in order to illustrate the issue. This section projects that loss over the next twenty years, i.e. 2008-2028.

If no changes are made in Rockford's high rates of chronic truancy, the rates of dropping out will continue.

3.0

Looking out into the future, however, raises some important questions. The structure of Rockford's economy has been changing rapidly and will continue to change. The region is working aggressively to restructure its economic base because its workers are earning less than state averages, and many sectors are experiencing long-term losses due to the pressures of global competition. If the region's economic development initiatives succeed, Rockford's economic structure will shift. That shift will change the earnings opportunities that are available to workers if they choose to remain in the Rockford region and participate in the benefits of current economic development initiatives. In this case, success in economic development policy will raise average wages by creating jobs in sectors that have wages that are higher than today's averages. But ironically, this success will increase the earnings losses that will be experienced by workers who do not have the benefit of a high school diploma.

In order to demonstrate how longer-term economic restructuring in the Rockford region can increase the impact of chronic truancy on long-term losses in earning power, we simplify the estimate by assuming that workers remain in the region (which data suggest the majority do) and we project the 20-year expected income losses in three different long-term scenarios related to the success of the region's economic development initiatives:

- Scenario One assumes that the current structure of Rockford's economy remains stable over the next twenty years. This means that current average wage levels remain unchanged, except for the general rate of inflation. In terms of estimating the long-term loss of earning power from chronic truancy, this is the most conservative scenario.
- Scenario Two assumes that Rockford's current economic development initiatives succeed in restructuring the region's economy to produce more high paying jobs. The result will raise wages across the board in a very short time-span of just five years. A conservative way of estimating this change would be to project that Rockford's average income measures rise to match the State of Illinois averages in just five years.
- Scenario Three assumes that Rockford does improve enough to meet state averages, but that it takes twenty years to achieve that goal.

Table 10 summarizes the estimates. These data take the three scenarios described above and project out twenty years of earnings losses that will be experienced by the growing number of workers in the Rockford region who engaged in chronic truancy as students and later dropped out of high school.

- The number of high school drop-outs is increased each year at the rate they are being created currently (i.e. 508 per year). The first column on Table 10 assumes that half of the students who drop-out are chronically truant. The second column assumes 80%.
- Scenario One uses current income levels and projects them forward.
- Scenario Two moves Rockford's income levels up quickly over the five years so they match current stage averages, then keeps income levels at state averages from year six through year twenty.
- Scenario Three moves Rockford's income levels up more slowly so that they reach parity with current state averages over twenty years (by 2028).

The stream of income losses that is projected in each scenario is then discounted back to the present with a discount rate of 5.16 percent, which is the most recent yield on 20-year U.S. Treasury notes. The result is an estimate of the present value of this projected stream of lost earnings power.

Table 10

**Net Present Value of Projected Earnings Losses Among Workers Who
Drop-Out of School and Who Were Chronically Truant
2008-2028**

	Percentage of Drop-Outs Related To Chronic Truancy	
	50%	80%
Scenario One	\$390,890,492	\$625,113,453
Scenario Two	\$490,337,643	\$784,063,919
Scenario Three	\$434,652,335	\$695,055,119

3.23 Summarizing Data on Lost Earning Power

Individuals who become chronically truant in school, eventually drop-out, and compete for jobs without the benefit of a high school degree experience substantial losses in their ability to earn income. None of these losses are recognizable to students when they are young, so they do not affect their decisions to engage in chronically truant behavior. But the losses are real – and materialize nonetheless.

Since the problem of high chronic truancy is not new in Rockford, the region already experiences substantial levels of lost earning power today caused by the accumulation over time of more high school drop-outs than it would otherwise contain. These losses will continue to accumulate in future years if chronic truancy rates are not reduced substantially. Indeed, these costs will be magnified if the region succeeds in improving its overall economic performance, because economic development success will increase the wage gap between jobs that require more education and jobs that are available to those who dropped out of high school.

The magnitude of these income losses depends on which assumption best describes the relationship between chronic truancy and dropping out of school. It also depends on how quickly the region's economy improves its performance relative to state averages.

3.3 Estimating the Long-Term Macroeconomic Effects of Reduced Earning Capacity For The Region

Consumer spending is one of the primary engines of economic activity in the modern American economy. The absence of a large amount of consumer income causes secondary and tertiary effects since that income is not spent, and not re-spent within the local, regional, state, and national economy.

In order to estimate these macroeconomic effects, the project used IMPLAN Professional to construct a model of the Winnebago County economy today. That model was then used to estimate the overall economic impact of the loss of consumer spending correlated with the losses of earning power estimated in the previous section. In order to improve the realism of the economic model, all consumer spending is assumed to come from households with current incomes in the range of \$25,000 to \$50,000.

It is important to note that the only macroeconomic effect that was examined was the loss of consumer spending driven by the loss of earning power among individuals who meet the following criteria:

- Are chronically truant while enrolled in District 205 schools;
- Drop-out of school before high school graduation from District 205;
- Choose to enter the labor market; and
- Compete in the labor market without a high school degree.

3.0

If Chronic truancy rates were lowered, the costs of juvenile delinquency would likely fall as well.

Any initiative to reduce the rate of chronic truancy would reduce the number of people who fit into these criteria.

A successful effort to reduce chronic truancy would yield other benefits, which could in turn translate into other beneficial effects on the region's macro-economic performance. For example, if chronic truancy rates were lowered, the costs of juvenile delinquency would likely fall as well. Many of these costs are paid by taxpayers. Others, such as the costs to crime victims, are experienced by individuals.

In order to pursue a conservative approach to this analysis, however, we have not attempted to factor these effects into our estimates.

Macroeconomic estimates were developed for two items:

- The legacy of the past: estimates of the current scale of output and jobs that are not in the region's economy today because of the accumulated loss of consumer spending associated with lost earning power over the last eight years.
- Projected future effects: estimates of the current scale of output and jobs that will not be created over the next twenty years because of the loss of consumer spending associated with lost earning power. These estimates were created for three different scenarios regarding the success of the region's current economic development initiatives.

Each of these estimates is developed by estimating the current effect of the present value of the range of reduced earning capacity associated with past and future chronically truant behavior. This method does not yield precise results. Rather, it is designed to gage only the magnitude of the consequences. The data reported below, therefore, should be considered "ballpark" figures. More extensive model-building would certainly develop more refined estimates.

3.31 The Legacy of the Past

The data in Table 11 reveal that the economy of Winnebago County has lost the current value of somewhere between \$73.6 and \$117.8 million in output and between 830 and 1,329 jobs from the accumulated effects of reduced earnings among workers associated with the last eight years of high chronic truancy in District 205 schools. This is, of course, a very rough estimate. But it does suggest the scale of the consequences.

A useful benchmark for comparison is that the Gross Metropolitan Product of the Rockford SMSA (Winnebago and Boone Counties) in 2006 is estimated at \$14.2 billion. Using this benchmark, the current scale of loss from chronic truancy over the last eight years in the Winnebago County economy is about 8/10ths of one percent of the Rockford MSA's current Gross Metropolitan Product.

Table 11

**Estimated Current Scale of Lost Economic Activity
Associated With Chronic Truancy
1998-2006
Winnebago County**

	Low Range	High Range
Value of Lost Output	\$ 73.6 million	\$117.8 million
Number of Jobs Not Created	830	1,329

The distribution of these impacts within the county's economy vary across different sectors. Since the model assumes that the increased consumer spending will come from households with incomes between \$25,000 and \$50,000, the projected impacts match the kind of spending done by these households. For example, the sector that would have received the greatest impact is Health and Social Services, which would have felt an increase in output between \$15 and \$24 million per year, and an accumulated job growth of between 212 and 339. Similarly, the retail sector would have increased output between \$9.2 and \$14.7 million, and job growth between 188 and 300.

3.32 Projections for the Future

Data in Table 12 estimate the current scale of growth in output and employment that will not occur in the Winnebago County economy over the next twenty years if chronic truancy rates remain at their current levels in District 205. These tables show estimates for each of the three long-term scenarios regarding the changing structure of the economy in the Rockford region.

Table 12

**Estimated Range of Current Scale of Projected Losses
in Economic Activity Associated With Chronic Truancy
2008 - 2028
Winnebago County**

Lowest Range:

Scenario One – \$391 million in lost output and 4,406 jobs not created

Highest Range:

Scenario Two – \$784 million in lost output and 8,839 jobs not created

As these data demonstrate, the cumulative constraints on the Rockford region's future economic performance that are tied to high rates of chronic truancy in District 205 schools will grow in scale over time. This growing drag on the region's economy will occur regardless of whether the region is successful in its current economic development initiatives. Yet if current economic development initiatives are successful, the drag on the region's economy that can be associated with high rates of chronic truancy will grow even larger. The scale of these estimates suggest that the cumulative drag will be somewhere between 2.7% and 5.5% of the Rockford MSA's current Gross Metropolitan Product.

While these estimates are very rough, their scale clearly raises the possibility that if the region fails to reduce this potential drag on its own economic growth, that failure may seriously impede its ability to benefit from the range of economic development initiatives that are underway at present.



*The cumulative drag will be
between 2.7 - 5.5% of the
Rockford MSA's Current
Gross Metropolitan Product.*

4.0

Assessing Return-on-Investment Opportunities

This analysis has used conservative estimation methods to quantify some of the social costs of sustained high rates of chronic truancy in the Rockford public schools. Future costs have been deflated to current dollar values in keeping with the preference to report conservative estimates. This allows future costs to be compared with current costs.

But in day-to-day policy making, the perceived value today of avoiding costs in the future is often underestimated even more dramatically. It is usually very difficult to rally support to spend money today on initiatives that provide pay-back over many years by avoiding future costs. Leaders are cautious about spending money today to solve a problem if there are few tangible, short-term benefits from doing so, even if the long-term benefits are very large.

This analysis, however, reveals that chronic truancy in Rockford generates many visible, short-term costs that would be reduced if the rates of chronic truancy among students were reduced. For example, in just the year 2006, this analysis conservatively estimates that chronic truancy inflicts costs ranging between \$25.2 and \$37.9 million on individuals, organizations, and government agencies in the region. (And this range does not include the effects of lost income suffered by adults in 2006 who were chronically truant as students within the previous eight years.) Any sustained initiative to reduce the rate of chronic truancy among public school students will reduce these short-term costs.

For example, initial data suggest that the rate of chronic truancy fell by about 2 percent between school year 2005-2006 (which is covered by this report) and school year 2006-2007 (full data are not yet available). This would represent approximately a 20 percent reduction in the rate of chronic truancy (i.e. 2 percent divided by 9.6 percent). This reduction should reduce the short-term costs of chronic truancy. For example, average daily attendance numbers should increase, thereby increasing state subsidies to the schools. Administrative costs of tracking chronic truancy should decrease. Juvenile justice costs should also decrease since the behavior of fewer young people will be affected by chronic truancy. This will likewise reduce the costs borne by crime victims. Even though some of these cost reductions are likely to have some “lags” in them, the tangible short-term benefits of falling rates of chronic truancy should be visible enough to demonstrate a high rate of return on funds “invested” in initiatives to reduce chronic truancy.

