



138  
174  
THS

748510  
1  
2004  
9 2 16 7 8 9

This is to certify that the

thesis entitled

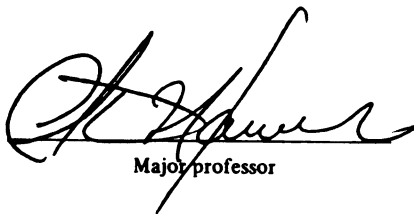
Alternative Sentencing Models for Controlled  
Substance Violations in the State of Michigan

presented by

Catharine M. Gamper

has been accepted towards fulfillment  
of the requirements for

M. S. Criminal Justice  
\_\_\_\_\_ degree in \_\_\_\_\_

  
Major professor

Date 12/11/02



PLACE IN RETURN BOX to remove this checkout from your record.  
TO AVOID FINES return on or before date due.  
MAY BE RECALLED with earlier due date if requested.

| DATE DUE    | DATE DUE | DATE DUE |
|-------------|----------|----------|
| MAR 18 2007 |          |          |
|             |          |          |
| 250-07      |          |          |
|             |          |          |
|             |          |          |
|             |          |          |
|             |          |          |
|             |          |          |
|             |          |          |
|             |          |          |

ALTERNATIVE SENTENCING MODELS FOR CONTROLLED SUBSTANCE  
VIOLATIONS IN THE STATE OF MICHIGAN

By

Catharine Marie Gamper

A THESIS

Submitted to  
Michigan State University  
In partial fulfillment of the requirements  
for the degree of

MASTER OF SCIENCE

Department of Criminal Justice

2002

## ABSTRACT

### ALTERNATIVE SENTENCING MODELS FOR CONTROLLED SUBSTANCE VIOLATIONS IN THE STATE OF MICHIGAN

By

Catharine Marie Gamper

The purpose of this study is to fabricate alternative sentencing models for controlled substance violations utilizing 1991 – 1999 sentencing data provided by the Michigan Department of Corrections. Specifically, this study attempts to incorporate proportionality into Michigan's existing drug sentencing structure utilizing Andrew von Hirsch's principle of commensurate deserts. Thus, the current maximum penalty of Life for the possession, delivery, or manufacture of 650 grams or more of a Schedule 1 or 2 controlled substance will illustrate relative congruence with the already proportional maximum sentence length increases for lesser quantities. A result of this attempt to equalize the graduated increases in drug sanctions is an overall thirty-one, twenty-three, and thirteen-year sentence year sentence reduction from the actual average of sixty-six years. This substantial sentence attenuation from sixty-six years corresponds with multi-billion dollar savings in annual prison operational costs. Implications for the incorporation of commensurate deserts into Michigan's current drug sentencing policy and related cost savings are discussed.

## TABLE OF CONTENTS

|                                                                            |    |
|----------------------------------------------------------------------------|----|
| LIST OF TABLES                                                             | v  |
| LIST OF FIGURES                                                            | vi |
| CHAPTER 1                                                                  |    |
| INTRODUCTION                                                               | 1  |
| CHAPTER 2                                                                  |    |
| SENTENCING FOR CONTROLLED SUBSTANCE VIOLATIONS IN THE<br>STATE OF MICHIGAN | 3  |
| Legal Challenges                                                           | 5  |
| Legislative Reform                                                         | 6  |
| CHAPTER 3                                                                  |    |
| PROPORTIONALITY AND PUNISHMENT                                             | 9  |
| Just Deserts                                                               | 9  |
| Principle of Commensurate Deserts                                          | 9  |
| Severity of Punishments                                                    | 11 |
| Internal Composition of the Scale                                          | 12 |
| Magnitude of the Scale                                                     | 13 |
| CHAPTER 4                                                                  |    |
| DATA AND METHODS                                                           | 15 |
| Data/Population                                                            | 15 |
| Population Demographics                                                    | 15 |
| Variables                                                                  | 18 |
| Dependent                                                                  | 18 |
| Independent                                                                | 18 |
| Analytic Technique                                                         | 20 |
| CHAPTER 5                                                                  |    |
| ANALYSES AND RESULTS                                                       | 23 |
| Bivariate Analyses                                                         | 23 |
| Multivariate Analyses                                                      | 25 |
| General Linear Modeling                                                    | 29 |
| Missing Value Analysis                                                     | 30 |
| 650 Offender Typology                                                      | 30 |
| Ordinary Least Squares Regression Equation                                 | 35 |
| Cost Analysis                                                              | 37 |

## **TABLE OF CONTENTS**

|                                                                                                                   |       |
|-------------------------------------------------------------------------------------------------------------------|-------|
| CHAPTER 6                                                                                                         |       |
| DISCUSSION                                                                                                        | 43    |
| Major Findings                                                                                                    | 43    |
| Limitations of Findings                                                                                           | 46    |
| Policy Implications                                                                                               | 48    |
| WORKS CITED                                                                                                       | 50    |
| APPENDIX A. MICHIGAN COMPILED LAW PUBLIC HEALTH CODE ACT<br>368 OF 1978                                           | 54-55 |
| APPENDIX B. VARIABLE DESCRIPTIONS                                                                                 | 56-57 |
| APPENDIX C. AVERAGE MAXIMUM SENTENCE LENGTH BY MODEL AND<br>WEIGHT                                                | 58    |
| APPENDIX D. CUMULATIVE COST DIFFERENCE BETWEEN PREDICTED<br>AND ACTUAL RELEASE YEARS BY ORIGINAL SENTENCE<br>YEAR | 59    |

## LIST OF TABLES

|                                                                                                                                  |       |
|----------------------------------------------------------------------------------------------------------------------------------|-------|
| Table 1. Population Demographics                                                                                                 | 16    |
| Table 2. Past <i>and</i> Present Criminal Justice System Contact                                                                 | 17    |
| Table 3. Study Drug-Crime Profile                                                                                                | 17    |
| Table 4. Distribution of Sentencing among Primary Metropolitan Statistical Area                                                  | 18    |
| Table 5. Average Maximum Length of Prison Term by PMSA                                                                           | 24    |
| Table 6. Pearson's Correlation Coefficients ( $\rho$ )                                                                           | 25    |
| Table 7. General Linear Model of Expected Maximum Length of Prison Term<br>Regressed on Offender Legal and extra-Legal Variables | 28-29 |
| Table 8. Missing Value Analysis Summary of Means and Standard Deviations                                                         | 30    |
| Table 9. Mean Distribution of Weight by Continuous Variables                                                                     | 31    |
| Table 10. Chi-Square Distribution of Weight by Race                                                                              | 31    |
| Table 11. Chi-Square Distribution of Weight by Sex                                                                               | 31    |
| Table 12. Chi-Square Distribution of Weight by Drug Role                                                                         | 32    |
| Table 13. Chi-Square Distribution of Weight by Status                                                                            | 32    |
| Table 14. Chi-Square Distribution of Weight by PMSA                                                                              | 33    |
| Table 15. Actual Average, Missing Value Analysis, and OLS Regression Equation<br>Predicted 650 Sentences                         | 36    |

## **LIST OF FIGURES**

|                                                                                                        |    |
|--------------------------------------------------------------------------------------------------------|----|
| Figure 1. Number of Offenders Sentenced by Original Sentencing Year                                    | 37 |
| Figure 2. Comparison of Actual and Predicted 650 Release Dates                                         | 38 |
| Figure 3. Non-Cumulative Annual Operational Cost Per Offender                                          | 39 |
| Figure 4. Cumulative Expenditure for Additional Sentencing Years 2026-2065<br>(Missing Value Analysis) | 40 |
| Figure 5. Cumulative Expenditure for Additional Sentencing Years 2034-2065<br>(OLS Regression Flat 30) | 41 |
| Figure 6. Cumulative Expenditure for Additional Sentencing Years 2044-2065<br>(OLS Regression Flat 40) | 42 |

## Chapter I. Introduction

In the State of Michigan, sentencing for drug-related criminal behavior has generally taken the form of determinate presumptive sentencing. Such a policy often exemplifies a draconian response to pacify public discontent when a particular crime or some general problem of crime arouses strong feelings (Gross, 1981). However, the implementation of such extreme measures to address conduct labeled criminal at times is often done without prospective considerations for the future cost to the state and to the offender.

For example, the state of Michigan enacted several quantity-based penalties that mandated minimum and maximum terms of imprisonment for the possession, delivery, or manufacture of a Schedule 1 or 2 controlled substance such as cocaine, heroin, or other variegated opiate derivatives (“FAMM Scores Major Victory with Rollback of Michigan’s 650 Lifer Law”, 1998). The most controversial of these measures was the non-parolable life sentence imposed on a defendant for the possession, delivery, or manufacture of 650 grams or more (or approximately one and a half pounds) of a Schedule 1 or 2 controlled substance (Families Against Mandatory Minimums, 2001). Schedule 1 substances include, but are not limited to Heroin, Lysergic Acid Diethylamide (LSD), Gamma-hydroxybutrate (GHB), Psilocyn, and Mescaline, while Methadone, Cocaine, Codeine, Morphine, and Oxycodon are examples of Schedule 2 substances (Michigan Department of Consumer and Industry Services, n.d.). Lesser quantity-based penalties were also instituted with accompanying terms of incarceration. For example, a 20 to 30 year penalty was prescribed for the possession, delivery, or manufacture of 225

to 649 grams and a 10 to 20 year penalty established for those quantities between 50 and 224 grams (“History of Mandatory Sentences”, n.d.).

Recognizing potential defects in its current sentencing policy, the Michigan Legislature reduced the non-parolable Life sentence to “life or any terms of years *but not* less than 20” for the possession, delivery, or manufacture of 650 or more grams of Schedule 1 or 2 controlled substances (State of Michigan, 2001). Sanctions for the remaining three penalties for lesser quantities of drugs remained in their inceptive form.

Though the State of Michigan did concede to the perceived harshness reflected in the 650 Lifer Law by reducing the minimum 20-year penalty, (“Legislature Passes 650 Reform”, n.d.), it did however neglect to address the lack of proportionality that remained between the maximum 30-year sentence for 225 to 649 grams and natural Life. Drawing upon the principle of commensurate deserts forwarded by Andrew von Hirsch, this study will address this lack of proportionality in sentencing by fashioning alternative sentencing models that reflect a more equitable distribution of sentence length between the 650 weight and the 224 to 649 weight. In addition, this study will also illustrate how this lack of relative equity in sentencing constitutes an unnecessary financial burden to Michigan’s taxpayers

## Chapter II. Sentencing For Controlled Substance Violations in the State of Michigan

Michigan's current mandatory minimum drug sentencing penalties reflect an overall national movement toward determinate presumptive sentencing for drug-related offenses (DiIulio, 1999). To control the movement of illegal narcotics through the State of Michigan and to identify and apprehend individuals considered "kingpins" in the drug industry, the Michigan Legislature established lengthy terms of imprisonment based primarily on the weight of the controlled substance involved in the offense (Cloud, 1999). In 1978 then Governor William Milliken signed into law a recodification of the Public Health Code 147 that incorporated mandatory minimum and maximum penalties for controlled substance offenses enacted earlier that year in other legislation ("Ex-Governor Regrets Signing 650 Lifer Law: Calls for Repeal", 1998). Most controversial of these measures was the provision requiring a mandatory life sentence (Michigan Compiled Law 333.74012A1 [Delivery/Manufacture] and 333.74032A1 [Possession]) without the possibility of parole for the possession, manufacture, delivery, or conspiracy to possess, manufacture, or deliver any mixture containing a Schedule 1 or 2 controlled substance that weighs 650 grams (23 ounces or about 1.4 pounds) or more ("Sentencing Today: The Nation's Harshest Law", n.d.). This provision became known as the "650 Lifer Law". Only first-degree murder carried with it the same penalty as the 650 Lifer Law while other violent crimes such as rape, second-degree murder, and armed robbery carried lesser sentences, including the potentiality of parole ("Michigan's Mandatory Sentences", n.d.).

This dramatic shift in sentencing policy is exemplified by the fact that prior to the recodification of Public Act 147, the *manufacture or delivery* of a Schedule 1 or 2

controlled substance was punishable by imprisonment for up to twenty years, and/or a fine of up to \$25,000. The *possession* of a Schedule 1 or 2 controlled substance was also punishable by imprisonment, but only up to four years and/or a \$2,000 fine (Spear, 1997).

Public Act 147 was to have taken effect on September 1, 1978. However, the Controlled Substances Act and subsequent drug penalty changes were immediately repealed and eventually incorporated into the 1978 recodification of the Public Health Code, Public Act 368 of 1978, which took effect on September 30, 1978 (“History of Mandatory Sentences”, n.d.). Adjustments in the penalty structure for the manufacture, delivery, or possession of a Schedule 1 or 2 controlled substance became law on that particular day. Cocaine would no longer carry lesser penalties than those for Schedule 1 or 2 drugs; the severity of the penalties would be graduated and based on specified amounts of mixtures containing these drugs; imprisonment for amounts weighing 50 grams (1.75 ounces) or more would carry mandatory minimum and maximum sentences without the possibility of parole or probation (“History of Mandatory Sentences”, n.d.). For amounts less than 50 grams, mandatory terms of imprisonment are a sentencing option in addition to or in place of a monetary fine or lifetime probation.

Specifically, the penalties for the manufacture, delivery, or possession of a mixture of Schedule 1 or 2 controlled substance were established as (State of Michigan, n.d.):

- Mandatory life imprisonment without parole or probation (“650 Lifer Law”) for mixtures weighing over 650 grams (MCL 333.74012A1 [Delivery/Manufacture] and MCL 333.74032A1 [Possession])
- Mandatory 20 to 30 years imprisonment without the possibility of parole or probation for mixtures weighing 225 to 649 grams (MCL 333.74012A2 [Delivery/Manufacture] and MCL 333.74032A2 [Possession])
- Mandatory 10 to 20 years imprisonment without the possibility of probation or parole for mixtures weighing 50 to 224 grams (MCL 333.74012A3 [Delivery/Manufacture] and MCL 333.74032A3 [Possession])
- Mandatory 1 to 20 years for mixtures weighing less than 50 grams for delivery/manufacture only (MCL 333.74012A4)
- Mandatory 1 to 4 years for mixtures weighing 25 to 49.99 grams for possession only (MCL 333.74032A4), and
- Second or subsequent convictions would carry a mandatory life imprisonment penalty (State of Michigan, 2001).

*Legal Challenges.* Despite controversy associated with attenuated terms of imprisonment, the 650 Lifer Law and other subsequent drug penalties have withstood challenges before the Michigan and the United States Supreme Court. For example in 1990, the United States Supreme Court ruled in *Harmelin v Michigan*, 111 s Ct 2680

(1991), that Michigan's 650 Lifer Law did not violate the "cruel and unusual" provisions of the Eighth Amendment to the United States Constitution (*Harmelin v. Michigan*, 1991).

However, in June 1991 [in the consolidated cases of *People v. Hassan*, Docket No. 89661, and *People v. Bullock*, Docket No. 89662], the Michigan State Supreme Court in a 4-3 decision struck down mandatory life imprisonment for conviction of simple possession. The sentence was ruled unconstitutional on the grounds that it violated Michigan's constitutional prohibition against cruel and unusual punishment (*People v. Bullock*, 1991; *People v. Hassan*, 1991). While representatives from the Michigan Attorney General and the Michigan Department of Corrections argued that the ruling did not apply to convictions for delivery, the Michigan Court of Appeals struck down mandatory life imprisonment for delivery of mixtures of 650 grams or more as unconstitutional on the same grounds as the earlier decision on possession ("Michigan's Mandatory Sentences", n.d.). However, in April 1993, the State Supreme Court overturned the Appeals Court rulings, thereby reinstating mandatory life imprisonment for the delivery or manufacture of 650 grams or more of a Schedule 1 or 2 controlled substance ("Michigan's Mandatory Sentences", n.d.).

*Legislative Reform.* Recognizing growing public discontent, the Michigan legislature began to initiate provisional amendments to the original 650 Lifer Law. Michigan State Senator William Van Regenmorter (R-Hudsonville) introduced legislation in 1997 that maintained the existing penalty for those convicted of a drug offense in excess of 650 grams, but provided parole eligibility after 15 years if the drug

offender was willing and able to inform on others (“Michigan Reconsiders Drug-Lifer Sentencing 70 Years After “Life for a Pint” Law”, 1998).

Notwithstanding this bill, on July 2, 1998, Governor John Engler (R) signed measures dramatically reforming the state’s 650 Lifer Law (“Legislature Passes 650 Reform”, n.d.; “Michigan Enacts Reform of 650-Lifer” Law, 1998). The law altered the mandatory life sentence for the possession, delivery, or manufacture of 650 grams or more to “life or any term of years, not less than 20”, for offenders who violate the law after October 1, 1988. Current and future 650 Lifers with no other convictions for serious crimes are eligible for parole after 17.5 years, or twenty years for those with another conviction. If a judge determines an individual has cooperated with law enforcement, he or she becomes eligible for parole 2.5 years earlier (“Legislature Passes 650 Reform”; “Michigan Enacts Reform of “650 Lifer” Law”, 1998).

In making parole-release decisions for current 650 Lifers, the Michigan Parole Board must consider whether the individual played a key role in the drug trade, whether the violation was part of a continuous series of violations under the Public Health Code, whether the drug was sold to children 17 or younger, or the individual committed the offense in a drug-free school zone. Also, parole is revoked if the offender commits another major drug or violent offense (“Michigan Enacts Reform of “650-Lifer” Law”, 1998). In addition, persons released under this act must spend the first thirty days of their parole in a community corrections center or community residential home.

Although significant alterations were made to the 650 statute, mandatory minimum penalties remained in place for lesser amounts of drugs. For example, an individual caught with as little as 50 grams of cocaine or heroin still must serve a

minimum term of 10 years and a maximum term of 20 years unless a judge finds a “substantial and compelling” reason to go below that minimum.

(“Legislature Passes 650 Reform”, n.d.; “Michigan Enacts Reform of “650-Lifer” Law”, 1998). For convictions of multiple drug charges requiring mandatory minimum penalties, judges must sentence offenders to serve their time consecutively, rather than concurrently (“Legislature Passes 650 Reform”, n.d.; “Michigan Enacts Reform of “650 Lifer” Law”, 1998).

### Chapter III. Proportionality and Punishment

Rationale for the creation of alternative sentencing models in the State of Michigan can be found within the principle of commensurate deserts forwarded by Andrew von Hirsch. The underlying tenet behind this justification for punishment maintains that “the severity of a penal sanction must be commensurate with the seriousness of the wrong committed” (von Hirsch, 1981, p. 243). Rigid sanctions should be withheld from minor transgressions and exercised only in grievous situations. Disproportionate sentences, like those found in Michigan’s sentencing policy for controlled substance violations, are seen as unjustifiable.

#### *Just Deserts*

The main component of a just desert theory of punishment is commensurability (von Hirsch, 1976). Sentences should be commensurate in their severity to the gravity of the offenders’ criminal conduct. The criterion for appraising the degree of severity of sanctions should, according to the principle of proportionality, be “oriented toward past-conduct and focus on the blameworthiness of the defendant’s behavior” (von Hirsch, 1976, p. 244). Prospective considerations--the effect of the penalty on the future behavior of the defendant or other potential offenders--should not govern the comparative severity of sentencing penalties (von Hirsch, 1976).

*The Principle of Commensurate Deserts.* According to von Hirsch (1976), the principle of commensurate deserts is a fundamental premise for the imposition of justice such that the rigorousness of retribution should correspond with the gravity of the wrong. The principle has its counterpart in mainstream concepts of impartiality that the populace habitually appropriates in their daily lives. Sanctions disproportionate to the injustice

committed are seen as fundamentally iniquitous. The principle also ensures that the civil liberties of the punished should not be undeservedly forfeited for the good of others. When the offender is punished commensurate with his or her transgression, the state is at liberty to forgo his or her rights to that degree because that is what he or she warrants.

In regards to Michigan's Life penalty for a drug weight of 650 grams or more, the sanction for such arbitrary quantities of controlled substances is argued to not purport any commonsense notions of balance and integrity in sentencing practices. This paper further contends that an offender's civil liberties should not be withdrawn for an offender's natural life for the commission of a non-violent offense. Nor should this deprivation of freedom be systematically sponsored by the state to attain a superior goal of deterring other prospective offenders.

The principle of commensurate deserts guarantees that offenders are not treated as more (or less) blameworthy than is defensible by the character of the offense. The imposition of punishment, in addition to admonishing a wrong, imparts a continuum of culpability. A criminal penalty is not merely objectionable: it also connotes that the offender perpetrated a transgression against society and is reprehensible for having done so. The offender, in other words, is being treated *as though he or she deserves* the degree of unpleasantness that is being exacted on him or her. That being the case, the "unpleasantness" should only be inflicted to the degree that it is warranted (Von Hirsch, 1976, p. 245).

This study maintains that the degree of blameworthiness attributed to the 650 offenders should not be equated to the degree of blameworthiness attributed to other offenses such as murder that also impose a maximum penalty of life. Drug offenders who

have not committed offenses employing violent means should not be deemed as culpable as an individual who has deprived another individual of life and liberty. For it is the absence of violence with respect to individuals and society that generates this disparity between the transgression and degree of blameworthiness.

In regards to the fortitude of sanctions, von Hirsch (1981) argues that the severity of the sanction includes inferences to the scale of reprobation. The more severe the punishment, the greater the implicit fault: incarcerating an offender for several years infers that he or she is to be more socially condemned than does incarcerating him or her for several months or putting him or her on probation (Von Hirsch, 1981). In the allocation of penalties, therefore, the crime should be satisfactorily grave enough to merit the implicit reprobation. According to Von Hirsch (1981), commensurate deserts ensures this. If the principle is not observed however, the degree of reprobation becomes unsuitable and justness is sacrificed.

*Severity of Punishments.* Severity refers to the offensiveness of the punishment. According to von Hirsch (1976), the severity of punishment should be tempered by the universal tolerability for anguish in the society: punishment is only one type of discomfort people may be subjected to, and it should be assessed by comparison with other sufferings they might encounter. If, when assessed, a punishment is considered agonizing, it becomes certified as severe. That is, the severity of a punishment thus ought not be gauged simply by its position on a dynamic continuum of penalties.

The principle of commensurate deserts also calls for the safeguarding of a proportion between the seriousness of the crime and the severity of the penalty. That leaves the question of how the proportion is to be judged. There is a general intuitive

intellect of what is visibly disproportionate: imprisonment is “too much” for petty theft, a warning “too little” for mayhem (von Hirsch, 1976). A maximum sentence of Life, in this study, is considered disproportional due to the maximum sentences available for lesser quantities. The State of Michigan has regarded drug crimes and drug-related behavior as especially serious. As a result, extensive terms of incarceration are mandated to censure the behavior. However, maintaining a sentencing scheme that increases from 20 years to 30 years to Life is visibly unbalanced. This study also argues that the quantities ascribed to the penalties are rather arbitrary. Therefore, can the State logically designate the 650 offenders as the “most blameworthy” when the 650 weight is purely an ambiguous number assigned to generally distinguish between drug weights?

Such intuition does not afford legitimate guidance or direction; thus it is essential to establish principles for coordinating offenses with their deserved penalties. von Hirsch (1976,1981) addresses two distinct concerns in regards to punishment via the utilization of scales: (1) the *internal composition* of the scale or how offenses are to be punished comparative to each other; and (2) the magnitude of the scale or what the scale’s overall dimensions should be. von Hirsch’s principle of commensurate deserts organizes the internal composition of the scale in addition to placing specific outside limits on its magnitude (von Hirsch, 1981).

*Internal Composition of the Scale.* The principle of commensurate deserts imposes, in the first place, an ordering of penalties. Punishments are to be affixed such that their relative painfulness corresponds with the comparative seriousness of the offenses (von Hirsch, 1981, p. 251). Spacing, therefore, is crucial: penalties ought not, for example, be meticulously constrained so as to eclipse distinctions in seriousness among

offenses (von Hirsch, 1981). The principle also requires that infractions of equal seriousness be punished with equal severity. For a given category of offense, therefore, a specific penalty should be established that is germane to all circumstances, except when special aggravating or mitigating circumstances can be shown to have existed.

These requirements limit the extent to which the scale may be varied internally for purposes unrelated to offenders' deserts. Raising the penalty for one kind of offense to achieve more deterrence will throw the ranking of offenses out of kilter, unless all other penalties are adjusted accordingly (von Hirsch, 1981). Holding one individual offender longer than others convicted of the same crime, in order to incapacitate him, will inevitably violate the equality requirement.

*Magnitude of the Scale.* The principle of commensurate deserts imposes outside limits on the magnitude of the scale. Commensurate deserts restricts severe punishments only to serious crimes. The penalties should not be inflated so much that non-serious crimes also receive severe penalties. Allocating severe punishments for non-serious offenses overemphasizes blame: the offender is being thought of as more reprehensible than the harmfulness of his or her transgressions justify (von Hirsch, 1981).

The internal composition and magnitude of the sentencing scheme for controlled substance violations in the State of Michigan is believed to violate the basic principles set forth in the preceding paragraphs. In regards to the internal composition, the penalty of life for 650 grams is greatly inflated to create a deterrent effect and ascribe the greatest blameworthiness. However, the sanctions for lesser quantities do not reflect the original inflation of the 650-weight category. This is in direct violation of the equality requirement that all sanctions must be devised in accordance with each other. The 650

offenders committed the same drug crimes as the offenders in lesser weight categories.

However, the only distinction between groups is an arbitrary assignment of weight.

Michigan's sentencing scheme for controlled substance violations also violates the principles set forth in regards to the magnitude of the scale. Maintaining a Life penalty for a non-violent drug offense over asserts the degree of attributable blame. The degree of blame should not be equivalent to that ascribed a violent offense in which lives are threatened and safety is compromised.

## Chapter IV. Data and Methods

### *Data/Population*

A subset of the Michigan Department of Corrections Court Disposition Database is utilized for secondary data analysis. The population within this subset consists of 12, 475 adult felony offenders convicted of a controlled substance violation in the State of Michigan during the years 1991-1999.

The subjects must have been sentenced under a statute mandating a minimum and maximum term of imprisonment for the particular drug-related offense or any other offense in addition to that specified drug charge. Those offenders who were sentenced under a mandatory minimum penalty but did not receive a term of imprisonment are excluded from this analysis. For delivery or manufacture of a controlled substance, the research subjects must be sentenced under MCL 333.74012A1, 333.74012A2, 333.74012A3, or 333.74012A4. For possession of a controlled substance, the subjects must be sentenced under MCL 333.74032A1, 333.74032A2, 333.74032A3 or 333.74032A4. However, only those specific offenders sentenced under MCL codes 333.74012A4 or 333.74032A4 who received an actual prison disposition are included. While MCL codes 333.74012A4 and 333.74032A4 do carry mandatory minimum prison terms, two additional sentencing options are available: monetary fines or lifetime probation. Complete descriptions of the Michigan Compiled Law Codes are found in Appendix A.

### *Population Demographics*

Table 1 reports the offenders' demographic characteristics. The majority of sentenced offenders are black (79.9%), males (91.8%), with an average age of 29.81

years ( $SD = 9.37$ ). Table 2 addresses past and present contact with the criminal justice system. Nearly half of the sample had no current contact with the criminal justice system (54.7%) prior to the commission of the study drug offense. The average number of prior felony convictions ranges from 0 to 28, with a mean of 1.57 ( $SD = 2.17$ ). The offender's drug-specific characteristics are presented in Table 3. The majority of offenders were sentenced for an average term of 20.11 years ( $SD = 9.58$ ), for the delivery/manufacture of a controlled substance (96.3%), in quantities of less than 50 grams (87.7%).

**Table 1. Population Demographics (N = 12,475)**

| <b>Variables</b> | <i>M</i> | <i>SD</i> | n     | %    |
|------------------|----------|-----------|-------|------|
| <b>Race</b>      |          |           |       |      |
| Black            | -        | -         | 9973  | 79.9 |
| White            | -        | -         | 2110  | 16.9 |
| Hispanic         | -        | -         | 287   | 2.3  |
| American Indian  | -        | -         | 8     | 0.1  |
| Other            | -        | -         | 88    | 0.7  |
| <b>Sex</b>       |          |           |       |      |
| Male             | -        | -         | 11452 | 91.8 |
| Female           | -        | -         | 1023  | 8.2  |
| Age              | 29.81    | 9.37      | -     | -    |

**Table 2. Past and Present Criminal Justice System Contact (N=12,475)**

| Variables                                   | <i>M</i> | <i>SD</i> | <i>n</i> | %    |
|---------------------------------------------|----------|-----------|----------|------|
| Total Number of Additional Drug Charges     | .27      | .66       | -        | -    |
| Total Number of Additional Non-Drug Charges | .07      | .40       | -        | -    |
| Number of Prior Felony Convictions          | 1.57     | 2.16      | -        | -    |
| <b>Status at Time of Offense</b>            |          |           |          |      |
| Other/Unknown                               | -        | -         | 55       | 0.44 |
| Free                                        | -        | -         | 6823     | 54.7 |
| Jail/Prison                                 | -        | -         | 526      | 4.2  |
| Probation/Parole/HYTA                       | -        | -         | 4541     | 36.4 |
| On Bond/Delayed Sentence                    | -        | -         | 1006     | 8.1  |

**Table 3. Study Drug-Crime Profile (N= 12,475)**

| Variables            | <i>M</i> | <i>SD</i> | <i>n</i> | %    |
|----------------------|----------|-----------|----------|------|
| Delivery/Manufacture | -        | -         | 12013    | 96.3 |
| Possession           | -        | -         | 462      | 3.7  |
| <b>Drug Weight</b>   |          |           |          |      |
| Less than 50 grams   | -        | -         | 10936    | 87.7 |
| 50 to 224 grams      | -        | -         | 1092     | 8.8  |
| 225 to 649 grams     | -        | -         | 308      | 2.5  |
| 650 or more grams    | -        | -         | 139      | 1.1  |
| Sentence Year        | 94.52    | 2.67      | -        | -    |

Table 4 demonstrates the distribution of sentenced offenders based on their Primary Metropolitan Statistical Area (MSA, 1999). Nearly half of the population was sentenced from the Detroit PMSA (47.4%), followed distantly by the Grand Rapids-Muskegon-Holland PMSA (15.4%) and the Flint PMSA (7.4%).

**Table 4. Distribution of Sentencing Among Primary Metropolitan Statistical Area (N=12,475)**

| <b>County</b>                 | <b>n</b> | <b>%</b> | <b>County</b>          | <b>n</b> | <b>%</b> |
|-------------------------------|----------|----------|------------------------|----------|----------|
| Detroit                       | 5917     | 47.4     | Jackson                | 349      | 2.8      |
| Flint                         | 924      | 7.4      | Lansing-East Lansing   | 582      | 4.7      |
| Saginaw-Bay City-Midland      | 550      | 4.4      | Kalamazoo-Battle Creek | 912      | 7.3      |
| Ann Arbor                     | 524      | 4.2      | Benton Harbor          | 395      | 3.2      |
| Grand Rapids-Holland-Muskegon | 1926     | 15.4     | Non-MSA                | 396      | 3.2      |

#### *Variables*

*Dependent Variable.* The dependent variable included in this study is the expected maximum length of prison term. The expected maximum length of prison term of Life for the 650 group was coded in the original data file as “99”. Thus, each offender was appropriated a 99-year maximum term of imprisonment. However, this study recognizes the variability that exists in life expectancy based on specific human attributes. The natural life expectancy was therefore calculated for each 650 offender based on his or her present age, gender and race utilizing data from the U.S. Department of Health and Human Services National Center for Health Statistics (1997). Employing the natural life expectancy of the 650 offenders rather than a flat sentence of 99 years will reflect the “true” expected maximum length of prison term.

*Independent Variables.* Race, sex, and age were selected for inclusion in this analysis due to their significant predictability of sentence length. Young black males have been acknowledged as consistently receiving longer terms of imprisonment for drug-related offenses (Albonetti, 1991-1992; Beatty, Phillip, Holman, Barry & Schiraldi, Vincent, 2000; Meierhoefer, 1992; Parent, Dunworth, McDonald, & Rhodes,

1997; United States Department of Justice, 1993; United States General Accounting Office, 1993; Vincent & Hofer, 1994).

Primary Metropolitan Statistical Area (PMSA) was also included in this analysis to identify the existence of sentencing disparity between geographic regions of Michigan. A PMSA contains a populace of more than 1 million persons and generally encompasses multiple counties. The counties that comprise the PMSA characteristically display robust internal economic and social links (United States Census Bureau, n.d.). The State of Michigan currently has nine PMSAs: Detroit, Ann Arbor, Jackson, Lansing/East Lansing, Flint, Bay City/ Saginaw/ Midland, Benton Harbor, Grand Rapids/Muskegon/Holland, and Kalamazoo/Battle Creek. Because this study is fashioning alternative 650 maximum sentence lengths that are applicable statewide, *all* Primary Metropolitan Statistical Areas were included in the analyses even though 650 offenders are not represented in all PMSAs.

The contribution of prior criminal history to sentence length has also been comprehensively examined with outcomes demonstrating that drug sanctions mandating extensive terms of imprisonment are equally distributed among low-level nonviolent first-time offenders and hardened chronic offenders (Albonetti, 1991-1992; Meierhoefer, 1992; Parent, Dunworth, McDonald, & Rhodes, 1997; United States General Accounting Office, 1993; United States Department of Justice, 1993).

Status at time of offense, number of prior felony convictions, total number of additional non-drug charges, and total number of additional drug charges are also included as measures of preceding and current criminal justice system contact.

Drug role (possession or delivery/manufacture) and drug weight were included as the State of Michigan has fashioned one weight-based sanction model for possession-based offenses and one weight-based sanction model for delivery/manufacture offenses. The sanctions for these offenses are indistinguishable except for those quantities less than fifty grams.

Sentencing year is included to ascertain conflicting patterns in sentencing practice in the State of Michigan during the years 1991– 1999. A synopsis regarding the independent and dependent variables used in this analysis is provided in Appendix B.

#### *Analytic Technique*

All offenders sentenced for the possession, delivery or manufacture of 650 grams or more are initially removed from the data set. Exclusion of this group will yield a more accurate estimate of the size of the effect of drug weight on maximum sentence length for those quantities less than 650 grams.

General Linear Modeling (GLM) is selected as the first analytic technique due to its ability to adequately manage violations regarding the assumptions of linear regression. This preliminary model will estimate the approximate effect size of drug weight on maximum sentence length. Offender legal and extra-legal variables that are known to contribute to sentence length are controlled for. Results will be reported in relation to effect size due to the availability of the entire population.

Missing Value Analysis is suitable for the next segment of the study, as this technique will generate a new 650 maximum sentence length that is based on the averages of the independent variables in the model. The Ordinary Least Squares regression equation will also be utilized as an additional technique for deriving a 650

predicted sentence. However, each 650-offender beta weight was established at a flat sentence of thirty years and a flat sentence of 40 years. This equation will also utilize the beta weights generated in the General Linear Model for the remaining independent variables.

It is hypothesized that the construction of a more balanced sentencing model will likely decrease the maximum term of imprisonment. Any diminution in sentence length must therefore result in a reduction of annual state expenditure. The final analyses to be performed is the calculation of how much additional money the state is expending due to the sentence length disparity that exists between the missing value analysis and the OLS prediction models and the actual maximum sentence.

Justice Expenditure and Employment in the United States data was secured from the United States Department of Justice, Bureau of Justice Statistics in regards to Michigan's annual state corrections disbursement. Ten years of data (1990-2000) were merged together to create a serial database of total annual state expenditures.

The arithmetic formula to compute this additional disbursement is presented below. Portions of the equations were amended for this specific study. However, support for the calculation of the average annual inflation rate and other formulas is provided by the Social Security Administration's Cost of Living Adjustment Formula ("Latest Cost of Living Adjustment", 2002).

***Step 1. Calculation of Annual Cost of Incarceration Per Offender from 1991 - 1999:***

1.) Annual Prison Operations Cost / Total Annual Prison Population

***Step 2. Calculation of Average Annual Inflation Rate from 1991 - 1999:***

1.)  $\text{Annual Operational Cost} - \text{Prior Year's Operational Cost} / \text{Prior Year's Operational Cost} \times 100$

2.) Average annual inflation rates are aggregated together

3.) Aggregated Annual Inflation Rate/ Number of Sentencing Years Under Study

\*It is important to note that operational costs include **only** those funds expended to maintain the adequate functioning of existing facilities. Operational costs **do not** include the construction of new prisons nor does it include costs to purchase equipment that is not needed to maintain the basic daily operation of the facility.

***Step 3. Calculation of Annual Cost of Incarceration:***

1.)  $(\text{Average Annual Inflation Rate} * \text{Annual Cost Per Offender of the Year Prior}) + \text{annual cost per offender of the year prior.}$

\*This formula will be applied until the last actual release date of 2065 for those offenders sentenced in 1999

***Step 4. Calculation of Total Cumulative Cost of Incarceration:***

***1.) Preliminary Calculations:***

a.)  $\text{Original Sentence Year} + \text{Average Actual Prison Sentence Length} = \text{Actual Release Date}$

b.)  $\text{Original Sentence Year} + \text{Predicted Average Prison Sentence Length} = \text{Predicted Release Date}$

***2.) Total Cumulative Cost:***

1.) Sum of Cumulative Costs from Predicted Release Date to Actual Release Date  
Applied for Each Original Sentencing Year (1991 – 1999)

2.) Sum of Total Cumulative Costs for all Sentencing Years

## Chapter V. Analyses and Results

### *Bivariate Analyses*

Independent Samples *t* tests were used to assess mean sentence length differences between male and female offenders and those sentenced for a possession-based offense or a delivery/manufacture offense. Male defendants ( $M=20.13$ ,  $SD=9.72$ ) did not receive an average maximum sentence length that was substantially longer than female defendants ( $M=19.92$ ,  $SD=7.89$ ). In regards to drug role, offender's sentenced for possession-based offenses serve a shorter sentence ( $M=17.18$ ,  $SD=14.11$ ) than those offenders sentenced for an offense involving delivery or manufacture ( $M=20.22$ ,  $SD=9.35$ ).

One-Way Analysis of Variances was used to assess mean differences within the variables' race, Primary Metropolitan Statistical Area (PMSA), drug weight, and criminal justice status. Results indicate that differences exist between the average maximum sentence length of white, black, and non-black minority defendants. The longest average sentence length was reported for non-black minority defendants ( $M=22.32$ ,  $SD=12.95$ ), followed by white defendants ( $M=21.77$ ,  $SD=10.72$ ) and black defendants ( $M=19.67$ ,  $SD=9.11$ ).

Sentence length differences also exist in regards to a defendant's Primary Metropolitan Statistical Area (PMSA). Table 5 provides insight into average sentence length differences based on Primary Metropolitan Statistical Area (PMSA). Offenders sentenced from the Kalamazoo/Battle Creek PMSA serve the longest average maximum length of prison term ( $M=21.66$ ,  $SD=7.67$ ), while those offenders sentenced within the Detroit PMSA serve the shortest ( $M=19.48$ ,  $SD=11.11$ ).

**Table 5. Average Maximum Length of Prison Term by PMSA (N=12,473)**

| <b>PMSA</b>                       | <b>n</b>     | <b><i>M</i></b> | <b><i>SD</i></b> |
|-----------------------------------|--------------|-----------------|------------------|
| Non-MSA                           | 396          | 21.00           | 7.07             |
| Flint                             | 924          | 21.00           | 7.20             |
| Bay City/Saginaw/Midland          | 550          | 21.33           | 9.40             |
| Ann Arbor                         | 524          | 19.52           | 6.77             |
| Jackson                           | 349          | 20.76           | 7.04             |
| Lansing/East Lansing              | 582          | 20.29           | 7.67             |
| Kalamazoo/Battle Creek            | 912          | 21.66           | 7.67             |
| Grand Rapids/Holland/<br>Muskegon | 1925         | 20.30           | 8.17             |
| Benton Harbor                     | 394          | 20.30           | 9.38             |
| Detroit                           | 5917         | 19.48           | 11.11            |
| <b>Total</b>                      | <b>12473</b> | <b>20.11</b>    | <b>9.89</b>      |

Differences were also noted between the four drug weight categories. Quantities involving 650 grams or more serve the longest average term of incarceration ( $M=66.29$ ,  $SD=17.89$ ), followed by 225 to 649 grams ( $M=30.48$ ,  $SD=7.7$ ), 50 to 224 grams ( $M=21.49$ ,  $SD=7.22$ ), and 50 grams or less ( $M=19.09$ ,  $SD=7.90$ ).

Differences were also identified based on a defendant's criminal justice status at time of offense. Offenders identified as "free" serve an average maximum term of imprisonment that is longer ( $M=20.59$ ,  $SD=9.57$ ) than offenders who were on parole, probation, or HYTA ( $M=19.63$ ,  $SD=9.69$ ), offenders who were pending sentence ( $M=19.45$ ,  $SD=9.27$ ), or offenders who were in prison or jail ( $M=18.37$ ,  $SD=8.86$ ).

Pearson's ( $\rho$ ) was used to measure the strength of the relationship between the continuous independent and dependent variables. All correlations were found to have weak positive relationships with maximum prison sentence length. Results of these analyses are presented in Table 6.

**Table 6. Pearson's Correlation Coefficients ( $\rho$ ) (N=12,473)**

|                                                   | $\rho$ |
|---------------------------------------------------|--------|
| Age                                               | .066   |
| Number of Prior<br>Felony Convictions             | .004   |
| Total Number of<br>Additional Drug<br>Charges     | .121   |
| Total Number of<br>Additional Non-Drug<br>Charges | .039   |
| Sentence Year                                     | .074   |

### *Multivariate Analysis*

*General Linear Modeling.* For multivariate analysis, race was recoded due to the diminutive representation from those offenders identified as “Hispanic”, “Native American”, or “other”. These three racial groups were merged into one general “non-black minority” category.

Status at time of offense was computed from 9 dummy variables (free, prison, jail, parole, probation, HYTA, delayed sentence, on bond, and other/unknown). The variables’ age, number of prior felony convictions, total number of additional drug charges and total number of additional non-drug charges were transformed into their natural logarithms prior to multivariate analysis due to positively skewed distributions.

Pertaining to the effect size of drug weight on expected maximum sentence length, results reveal a three year estimated increase in sentence length for 50 to 224 grams and an approximately thirteen-year estimated increase in sentence length for 225 to 649 grams. These results are in comparison to the excluded category of less than 50 grams.

The maximum term of imprisonment is approximately six years less for possession-based offenses than convictions for delivery or manufacture offenses.

In regards to race, there is an approximately four month estimated increase in sentence length for white offenders and an approximately two month decrease in sentence length for non-black minority offenders. These results are in comparison to the excluded category of black offenders. In relation to an offender's sex, an approximately one month estimated decrease was found for female offenders as compared to male offenders. The log of age was found to contribute to a two-month increase in sentence length.

Offenders sentenced within the Kalamazoo/Battle Creek and Jackson PMSA receive an average prison sentence that is three years longer than those offenders sentenced within the Detroit PMSA. Offenders sentenced within a Non-MSA, Flint, Bay City/Saginaw/Midland, and Benton Harbor also receive an average prison sentence that is 2 years longer than offenders sentenced within the Detroit PMSA. Offenders sentenced within the Lansing/East Lansing and Grand Rapids/ Muskegon/Holland PMSA receive an average sentence length that is one year longer. Finally, being sentenced within the Ann Arbor area increases sentence length by approximately one-month.

In regards to prior criminal history, those offenders who were incarcerated (jail/prison), on probation, parole, or HYTA, and pending sentence (delayed sentence/on bond) all serve an average maximum term of imprisonment that is less than offenders considered "free" at the time of the offense. Specifically, those in jail or prison will serve an average estimated sentence length that is approximately 1 year less; those pending sentence (on bond/delayed sentence) will serve 7 months less; and those on probation, parole, or HYTA will serve an average estimated sentence length this is one month less.

Conversely, those offenders whose status was “unknown/other” serve a sentence length that is approximately three months longer than an offender who was considered “free”.

There is an approximately 10-month increase in sentence length for every One unit increases in the log of number of prior felony convictions. For every one-unit increase in the log of additional drug and non-drug charges, there is a corresponding three and one year increase in sentence length. Increases in sentence year correspond with a related two-month increase in expected maximum sentence length.

**Table 7. General Linear Model of Expected Maximum Length of Prison Term****Regressed on Offender Legal and Extra-Legal Variables (N=12,336)\***

|                                                                    | <i>B</i> | <i>SE B</i> | <i>t</i> | <i>Sig</i> | <i>Partial<br/>Eta Sq</i> |
|--------------------------------------------------------------------|----------|-------------|----------|------------|---------------------------|
| Constant                                                           | -4.68    | 2.60        | -1.80    | .069       | .000                      |
| <b>Sex</b>                                                         |          |             |          |            |                           |
| Females                                                            | -.13     | .25         | -.51     | .610       | .000                      |
| Males                                                              | 0**      |             |          |            |                           |
| <b>Race</b>                                                        |          |             |          |            |                           |
| White                                                              | .35      | .20         | 1.80     | .073       | .000                      |
| Non Black Minority                                                 | -.20     | .41         | -.49     | .628       | .000                      |
| Black                                                              | 0**      |             |          |            |                           |
| <b>Age<sup>a</sup></b>                                             | .18      | .26         | .69      | .488       | .000                      |
| <b>PMSA</b>                                                        |          |             |          |            |                           |
| Non-MSA                                                            | 2.47     | .40         | 6.18     | .000       | .003                      |
| Flint                                                              | 2.79     | .27         | 10.33    | .000       | .009                      |
| Bay City/Sag/Mid                                                   | 2.55     | .34         | 7.49     | .000       | .005                      |
| Ann Arbor                                                          | 0.95     | .35         | 2.72     | .006       | .001                      |
| Jackson                                                            | 3.07     | .42         | 7.35     | .000       | .004                      |
| Lansing/E Lansing                                                  | 1.40     | .33         | 4.25     | .000       | .001                      |
| Kazoo/B Creek                                                      | 3.35     | .27         | 11.55    | .000       | .011                      |
| GR/Musk/Holland                                                    | 1.73     | .20         | 8.56     | .000       | .006                      |
| Benton Harbor                                                      | 2.55     | .40         | 6.42     | .000       | .003                      |
| Detroit                                                            | 0**      |             |          |            |                           |
| <b>Number of Prior<br/>Felony Convictions<sup>a</sup></b>          | .79      | .13         | 6.35     | .000       | .003                      |
| <b>Total Number of<br/>Additional Drug<br/>Charges<sup>a</sup></b> | 3.09     | .20         | 15.57    | .000       | .019                      |

R<sup>2</sup> = .126; Adj R<sup>2</sup> = .125 <sup>a</sup> Natural Logarithm

\*Total number of offenders excluding those sentenced for the possession, delivery, or manufacture of drug quantities in excess of 650 grams

\*\*Parameter estimate signifies reference category

**Table 7. (Continued)**

|                                                                        | B     | SE B | t     | Sig  | Partial<br>Eta Sq |
|------------------------------------------------------------------------|-------|------|-------|------|-------------------|
| <b>Total Number of<br/>Additional<br/>Non-Drug Charges<sup>a</sup></b> | 1.24  | .22  | 5.60  | .000 | .003              |
| <b>Status At Time<br/>of Offense</b>                                   |       |      |       |      |                   |
| Unknown/Other                                                          | .32   | 1.03 | 0.32  | .753 | .000              |
| Incarcerated                                                           | -1.19 | .48  | -2.49 | .013 | .001              |
| Pending Sentence                                                       | -.60  | .27  | -2.22 | .027 | .000              |
| Par/Prob/HYTA                                                          | -.16  | .16  | -1.00 | .317 | .000              |
| Free                                                                   | 0**   |      |       |      |                   |
| <b>Drug Role</b>                                                       |       |      |       |      |                   |
| Possession                                                             | -6.09 | .38  | 16.08 | .000 | .021              |
| Delivery/Manufacture                                                   | 0**   |      |       |      |                   |
| <b>Drug Weight</b>                                                     |       |      |       |      |                   |
| 225-649                                                                | 12.76 | 0.44 | 28.60 | .000 | .014              |
| 50-224                                                                 | 3.35  | 0.26 | 13.17 | .000 | .062              |
| Less than 50                                                           | 0**   |      |       |      |                   |
| <b>Sentence Year</b>                                                   | .22   | 0.26 | 8.56  | .000 | .006              |

R<sup>2</sup> = .126; Adj R<sup>2</sup> = .125 <sup>a</sup> Natural Logarithm

\*Total number of offenders excluding those sentenced for the possession, delivery, or manufacture of drug quantities in excess of 650 grams

\*\*Parameter estimate signifies excluded reference category.

**Table 8. Missing Value Analysis Summary of Means and Standard Deviations**

|                                           | N            | Estimated<br><i>M</i> | Estimated<br><i>SD</i> | Missing<br>Count | Missing<br>Percent |
|-------------------------------------------|--------------|-----------------------|------------------------|------------------|--------------------|
| Total Number of<br>Drug Charges           | 12468        | 0.17                  | 0.35                   | -                | -                  |
| Total Number of<br>Non-Drug Charges       | 12468        | 0.04                  | 0.18                   | -                | -                  |
| <b>Maximum Prison<br/>Sentence Length</b> | <b>12468</b> | <b>19.77</b>          | <b>8.22</b>            |                  |                    |
| <b>EM</b>                                 | <b>12327</b> | <b>19.59</b>          | <b>8.06</b>            | <b>139*</b>      | <b>1.1%</b>        |
| Sentence Year                             | 12468        | 94.52                 | 2.67                   | -                | -                  |
| Age                                       | 12468        | 3.35                  | 0.31                   | -                | -                  |
| Number of Prior<br>Felony Convictions     | 12468        | 0.71                  | 0.66                   | -                | -                  |

*Missing Value Analysis (MVA)*

Table 8 reports descriptive statistics for the continuous variables included in missing value analysis. The overall MVA average expected prison sentence length for quantities less than 650 is 19.59 years ( $SD=8.06$ ). The overall MVA predicted average expected prison sentence length for all offenders including the 650s originally removed from the data file and coded as missing, is 19.77 years ( $SD=8.22$ ).

In regards to the 650-weight category, missing value analysis generated a predicted maximum term of imprisonment of 35.40 years ( $SD= 1.62$ ). This sentence is approximately 31 years less than the actual average maximum sentence of 66.29 years ( $SD=17.89$ ).

*650 Offender Typology*

Results from Tables 9 – 14 allow for the development of a 650-offender profile. This profile is contrasted against the profile of a “less than 50” offender to demonstrate that drug weight is the only distinguishable characteristic among the offender population.

**Table 9. Mean Distribution of Weight by Continuous Variables (N=12,468)**

|                                                      | <b>650&gt;</b> |           | <b>225-649</b> |           | <b>50-224</b> |           | <b>&lt;50</b> |           |
|------------------------------------------------------|----------------|-----------|----------------|-----------|---------------|-----------|---------------|-----------|
|                                                      | <i>M</i>       | <i>SD</i> | <i>M</i>       | <i>SD</i> | <i>M</i>      | <i>SD</i> | <i>M</i>      | <i>SD</i> |
| Age                                                  | 2.03           | .95       | 2.00           | .91       | 1.87          | .87       | 1.69          | .84       |
| Number of<br>Prior Felony<br>Convictions             | .83            | .84       | .71            | .83       | .74           | .86       | 1.04          | .86       |
| Total Number<br>Of Additional<br>Drug Charges        | .20            | .40       | .23            | .42       | .25           | .43       | .20           | .40       |
| Total Number<br>of Additional<br>Non-Drug<br>Charges | .04            | .19       | .04            | .19       | .05           | .21       | .05           | .23       |

**Age:** (17-27) = 1; (28-38) = 2; (39 – 49) = 3; (50 +) = 4

**Number of Prior Felony Convictions:** (0) = 0; (1) = 1; (2 or More) = 2

**Total Number of Additional Drug Charges:** (0) = 0; (1 or More) = 1

**Total Number of Additional Non-Drug Charges:** (0) = 0; (1 or More) = 1

**Table 10. Chi Square Distribution of Weight by Race (N=12,468)**

|                       | <b>650&gt;</b> | <b>225-649</b> | <b>50-224</b> | <b>&lt;50</b>  | <b>Total</b>   |
|-----------------------|----------------|----------------|---------------|----------------|----------------|
| White                 | 35.3% (49)     | 36.0% (111)    | 36.7% (401)   | 14.2% (1548)   | 16.9% (2109)   |
| Non-Black<br>Minority | 14.4% (20)     | 7.5% (23)      | 9.1% (99)     | 2.3% (250)     | 3.1% (392)     |
| Black                 | 50.4% (70)     | 56.5% (174)    | 54.2% (592)   | 83.5% (9131)   | 79.9% (9967)   |
| <b>Total</b>          | 100.0% (139)   | 100.0% (308)   | 100.0% (1092) | 100.0% (10929) | 100.0% (12468) |

*Note.* Values reflect column percentages with total count in parentheses.

**Table 11. Chi Square Distribution of Weight by Sex (N=12468)**

|              | <b>650&gt;</b> | <b>225-649</b> | <b>50-224</b> | <b>&lt;50</b>  | <b>Total</b>  |
|--------------|----------------|----------------|---------------|----------------|---------------|
| Male         | 97.1% (135)    | 91.9% (283)    | 94.3% (1030)  | 91.5% (9997)   | 91.8%(11445)  |
| Female       | 2.9% (4)       | 8.1% (25)      | 5.7% (62)     | 8.5% (932)     | 8.2% (1023)   |
| <b>Total</b> | 100.0% (139)   | 100.0% (308)   | 100.0% (1092) | 100.0% (10929) | 100.0%(12468) |

*Note.* Values reflect column percentages with total count in parentheses.

**Table 12. Chi Square Distribution of Weight by Drug Role (N=12,468)**

|                          | <b>650&gt;</b> | <b>225-649</b> | <b>50-224</b> | <b>&lt;50</b>  | <b>Total</b>   |
|--------------------------|----------------|----------------|---------------|----------------|----------------|
| Possession               | 13.7% (19)     | 15.6% (48)     | 16.3% (178)   | 2.0% (215)     | 3.7% (460)     |
| Delivery/<br>Manufacture | 86.3% (120)    | 84.4% (260)    | 83.7% (914)   | 98.0% (10714)  | 96.3% (12008)  |
| <b>Total</b>             | 100.0% (139)   | 100.0% (308)   | 100.0% (1092) | 100.0% (12468) | 100.0% (12468) |

*Note.* Values reflect column percentages with total count in parentheses.

**Table 13. Chi Square Distribution of Weight by Status (N=12,468)**

|                           | <b>650&gt;</b> | <b>225-649</b> | <b>50-224</b> | <b>&lt;50</b>  | <b>Total</b>   |
|---------------------------|----------------|----------------|---------------|----------------|----------------|
| Unknown/Other             | 0.0% (0)       | 1.3% (4)       | 0.4% (4)      | 0.4% (4)       | 0.4% (55)      |
| Jail/Prison               | 1.4% (2)       | 4.2% (13)      | 1.6% (17)     | 2.2% (236)     | 2.1% (268)     |
| Pending Sentence          | 4.3% (6)       | 4.5% (14)      | 5.4% (59)     | 7.6% (834)     | 7.3% (913)     |
| Parole/Probation/<br>HYTA | 16.5% (23)     | 14.6% (45)     | 19.6% (214)   | 37.8% (4129)   | 35.4% (4411)   |
| Free                      | 77.7% (108)    | 75.3% (232)    | 73.1% (798)   | 52.0% (5683)   | 54.7% (6821)   |
| <b>Total</b>              | 100.0% (139)   | 100.0% (308)   | 100.0% (1092) | 100.0% (12468) | 100.0% (12468) |

*Note.* Values reflect column percentages with total count in parentheses.

**Table 14. Chi Square Distribution of Weight by PMSA (N=12,468)**

|                                       | <b>650&gt;</b>      | <b>225-649</b>      | <b>50-224</b>        | <b>&lt;50</b>         | <b>Total</b>         |
|---------------------------------------|---------------------|---------------------|----------------------|-----------------------|----------------------|
| Non-MSA                               | 0.7% (1)            | 2.3% (7)            | 4.1% (45)            | 3.1% (343)            | 3.2% (396)           |
| Flint                                 | 2.9% (4)            | 4.5% (14)           | 5.5% (60)            | 7.7% (846)            | 7.4% (924)           |
| Bay City/<br>Saginaw/<br>Midland      | 5.0% (7)            | 1.3% (4)            | 3.3% (36)            | 4.6% (503)            | 4.4% (550)           |
| Ann Arbor                             | 2.2% (3)            | 2.6% (8)            | 4.1% (45)            | 4.3% (467)            | 4.2% (523)           |
| Jackson                               | 0.0% (0)            | 1.6% (5)            | 1.5% (16)            | 3.0% (327)            | 2.8% (348)           |
| Lansing/<br>E Lansing                 | 2.9% (4)            | 6.2% (19)           | 4.5% (60)            | 4.6% (498)            | 4.7% (581)           |
| Kalamazoo/<br>Battle Creek            | 4.3% (6)            | 3.9% (12)           | 4.5% (49)            | 7.7% (845)            | 7.3% (912)           |
| Grand Rapids/<br>Muskegon/<br>Holland | 12.2% (17)          | 3.9% (12)           | 15.7% (171)          | 15.8% (1726)          | 15.4% (1926)         |
| Benton Harbor                         | 2.2% (3)            | 1.9% (6)            | 2.9% (32)            | 3.2% (354)            | 3.2% (395)           |
| Detroit                               | 67.6% (94)          | 71.8 % (221)        | 52.9% (578)          | 45.9% (5020)          | 47.4% (5913)         |
| <b>Total</b>                          | <b>100.0% (139)</b> | <b>100.0% (308)</b> | <b>100.0% (1092)</b> | <b>100.0% (12468)</b> | <b>100.0%(12468)</b> |

*Note.* Values reflect column percentages with total count in parentheses

The average 650 offender is a Black male, between 28 and 38 years old, and sentenced within the metropolitan Detroit PMSA for a crime involving the delivery/manufacture of a controlled substance. In regards to criminal justice system contact, the average 650 offender was identified as “free” prior to the commitment of the study drug offense, possessed at least one prior felony conviction and less than one additional drug and non-drug charge.

The average “less than 50” offender is also a Black male, between 17 and 27 years old, and sentenced within the metropolitan Detroit PMSA for a crime involving the delivery/manufacture of a controlled substance. In regards to criminal justice system contact, the average “less than 50” offender was identified as “free” prior to the commitment of the study offense, possessed at least one prior felony conviction, and less than one additional drug and non-drug charge.

*Ordinary Least Squares Regression Equation.* The Ordinary Least Squares regression equation was also utilized to derive a predicted maximum term of imprisonment for the 650 offenders. Calculating the midpoint for each actual sentencing guideline range derived the beta weights for the weight categories. For example, the actual sentencing guideline range for the 50 to 224 offenders is 10 to 20 years, thus the midpoint value and subsequent beta weight is 15 years. For the 224 to 649 offenders, the actual sentencing guideline range is 20 to 30 years. Therefore, the midpoint and subsequent beta weight is 25 years.

For the 650 offenders however, a flat sentence of fifteen years was initially distributed. An additional fifteen years was also given which represents the sum of the distribution of sentence lengths between each drug weight as generated in the General Linear Model. This results in a conservative flat sentence of 30 years. A liberal flat sentence of 40 years was also substituted into the regression equation for the 650-weight variable.

Equation 1 represents the Ordinary Least Squares regression equation applied to either the 30 or 40-year flat sentence model:

$$\begin{aligned} \hat{y} = & -4.68 + 1.24(\text{total number of additional non-drug charges}) + 3.09 (\text{total} \\ & \text{number of additional drug charges}) + 0.22(\text{sentence year}) + 0.79 (\text{number of} \\ & \text{prior felony convictions}) + 0.17(\text{age}) + 30(650) \text{ or } 40(650) + 25(225-649) + \\ & 15(50-224) + -6.09 (\text{delivery/manufacture}) + -0.13 (\text{male}) + 0.35(\text{white}) + \\ & -0.19 (\text{non-black minority}) + 2.47 (\text{Non-MSA}) + 2.79 (\text{PMSA: Flint}) + 2.79 \\ & (\text{PMSA: Bay City, Saginaw, Midland}) + 2.55 (\text{PMSA: Ann Arbor}) + 0.95 \\ & (\text{PMSA: Jackson}) + 3.02 (\text{PMSA: Lansing}) + 1.40 (\text{PMSA: Kalamazoo}) + 3.35 \\ & (\text{PMSA: Grand Rapids}) + 1.73 (\text{PMSA: Benton Harbor}) + 0.32 (\text{Status:} \\ & \text{Other/Unknown}) + -1.19 (\text{Status: Jail/Prison}) + -0.59 (\text{Status: Pending/Delayed} \\ & \text{Sentence}) + -0.16 (\text{Parole, Probation, HYTA}) \end{aligned} \quad (1)$$

The predicted average maximum term of imprisonment for the 650 offenders given a flat sentence of thirty and forty years is 43.37 ( $SD=2.64$ ) and 53.37 ( $SD=2.84$ ) respectively. These predictions are approximately eight and eighteen years more than the predicted MVA 650 sentence length ( $M=35.40$ ,  $SD=1.62$ ) and approximately twenty-three and thirteen years less than the actual average maximum term of imprisonment of 66.29 years ( $SD=17.89$ ).

In addition, since the beta weights for the 650 offenders were set at a flat sentence of 30 and 40 years, the remaining additional 13.37 years is due to the influence of the remaining independent variables in the model. Summaries of the actual, missing value analysis, and regression equation 650 predicted sentence lengths are presented in Table 15.

**Table 15. Actual Average, Missing Value Analysis and OLS Regression Equation Predicted 650 Sentences**

|           | <b>Actual</b> | <b>Missing Value Analysis</b> | <b>OLS Regression Equation</b> |                |
|-----------|---------------|-------------------------------|--------------------------------|----------------|
|           |               |                               | <b>30 year</b>                 | <b>40 year</b> |
| <i>M</i>  | <b>66.29</b>  | <b>35.40</b>                  | <b>43.37</b>                   | <b>53.37</b>   |
| <i>n</i>  | 139           | 139                           | 139                            | 139            |
| <i>SD</i> | 17.89         | 1.62                          | 2.64                           | 2.84           |
| Minimum   | 3.00          | 33.65                         | 39.28                          | 49.28          |
| Maximum   | 84.40         | 42.65                         | 52.05                          | 62.05          |
| Range     | 81.40         | 9.00                          | 12.76                          | 12.76          |

Using the actual and predicted 650 sentences, it is now possible to construct three complete alternative sentencing models that include the remaining weights of controlled substances. Appendix C provides a comparative table comprised of all four sentencing models.

*Cost Analysis.* The average annual inflation rate from 1991-1999 was found to be 7.2%. Figure 1 illustrates the number of offenders sentenced annually from 1991-1999. As indicated, the number of 650 offenders sentenced each year is progressively waning with less than fourteen offenders sentenced each year since 1995.

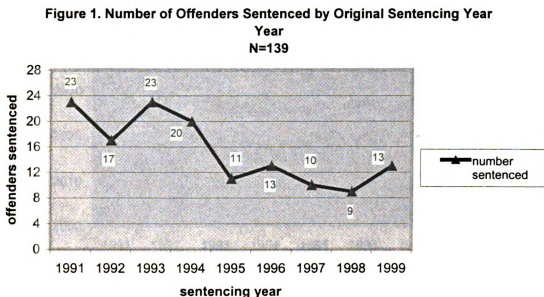


Figure 2 provides a graphic illustration of the actual and predicted release dates. As demonstrated, missing value analysis generated the earliest predicted release dates for the 650 offenders followed by the OLS flat 30 model and the OLS flat 40 model.

**Figure 2. Actual and Predicted 650 Offender Release Dates**

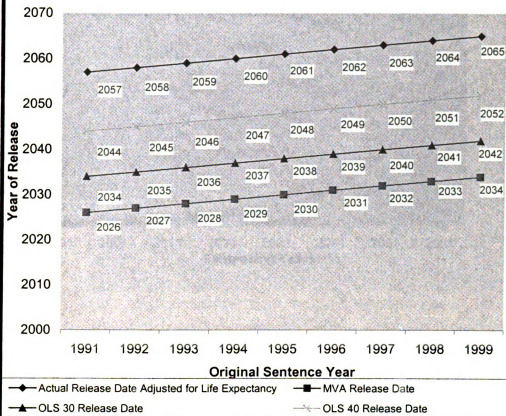


Figure 3. Non-Cumulative Annual Operational Cost Per 650 Offender

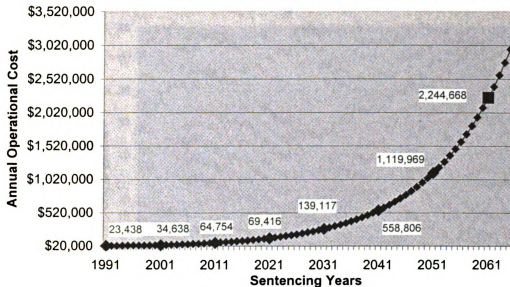


Figure 3 highlights the escalation in non-cumulative operational costs per offender. Over the extent of roughly seven decades the operational cost per offender per year soars from approximately \$23,000 in 1991 to over 2.2 million dollars in 2061.

**Figure 4. Cumulative Expenditure Per Offender for Additional Sentencing Years 2026-2065**

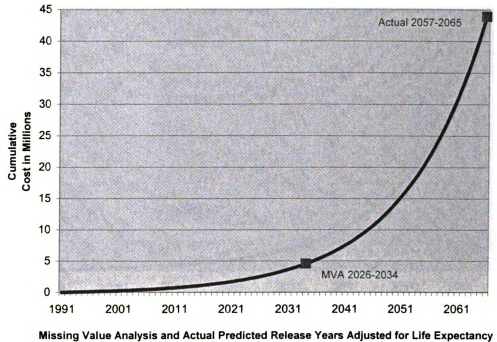
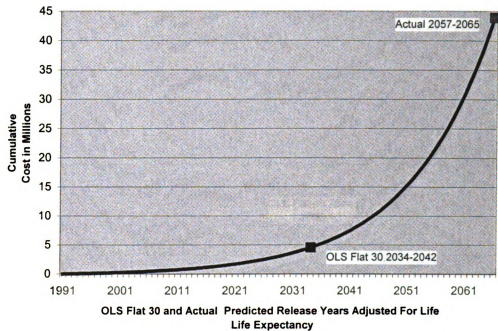


Figure 4 illustrates the additional sentencing years and related cumulative costs per offender between the missing value analysis and the actual sentencing model. Under the missing value analysis model, those 139 650 offenders will have an adjusted release date 35 years after the initial sentencing date. The total cumulative cost savings for the difference between the missing value analysis release dates and the actual release dates for the 139 currently sentenced offenders is \$56,084,000,000. Detailed cumulative cost differences between the actual and predicted release dates by original sentencing year and number of offenders sentenced can be found in Appendix D.

Figure 5 illustrates the additional sentencing years and related cumulative costs between the OLS Flat 30 and the actual sentencing model

**Figure 5. Cumulative Expenditure Per Offender for Additional Sentencing Years 2034-2065**



Under the OLS 30 model, those 139 650 offenders will have an adjusted release date 43 years after the initial sentencing date. The total cumulative savings for the difference between the OLS 30 predicted release dates and the actual release dates for the 139 currently sentenced offenders is \$50,744,000,000. Detailed cumulative cost differences between the actual and predicted release dates by original sentencing year and number of offenders sentenced can be found in Appendix D.

**Figure 6. Cumulative Expenditure Per Offender for Additional Sentencing Years 2044-2065**

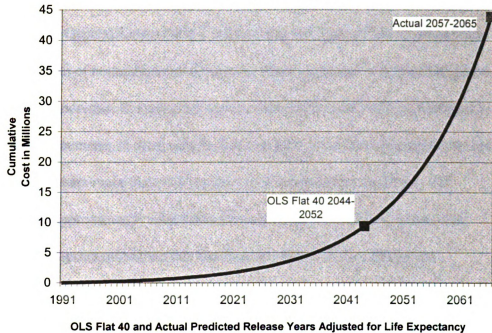


Figure 6 illustrates the additional sentencing years and related cumulative costs between the OLS Flat 40 and the actual sentencing model. Under the OLS 40 model, those 139 650 offenders will have an adjusted release date 53 years after the initial sentencing date. The total cumulative savings for the difference between the OLS 40 release dates and the actual release dates for the 139 currently sentenced offenders is \$37,226,000,000. Detailed cumulative cost differences between the actual and predicted release dates by original sentencing year and number of offenders sentenced can be found in Appendix D.

## Chapter VI. Discussion

### *Major Findings*

Results of the General Linear Model indicate that the State of Michigan upholds Von Hirsch's principle of commensurate deserts for those quantities less than 650 grams (Von Hirsch, 1981). Increases in maximum sentence length are relatively proportional to those specified enhancements in drug weight. For example, 50 to 224 offenders will serve approximately three years more than the less than 50 offenders, and the 225 to 649 offenders will serve approximately nine years more than the 50 to 224 offenders and approximately twelve years more than the less than 50 offenders. In addition to proportionality, these augmentations in maximum sentence length also illustrate that the specified drug crime, as dictated by the state, is sufficiently serious enough to merit the implicit reprobation attached.

While the General Linear Model supports our contention that weight has the largest effect on sentence length other factors were shown to contribute to the variation in the sentencing model as well. These factors, while maintaining a rather minimal contribution to the sentencing model, do warrant further contemplation. They include: Primary Metropolitan Statistical Area, number of prior felony convictions, drug role, total number of additional drug and non-drug charges, and sentencing year. Interestingly, race, sex, age and criminal justice status did not contribute to the variation in this sentencing model.

However, this proportionality and related-blameworthiness rationale cannot be employed to sustain the existence of a Life sentence the State of Michigan currently imposes for those offenders convicted of drug crimes in excess of 650 grams. The

maximum sentence of Life crudely breaches the basic tenets of Von Hirsch's principle of commensurate deserts previously discussed in Chapter 3. This study addressed this issue of proportionality in sentencing by fashioning three alternative maximum sentence lengths for the 650 offenders which each incorporate Von Hirsch's principle of commensurate deserts. Rather than Life, these three alternative maximum 650 sentence lengths (1) demonstrate the final proportional increase in a series of proportional increases among all drug weights, and (2) ascribe an equitable distribution of blameworthiness from the lowest to the highest weight. It is important to note that the study utilized two different statistical techniques to derive the 650 predicted values (missing value analysis and an OLS regression equation) and each method produced significantly different sentence lengths as indicated in the prior chapter. Because the actual maximum sentence length for the 650 offenders is Life and the focus of the study is the exorbitant gap between 30 years and Life sentence, any reduction can be viewed as an attempt to incorporate proportionality.

Results from the 650 typology illustrate the fact that the 139 650 offenders sentenced to a term of Life are characteristically no different from offenders in lesser weight categories. Therefore, those 650 offenders sentenced to a term of Life can be no more considered a dangerous threat to public safety and deserving of the ultimate punishment of Life than those offenders sentenced for example, for a drug crime involving less than 50 grams.

If is important to note that these alternative sentence lengths still may not reflect an equitable distribution of sentencing if the principle of commensurate deserts is rigidly employed. Models were only established which reflect penalties for drug crimes and were

not situated within the vast range of conduct designated as criminal. If this study were to position drug offenses within the full range of available crimes these sentence lengths probably would be considered grossly inflated. However, this study was only a preliminary examination of the effect of incorporating proportionality into one type of crime. More comprehensive studies would be necessary to truly gauge the result of a strict incorporation of the principle of commensurate deserts.

Results from our cost-analyses reveal substantial savings to taxpayers if the State of Michigan employed one of the three alternative sentencing models. If the missing value analysis model were incorporated into Michigan's Public Health Code the state would save approximately \$56 billion dollars over the span of three decades. In addition, offenders would be serving a predicted maximum prison sentence that is approximately 31 years less than the actual average prison sentence of nearly 66 years.

Conversely, if the OLS Flat 30 regression equation model was incorporated into Michigan's Public Health Code an overall savings of approximately \$50 billion would be demonstrated over the course of two decades. In addition, offenders would be serving a predicted maximum prison sentence that is approximately 23 years less than the actual average prison sentence of nearly 66 years. Finally, if the state of Michigan employed the OLS Flat 40 model, an overall savings of approximately \$37 billion dollars would be demonstrated over a decade and a half and offenders would be serving a predicted maximum term of imprisonment that is approximately 13 years less than the average term of 66 years.

While it may be difficult to conceive of a projected cost savings of thirty, forty, or fifty billion dollars over a span of nearly forty years, it is not incomprehensible when we

place prison operational costs within the context of other high-dollar expenditures that are demonstrating remarkable annual increases in cost. The cost of higher education, which has seen a marked escalation similar to that of the corrections industry over the past decade, is one such fee that this study briefly examined to put this projected prison cost into perspective.

For example, the projected operational cost of incarcerating one offender in 2026 is \$24,393,674. The estimated tuition cost for four academic years at a college or university from 2026-2030, at a 7% annual rate of inflation will be \$450,420. In 2034, the projected cost for four academic years will be \$773,906. Likewise in 2034, the projected operational cost per offender will be \$78,731,472. (Expected Future Education Cost Calculator, n.d.). As demonstrated, college tuition costs like prison operations costs will also escalate to projected figures beyond what is readily comprehensible.

The creation of these two prediction models, while certainly not the panacea for Michigan's mounting prison population and related financial burdens, offer insight into one way the state can sustain its punitive response to drug crime and more importantly, save a significant amount of taxpayer's money. Fundamentally these models illustrate how one can develop a series of sanctions for criminal behavior that reflects von Hirsch's principle of commensurate deserts

*Limitations of Study.* The ability to generalize the findings of this study to other states is limited. Because data was secured specifically for the state of Michigan and no other geographic location was incorporated into this analysis, results can only be applied to Michigan. However, future policy-oriented research may involve the inclusion of

several other states such as New York and Massachusetts who also employ mandatory minimum and maximum terms of imprisonment for drug offenses.

In addition, this study utilizes the entire population of drug offenders sentenced under four specific Michigan Criminal Law Codes. Further research should therefore focus on selecting a sample or groups of samples that exhibit differences in the traits under study. It is also important to note that while this study does contain the entire population of 650 offenders sentenced between 1991-1999 it does *not* include those drug offenders who were sentenced from 1978, when the current penalties were enacted, to 1990. In addition, Governor John Engler has recently commuted the life sentence of nine 650 offenders. However, these offenders were sentenced between 1987 and 1989 and are excluded from the data set used in this analysis (“Engler Shortens Prison Sentences”, 2002).

It should also be cautioned that this study investigated the effects of a sentencing policy at the last stages of the criminal justice system, i.e. conviction. The processing of an offender through the criminal justice system is a dynamically complex procedure with administrative and individual decisions regarding the offender’s succession occurring at every stage. Decisions regarding the progression of each offender through the criminal justice system can either divert the offender from further criminal justice system contact or mandate the offender’s further processing along the continuum. Thus, this study is comprised of those offenders who, due to reasons certainly beyond the scope of this present investigation, were processed through to the final criminal justice stage, i.e. a term of incarceration.

This study has presented several consequences to maintaining Michigan's sentencing policy for controlled substance violations and has unintentionally neglected to address the possible benefits. A plausible argument could be developed regarding the deterrence value this type of sentencing policy has provided. Extensive terms of incarceration quite possibly could serve as an example to the general public and thus to discourage the commission of drug-related offenses. In addition, a contention could be made that the State would actually save money by mandating lengthy terms of incarceration if the projected health care costs of substance abusing buyers and sellers over the course of several decades were accounted for.

### *Policy Implications*

Michigan's current sentencing policy for controlled substance violations demands extensive prison terms for the possession, delivery, or manufacture of specified quantities of controlled substances (State of Michigan, 2001). While complete policy revision was certainly not the intended focus of this study, it did however, create a series of alternative sanctions that the State of Michigan could possibly utilize that does not compromise the existing "get-tough" approach to drug crime and related criminal behavior. Any "get-tough" sentencing policy, however, must be tempered with the notions of equity and justice. This final component of equity and justice is where the State of Michigan has faltered in regards to its attempt to respond in a punitive and impartial manner to how best to address drug crime and related behavior.

By incorporating proportionality into their sentencing guidelines as this study has done, the state of Michigan can preserve its current use of weight-range increments as the basis for length of imprisonment, but execute sentencing in a more uniform and balanced

manner. Thus, for each increase in weight there will be a proportionate increase in sentence length that is based on the proportionate increase of the weights prior. A foreseeable result of this relatively balanced sentencing model is a reduction in the annual operational costs to taxpayers to maintain those incarcerated offenders.

Finally, organizations that visibly campaign for sentence adjustment in the State of Michigan possibly should contemplate focusing their resources on reducing the maximum term of Life to a term that would readily fulfill Michigan's sentencing goals for controlled substance violations. Success in sentence reduction might be a more realistic result if organizations such as Families Against Mandatory Minimums (FAMM) propose an alternative sentencing model in addition to the impact of this alternative model such as the two devised in this study. Without a tangible solution that is supported through the analysis of existing data, the State of Michigan will continue to maintain its policy of incarcerating drug offenders for prolonged periods of time at a staggering cost to taxpayers.

## WORKS CITED

- Albonetti, C.A. Sentencing under the federal sentencing guidelines: Effects of defendant characteristics, guilty pleas, and departures on sentence outcomes for drug offenses, 1991-1992. *Law & Society Review*, 31(4), 789-822.
- Beatty, Phillip, Holman, Barry and Schiraldi, Vincent. (2000). *Poor prescription: The costs of imprisoning drug offenders in the United States*. Washington DC: The Justice Policy Institute.
- Bische, P.M. (1998, February – March). *Michigan reconsiders drug-lifer sentencing 70 years after the "life for a pint" law*. November Coalition. Retrieved September 17, 2001, from <http://www.november.org/0602a.html>
- Board denies two ballot proposals. (2002, September 4). *Lansing State Journal*. Retrieved October 25, 2002 from [http://www.lsj.com/news/election2002local/020904ballot\\_1a-5a.html](http://www.lsj.com/news/election2002local/020904ballot_1a-5a.html)
- Cloud, J. (1999, February 1). A get-tough policy that failed. *Time*. Retrieved September 18, 2001, from <http://time.com/magazine/printout/0%2c8816%2c19229%2C00.html>
- DRUG LIFER LAW: Milliken rightly seeks appeal of a mistaken law. (1998, February 20). *Detroit Free Press*. Retrieved September 18, 2001, from <http://www.freep.com/voices/editorials/0220lifer.htm>
- Deming, S.H. (1997). Drugs: The unstated draconian costs. *Update on Law-Related Education*, 21, 11-12.
- Dilulio, J.J. (1999). Against mandatory minimums. *National Review*, 51(9), 46.
- Easterbrook, G. (1999). Run-on sentencing. *The New Republic*, 220(17-180), 57.
- Eliminate mandatory drug sentences, allow parole*. (n.d.). Retrieved September 18, 2001, from <http://www.crimeapp.com/650/hxs0280.htm>
- Engler shortens prison sentences: 9 commutations tied to changes in drug-lifer law. (2002, October 15). *Detroit Free Press*. Retrieved October 30, 2002, from [http://www.freep.com/news/mich/lifer15\\_20021015.htm](http://www.freep.com/news/mich/lifer15_20021015.htm)
- Ex-governor regrets signing "650-Lifer" law": Calls for repeal*. (1997-1998, November – March). Retrieved September 18, 2001 from [http://www.famm.org/fammgr\\_March98/repeal.html](http://www.famm.org/fammgr_March98/repeal.html)
- Expected Future Education Cost Calculator*. (n.d.). Retrieved October 30, 2002 from <http://www.bloomberg.com/money/tools/education.html>

- FAMM scores major victory with rollback of Michigan's "650 Lifer" law.* (1998, September - December). Retrieved September 17, 2001 from [http://www.famm.org/fammgr\\_Dec98/cover.htm](http://www.famm.org/fammgr_Dec98/cover.htm)
- Families against mandatory minimums. (2001, November). *Michigan Legislative News*. [Brochure]. Washington, DC: Author.
- Frank, A. (2001, June 29). Michigan needs to examine lifer law: Even ex-gov who signed law says it was a mistake. *Detroit Free Press*. Retrieved September 18, 2001, from <http://www.freep.com/voices/editorials/0918lifer.htm>
- Gross, H. (1981). Doing justice: The principle of commensurate deserts. In Hyman Gross & Andrew Von Hirsch (Ed.), *Sentencing* (pp. 272-283). New York: Oxford University Press.
- Harmelin v. Michigan, 111 S Ct. 2680 (1991).
- History of mandatory sentences.* (n.d.). Retrieved September 18, 2001, from <http://www.famm.org/about3.htm>
- Legislature passes 650 reform.* (n.d.). Retrieved September 17, 2001, from <http://crimapp.com/650.html>
- Levine, B. R. (1997, September 26). *Emergency defense action needed: Over 650 & truth-in-sentencing bills.* Retrieved September 18, 2001, from <http://www.sado.org/news926.htm>
- Meierhoefer, B.S. (1992). *The general effect of mandatory minimum prison terms.* Washington, DC: Federal Judicial Center.
- Michigan drug reform initiative.* (n.d.) Retrieved June 7, 2002 from <http://www.drugreform.org/michigan.faq.tpl>
- Michigan enacts reform of "650 Lifer" law.* (1998, July – August). Retrieved September 18, 2001, from <http://www.ndsn.org/JULAUG98/SENT.html>
- State of Michigan. (n.d.). *Michigan Compiled Laws Complete Through PA 179 of 2000.* Retrieved January 28, 2002, from <http://www.michiganlegislature.org>
- Michigan's mandatory sentences.* (n.d.). Retrieved September 18, 2001, from <http://www.famm.org/about21.htm>

- Parent, D., Dunworth, T., McDonald, D., & Rhodes, W. (1997). *Mandatory sentencing*. National Institute of Justice. Retrieved September 18, 2001 from <http://www.ncjrs.org/txtfiles/061839.txt>
- People v. Bullock, Docket No. 89662 (1991).
- People v. Hassan, Docket No. 89661 (1991).
- Scales of justice need leveling. (2000, December 6). *The Grand Rapids Press*. Retrieved September 18, 2001, from <http://www.famm.org/about21.htm>
- Sentencing today: The nation's harshest law*. (n.d.). Retrieved September 18, 2001, from <http://www.drcnet.org/pubs/guide/11-94/mandmims.html>
- Signing drug lifer law was a mistake says former Michigan governor*. (1998, February). Retrieved September 17, 2001, from <http://www.ndsn.org/FEB98/sentence.html>
- Spear, L. (1997). Michigan's 650 lifer law. *America*, 177, 8-9.
- State sentencing reform: Michigan, New York, and Florida*. (1999, April – June). Retrieved September 18, 2001, from [http://www.famm.org/fammgr\\_June99/state\\_sentencing\\_reform.htm](http://www.famm.org/fammgr_June99/state_sentencing_reform.htm)
- State of Michigan. (n.d.) *Michigan compiled laws complete through PA 15 of 2002*. Retrieved September 18, 2001, from <http://michiganlegislature.htm>
- Michigan Department of Consumer and Industry Services. (n.d.) *Occupational regulation sections of the Michigan Public Health Code*. Retrieved October 1, 2002, from <http://michiganlegislature.htm>
- Social Security Administration. (2002). *Latest Cost of Living Adjustment*. Retrieved December 15, 2002, from: <http://www.ssa.gov/OACT/COLAlatestCOLA.htm>
- Thevenot, C. (1999, March 18). *Crisis of the anti-drug effort*. Retrieved September 18, 2001 from <http://www.cjpf.org/pubs/crisis>.
- Thomas, B.M. (1999). Criminal procedure-parole eligibility-Michigan eliminates mandatory drug sentences and allows parole for possession of 650 or grams of cocaine or heroin. *University of Detroit Mercy Law Review*, 76(2), 679-692.
- United States Census Bureau. (n.d.). Metropolitan Area: Three Types. Washington, DC: Author. Retrieved October 4, 2002, from [http://www.census.gov/mso/www/pres\\_lib/geo\\_con/sld016.htm](http://www.census.gov/mso/www/pres_lib/geo_con/sld016.htm)

United States Department of Health and Human Services National Center for Health Statistics. (1997). *U.S. Decennial Life Tables for 1989-91*. (Tech. Rep. No. 1, Vol. 1). Hyattsville, MD: Author.

United States Department of Justice. (1993). *An analysis of non-violent drug offenders with minimal criminal histories*. Washington, DC: Author.

United States Department of Justice, Bureau of Justice Statistics. (1990- 2000). Justice Expenditure and Employment Data for the Criminal Justice System, 1990 – 2000 [Data file]. Available from the Inter-university Consortium for Political and Social Research Web site, <http://www.icpsr.umich.edu>  
1990 Data Set #6006; 1991 Data Set #6259; 1992 Data Set #6579;  
1993 Data Set #6795; 1994 Data Set #2257; 1995 Data Set #2840;  
1996 Data Set #3063; 1997 Data Set #3229; 1998 Data Set #3408;  
1999 Data Set #3409

United States General Accounting Office. (1993). *Mandatory minimum sentences: Are they being imposed and who is receiving them?* Washington, DC: Author.

Vincent, B.S. & Hofer, P.J. (1994). *The consequences of mandatory minimum prison terms: A summary of recent findings*. Washington, DC: Federal Judicial Center.

von Hirsch, A. (1976). *Doing justice: The choice of punishments*. New York: Hill and Wang.

von Hirsch, A. (1981). Doing justice: The principle of commensurate deserts. In Hyman Gross & Andrew Von Hirsch (Ed.), *Sentencing* (pp. 243-255). New York: Oxford University Press.

---

**Appendix A. Michigan Compiled Law Public Health Code Act 368 of 1978**

---

| <b>Code</b>        | <b>Role</b>              | <b>Penalty</b>                                                                                                                                                                                                                                                                                                                                             |
|--------------------|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>333.74012A1</b> | Delivery/<br>Manufacture | A person who violates this section as to:<br>(a) A controlled substance classified in Schedule 1 or 2 that is a narcotic drug and:<br>(i) Which is in an amount of 650 grams or more of any mixture containing that substance is guilty of a felony punishable by imprisonment for life or any terms but not less than 20 years.                           |
| <b>333.74032A1</b> | Possession               |                                                                                                                                                                                                                                                                                                                                                            |
| <b>333.74012A2</b> | Delivery/<br>Manufacture | A person who violates this section as to:<br>(a) A controlled substance classified in Schedule 1 or 2 that is a narcotic drug and:<br>(ii) Which is in the amount of 225 grams or more, but less than 650 grams, of any mixture containing that substance is guilty of a felony and shall be imprisoned for no less than 20 years nor more than 30 years.  |
| <b>333.74032A2</b> | Possession               |                                                                                                                                                                                                                                                                                                                                                            |
| <b>333.74012A3</b> | Delivery/<br>Manufacture | A person who violates this section as to:<br>(a) A controlled substance classified in Schedule 1 or 2 that is a narcotic drug and:<br>(iii) Which is in the amount of 50 grams or more, but less than 225 grams, of any mixture containing that substance is guilty of a felony and shall be imprisoned for not less than 10 years nor more than 20 years. |
| <b>333.74032A3</b> | Possession               |                                                                                                                                                                                                                                                                                                                                                            |

---

## Appendix A. (Continued)

### Michigan Compiled Law Public Health Code Act 368 of 1978

| Code        | Role                     | Penalty                                                                                                                                                                                                                                                                                                                                                                                                            |
|-------------|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 333.74012A4 | Delivery/<br>Manufacture | A person who violates this section as to:<br>(a) A controlled substance classified in Schedule 1 or 2 that is a narcotic drug and:<br>(iv) Which is in the amount of less than 50 grams, of any mixture containing that substance is guilty of a felony and shall be imprisoned for not less than 1 year nor more than 20, fined no more than \$25,000.00, or placed on lifetime probation.                        |
| 333.74032A4 | Possession               | A person who violates this section as to:<br>(a) A controlled substance classified in Schedule 1 or 2 that is a narcotic drug and<br>(iv) Which is in the amount of 25 grams or more, but less than 50 grams, of any mixture containing that substance is guilty of a felony and shall be imprisoned for not less than 1 year nor more than 4 years, fined no more than \$25,000, or placed on lifetime probation. |

*Note.* Adapted from *Michigan Legislature: Michigan Compiled Laws Complete Through PA 179 of 2000.* (n.d.). Retrieved January 28, 2002, from <http://www.michiganlegislature.org>

## Appendix B. Variable Descriptions

| Variable | Label                                                                                           | Coding                                                                                                      |
|----------|-------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|
| age      | chronological age measured in years                                                             |                                                                                                             |
| npfcIn   | total number of prior felony convictions                                                        |                                                                                                             |
| tdrchIn  | total number of <b>additional</b> drug charges <b>excluding</b> original study drug offense     |                                                                                                             |
| tndrchIn | total number of <b>additional</b> non-drug charges <b>excluding</b> original study drug offense |                                                                                                             |
| senyear  | sentencing year for original study drug offense                                                 | 1991-1999                                                                                                   |
| sex      | offender's sex                                                                                  | 1=male<br>0=female                                                                                          |
| race     | offender's race                                                                                 | 0=white<br>1=non-black<br>2=black                                                                           |
| role     | offender's drug-related behavior                                                                | 0=possession<br>1=delivery/<br>manufacture                                                                  |
| status   | offender's status at commission of offense                                                      | 1=other/<br>unknown<br>2=jail/prison<br>3=delayed/pending sentence<br>4=probation/<br>parole/HYTA<br>5=free |

**Appendix B. (Continued) Variable Descriptions**

---

| <b>Variable</b> | <b>Label</b>                                                                                          | <b>Coding</b>                                                                                                                                                                                                             |
|-----------------|-------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PMSA            | Primary Metropolitan Statistical Area                                                                 | 1=non-PMSA<br>2=Flint<br>3=Bay City/Saginaw/<br>Midland<br>4=Ann Arbor<br>5=Jackson<br>6=Lansing/ East<br>Lansing<br>7=Kalamazoo/<br>Battle Creek<br>8=Grand Rapids/<br>Muskegon/Holland<br>9=Benton Harbor<br>10=Detroit |
| xmpst           | expected maximum length of<br>prison term (denoted in years;<br>rounded to the nearest tenth of year) |                                                                                                                                                                                                                           |

---

**Appendix C. Average Maximum Sentence Length by Model and Weight (N=12,468)**

|                                      | <b>Actual Sentence</b> |             | <b>Missing Value Analysis</b> |             | <b>OLS Regression Equation</b> |             |                |             |
|--------------------------------------|------------------------|-------------|-------------------------------|-------------|--------------------------------|-------------|----------------|-------------|
|                                      | <i>M</i>               | <i>SD</i>   | <i>M</i>                      | <i>SD</i>   | <b>30 year</b>                 |             | <b>40 year</b> |             |
|                                      | <i>M</i>               | <i>SD</i>   | <i>M</i>                      | <i>SD</i>   | <i>M</i>                       | <i>SD</i>   | <i>M</i>       | <i>SD</i>   |
| Less than 50 grams<br>(n=10929)      | 19.10                  | 7.90        | 19.10                         | 7.90        | 12.92                          | 2.01        | 12.92          | 2.01        |
| 50-224 grams<br>(n=1092)             | 21.49                  | 7.22        | 21.49                         | 7.22        | 28.92                          | 2.77        | 28.92          | 2.77        |
| 225-649 grams<br>(n=308)             | 30.48                  | 7.70        | 30.48                         | 7.70        | 38.47                          | 2.84        | 38.47          | 2.84        |
| <b>650 or more grams<br/>(n=139)</b> | <b>66.29</b>           | <b>17.9</b> | <b>35.40</b>                  | <b>1.62</b> | <b>43.37</b>                   | <b>2.64</b> | <b>53.37</b>   | <b>2.84</b> |
| <b>Total</b>                         | 20.12                  | 9.58        | 19.10                         | 7.90        | 15.29                          | 6.91        | 15.40          | 7.40        |

**Appendix D. Cumulative Cost Difference Between Predicted and Actual Release Years by Original Sentencing Year (N=139)\***

| Original Sentence Year | Actual Release Dates | Missing Value Release Dates | OLS Regression Equation Release Dates |        |              |        |
|------------------------|----------------------|-----------------------------|---------------------------------------|--------|--------------|--------|
|                        |                      |                             | 30 Year                               |        | 40 Year      |        |
| 1991<br>(n=23)         | 2057                 | 2026 (7.51)                 | 2034                                  | (6.80) | 2044         | (5.09) |
| 1992<br>(n=17)         | 2058                 | 2027 (5.96)                 | 2035                                  | (5.40) | 2045         | (4.04) |
| 1993<br>(n=23)         | 2059                 | 2028 (8.58)                 | 2036                                  | (7.83) | 2046         | (5.86) |
| 1994<br>(n=20)         | 2060                 | 2029 (8.08)                 | 2037                                  | (7.31) | 2047         | (5.47) |
| 1995<br>(n=11)         | 2061                 | 2030 (4.77)                 | 2038                                  | (4.31) | 2048         | (3.23) |
| 1996<br>(n=13)         | 2062                 | 2031 (4.19)                 | 2039                                  | (3.79) | 2050         | (2.69) |
| 1997<br>(n=10)         | 2063                 | 2032 (6.49)                 | 2040                                  | (5.87) | 2051         | (4.17) |
| 1998<br>(n=9)          | 2064                 | 2033 (5.35)                 | 2041                                  | (4.84) | 2052         | (3.34) |
| 1999<br>(n=13)         | 2065                 | 2034 (5.17)                 | 2042                                  | (4.60) | 2053         | (3.32) |
| <b>TOTAL SAVINGS**</b> |                      | <b>56.10</b>                | <b>50.50</b>                          |        | <b>37.20</b> |        |

\* Cost difference between actual and predicted release dates in billions of dollars denoted in parentheses

\*\*Total cumulative savings for original sentencing years 1991-1999

MICHIGAN STATE UNIVERSITY LIBRARIES



3 1293 02504 4698