



MEMORANDUM

TO: Scott R. Niehaus, Village Manager

FROM: William J. Heniff, AICP, Director of Community Development *WJH*

DATE: January 8, 2015

SUBJECT: PC 14-32: 510 E. 22nd Street (MMRE LLC)

Plan Commission Case PC14-32 was continued by the Village Board at the petitioner's request to the January 8, 2015 meeting. Staff provides this memorandum which provides additional information relative medical cannabis dispensaries.

Approval Status of Other Dispensaries by Other Jurisdictions

Staff researched the zoning approval status of other municipalities' medical cannabis dispensary applications. Staff focused on DuPage County, but did include updates from other jurisdictions.

Zoning approved by right or through a local legislative approval – 9

Municipality (DuPage County)	Number of applicants for a dispensary	Zoning considerations/status
Addison	Six	Permitted use in M2 District.
Aurora	One dispensary (two other dispensaries outside DuPage Co.)	City Council granted special use permits to all on November 18.
Naperville	Two	One dispensary application is in a permitted zoning district. The second application requires a conditional use and was continued to a Plan Commission meeting on January 21, 2015.
Willowbrook	One	Special use in the office/industrial district, approved by the Village Board.

Zoning denied – 2

Municipality (DuPage County)	Number of applicants for a dispensary	Zoning considerations/status
Villa Park	One	Their Board voted 3-3 to deny rezoning to M1 an area proposed as a medical cannabis dispensary. As the rezoning was denied, the vote for the conditional use for the dispensary did not proceed.
Westmont	One	Denied by the Village Board due to concerns about The School Association for Special Education being within the State buffer area.

Zoning pending – 4

Municipality (DuPage County)	Number of applicants for a dispensary	Zoning considerations/status
Bartlett	One (DuPage County)	Special use in their industrial districts; will not receive considerations until approx. March 2015.
Bensenville	One	Conditional use in the industrial district, the dispensary applicant has not yet applied for zoning entitlements with the Village.
Naperville	Two	One dispensary application is in a permitted zoning district. The second application requires a conditional use and was continued to a Plan Commission meeting on January 21, 2015.
Oakbrook Terrace	One	On December 9th, the City Council tabled the item to January 13, 2015.

Staff is also aware of other petitions outside of DuPage County and their status is noted below.

Zoning approved by right or through a local legislative approval – 22

Other Selected Municipalities	Number of applicants for a dispensary	Zoning considerations
Des Plaines	One	Approved by the City Council via a conditional use permit.
Forest Park	Three	All three approved via a special use permit.
Joliet	Three	Special use permit required, all three approved by the City Council.
Manhattan	One	Permitted use as a pharmacy.
North Aurora	Three	Permitted use in non-residential areas.
Oak Park	One	Permitted use.
Rolling Meadows	One	Approved by Village Board.
Shorewood	One	Permitted use in the B3 and industrial districts.
St. Charles	Four	Permitted use in the manufacturing district.
Westchester	One	Received approvals from the Village (MMRE, LLC).
Wheeling	Four	Two were approved by their Board on December 15. No public comment. One applicant pending before their Board on January 2015. The fourth applicant has not had their Plan Commission meeting, which may occur in February 2015.

Woodstock	One	Approved; special use in the M1 district.
-----------	-----	---

Zoning denied – 3

Other Selected Municipalities	Number of applicants for a dispensary	Zoning considerations
Glenview	One	Denied by Village Board. The applicant filed litigation against the Village of Glenview.
Palatine	Two	One application was denied by their Board on Sept. (due to prox. to a church) and the petitioner asked the Board to reconsider their decision at the January 5, 2015 meeting; the second application was denied on December 15 (due to concerns about parking, prox. to residents and property values).

Zoning pending – 8

Other Selected Municipalities	Number of applicants for a dispensary	Zoning considerations
Chicago	Multiple, none in DuPage County	Special use; varying stages of final consideration.
Schaumburg (Cook County portion)	Six	Interested dispensary applicants will go before the ZBA after the impact fee concept is vetted.
Wheeling	Four	Two were approved by their Board on December 15. No public comment. One applicant pending before their Board on January 2015. The fourth applicant has not had their Plan Commission meeting, which may occur in February 2015.

Please see attached pie chart showing the percentages of zoning applications that were approved, denied, or are pending from local municipalities.

Glenview Petition

Staff is aware of one pending item of litigation filed against the Village of Glenview, due to their denial of a conditional use permit for a medical cannabis dispensary. Village Counsel, Tom Bayer, who contacted Eric Patt, attorney for Glenview, who offered the following case narrative:

- Glenview allows medical cannabis dispensaries as a conditional use in the I-2 Light Industrial Zoning District.*

2. *Greenleaf Organics, LLC (the plaintiff in the litigation) ("Greenleaf") applied for a conditional use for a medical cannabis dispensary at a location in Glenview within the I-2 Light Industrial Zoning District.*
3. *The State of Illinois will be awarding one (1) medical cannabis dispensary license within the New Trier and Northfield Townships Medical Cannabis District (the "District"), and most of Glenview is located within this District.*
4. *Greenleaf is one (1) of only two (2) applicants to the State for the medical cannabis dispensary license for the District.*
5. *The location proposed for the other applicant's medical cannabis dispensary is in unincorporated Cook County, with a medical cannabis dispensary being a permitted use, under Cook County's Zoning Ordinance, at the location in question. As such, no zoning relief is required by the other applicant.*
6. *The Glenview Plan Commission voted unanimously to recommend that the Glenview Village Board approve the conditional use for Greenleaf's proposed medical cannabis dispensary.*
7. *The Glenview Village Board, by a 4 to 2 vote, voted to deny the granting of a conditional use to Greenleaf for Greenleaf's proposed medical cannabis dispensary.*
8. *The formal basis for the denial by the Glenview Village Board was as follows:*
 - A. *Property values will go down, because people will start selling their homes to get away from the medical cannabis dispensary; and*
 - B. *The use would change the character of the neighborhood.*
9. *Apparently, in making statements prior to voting on the denial of the conditional use, some of the Trustees, who voted to deny the conditional use, made comments that, as alleged by Greenleaf, show that factors, other than only the conditional use requirements, were taken into consideration when voting.*
10. *Greenleaf's complaint alleges that Greenleaf met all of the requirements under the Glenview Zoning Ordinance for conditional use approval, and, therefore, the denial of the conditional use was arbitrary, capricious and unreasonable, and that it takes away the State's ability to choose between multiple qualified applicants in the District when granting a medical cannabis dispensary license.*
11. *Greenleaf attempted to get a temporary restraining order, requiring Glenview to approve the conditional use, on the date it filed its complaint, but the Court denied Greenleaf's motion. The Court indicated, in its Memorandum Order, that such relief would have given Greenleaf its ultimate relief, without the Court hearing Glenview's side of the issue.*

Federal Legislation

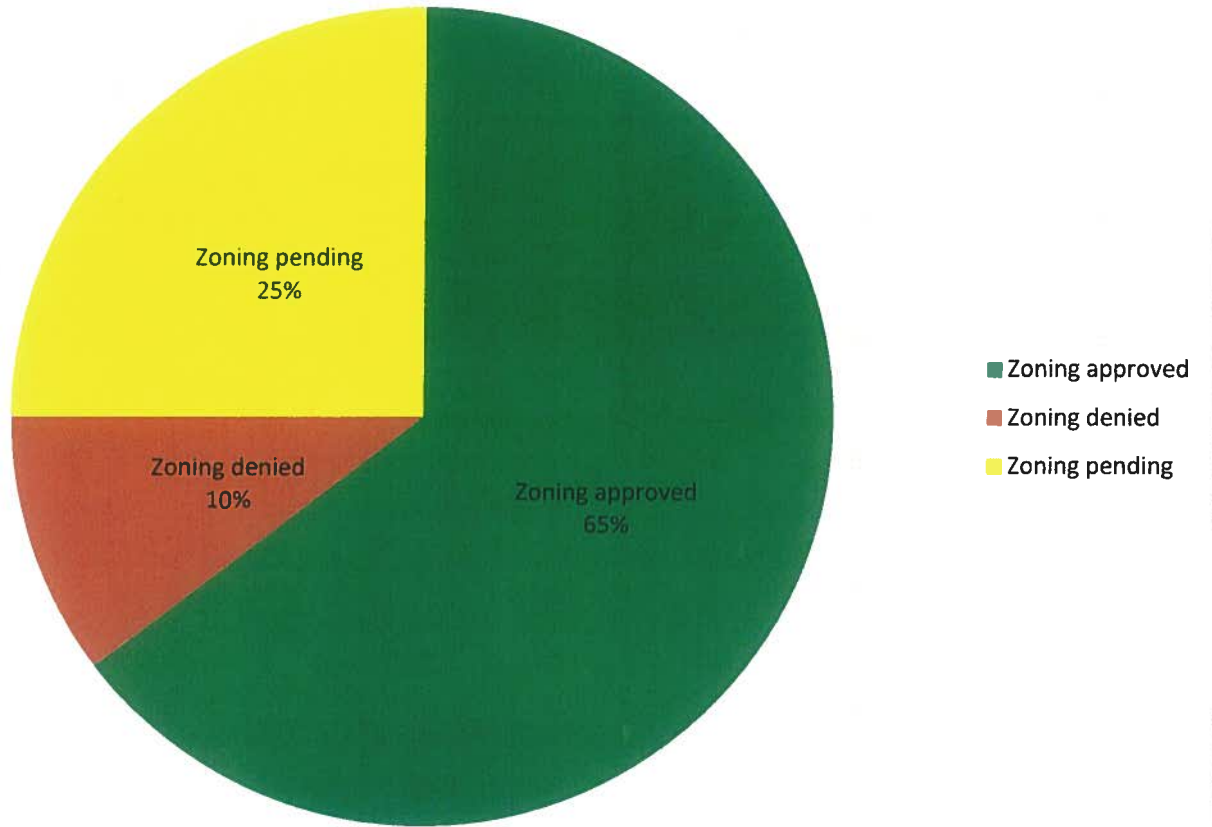
January 8, 2015
PC 14-32
Page 5

In consideration of this petition, concerns have been expressed that granting approvals may be in conflict with federal law. Since the last Board meeting, the federal government has approved the 2015 federal budget legislation, which includes language prohibiting the Department of Justice using federal funds to prosecute state approved medical cannabis programs.

Documents for Reference Purposes

Lastly, both the petitioner and an objector to the petition have submitted the attached corresponding documentation implied and/or referenced at the November 6 Village Board meeting. Also attached is a Chicago Tribune article dated December 30, 2014 which notes that the State has not released a date specific on which they will release the awarded license names. Staff has attempted to contact the State and has no additional information on their approval timeline, as of January 2, 2015.

Dispensary Applications



Bauer, Carol

From: Sean Daly <sdaly@thedalygroup.com>
Sent: Monday, November 17, 2014 5:17 PM
To: Bauer, Carol
Cc: Ganser, Jennifer
Subject: MMRE Application - Reference Articles
Attachments: The Effect of Medical Marijuana Laws on Crime.pdf; How Is Marijuana Legalization Going-Forbes.pdf

Carol,

Please find attached an article and an academic paper that I referenced in my presentation to the Village Board of Trustees on November 6th relating to MMRE, LLC's request for a conditional use at 510 E 22nd St. Please distribute the articles to Village Trustees for their review. Both articles were referenced in my presentation. I am submitting these articles in order to elucidate some of the points that I attempted to make during my remarks.

The article in Forbes discusses the impact of the medical marijuana legislation on crime and underage marijuana usage statistics in Colorado. The academic study analyzes crime in states with MMJ legislation.

Please do not hesitate to contact me with any questions. Should any Trustee wish to discuss our application further, I am available to discuss at their convenience.

Thank you
Sean

The Effect of Medical Marijuana Laws on Crime: Evidence from State Panel Data, 1990-2006

Robert G. Morris*, Michael TenEyck, J. C. Barnes, Tomislav V. Kovandzic

Program in Criminology, University of Texas at Dallas, Richardson, Texas, United States of America

Abstract

Background: Debate has surrounded the legalization of marijuana for medical purposes for decades. Some have argued medical marijuana legalization (MML) poses a threat to public health and safety, perhaps also affecting crime rates. In recent years, some U.S. states have legalized marijuana for medical purposes, reigniting political and public interest in the impact of marijuana legalization on a range of outcomes.

Methods: Relying on U.S. state panel data, we analyzed the association between state MML and state crime rates for all Part I offenses collected by the FBI.

Findings: Results did not indicate a crime exacerbating effect of MML on any of the Part I offenses. Alternatively, state MML may be correlated with a reduction in homicide and assault rates, net of other covariates.

Conclusions: These findings run counter to arguments suggesting the legalization of marijuana for medical purposes poses a danger to public health in terms of exposure to violent crime and property crimes.

Citation: Morris RG, TenEyck M, Barnes JC, Kovandzic TV (2014) The Effect of Medical Marijuana Laws on Crime: Evidence from State Panel Data, 1990-2006. PLoS ONE 9(3): e92816. doi:10.1371/journal.pone.0092816

Editor: Joseph A. Keating, Tulane University School of Public Health and Tropical Medicine, United States of America

Received: November 22, 2013; **Accepted:** February 25, 2014; **Published:** March 26, 2014

Copyright: © 2014 Morris et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Funding: The authors have no funding or support to report.

Competing Interests: The authors have declared that no competing interests exist.

* E-mail: morris@utdallas.edu

Introduction

The social ramifications of marijuana legalization have been hotly debated for at least four decades [1]. Despite a long history of marijuana use for medical purposes, policymakers and in some instances, the scientific community, have been quick to note the potential problematic social outcomes of marijuana legalization [2]. In spite of these political discussions, medical marijuana legalization (MML) has occurred in 20 states and the District of Columbia (between 1996 and the writing of this paper) and its recreational use has now been legalized in Colorado and Washington [3]. An interest in the ramifications of these laws has led to an increase in scholarly activity on the topic [4], [5]. The issue addressed in this article is whether MML has the effect of increasing crime. While there are many mechanisms by which MML might affect crime rates, the most obvious is by increasing the number of marijuana users, which may lead to a broader social acceptance of drug using behaviors and drug users [6]. To the extent that marijuana use serves as a “gateway” to harder drugs such as cocaine and heroin, MML could lead to long-term increases in crime as an ever-growing number of illicit drug users engage in serious predatory crimes to support their habits (but see [7]). But even if MML does not lead to a rise in marijuana use (especially among youth), the laws could still stimulate crime as newly opened medical marijuana dispensaries provide criminals with a highly attractive target with their repository of high quality marijuana and customers carrying large amounts of cash (but see [8]). As a member of the California Chiefs of Police Association

stated, “A disturbing and continuing trend is the increasing number of home invasion robberies and associated violence resulting in the victimization of those cultivating and possessing marijuana ... [D]ispensaries also continue to be targeted based upon the availability of larger quantities of drugs and cash” (see http://californiapolicechiefs.org/wp-content/uploads/2012/02/July_September_2010_Final.pdf). Though anecdotal evidence abounds to support both theses, and a few single-jurisdiction and cross-sectional studies have examined the MML-crime link (e.g., [9]), no single analysis has assessed the overall consequences of medical marijuana laws on crime rates across the United States. This study seeks to inform the debate by providing a comprehensive evaluation of the effects of state MML on state crime rates.

The Positive Correlation between Marijuana Use and Criminal Behavior

Though the gateway hypothesis applies to the progression of drug-using behaviors, there remains the possibility that marijuana use leads to delinquent or criminal behavior via a similar mechanism. A number of studies have specifically examined the relationship between marijuana use and crime [10], [11], [12], [13], [14]. Early studies compared the amount of crimes committed by juveniles whose urine tested positive for marijuana upon entering a detention center and those committed by individuals who tested negative for marijuana. Dembo and associates [15], [16], for instance, found that youths who tested positive for marijuana had a significantly higher number of

referrals to juvenile court for nondrug felonies than those testing negative for marijuana use.

Arseneault and colleagues [17] examined the relationship between marijuana dependence and the risk for violence in a sample of New Zealand adolescents. The authors controlled for gender, socioeconomic status, and many other concurrent disorders and concluded that marijuana dependence was related to a 280 percent increase in the odds of violence. This association was stronger than the individual effects of manic disorder, alcohol dependence, and schizophrenia. In a study using data collected from school-age adolescents in the Netherlands, those who reported marijuana use tended to report more delinquent and aggressive behaviors [18]. This relationship was significant after controlling for variables such as alcohol and tobacco use and the strength of the relationship increased with higher frequency of marijuana use. This study is noteworthy because marijuana use is decriminalized in the Netherlands, thus the relationship is unlikely to be based on the fact that marijuana users have to participate in the illegal market and are therefore at an increased risk for violence. While these studies were cross-sectional and show a correlation between current marijuana use and criminality or violent behaviors, other scholars have examined the link with longitudinal data.

Using multi-wave data, research has shown adolescents who reported marijuana use at age 15 were more likely to report violent involvement at age 19, indicating that marijuana use, particularly during adolescence may impact violent behavior in young adulthood [19]. Similarly, research has shown that frequent marijuana use during adolescence was a strong predictor of being involved in intimate partner violence [5]. Results revealed that consistent marijuana use during adolescence was related to a 108 percent increase in the likelihood of being involved in intimate partner violence in young adulthood and consistent marijuana use was associated with an 85 percent increase in the odds of being the perpetrator of intimate partner violence, independent of alcohol use.

These studies provide evidence to the notion that marijuana use is at a minimum correlated with an increase in violent or aggressive behaviors. What remains unclear is whether these findings imply a causal link between marijuana use and violence or whether the relationship is driven by an uncontrolled variable(s) (i.e., a spurious correlation). Along these lines, it could be argued that the relationship between violence and marijuana use is primarily due to its illegality and thus would not exist in an environment in which marijuana use, at least medicinally, is legalized.

The Negative or Null Correlation between Marijuana Use and Criminal Behavior

Most researchers who have examined the relationship between marijuana use and crime report that these laws do not have an effect on violent crime [20], [21]. Green and associates [20], for instance, concluded that while marijuana use was related to an increase in drug and property crime, it was not related to an increase in violent crime. Pedersen and Skardhamar [21] also found a relationship between marijuana use and subsequent arrest, although once the authors removed all types of drug charges from the models, the relationship was no longer significant. Results revealed no evidence that marijuana use was related to an increase in later non-drug arrest, such as arrests for violent crimes. The authors argued that the association between marijuana use and crime appears to exist because of its illegality. Thus, if the possession and sale of marijuana was legal the relationship between marijuana and crime might disappear.

It has been argued that medicinal marijuana laws may increase crime because the dispensaries and grow houses provide an opportunity for property crime and violent crime to occur, such as burglary and robbery. Kepple and Freisthler [9] examined the relationship between medical marijuana dispensaries and crime and their results suggested that after controlling for a host of ecological variables, no relationship existed between medicinal marijuana dispensaries and property or violent crime. Additional research has shown that medical marijuana dispensaries may actually reduce crime within the immediate vicinity of the dispensaries [8]. This may be due to the security measures implemented by dispensary owners (i.e., having security cameras, having a doorman, and having signs requiring identification). Importantly, medical marijuana dispensaries do not appear to increase crime in their surrounding areas.

In sum, research on the relationship between medicinal marijuana and crime is mixed. Studies have shown that states allowing the use of medical marijuana have higher prevalence rates of marijuana use [13], [14], yet other studies have found that legalized medicinal marijuana does not lead to an increase in its overall use [21], [22]. Research has also suggested that marijuana use is associated with an increase in illicit drug use [23], [19] and an increase in crime [17], [19], [16]. Others, however, have revealed that marijuana is not related to additional illicit drug use [22], [7], [17] or crime [8], [20], [9], [21]. Thus, the available evidence is equivocal and in need of a rigorous evaluation of the MML-crime relationship.

Methods

Data & Measures

Dependent Variables. Data on all seven Part I offenses—homicide, rape, robbery, assault, burglary, larceny, and auto theft—for each state between 1990 and 2006 were obtained from the Federal Bureau of Investigation's Uniform Crime Reporting (UCR) Program, published as *Crime in the United States*. The data were obtained using the "data for analysis" tool on the Bureau of Justice Statistics Web site (<http://www.ojp.usdoj.gov/bjs/dtd.htm>). All data were gathered for each of the 50 U.S. states across the 17 year time span for a total $N=850$. Values reflect the rate of each crime per 100,000 residents.

Medical Marijuana Legalization (MML). To determine if and when MML occurred within a state, we searched the official legislative website of each US state. Between 1990 and 2006, the following 11 states legalized marijuana for medical use, with the year the law was passed in parentheses: Alaska (1998), California (1996), Colorado (2000), Hawaii (2000), Maine (1999), Montana (2004), Nevada (2000), Oregon (1998), Rhode Island (2006), Vermont (2004), and Washington (1998). We also ran models based on MML "legislation-effective year" rather than "legislation-passed year" and found no substantive differences in the results. The MML effective dates were also gathered from each State's official legislative website. Only 2 states (Connecticut and Colorado) had an MML effective year different than "passed" year, both being only a 1-year difference. While there are many options in modeling the effects of MML adoption on crime, we opted to use a post-law trend variable. The trend variable represents the number of years the law has been in effect with a value of zero for all years before the law was passed, a value of 1 for the year the law was passed, and a value of $1+k$, where k = number of years after the initial passage of the law, for all subsequent years. Unlike the traditional "dummy variable" approach (i.e., 0 = no MML law, 1 = MML law), which posits a once-and-for-all impact on crime, the post-law trend variable

captures any changes in the linear trend of crime that may be observed over time. If opponents of MML are correct that the laws lead to increased marijuana use by teenagers, many of whom are likely to continue illicit hard drug use throughout their adulthood, one might expect a gradual increase in crime over time. Such an effect would be best captured by the post-law trend variable.

Sociodemographic Control Variables. Sociodemographic variables were included in the analysis to aid in controlling for a vast array of other time-varying influences that might be potential confounding factors over the study period. These variables, and their sources, have been described previously [24]. Specifically, they include each state's percent of the civilian labor force unemployed; the total employment rate; percent of the population living below the poverty line; real per-capita income (divided by the Consumer Price Index); the proportion of residents aged 15–24; the proportion of residents aged 25–34, the proportion of residents aged 35–44 years; the per-capita rate of beer consumption [25]; the proportion of residents with at least a bachelor's degree; and the percent of the state's population that lived in a metropolitan area. State-level unemployment data were obtained from the Bureau of Labor Statistics website (www.bls.gov/sae/home). Data on poverty were acquired via the Bureau of the Census website (www.census.gov/hhes/www/poverty). Personal income and real welfare payments data were taken from the Bureau of Economic Analysis website (www.bea.doc.gov/bea/regional/reis). The age variables were obtained directly from the U.S. Bureau of the Census. Data on beer consumption were taken from the Beer Institute website (www.beerinstitution.org). The percent of the population with college degrees or higher and the percent of the population living in a metropolitan area are linear interpolations of decennial census data, as reported in various editions of the *Statistical Abstracts of the United States*.

Additional measures included the number of prison inmates per 100,000 residents and the number of police officers per 100,000 residents. The number of prisoners was measured as the number of prisoners sentenced to more than a year in custody as of December 31 per 100,000 residents and was obtained from the Bureau of Justice Statistic's website (www.ojp.usdoj.gov/bjs). Data on the total number of police, including civilians, were taken from the Public Employment series prepared by the Bureau of the Census. Louisiana and Mississippi were missing information on this variable for the year 2006, therefore reducing the usable case count by two units. Substantive results were identical when values for this year were imputed with values from the previous year. Summary statistics for these explanatory variables are presented in Table 1.

Analysis Plan

To identify the effect of MML on crime, we use a fixed-effects panel design, exploiting the within state variation introduced by the passage of MML in 11 states over the 17 year observation period. The design allows for the assessment of whether states adopting MML experienced changes in the trend of crime by analyzing within state changes in crime rates over time and comparing those changes to the crime rate trends among states that did not pass an MML law. To carry out this analysis, we estimate fixed-effects ordinary least squares regression models, where the natural log of each crime rate variable (i.e., homicide, rape, robbery, assault, burglary, larceny, and auto theft) is the dependent variable. This model directly accounts for dynamic factors that cause crime to vary from state to state, as well as those stable unmeasured factors that differ between states [26], [27]. In addition, we also include “year fixed-effects,” which capture any national influences on crime that are not captured in any of the

Table 1. Summary Statistics.

	Mean	SD
<i>Dependent Variables (prior to log transformation)</i>		
Homicide Rate	5.778	3.347
Rape Rate	36.774	13.212
Robbery Rate	130.346	91.687
Assault Rate	303.573	161.996
Burglary Rate	845.706	304.654
Larceny Rate	2,727.552	687.953
Auto Theft Rate	406.504	208.103
<i>Independent Variable</i>		
Medical Marijuana Law (Post-law Trend)	.393	1.489
<i>Sociodemographic control variables</i>		
Unemployment rate	5.162	1.393
Employment rate	58,568.89	5,043.444
Poverty rate	12.442	3.638
Real per-capita income	5.193	.844
Proportion persons ages 15 to 24	.142	.011
Proportion persons ages 25 to 34	.145	.017
Proportion persons ages 35 to 44	.156	.011
Beer shipments (31-gallon barrels) per 100k	73,670.89	12,003.72
Percent persons with college degree	23.897	4.903
Percent persons residing in metropolitan area	67.654	20.636
Prisoners per 100k	343.072	144.897
Police officers per 100k	278.473	48.917

Note: Descriptive statistics are for the 1990–2006 period. The data sources are noted in the text.
doi:10.1371/journal.pone.0092816.t001

time-varying explanatory variables. Robust standard errors are clustered at the state level to avoid biased standard errors due to the non-independence of data points over time [28]. Thus, the fixed effects models can be expressed algebraically following the convention set forth by Wooldridge [27] as:

$$\log(\hat{y}_{ijt}) = bi_0 + bi_1 MML_{jt} + \dots + bik_{jt} + \hat{e}_{it}$$

where:

- the subscripts *i*, *j*, and *t* are used to identify the crime rate variable being used as the dependent variable, the 50 states, and time (1990–2006), respectively;
- $\log(\hat{y}_{ijt})$ = the time-demeaned (see [27]) logged crime rate outcome variable;
- bi_0 = the crime-specific constant term;
- $bi_1 MML_{jt}$ = the time-demeaned crime-specific average impact of MML on crime rates;
- $+\dots + bik_{jt}$ = the time-demeaned crime-specific effect of the various control variables, including year dummies, a linear trend variable, and state fixed effects;
- and, \hat{e}_{it} = the time-demeaned crime-specific error term.

It is important to note that fixed-effects models are not without limitations. While they are well suited to address the issue at hand and account for unobserved time-invariant factors, they are always

vulnerable to time-varying factors that are not accounted for that differ between states with MML and those without. However, we have accounted for the bulk of factors that have been shown associated with state crime rates and our models explain a considerable amount of variation in each outcome. It is also important to acknowledge that fixed-effects models do not account for temporal ordering for time-varying predictors within a given observation period. For example, it is unknown whether states adopted MML after experiencing lower crime rates in a given year(s), however, this is unlikely to be an issue here since policy response to crime rates tend to take time and we account for this via operationalization of MML as an additive effect.

Results

Primary Findings

Before consulting the results from the fixed effects regression models, a series of unconditioned crime rates for each offense type were generated and are presented in Figure 1. Note that two crime rate trends are presented in each panel. One trend—the solid line—shows the crime rate, by year, for states that had *not* passed an MML law. Thus, states that eventually did pass an MML law contribute to the solid line up until the year that they passed the MML law. As expected from the overall crime trend during this time period, the solid line reveals that all states experienced a reduction in each of the seven crimes from 1990 to 2006. Important to note is the trend revealed by the dashed line, which shows the crime rate trends for states *after* passing an MML law. With one exception—forcible rape—states passing MML laws experienced reductions in crime and the rate of reduction appears to be steeper for states passing MML laws as compared to others for several crimes such as homicide, robbery, and aggravated assault. The raw number of homicides, robberies, and aggravated assaults also appear to be lower for states passing MML as compared to other states, especially from 1998–2006. These preliminary results suggest MML may have a crime-reducing effect, but recall that these are unconditional averages, meaning that the impact of the covariates and other factors related to time series trends have not been accounted for in these figures.

The results of the fixed effects analyses are presented in Table 2. It is important to note that a Hausman test was carried out to determine whether the fixed effects model was preferable over the random effects model; the latter model is more parsimonious and, thus, should be preferred when results do not systematically differ across the two approaches. The results of the Hausman tests (with year fixed effects omitted for both equations because they are inestimable in the random effects model) suggested that the fixed effects model was preferred in each of the seven analyses. For reference, the Hausman χ^2 values were 302.61, 23.64, 102.50, 414.94, 58.87, 34.18, and 31.28 for homicide, rape, robbery, assault, burglary, larceny, and auto theft, respectively.

The key results gleaned from the fixed effects analyses are presented in row 1 of Table 2, which reveals the impact of the MML trend variable on crime rates, while controlling for the other time-varying explanatory variables. Two findings worth noting emerged from the different fixed effects regression analyses. First, the impact of MML on crime was negative or not statistically significant in all but one of the models, suggesting the passage of MML *may* have a dampening effect on certain crimes. The second key finding was that the coefficients capturing the impact of MML on homicide and assault were the only two that emerged as statistically significant. Specifically, the results indicate approximately a 2.4 percent reduction in homicide and assault, respectively, for each additional year the law is in effect. Because

log-linear models were estimated, the coefficient must be transformed according to the following formula to generate percentage changes in crime for a one-unit increase in MML: $e^{(b-1)*100}$ [27]. However, it is important to note that the finding for homicide was less variable (i.e., a lower standard error) as compared to assault. One might argue a Bonferroni correction is necessary given the exploratory nature of the study and the multiple models that were analyzed. Once a Bonferroni correction was carried out (i.e., $\alpha/7$), only the effect of MML on homicide remained statistically significant ($.05/7 = .007$). Perhaps the most important finding in Table 2 is the lack of evidence of any increase in robbery or burglary, which are the type of crimes one might expect to gradually increase over time if the MML-crime thesis was correct. Thus, in the end, MML was not found to have a crime enhancing effect for any of the crime types analyzed.

Sensitivity Analyses

The fixed effects models presented above were subjected to a range of sensitivity tests to determine whether the findings were robust to alternative model specifications. First, and as previously noted, data for the two missing cases were imputed using matched case replacement for Louisiana and Mississippi. Importantly, substantive results were identical when this strategy was carried out. A second sensitivity analysis explored the possibility that the effect of MML on crime rates was non-linear. No evidence emerged to support the hypothesis that MML has a non-linear effect on crime rate trends. Third, a related issue concerns whether the MML effect has *both* a trend effect (shown above) *and* a one-time shock effect. We considered this issue by including the MML trend variable (discussed above) along with a dummy variable coded 0 for years when no MML law was present (by state) and coded 1 in years when an MML law had been passed. The findings were practically identical to those shown above: the MML trend variable was negatively related to homicide ($b = -.02$, $p < .10$) and assault ($b = -.02$, $p < .10$). A fourth sensitivity analysis re-estimated the original models (shown above), by weighting each state proportional to its population size. When these weighted fixed effects models were estimated, the substantive findings were somewhat different than those presented above. Specifically, the effect of MML on homicide rates was no longer statistically significant ($b = -.01$, $p = .30$), MML negatively predicted robbery rates ($b = -.02$, $p < .10$), MML negatively predicted assault rates ($b = -.03$, $p < .01$), and MML *positively* predicted auto theft rates ($b = .03$, $p < .05$). While it is common in the crime policy literature to weight observations by resident population to correct for possible heteroskedasticity, this will be the efficient feasible GLS (generalized least squares) procedure only if the heteroskedasticity takes a particular form, i.e. variance proportional to the square of the population. In the present study, the unweighted results produce findings that are substantively consistent with the weighted results, although they differ slightly quantitatively. The most likely explanation for this discrepancy is that the weighted results are driven by a few large population states. For this reason, we present the unweighted results as the main results and the weighted results as part of our numerous robustness checks.

Discussion and Conclusion

The effects of legalized medical marijuana have been passionately debated in recent years. Empirical research on the direct relationship between medical marijuana laws and crime, however, is scant and the consequences of marijuana use on crime remain unknown. Studies have shown that marijuana use was associated with higher prevalence of subsequent illicit drug use [19] and an

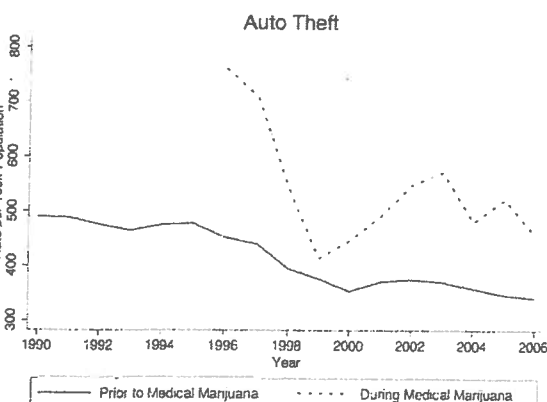
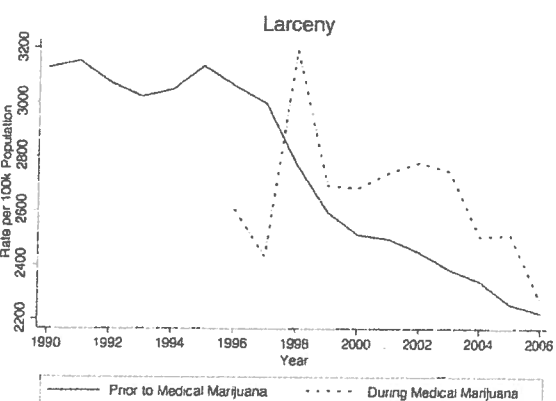
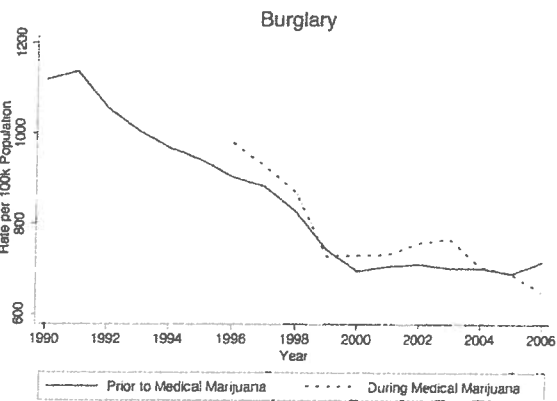
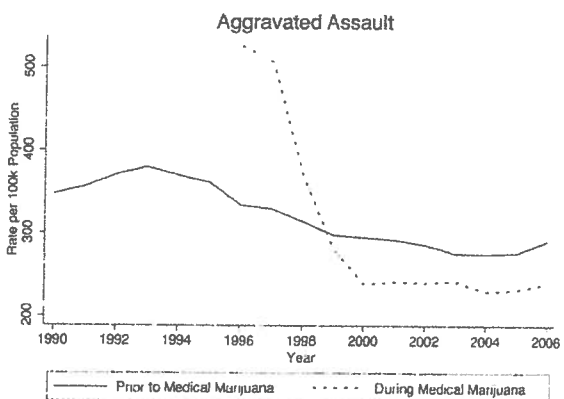
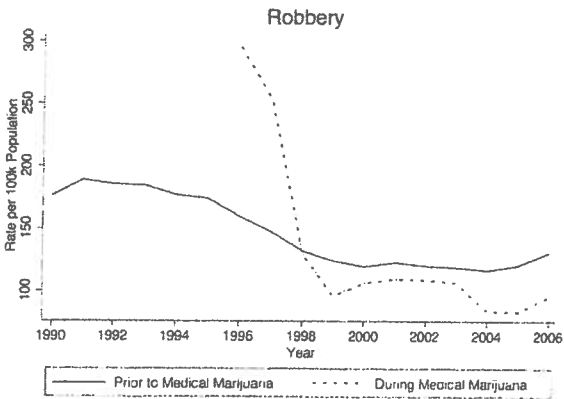
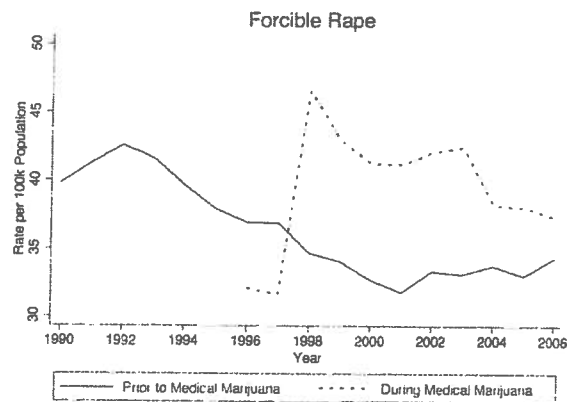
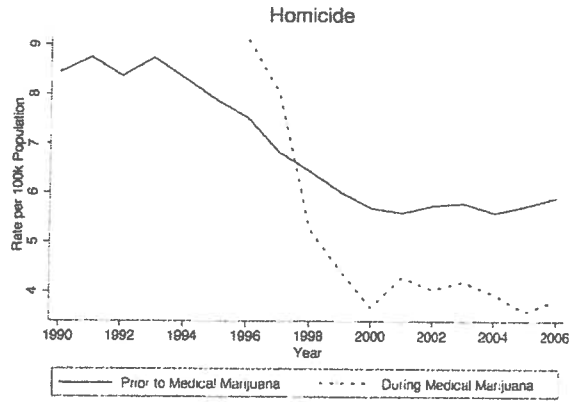


Figure 1. Mean State Crime Rates as a Function of Year, by Medical Marijuana Law (MML). NOTE: Crime rates for states mandating MML after 1996 remained in the “Prior to Medical Marijuana” line until transition to MML.
doi:10.1371/journal.pone.0092816.g001

increased risk of violence [17]. Yet, other studies have found that once additional factors were controlled for, there was no relationship between marijuana use and later serious drug use [7]. Research has also shown that marijuana use is not related to violent crime when measured at the individual-level [20]. Once drug charges are controlled for, Pedersen and Skardhamar [21] reported that the relationship between marijuana and crime was not significantly different from zero. Unfortunately, no study has examined the effect of legalized medical marijuana on state crime rates across the United States. The current study sought to fill this gap by assessing the effect of legalized medicinal marijuana on the seven Part I UCR offenses. The analysis was the first to look at multiple offenses across multiple states and time periods to explore whether MML impacts state crime rates.

The central finding gleaned from the present study was that MML is not predictive of higher crime rates and *may* be related to reductions in rates of homicide and assault. Interestingly, robbery

and burglary rates were unaffected by medicinal marijuana legislation, which runs counter to the claim that dispensaries and grow houses lead to an increase in victimization due to the opportunity structures linked to the amount of drugs and cash that are present. Although, this is in line with prior research suggesting that medical marijuana dispensaries may actually reduce crime in the immediate vicinity [8].

In sum, these findings run counter to arguments suggesting the legalization of marijuana for medical purposes poses a danger to public health in terms of exposure to violent crime and property crimes. To be sure, medical marijuana laws were *not* found to have a crime exacerbating effect on any of the seven crime types. On the contrary, our findings indicated that MML precedes a reduction in homicide and assault. While it is important to remain cautious when interpreting these findings as evidence that MML *reduces* crime, these results do fall in line with recent evidence [29] and they conform to the longstanding notion that marijuana

Table 2. The Impact of Medical Marijuana Laws on Crime Rates.

Variable	Homicide	Rape	Robbery	Assault	Burglary	Larceny	Auto Theft
Medical Marijuana Law (MML)	-0.024*** (0.007)	-0.005 (0.009)	-0.016 (0.010)	-0.024* (0.013)	-0.004 (0.007)	-0.002 (0.004)	0.026 (0.016)
Unemployment rate	0.031** (0.012)	-0.001 (0.014)	0.039** (0.015)	-0.021 (0.022)	0.022** (0.011)	0.005 (0.009)	0.036** (0.017)
Employment rate	1.325 (1.277)	3.672*** (1.156)	3.637** (1.536)	4.249*** (1.383)	0.420 (0.943)	-0.584 (0.747)	-0.069 (1.715)
Poverty rate	-0.008** (0.003)	0.006 (0.004)	0.001 (0.005)	0.001 (0.005)	-0.004 (0.003)	-0.002 (0.002)	-0.007* (0.004)
Per-capita income	-0.013 (0.057)	-0.226*** (0.067)	-0.148** (0.072)	-0.173* (0.100)	-0.194*** (0.048)	-0.099*** (0.036)	-0.137 (0.102)
Proportion aged 15 to 24	3.528 (2.447)	-0.279 (1.681)	-3.591 (3.371)	-3.245 (2.961)	0.676 (1.696)	-0.266 (1.422)	5.279 (3.509)
Proportion aged 25 to 34	-4.250** (1.884)	-0.202 (2.038)	-3.478 (2.920)	-7.492** (3.112)	5.150*** (1.904)	2.729 (1.712)	11.352*** (2.609)
Proportion aged 35 to 44	-1.393 (2.041)	-3.083 (2.319)	-4.008 (3.366)	-13.777*** (4.654)	-1.940 (1.928)	0.193 (1.489)	-3.558 (4.075)
Beer consumption	0.903** (0.399)	0.504* (0.283)	1.261*** (0.442)	0.436 (0.576)	0.857*** (0.291)	0.762*** (0.280)	1.376** (0.580)
Percent college degree	-0.004 (0.011)	0.016 (0.010)	-0.032** (0.012)	-0.012 (0.017)	-0.001 (0.007)	0.005 (0.007)	-0.018 (0.013)
Percent metropolitan	0.015** (0.007)	0.022** (0.008)	0.004 (0.009)	0.004 (0.015)	-0.006 (0.008)	-0.005 (0.006)	-0.009 (0.014)
Prisoners per 100k	-45.675 (33.964)	-20.410 (22.442)	-33.918 (35.013)	41.979 (30.046)	-7.186 (26.127)	9.724 (18.575)	-56.412 (48.726)
Police officers per 100k	-0.001 (0.001)	0.000 (0.001)	-0.002 (0.001)	-0.001* (0.001)	-0.000 (0.001)	0.001 (0.001)	-0.001 (0.002)
R ²	.50	.46	.58	.44	.83	.75	.44

Robust standard errors in parentheses.

*** p<0.01, ** p<0.05, * p<0.1

Note: State fixed-effects and year fixed-effects are included in all estimates but are not shown in the table. The following variables were divided by 100000 in order to produce coefficients that did not require scientific notation to interpret: Employment rate, Beer consumption, and Prisoners per 100k.

doi:10.1371/journal.pone.0092816.t002

legalization may lead to a reduction in alcohol use due to individuals substituting marijuana for alcohol [see generally 29, 30]. Given the relationship between alcohol and violent crime [31], it may turn out that substituting marijuana for alcohol leads to minor reductions in violent crimes that can be detected at the state level. That said, it also remains possible that these associations are statistical artifacts (recall that only the homicide effect holds up when a Bonferroni correction is made).

Given that the current results failed to uncover a crime exacerbating effect attributable to MML, it is important to examine the findings with a critical eye. While we report no positive association between MML and any crime type, this does not *prove* MML has no effect on crime (or even that it reduces crime). It may be the case that an omitted variable, or set of variables, has confounded the associations and masked the true positive effect of MML on crime. If this were the case, such a variable would need to be something that was restricted to the states that have passed MML, it would need to have emerged in close temporal proximity to the passage of MML in all of those states (all of which had different dates of passage for the marijuana law), and it would need to be something that decreased crime to such an extent that it “masked” the true positive effect of MML (i.e., it must be something that has an opposite sign effect between MML [e.g., a positive correlation] and crime [e.g., a negative correlation]). Perhaps the more likely explanation of the current

findings is that MML laws reflect behaviors and attitudes that have been established in the local communities. If these attitudes and behaviors reflect a more tolerant approach to one another's personal rights, we are unlikely to expect an increase in crime and might even anticipate a slight reduction in personal crimes.

Moreover, the present findings should also be taken in context with the nature of the data at hand. They are based on official arrest records (UCR), which do not account for crimes not reported to the police and do not account for all charges that may underlie an arrest. In any case, this longitudinal assessment of medical marijuana laws on state crime rates suggests that these laws do not appear to have any negative (i.e., crime exacerbating) impact on officially reported criminality during the years in which the laws are in effect, at least when it comes to the types of offending explored here. It is also important to keep in mind that the UCR data used here did not account for juvenile offending, which may or may not be empirically tethered to MML in some form or another; an assessment of which is beyond the scope of this study.

Author Contributions

Analyzed the data: RM JCB. Contributed reagents/materials/analysis tools: TK. Wrote the paper: RM MT JCB TK.

References

- Levinthal CF (2008) *Drugs, society, and criminal justice* (2nd Ed.). Boston: Pearson.
- American Academy of Pediatrics (2004) Legalization of marijuana: Potential impact on youth. *Pediatr* 113: 1825–1826.
- Johnson K, Chebium R (2013) Justice Department won't challenge state marijuana laws. USA Today, Retrieved from: <http://www.usatoday.com/story/news/nation/2013/08/29/justice-medical-marijuana-laws/2727605/>
- O'Brien PK (2013) Medical marijuana and social control: Escaping criminalization and embracing medicalization. *Deviant Behav* 34: 423–443.
- Reingle JM, Staras SAS, Jennings WG, Branchini J, Maldonado-Molina MM (2012) The relationship between marijuana use and intimate partner violence in a nationally representative, longitudinal sample. *J Interpers Violence* 27: 1562–1578.
- Keyes KM, Schulenberg JE, O'Malley PM, Johnston LD, Bachman JG, et al. (2011) The social norms of birth cohorts and adolescent marijuana use in the United States, 1976–2007. *Addict* 106: 1790–1800.
- Cleveland HH, Wiebe RP (2008) Understanding the association between adolescent marijuana use and later serious drug use: Gateway effect of developmental trajectory? *Dev Psychopathol* 20: 615–632.
- Freisthler B, Kepple NJ, Sims R, Martin SE (2013) Evaluating medical marijuana dispensary policies: Spatial methods for the study of environmentally-based interventions. *Am J Community Psychol* 51: 278–288.
- Kepple NJ, Freisthler B (2012) Exploring the ecological association between crime and medical marijuana dispensaries. *J Stud Alcohol Drugs* 73: 523–530.
- Harris AWF, Large MM, Redoblado-Hodge A, Nielsen O, Anderson J, et al. (2010) Clinical and cognitive associations with aggression in the first episode of psychosis. *Aust N Z J Psychiatry* 44: 85–93.
- Moore TM, Stuart GL (2005) A review of the literature on marijuana and interpersonal violence. *Agress Violent Behav* 10: 171–192.
- Ostrowsky MK (2011) Does marijuana use lead to aggression and violent behavior? *J Drug Educ* 41: 369–389.
- Niveau G, Dang C (2003) Cannabis and violent crime. *Med Sci Law* 43: 115–121.
- Swartout KM, White JW (2010) The relationship between drug use and sexual aggression in men across time. *J Interpers Violence* 25: 1716–1735.
- Dembo R, Washburn M, Wish ED, Schmeidler J, Getreu A., et al. (1987) Further examination of the association between heavy marijuana use and crime among youths entering a juvenile detention center. *J Psychoactive Drugs* 19: 361–373.
- Dembo R, Walshburn M, Wish E, Yeung H, Getreu A, et al. (1987) Heavy marijuana use and crime among youths entering a juvenile detention center. *J Psychoactive Drugs* 19: 47–56.
- Arseneault L, Moffitt TE, Caspi A, Taylor PJ, Silva PA (2000) Mental disorders and violence in a total birth cohort. *Arch Gen Psychiatry* 57: 979–986.
- Monshouer K, Van Dorselaer S, Verdunmen J, Ter Bogt T, De Graff R, et al. (2006) Cannabis use and mental health in secondary school children. *Br J Psychiatry* 188: 148–153.
- Brady SS, Tschann JM, Pasch LA, Flores E, Ozer EJ (2008) Violence involvement, substance use, and sexual activity among Mexican-American and European-American adolescents. *J Adolesc Health* 43: 285–295.
- Green KM, Doherty EE, Stuart EA, Ensminger ME (2010) Does heavy adolescent marijuana use lead to criminal involvement in adulthood? Evidence from a multiwave longitudinal study of urban African Americans. *Drug Alcohol Depend* 112: 117–125.
- Pedersen W, Skardhamar T (2010) Cannabis and crime: Findings from a longitudinal study. *Addict* 105: 109–118.
- Bureau of Justice Statistics (2008) Deaths in custody reporting program. Retrieved October 29, 2008 from ojp.usdoj.gov/bjs/dcrp/prisonindex.htm.
- DeSimone J (1998) Is marijuana a gateway drug? *East Econ J* 24: 149–164.
- Kovandzic TV, Vieraitis LM, Paquette-Boots D (2009) Does the death penalty save lives? New evidence from state panel data, 1977 to 2006. *Criminol Public Policy* 8: 803–843.
- Scribner R, Cohen D, Kaplan S, Allen SH (1999) Alcohol availability and homicide in New Orleans: Conceptual considerations for small area analysis of the effect of alcohol outlet density. *J Stud Alcohol* 60: 310–316.
- Allison PD (2009) *Fixed effects regression models*. Thousand Oaks, CA: Sage.
- Wooldridge JM (2009) *Introductory econometrics: A modern approach*. Mason, OH: South-Western Cengage Learning.
- Bertrand M, Dufo E, Mullainathan S (2004). How much should we trust differences-in-differences estimates? *Q J Econ* 119: 249–275.
- Anderson DM, Hansen B, Rees DI (2013). Medical marijuana laws, traffic fatalities, and alcohol consumption. *J. of Law Econ*: 333–69.
- DiNardo JE, Lemieux T (2001). Alcohol, marijuana, and American youth: The unintended consequences of government regulation. *J. Health Econ*: 991–1010.
- Boden JM, Fergusson DM, Horwood LJ (2012). Alcohol misuse and violent behavior: Findings from a 30-year longitudinal study. *Drug Alcohol Depend*: 135–41.

How Is Marijuana Legalization Going? The Price Of Pot Peace Looks Like A Bargain.

July 10, 2014 *Forbes*

In 2012 John Larson, a retired high school math and science teacher, voted against I-502, the initiative that legalized marijuana in [Washington](#). Yet this week Larson was one of the first government-licensed [marijuana merchants](#) to open a store in that state: Main Street Marijuana in Vancouver. “If people were dumb enough to vote it in, I’m all for it,” he [told](#) *The New York Times*. “There’s a demand, and I have a product.”

Colorado Gov. John Hickenlooper also seems to have had a change of heart about marijuana. The former brewer, who opposed Amendment 64, his state’s legalization initiative, is not about to become a budtender. But in a recent [interview](#) with Reuters, Hickenlooper conceded that the consequences of letting people grow, sell, and consume pot without risking arrest have not been as bad as he feared.

“It seems like the people that were smoking before are mainly the people that are smoking now,” Hickenlooper said as Colorado marked six months of legal recreational sales last week. “If that’s the case, what that means is that we’re not going to have more drugged driving, or driving while high. We’re not going to have some of those problems. But we are going to have a system where we’re actually regulating and taxing something, and keeping that money in the state of Colorado...and we’re not supporting a corrupt system of gangsters.”

Hickenlooper sounds cautiously optimistic, and there are good reasons for that. Possession and consumption of cannabis have been legal in Colorado and Washington since the end of 2012. In Colorado, so has home cultivation of up to six plants and noncommercial transfers of up to an ounce at a time. Since the beginning of this year, anyone 21 or older has been able to walk into a store in Colorado and walk out with a bag of buds, a vape pen loaded with cannabis oil, or a marijuana-infused snack. And for years in Washington as well as Colorado, such products have been readily available to anyone with a doctor’s recommendation, which critics say is so easy to get that the system amounts to legalization in disguise. Despite all this pot tolerance, the sky has not fallen.

A [study](#) released yesterday by Colorado’s Marijuana Enforcement Division supports Hickenlooper’s impression that legalization has not had much of an effect on the prevalence of cannabis consumption. The authors, Miles Light and three other analysts at the Marijuana [Policy](#) Group, note that the percentages of Coloradans reporting past-month and past-year consumption of marijuana in the National Survey on Drug Use and [Health](#) (NSDUH) rose between 2002 and 2010, mirroring a national trend. But consumption fell a bit in Colorado after 2010 while continuing to rise in the rest of the country. That is striking because Colorado’s medical marijuana industry began to take off in the second half of 2009 after the legal standing of dispensaries [became more secure](#).

Another surprising finding is that marijuana use during this period was less common in Colorado than in the country as a whole. Based on NSDUH data from 2010 and 2011, 12 percent of Coloradans 21 or older were past-year users, compared to a national figure of 16 percent. But among those past-year users, daily use was more common in Colorado: 23 percent of them reported consuming marijuana 26 to 31 times a month, compared to a national rate of 17 percent. It's not clear to what extent Colorado's medical marijuana system is responsible for this difference in patterns of use.

More-recent NSDUH numbers for Colorado are not available yet. But Light and his colleagues, in estimating total marijuana consumption for 2014, assume that prevalence rates remain about the same this year, despite broader legalization. "We do not include an additional prevalence increase factor," they explain, "because the NSDUH user population for Colorado was flat between 2009/2010 and 2010/2011." That assumption may prove to be mistaken, and in any case prevalence may rise as the recreational market develops and prices fall. But so far it looks like Hickenlooper is right: Legalization has not resulted in a lot of new pot smokers.

The experience with medical marijuana is also instructive when it comes to underage consumption. Studies that compare states with medical marijuana laws to other states do not find much evidence that allowing patients to use cannabis for symptom relief drives up recreational use by teenagers. In the Youth Risk Behavior Survey, the share of Colorado high school students reporting past-month marijuana use fell by 11 percent between 2009 and 2011. (Nationwide that number *rose* by 11 percent during the same period.) Recreational sales may result in more diversion to minors than medical sales do, although legal retailers card all customers to make sure they are 21 or older, something black-market dealers do not have much incentive to do. Hickenlooper worried aloud about underage consumption in the Reuters interview. But when he was asked if there is "any evidence that it's easier for underage kids to get marijuana than six months ago," he replied: "No, we haven't seen that.... One of the reasons so many people voted to legalize it was [that] it's been pretty easy to get it for decades."

What about drugged driving, another concern mentioned by Hickenlooper? A study reported in the journal *Drug and Alcohol Dependence* last April found that "the proportion of marijuana-positive drivers involved in fatal motor vehicle crashes in Colorado has increased dramatically since the commercialization of medical marijuana in the middle of 2009." Or as the headline over a University of Colorado at Denver press release put it, "Marijuana use [has been] involved in more fatal accidents since commercialization of medical marijuana." The implication is that easier availability of marijuana in Colorado has led to an increase in traffic fatalities. But as with a similar analysis of data from six states that was published by the *American Journal of Epidemiology* in January, that is not what the study shows.

Using data from the federal government's Fatality Analysis Reporting System, pharmacologist Stacy Salomonsen-Sautel and her co-authors found that the proportion of fatal crashes involving "marijuana-positive drivers" was 4.5 percent in the first six months of 1994, 5.9 percent in the first six months of 2009, and 10 percent at the end of 2011. The upward trend accelerated after Colorado regulators rejected restrictions on medical marijuana in July 2009, and there was no similar increase in the 34 states that at the time did not have medical marijuana laws. Meanwhile,

the proportion of fatal accidents in which drivers tested positive for alcohol remained about the same.

Do these data mean that legalizing marijuana for medical or recreational use results in more blood on the highways? No. What Salomonsen-Sautel et al. call “marijuana-positive drivers” actually tested positive for metabolites that linger in blood and urine long after the drug’s effects wear off. “THC metabolites are detectable in an individual’s blood or urine for several days and sometimes weeks for heavy marijuana users,” the authors note toward the end of the article. Hence a “marijuana-positive” result does not indicate the driver was under the influence of marijuana at the time of the accident, let alone that marijuana was a factor in the crash. “This study cannot determine cause and effect relationships, such as whether marijuana-positive drivers contributed to or caused the fatal motor vehicle crashes,” Salomonsen-Sautel et al. concede. “Colorado may have an increased number of drivers, in general, who were using marijuana, not just an increase in the proportion who were involved in fatal motor vehicle crashes.... The primary result of this study may simply reflect a general increase in marijuana use during this same time period in Colorado.” (Salomonsen-Sautel et al. assume that marijuana consumption continued rising in Colorado after 2010, although the NSDUH numbers suggest otherwise.)

Another reason to doubt that greater tolerance of marijuana boosts traffic deaths: “There was a decreasing trend in fatal motor vehicle crashes in Colorado since 2004.” There was a similar decline in the 34 comparison states, so it does not look like readier access to marijuana has interfered with this welcome trend. In fact, there is [some evidence](#) that it has on balance reduced traffic fatalities by encouraging the substitution of marijuana for alcohol, which has a more dramatic effect on driving ability.

A recent [working paper](#) from the National Bureau of Economic Research casts some doubt on that hypothesis, finding that medical marijuana laws are associated with a 6-to-9-percent increase in the frequency of binge drinking among residents 21 or older. It is too early to say whether legalizing marijuana for recreational use will have a noticeable impact, whether positive or negative, on accident trends in Colorado or Washington. But for what it’s worth, fatal crashes in Colorado, after rising from 2011 to 2012, [fell slightly](#) (from 434 to 428) between 2012 and 2013. In Washington fatal crashes [rose slightly](#) (from 403 to 405) between 2012 and 2013.

Hickenlooper did not mention crime rates, but some opponents of legalization warned that cash-heavy cannabusinesses would invite robberies, leading to an increase in violence. Instead the frequency of burglaries and robberies at dispensaries has [declined](#) since they began serving recreational consumers in January. **[FBI data](#) indicate that the overall crime rate in Denver, the center of Colorado’s marijuana industry, was 10 percent lower in the first five months of this year than in the same period of 2013.**

Although the prospect of more money for the government to spend has always struck me as a pretty weak argument for legalization, Hickenlooper is happy to have tax revenue from the newly legal marijuana industry. So far there has not been much: just \$15.3 million from the recreational sector in the first five months of 2014 (\$23.6 million if you include medical sales), although [monthly revenue](#) rose steadily during that period. The economic activity associated

with the new industry, including not just marijuana sales but various ancillary goods and services, is bound to be much more significant than the tax revenue. And although Hickenlooper says he does not want Colorado to be known for its cannabis, legalization (along with abundant snow) may have something to do with the record numbers of tourists the state is seeing. It seems clear, in any case, that legalization has not hurt Colorado's economy, which Hickenlooper accurately describes as “thriving.”

Another benefit of legalization that can be measured in money is law enforcement savings, which various sources put somewhere between \$12 million and \$60 million a year in Colorado. Those estimates do not include the human costs associated with treating people like criminals for growing, selling, and consuming an arbitrarily proscribed plant. Prior to legalization police in Colorado were arresting 10,000 pot smokers a year. Today those criminals are customers of legitimate businesses, which are replacing the “corrupt system of gangsters” decried by Hickenlooper.

Bauer, Carol

From: James Segredo <jsegredo@montini.org>
Sent: Monday, November 17, 2014 3:55 PM
To: Giagnorio, Keith; Fitzpatrick, Laura; Fugiel, Mike; Foltyniewicz, Reid; Breen, Peter; Whittington, Dan; Niehaus, Scott
Cc: Maryann O'Neill; Walter Weisenburger
Subject: opposition to Medical Marijuana Distribution Center in Lombard

I am respectfully attaching two links to articles that were recently published in the Chicago Tribune about concerns and opposition to Medical Marijuana Distribution Centers.

The first article deals with Alderman Ed Burke of the City of Chicago calling for 24/7 security guards posted at these centers due to the number of robberies cited in Colorado and California. The other is the Village of Glenview Board of Trustees voting no to allowing Medical Marijuana Distribution Centers in their village citing, property values, crime, etc. I would suggest we learn from past experiences and not allow this Medical Marijuana Center to be located near a high school and residential community. Please take time out of your busy schedules to read both articles.

Jim Segredo

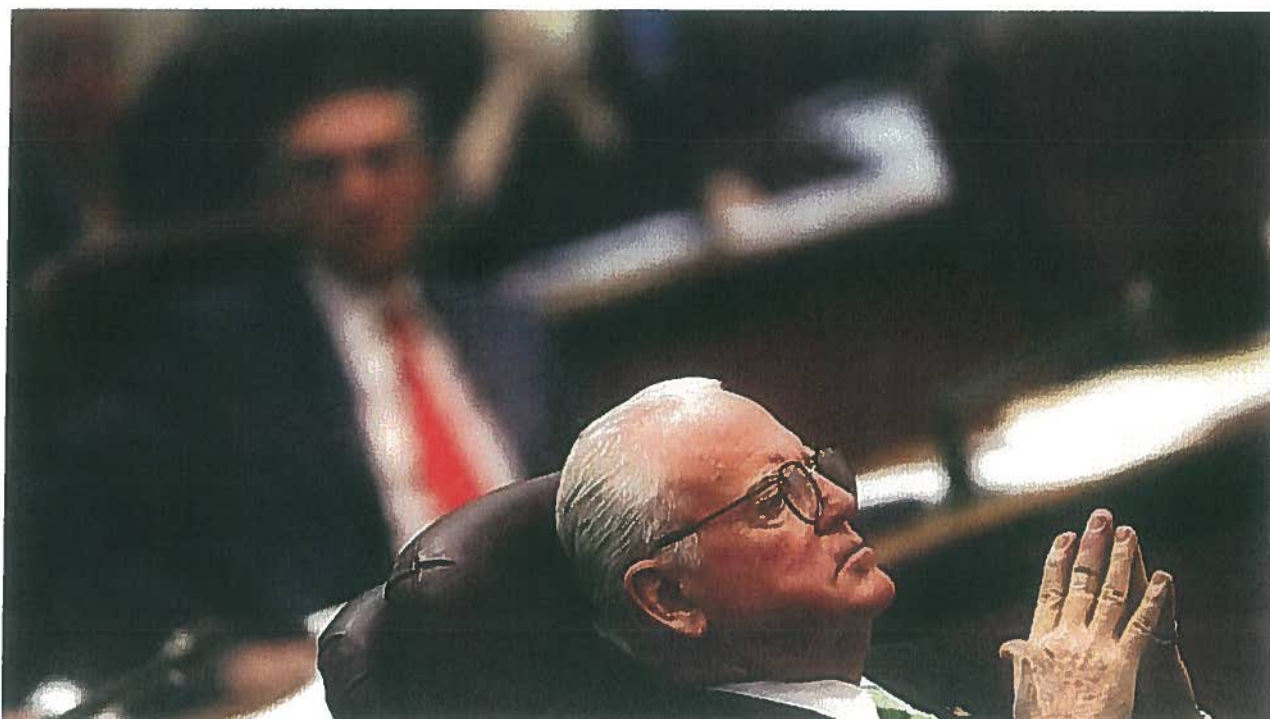
<http://www.chicagotribune.com/news/ct-chicago-medical-marijuana-security-1114-20141113-story.html>

<http://www.chicagotribune.com/suburbs/glenview/ct-glenview-village-board-meeting-tl-1021-20141024-story.html>

--
James F. Segredo
President
Montini Catholic High School
(630) 627-6930 x174
jsegredo@montini.org



Burke calls for 24-7 medical pot security



Ald. Ed Burke suggests adding security 24-7 for medical pot facilities. (Nancy Stone / Chicago Tribune)

By **Hal Dardick**,
Chicago Tribune

NOVEMBER 13, 2014, 5:31 PM

Medical marijuana facilities in Chicago would be required to have around-the-clock security guards under proposed city regulations endorsed Thursday by the City Council Zoning Committee.

Aldermen said they wanted to require the presence of licensed private security contractors 24 hours-a-day, seven-days-a-week at all city marijuana dispensaries and cultivation centers because of the cash-only nature of the business. The rule would go beyond what the state requires.

Ald. Ed Burke, 14th, the primary sponsor of the ordinance, cited a rash of burglaries and robberies in Colorado and California, where medical marijuana has been legal for years. He highlighted a California case in which a medical marijuana owner was tortured by people trying to determine where he kept his cash — even though the incident occurred at the man's home and not a medical marijuana facility.

The proposed ordinance also would bar the display of marijuana, cannabis-infused products and paraphernalia where it can be seen from outside any of the 13 dispensaries or two cultivation centers allowed in the city.

"These reasonable requirements would go a long way towards helping to deter crime at medical cannabis cultivation centers and dispensing facilities," Burke said. "Given the unique public safety issues associated

with medical marijuana facilities and the already severe demands that are placed on our police department, businesses should take these reasonable precautions to keep their customers, employees and surrounding communities safe."

State law already requires 24-hour video surveillance, "enclosed, locked" facilities and provisions for "safe delivery" but doesn't require around-the-clock guards to be present. But many of the applications being considered by the state and the Chicago Zoning Board of Appeals lay out much tougher security protocols than those required by the state.

Much of the problem lies with the fact that federally regulated financial institutions have refused to allow credit card purchases of marijuana because the drug remains illegal under federal law, a security consultant told aldermen at the hearing. That means the cash-based businesses are "a magnet for criminals who like the idea of unguarded counting rooms and shelves lined with lucrative cannabis plants," said James Smith, a former inspector with the U.S. Marshals Service who is a consultant in the medical marijuana industry.

The ordinance is set to be considered Wednesday by the full council, as is another measure endorsed Thursday by the Zoning Committee that would regulate signs on buildings along the Chicago River between Lake Shore Drive and Roosevelt Road.

Mayor Rahm Emanuel and Ald. Brendan Reilly, 42nd, proposed the sign ordinance after New York real estate mogul Donald Trump emblazoned his own name in 2,891-square-foot sign on his skyscraper on Wabash Avenue just north of the river.

Under the proposal, buildings along the river in the future would only be allowed a single sign, with a maximum size of 550 square feet, that must be placed "at the highest point of the building," said city zoning administrator Patricia Scudiero. Businesses along the first or second floors of those buildings also would be allowed to put up signs that meet current city regulations for business signs.

Tribune reporter Robert McCoppin contributed.

hdardick@tribune.com

Twitter @ReporterHal

Copyright © 2014, Chicago Tribune

Glenview rejects marijuana dispensary plan



Glenview residents speak about a proposed medical marijuana dispensary during the Glenview Village Board of Trustees meeting on Oct. 21. (Melissa Anders photo, for the Chicago Tribune)

By Melissa Anders,
Chicago Tribune

OCTOBER 25, 2014, 7:53 PM

Glenview trustees have rejected a plan to open a medical marijuana dispensary in the village, citing concerns about its impact on the character of the neighborhood, property values and its proximity to children.

The Glenview Village Board of Trustees voted 4-2 on Oct. 21 against an application by Glenview resident Julie Stone to open GreenLeaf Organics at an existing building in an industrially zoned area on West Lake Avenue near Greenwood Road. The move went against the village plan commission's recommendation, which last month voted 5-0 in favor of the application.

Officials said the board's final decision came after several meetings and many hours of public comment on what Trustee Philip White called the most controversial issue he's faced in his nine years on the board.

"There's just an overwhelming feeling in my opinion that this is not a use that people want in the neighborhood," White said during the meeting, explaining that he thought the negative perception would hurt property values.

White was joined by trustees Scott Britton, Michael Jenny and Deborah Karton in opposing the application, while trustees Paul Detlefs and John Hinkamp voted in favor of the dispensary.

Most of the nearly 20 residents who spoke at the meeting were opposed to the dispensary being at that location.

Many said the area is frequented by children and expressed concerns that the dispensary would attract crime.

Opponents also argued the location was inappropriate because it's less than 1,000 feet from the Taniel Varoujan Armenian School, where about 100 students attend Saturday classes on Armenian language and history in the Armenian All Saints Apostolic Church and community center.

State law prohibits dispensaries from opening in residential areas or within 1,000 feet of a school or day care facility. While the dispensary argued that the Armenian school doesn't qualify under the state's definition of elementary and secondary schools, the state had not yet provided an opinion on the issue.

"The Armenian school may not be a school in the state's eyes, but it is a school to us and part of the neighborhood's character," resident Lowell Zarzuela said during the meeting.

Several residents echoed Zarzuela's views, including Allison Elias, who submitted more than 600 signatures from people opposed to the dispensary's location.

An Illinois law took effect in January creating a pilot program that permits patients with certain medical conditions to obtain ID cards to purchase and use medical marijuana with a doctor's recommendation.

It allows for the creation of 22 cultivation centers throughout the state where the cannabis can be grown as well as 60 dispensaries to sell the marijuana. Dispensaries must receive local approval before seeking a license from the state.

While local governments may apply zoning regulations to proposed dispensaries, they can't impose unreasonable restrictions on their location or go beyond state distance requirements.

Glenview restricts dispensaries to areas zoned for light industrial use, leaving few spots that also meet state rules.

Sanford Stein, attorney for Stone and GreenLeaf Organics, said they'll consider legal options for fighting the board's decision.

"This is a legal land use at that location pursuant to the conditional use," Stein said. "We think they made a mistake."

Stone said she wants to open a medical marijuana dispensary to help those suffering from cancer and other ailments, saying that last year seven people close to her were diagnosed with or died of cancer.

She told the board she planned to operate the business like a doctor's office, accepting one patient every five minutes by appointment during "reasonable hours of operation" Monday through Saturday.

Stone said she planned to implement several security measures, including installing a machine to collect cash payments and hiring two unarmed guards to patrol the site during business hours.

Detlefs said he agreed with a resident who said there was no more danger than if children were to walk by a drugstore or hospital.

"I'm just struggling with what it is that's going to happen there that's going to change the character of the neighborhood or be a danger to children," he said.

While the board may have squashed Stone's proposal, medical marijuana dispensaries could still open in the surrounding area.

Officials said state rules permit one dispensary in either New Trier or Northfield townships and one in Maine or Wheeling townships, all of which are partly located within Glenview village boundaries.

triblocaltips@tribune.com

Copyright © 2014, Chicago Tribune

Still no decision on licenses to grow, sell medical pot in Illinois



Tribune illustration

By **Robert McCoppin**

Chicago Tribune

DECEMBER 30, 2014, 2:54 PM

State regulators are still reviewing applications for medical marijuana business licenses, jeopardizing their goal of naming the winners before the end of the year.

Officials issued a statement Tuesday that they are still conducting "a comprehensive review of every cultivation center and dispensary applicant to ensure that only the most qualified are approved for this important program."

"We are strongly committed to bringing relief to thousands of people across the state and ensuring Illinois is the national model for implementing medical cannabis," the statement read. "We are working hard to make sure this is done right."

Government watchdogs have criticized the secrecy surrounding the process of granting business licenses under the state law that authorized a four-year medical marijuana pilot program starting this year. State officials from the Illinois Department of Financial and Professional Regulation and the Department of Agriculture, which are overseeing the review, have not revealed who has applied, but said they will announce the winners when they finish scoring the applications.

Business applicants have praised regulators' implementation of the program, including setting rules earlier this year, but many patients are frustrated that the process is taking this long.

After licenses are awarded for 21 growing centers and 60 retail shops, officials say it will probably take until spring before the first crop is available. Patients must pass a criminal background check and get their doctors' recommendation to prove they have one of about three dozen qualifying medical conditions.

rmccoppin@tribpub.com

Twitter @RobertMcCoppin

Copyright © 2015, Chicago Tribune
