Planning Effectively for Legalized Recreational Marijuana:

An Assessment of Community Land Use Ordinances in Washington State

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ABSTRACT

Planning Effectively for Legalized Recreational Marijuana Use:
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In November of 2012 the citizens of Washington State voted to legalize the cultivation, processing, sale, and use of recreational marijuana. As legalization unfolds, the experiences of local governments will inform the development and implementation of effective land use regulatory mechanisms. The study population for this research was all 23 jurisdictions within the five most populated counties that had adopted interim or permanent recreational marijuana land use ordinances. Content analysis methodology was used to explore how counties and municipalities were addressing legalization. Local land use ordinances were evaluated using six indicator categories derived from the literature on other controversial land uses: Fact Base, Goals, Definitions, Locational Control Policies, Operational Control Policies, and Other. With no past experience and facing an uncertain legal environment, wide differences existed in how these local governments have approached recreational marijuana legalization. By documenting their pioneering work, this research will assist future planners and policy makers to develop effective mechanisms for regulating the emerging legal recreational marijuana economy in their communities.
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CHAPTER I: INTRODUCTION

In November of 2012 voters in Washington approved Initiative 502 (I-502) to legalize the cultivation, processing, sale, and use of marijuana for recreational use (Crick, Haase, & Bewley-Taylor 2013). Along with Colorado—where voters passed a similar ballot initiative—Washington became the first place in the modern world where the commercial production, distribution, and possession of recreational marijuana would be regulated (Caulkins, Kilmer, MacCoun, Pacula, & Reuter, 2011).

With many unknown implications, the implementation of I-502 will no doubt be watched closely (Crick, et al. 2013; Caulkins, Lee, & Kasunic, 2012). Since the passing of I-502, all levels of government have exercised their respective powers to regulate marijuana activity. Perhaps one of the greatest sources of uncertainty and tension is the legal rift between state-level legalization and federal prohibitions (Sekhon 2009). While the Department of Justice has stated that the federal government will not interfere with state legalization efforts, marijuana remains illegal under federal law (Cole 2013).

Similar uncertainty and tension exists between state legalization efforts and local governments. In an opinion, the Attorney General of Washington Bob Ferguson wrote that the current law does not “entitle the licensee to locate or operate a marijuana processing, producing, or retail business in violation of local rules or without any necessary approval from local jurisdictions” (AGO 2014: 4). Nonetheless it remains unclear whether state or local level regulation will be preemptive.

Within this uncertain and evolving policy environment, and with no previous case studies to follow, implementation and regulation systems had to be created from the
ground up with little experiential guidance. The Washington State Liquor Control Board (WSLCB) was tasked with the responsibility, and given the deadline of December 1, 2013 to develop rules for implementation (WSLCB 2014).

**Statement of the Problem**

Two states, Washington and Colorado, have legalized recreational marijuana production, processing, retail sales, and personal consumption. These legalization efforts have led to policy tensions between the states and both the federal and local governments. Recreational marijuana can be viewed as a new land use for Washington communities, and as such, counties and local municipalities lack experience with this form of land use regulation. This uncertain and fluid policy environment makes it difficult for state, county, and municipal policy makers to develop effective regulatory measures. As legalization efforts unfold in other states, the experience in Washington and Colorado will inform the development of effective regulatory mechanisms (Crick et al. 2013; Caulkins et al. 2012a; Caulkins, Hawken, Kilmer, & Kleiman 2012).

**Purpose of the Study**

The purpose of this study is two fold:

1. To describe how municipalities in Washington’s most populated areas are addressing recreational marijuana use; and
2. To provide local policy makers with a guide to assist with the formulation of recreational marijuana ordinances, across the three supply chain levels of production, processing, and retail sales.

Using a mixed method approach, this study begins with a historical overview of
marijuana policy in the United States, highlighting policy shifts that lead up to the passage of I-502. It continues by summarizing the regulatory framework that I-502 lays out for recreational marijuana use. Keeping in mind that legalization of marijuana will likely be addressed by other states (Crick et al. 2013; Caulkins et al. 2012a; Caulkins 2012b), policy approaches undertaken to date by Washington communities were analyzed. From this analysis, an evaluative instrument was developed for use by state and community policy makers contemplating legalization measures (see Appendix B).

**Significance of Study**

This study contributes to understanding of the fast emerging area of recreational marijuana policy implementation by providing an analysis of the ordinances adopted by Washington communities. This analysis, along with the evaluative tools developed to conduct it, will provide useful guidance to future policymakers interested in developing effective policies for the regulation of recreational marijuana cultivation, production, and distribution.

**Delimitations**

The study is delimited as follows:

- Focus is on the recreational marijuana ordinances adopted by county and municipal governments as of April 1, 2014.
- The geographic location is limited to Washington State.
- The sample represents incorporated municipalities in the five most populous counties, representing 65% of state residents.
- The study does not include medical marijuana ordinances.
• The primary source of ordinance data came from the Municipal Research and Services Center (MRSC).

• Analysis was limited to the comprehensiveness of ordinances, rather than evaluative judgments of their likely effectiveness. As such, the scale indicators presented in Chapter III and Chapter IV are in no way prescriptive, consultative, or recommended. They serve merely as descriptors to the current state of land use policies in Washington State.

**Limitations**

Limitations of this study are as follow:

• The study occurred early on in the implementation phase, with conditions changing from the start of the research to the finish.

• Because implementation will not take place until after the end of the study, the effectiveness of the ordinances can be hypothesized but not measured.

• Since the primary source is from the MRSC, discrepancy may exist between the data and the actual county and municipal ordinances.

**List of Terms**

*Childcare center*: "an entity that regularly provides child day care and early learning services for a group of children for periods of less than twenty-four hours" (WAC 314-55-010).

*Decriminalization*: threat of arrest or a criminal record. Often offenders are given a civil penalty, like a fine.

*Elementary school*: “a school for early education that provides the first four to eight
years of basic education and recognized by the Washington state superintendent of public instruction” (WAC 314-55-010).

*Game arcade:* “an entertainment venue featuring primarily video games, simulators, and/or other amusement devices where persons under twenty-one years of age are not restricted” (WAC 314-55-010).

*Initiative 502 (I-502):* A Washington state initiative legalizing the cultivation, processing, selling, and use of recreational marijuana.

*Legalization:* the opposite of prohibition, or the total banning of a drug. Legalization means that a drug would be treated “more or less the way we treat other commodities: production, distribution, retail sale, possession, and use would all be legal for all or most people” (Caulkins et al. 2012b: 107). In the case of marijuana, legalization includes people 21 years and older.

*Marijuana:* “all parts of the plant Cannabis, whether growing or not, with a THC concentration greater than 0.3% on a dry weight basis; the seeds thereof; the resin extracted from any part of the plant; and every compound, manufacture, salt, derivative, mixture, or preparation of the plant, its seeds or resin. The term does not include the mature stalks of the plant, fiber produced from the stalks, oil or cake made from the seeds of the plant, any other compound, manufacture, salt, derivative, mixture, or preparation of the mature stalks (except the resin extracted therefrom), fiber, oil, or cake, or the sterilized seed of the plant which is incapable of germination” (RCW 69.50.101(t)).

*Marijuana licensee:* “any person or entity that holds a marijuana license, or any person or entity who is a true party of interest in a marijuana license (WAC 314-55-010).

*Marijuana processor:* “a person licensed by the state liquor control board to process
marijuana into useable marijuana and marijuana-infused products, package and label useable marijuana and marijuana-infused products for sale in retail outlets, and sell useable marijuana and marijuana-infused products at wholesale to marijuana retailers" (RCW 69.50.101(u)).

*Marijuana producer:* “a person licensed by the state liquor control board to produce and sell marijuana at wholesale to marijuana processors and other marijuana producers” (RCW 69.50.101(v)).

*Marijuana-infused products:* Products that contain marijuana or marijuana extracts and are intended for human use. The term "marijuana-infused products" does not include useable marijuana” (RCW 69.50.101(w)).

*Marijuana retailer:* “a person licensed by the state liquor control board to sell useable marijuana and marijuana-infused products in a retail outlet” (RCW 69.50.101(x)).

*Medical marijuana dispensary (MMD):* MMDs function as the “distribution sites for patients who have been legally prescribed marijuana as a treatment for specified medical conditions” (Bogges et al. 2014: 1). I-503 restricts sale of marijuana to retailers licensed by the WSLCB. This does not include MMDs (Washington State Department of Health 2014).

*Medical marijuana use (MMU):* Refers to the use of cannabis and its constituent cannabinoids, such as tetrahydrocannabinol (THC) and cannabidiol (CBD), as medical therapy to treat disease or alleviate symptoms (Amar 2006).

*Municipal Research and Services Center (MRSC):* A private, non-profit organization that serves Washington state local governments by providing information and research services.

*Playground:* “a public outdoor recreation area for children, usually equipped with
swings, slides, and other playground equipment, owned and/or managed by a city, county, state, or federal government” (WAC 314-55-010).

*Preemption:* The legal doctrine that “refers to the authority of higher levels of government to mandate the practices of lower levels of government. Local and state governments must adhere to the policies mandated at the higher levels of government and are precluded from deviating from these policies” (Mosher & Trefers 2013: 400).

*Public park:* “an area of land for the enjoyment of the public, having facilities for rest and/or recreation, such as a baseball diamond or basketball court, owned and/or managed by a city, county, state, federal government, or metropolitan park district. Public park does not include trails” (WAC 314-55-010).

*Public transit center:* “a facility located outside of the public right of way that is owned and managed by a transit agency or city, county, state, or federal government for the express purpose of staging people and vehicles where several bus or other transit routes converge. They serve as efficient hubs to allow bus riders from various locations to assemble at a central point to take advantage of express trips or other route to route transfers” (WAC 314-55-010).

*Recreation center or facility:* “a supervised center that provides a broad range of activities and events intended primarily for use by persons under twenty-one years of age, owned and/or managed by a charitable nonprofit organization, city, county, state, or federal government” (WAC 314-55-010).

*Residence:* “a person’s address where he or she physically resides and maintains his or her abode” (WAC 314-55-010).

*Retail outlet:* “a location licensed by the state liquor control board for the retail sale
of useable marijuana and marijuana-infused products” (RCW 69.50.101(gg)).

Secondary school: “a high and/or middle school: A school for students who have completed their primary education, usually attended by children in grades seven to twelve and recognized by the Washington state superintendent of public instruction” (WAC 314-55-010).

Useable marijuana: dried marijuana flowers and the term "does not include marijuana-infused products (RCW 69.50.101(ll)).

Vesting: Refers to the vested right doctrine, which in Washington State is the legal doctrine that states that a land use application, under the proper conditions, will be considered only under the land use statutes and ordinances in effect at the time of that the application was submitted (MSRC 2013).

Washington State Liquor Control Board (WSLCB): the state agency in charge of implementing marijuana legalization.
CHAPTER II: HISTORY AND BACKGROUND

The purpose of this chapter is to provide historical, legal, and policy context for recreational marijuana legalization in Washington State. It begins with a history of marijuana policy in the U.S. The concept of legalization is then discussed, followed by an overview of medical marijuana policy and the fast-evolving climate surrounding recreational marijuana. The chapter concludes with a review of the Washington State case, particularly efforts that led up to the passing of I-502.

History of Marijuana Policy in the United States

Many researchers and writers (e.g. Abel 1980; Caulkins et al. 2012b; Booth 2003; Bouchard, Decorte & Potter 2013; Lee 2013; Pollan 2001) have explored the use of the cannabis plant through human history. The earliest use of the cannabis plant dates back 10,000 years ago in China, where clay pots were made from fibers of the plant (Abel 1980: 4; Bouchard et al. 2013: 7). Cannabis served a variety of uses, such as cloth, medicines, rope, paper, food, chemicals, and fuel (Bouchard et al. 2013: 7; Booth 2003, 5; Pollan 2001, 152). It was not until the middle of the 20th century that the plant’s drug properties became the “driver of cultivation” (Bouchard et al. 2013: 7; Pollan 2001: 128).

Marijuana was first used widely as a drug in the United States in the early 1900s (Caulkins et al. 2012b: 19). Not long after, marijuana became viewed as a “dangerous social menace” (Booth 2003: 127). America in the 1920s was a “simmering cauldron of phobias—anti-Communist, anti-drug, anti-black, anti-foreigner” (Lee 2012: 42). Association of marijuana with ethnic minorities and foreigners perpetuated the feelings of fear and danger surrounding marijuana (Booth 2003: 127). The African American jazz culture
serves as one example of a community that linked with marijuana use in the first half of the 20th century (Caulkins et al. 2012b: 19; Abel 1980: 214). This lead to minority populations being “noticed, stigmatized, and targeted” because of perceived association with marijuana use (Bryant 2012: 13).

In the United States during the 1930s, individual state and federal governments response to the rise in cannabis use was to construct a narrative and policy framework that viewed it as a dangerous intoxicant. This effort included propaganda campaigns orchestrated by the new Federal Bureau of Narcotics (FBN) and its director, Harry Anslinger (Lee 2012: 48), that labeled cannabis as “the most violence-causing drug in the history of mankind” (Lee 2012: 48). Anslinger has been criticized for promoting an unfounded relationship between crime and marijuana and for being responsible for the prohibition of marijuana (Pollan 2001: 173; Bryant 2012: 13; Booth 2003; Abel 1980).

By 1931, 29 states had passed legislation criminalizing the possession of marijuana (Caulkins et al. 2012b: 19). The federal government induced all states to adopt laws to control marijuana use the following year with the Uniform State Narcotics Act of 1932 (Caulkins et al. 2012b: 19). Federal criminalization of the cannabis plant came five years later in 1937 with the Marijuana Tax Act.

The reason for the Marijuana Tax Act was not to raise revenue, but to control behavior (Lee 2012: 54). It gave federal law enforcement the authority to arrest people who were in possession of marijuana (Abel 1980: 254). It also allowed up to five years imprisonment and/or a fine of $2,000 for breaking a provision of the law. However, the courts were given discretion to set fines and the length of prison sentences. Before the Marijuana Tax Act was passed, cannabis production tended to be grassroots and
decentralized. With no large marijuana growing operations for the FBN to target, most arrests and incarcerations were low-level violators (Lee 2012: 55).

Abel (1980), Pollan (2001) and Caulkins et al. (2012b) describe the rise of marijuana use during the 1950s and 1960s as part of the beat and hippie countercultures. Booth (2003) and Lee (2012) have researched extensively on the cannabis plant’s role in both socio-political movements. It was not until the 1960s that the cannabis plant began to be used, and grown, widely as a drug (Pollan 2001: 128). Also during this time, cannabis use, culture, regulation and prohibition began to be studied by academics and through public polls. In 1967, the first marijuana use survey carried out in the United States, in the form of a Gallup poll given to college students (Caulkins 2012b: 20). The results showed a 5% lifetime prevalence of use. By 1969, the lifetime use increased to 22%. And in 1971, 51% of college students reported having used marijuana in their lifetime.

In 1970, President Richard Nixon signed the Comprehensive Drug Abuse Prevention and Control Act, which included the Controlled Substance Act (CSA). The CSA serves as the legislation for international drug treaties, and remains a major force in federal drug policy (Caulkins et al 2012b: 20). The CSA also created a five-category drug classification system, exclusive of caffeine, alcohol, and tobacco. A substance’s classification is based on its potential for abuse, safety, and also its medicinal value (Lee 2012: 119). Marijuana, along with heroin and LSD, were listed as Schedule I drugs, which are defined as being, dangerous, having a high potential for abuse and no medicinal use. Cocaine and methamphetamine were classified as Schedule II. Under the CSA, a National Commission on Marijuana and Drug Abuse was created to look at the effects of the drugs and to make policy recommendations. A resulting 1972 report found that “Neither the marijuana user,
nor the drug itself can be said to constitute a danger to public safety,” and recommended the decriminalization of marijuana (Caulkins et al. 2012b: 21). The report also recommended that cannabis be researched for potential medicinal uses, and noted adverse effects of prohibition (Lee 2012: 123). However, Nixon rejected every one of the report’s recommendations.

The results of the National Commission on Marijuana and Drug Abuse’s report mirrored the shift in the public opinion of many Americans, and in policy. By 1972, 11 states had decriminalized the possession of marijuana and several others had reduced penalties (Caulkins et al. 2012b: 21). In 1973, Oregon became the first state to decriminalize personal possession, with California following suit the next year (Crick et al. 2013: 3).

Caulkins et al. (2012b), Booth (2003), and Lee (2012) write that the election of Jimmy Carter in 1977 seemed to suggest a movement towards legalization of cannabis in the United States. During his first year as president, Carter took the position that all federal penalties should be eliminated for the possession of quantities of marijuana under one ounce. In a speech made to Congress Carter stated, “Penalties against possession of a drug should not be more damaging to an individual than the use of the drug itself...Nowhere is this more clear than in the laws against possession of marijuana in private for personal use” (as quoted in Booth 2003: 253). However, no policy changes were passed during Carter’s administration.

In stark contrast to the Carter years, Ronald Reagan’s election in 1980 brought with it harsher policies for drug violations. Large-scale cannabis production in the United States was not recognized as a problem until 1982 (Bouchard et al. 2013: 8). Marijuana became
the target of Reagan’s “drug war” because of its connection with the counterculture. It was the only illicit drug used widely enough for Reagan to justify “waging so ambitious a war” (Pollan 2001: 126). Reagan’s drug war included an aggressive, nationwide campaign against cannabis cultivators. Up until the early 1980s, almost all marijuana was grown outdoors (Pollan 2001: 133). The intensified efforts of law-enforcement at local, state, and federal levels, along with new federal legislation under the Reagan administration forced cannabis growers to adapt their production methods (Pollan 2001; Lee 2012). Growers moved either onto public lands, where their property could not be taken, or moved indoors to avoid detection by law-enforcement (Lee 2012: 180).

Despite Reagan’s “war on drugs,” in 1986 Oregon voters considered a ballot initiative to legalize marijuana, but it failed by a large margin (Crick et al. 2013: 3). The trend at the state level since the Reagan Administration has been to relax marijuana penalties, although a few states did increase penalties during the Reagan Administration (Crick et al. 2013: 3). In 2013, four states voted to decriminalize the possession of small amounts of marijuana (Crick, et al. 2013: 3).

**Legalization**

What does it mean to legalize a drug? Simply stated, legalization is the opposite of prohibition, or the total banning of a drug (Caulkins et al. 2012b: 107). Legalization means that a drug would be treated “more or less the way we treat other commodities: production, distribution, retail sale, passion, and use would all be legal for all or most people” (Caulkins et al. 2012b: 107). In the case of marijuana, legalization generally includes people 21 years and older.

There are varying degrees and forms of legalization (Caulkins et al. 2012b: 108-109;
Caulkins et al. 2012a: 26). For example, legalizing marijuana at the federal level would have very different outcomes than state level legalization with federal prohibition still in place (Caulkins et al. 2012a: 26). Some states have decriminalized the possession of marijuana, meaning that while it is still illegal to possess marijuana, offenders are given a civil penalty, like a fine. If both criminal and civil penalties were removed, then possession would be legalized, although it would not be outright legalization (Caulkins et al. 2012b: 109).

Caulkins et al. (2012c) reviewed 17 marijuana legalization proposals considered in 2012. Of the 17, 14 were voter initiatives and 3 were legislative bills (Caulkins et al. 2012c: 8). The authors found that although legalization may seem like a simple “binary” issue, there was considerable variation in the 17 proposals. The most notable distinctions across the proposals was whether they were restricted to ending state and local enforcement (“repeal only”), created new regulatory structure either directly through the state (“repeal and regulate”), or through assigning the task to a new agency (“repeal and delegate”) (Caulkins et al. 2012c; 26). Each option has a unique set of challenges at the local, state, and federal level.

Motivations behind creating a legalized marijuana market include collecting tax revenue, lowering arrest rates, “undercutting” illicit markets, ensuring product quality, allowing legal and police resources to be redistributed to other priorities, market variety for people wanting to consume marijuana, and limiting youth access (Caulkins et al. 2012a). However, the ultimate success of I-502 at meeting these goals in Washington will be dependent on how the regulations are carried out (Crick et al. 2013: 9). Managing the new system will require regulation and enforcement, which also means financial resources, a reason why some believe that the net revenue the state sees from marijuana sales will be
less than expected (Crick et al. 2013: 9).

However, concerns remain with legalization. Studies have pointed to the fact that state level legalization of marijuana may lead to a sharp price decline (Caulkins et al. 2012a: 867), that legalization will increase consumption (Caulkins et al. 2012a: 867), and that there are public health effects (Caulkins et al. 2012c: 2012). However, there is little conclusive evidence that points to how legalization will ultimately play out (Caulkins et al. 2012a; 870; Caulkins et al. 2012b; Caulkins et al. 2012c; MacCoun & Reuter 2011).

**Medical Marijuana Policy in the United States**

A discussion of marijuana policy is incomplete without addressing medical marijuana. California was the first state to pass medical marijuana legislation—the Compassionate Use Act in 1996—that allows medical marijuana use (MMU) by any patient with a physician’s recommendation (Freisthler et al. 2013: 278). Since 1996, 21 states and the District of Columbia have enacted MMU legislation (NORML 2014). However, under federal law, it is illegal in all 50 states. Approximately one-third of the nation’s population lives in a jurisdiction that has legislation addressing MMU (Caplan 2012: 127).

Washington State passed Measure 692 on November 3, 1998 (NORML 2014). The law removed state-level criminal penalties for the use, possession and cultivation of marijuana for qualified patients. There have been several amendments to the legislation since its enactment.

The Drug Enforcement Agency (DEA) and the Food and Drug Administration (FDA) are the two leading agencies in opposition to MMU, based on the arguments that there is no medically accepted use and the high potential for abuse (Caplan 2012: 128). Similarly, the actions of federal law enforcement agencies have also not changed drastically in response
to state MMU laws (Caplan 2012: 128). Raids on MMDs have increased over the years, although this may be due to the influx of MMDs that opened after the Obama Administration announced it would not arrest people who were using marijuana in compliance with state medical marijuana laws and local regulations that did not sufficiently meet federal standards (Caplan 2012: 128-130; Vitiello 2013: 1020-1022). Although state laws make MMU legal, such laws may not properly address the challenges that local municipalities face, namely concerns with perceived negative public health and safety impacts (Salkin & Kansler 2011: 296). While MMU laws do create tension between the states and the federal government, generally, the federal government has not challenged them (Crick et al. 2013: 4). Nonetheless, this remains an issue of concern for local governments.

The actual medical benefits of marijuana remain in dispute. The federal government has said since the 1970s that there is no medically acceptable use for marijuana (Lee 2012: 119). MMU supporters claim that it is an effective treatment for nausea, insomnia, anxiety, chronic pain, and many other medical problems (Caulkins et al. 2012b: 95). The recent increase in the number of states that have legalized MMU points to increasing belief among the American public in the medicinal benefit. However, a small number of scientific studies exist on the benefits of MMU, and the opinions from the medical community continue to be mixed (Caulkins et al. 2012b: 95-96). Although state laws vary greatly, generally doctors in MMU states give recommendations to patients, who can then obtain marijuana products from licensed MMU dispensaries (Caulkins et al. 2012b: 95).

While an increasing number of states are enacting MMU legislation, there is little research examining the effects of regulatory land use policies at the local community level
(Freisthler et al. 2013: 278). One study hypothesized that MMDs in Denver, Colorado would function like locally undesirable land uses (LULUs) but concluded that dispensaries do not take on LULU characteristics, despite popular assumptions (Boggess et al. 2014: 1-22). Another study looked at environmental interventions, like distance buffers and security measures, enacted by communities to limit negative secondary effects caused by MMDs (Freisthler et al. 2013: 278-288). The results showed that while some security measures may be more likely to reduce crime rates than others, the primary indicator of crime was the location of the medical marijuana dispensary (MMD), rather than the MMD itself (287). Additional research has analyzed the different regulatory approaches that municipalities are taking to address medical marijuana land use issues (Bryant 2012; Caplan 2012; Freisthler et al. 2012; Salkin & Kansler 2011)

Perhaps most interesting is the impending discussion of how the separate MMU and recreational marijuana legislation will coexist. Some of the loudest voices opposing I-502 in Washington came from the MMU community (Keefe 2013) and lawmakers in Washington are still reconciling MMU and recreational marijuana land uses.

**National Climate Surrounding Recreational Marijuana**

When Colorado and Washington voters legalized marijuana, there was some worry over how the federal government would react, since marijuana possession is still a federal offense. However in 2013, the United States Justice Department announced that it would not sue to block laws legalizing marijuana. As a result large scale and for-profit cannabis dispensaries and cultivation centers are not currently a potential target for criminal prosecution under federal legislation. However, federal prosecutors could still take actions if they believe that a state’s controls are inadequate and if the state drug laws are creating
“adverse public health consequences associated with marijuana use” (Southall & Healy 2013).

As long as federal marijuana laws remain unchanged, marijuana-related enterprises may find it difficult to conduct essential business operations such as banking, financing, insurance, and human resource management. For instance, financial institutions may not be willing to take the risk of working with marijuana businesses (Keefe 2013). According to the National Cannabis Industry Association, less than half of the medical-marijuana businesses in the United States have bank accounts (Keefe 2013).

The President said the following in regard to marijuana legalization:

It’s important for it to go forward because it’s important for society not to have a situation in which a large portion of people have at one time or another broken the law and only a select few get punished. Having said all that, those who argue that legalizing marijuana is a panacea and it solves all these social problems I think are probably overstating the case. There is a lot of hair on that policy. And the experiment that’s going to be taking place in Colorado and Washington is going to be, I think, a challenge (as quoted in Remnick 2014).

This quote points to many of the uncertainties that are facing policy makers as marijuana legalization moves forward. Because such an “experiment” has never been undertaken, the stigma surrounding marijuana use, and the limited research surrounding marijuana, much is still unknown and much is still to be worked out. But, as many states begin to entertain the idea of introducing legalization measures, the Obama Administration’s “apparent acquiescence” will likely impact and accelerate these
developments (Keefe 2013).

**The Washington Case**

Support for I-502 came from a variety of Washington politicians, academics, and legal professionals, including Seattle City Attorney Pete Holmes, Seattle University law professor and former United States Attorney for the Western District of Washington John McKay, Drug Policy Director for the American Civil Liberties Union Alison Holcomb, and the primary sponsor of the initiative Representative Mary Lou Dickerson (New Approach Washington 2014). Washington has had an established medical marijuana system since 1998 and some have credited this with I-502’s final success, noting that states that have medical marijuana legislation already have higher levels of support for recreational marijuana legalization then those states that do not (Crick et al. 2013: 6). In Washington, 60% of the tax revenue collected from recreational marijuana sales will be dedicated to substance-abuse prevention programs, research, schools and health care (New Approach Washington 2014).

Passed with 55.7% support, the three main goals of I-502 are to:

- Allow law enforcement resources to focus on other public safety concerns, like violent and property crimes;
- Generate new tax revenue tax revenue for education, healthcare, research, and substance abuse prevention programs, and;
- Take marijuana out of the hands of illegal drug organizations and bring it under a state licensed regulatory system, similar to that used to control alcohol (Washington Initiative 502).
I-502 legalized the possession of marijuana for adults, age 21 and older. Selling marijuana to minors is still illegal (New Approach Washington 2014). I-502 establishes a three-tiered supply chain, regulated by the WSLCB, comprised of production, processing, and retail operations (WSLCB Fact Sheet 2014). The law prevents “vertical integration” by prohibiting single entities or individuals from participating in more than one level of the supply chain (Crick et al. 2013: 6). A 25% excise tax is applied at each level of the supply chain, along with B&O taxes for production and local sales taxes apply for retail (WSLCB Fact Sheet 2014).

I-502 does not mention medical marijuana, although there have been some recent efforts in the state legislature to reconcile the two uses (Crick, et al. 2013: 6). Growing marijuana in one’s home for recreational use, or selling home grown marijuana, remains illegal. The exception to this is people who have a valid medical marijuana recommendation (Crick et al. 2013: 6). I-502 only legalizes the recreational use of marijuana that is bought through a retailer with a state-license (WSLCB 2014).

**Licensing**

Under I-502, the WSLCB was tasked with creating rules and an implementation process, with a deadline of December 1, 2013 to complete the task. The WSLCB developed a new licensing system for each supply chain level; production, processing, and retail sales (Washington State Uniform Controlled Substances Act, § RCW 69.50.325, 2013). License applicants must identify where they will be locating their operations, which must comply with several locational requirements, including not being within 1,000 feet of the perimeter of the grounds of the following land uses:

- Elementary or secondary school;
- Playground;
- Recreation center or facility;
- Child care center;
- Public park;
- Public transit center;
- Library; or
- Game arcades that are not restricted to people twenty-one years or older

(Washington State Uniform Controlled Substances Act, RCW § 69.50.331, 2013).

The WSLCB was tasked with processing all license applications. When a license application is received, the WSLCB is required to inform the local jurisdiction in which the applicant is planning to locate, and for the local jurisdiction to file any objections against the applicant or the potential locations (Washington State Uniform Controlled Substances Act, RCW § 69.50.331, 2013).

Within I-502 itself, each type of license (production, processing, and retail) is required to outline their operating plan. There are additional regulations on advertising and signage, reporting, quality assurance, and security (Washington State Administrative Code 314-55, 2013). There are also three different “tiers” of production licenses based on the square footage of plant canopy. However, the code states that, “the issuance or approval of a license shall not be construed as a license for, or an approval of, any violations of local rules or ordinances including, but not limited to: Building and fire codes, zoning ordinances, and business licensing requirements” (Washington State Administrative Code 314-55, 2013).

This has created some uncertainty and tension between local governments and the
state government. In an opinion, written at the request of the chair of the WSLCB Sharon Foster, the Attorney General of Washington Bob Ferguson wrote that the current law does not “entitle the licensee to locate or operate a marijuana processing, producing, or retail business in violation of local rules or without any necessary approval from local jurisdictions” (Attorney General Opinion No. 2, 2014).

Ferguson states that I-502 does not prevent counties, cities, or towns from banning marijuana related businesses within their jurisdictions. According to Ferguson, I-502 did not include any indications that it was meant to “preempt local authority to regulate such businesses. We therefore conclude that I-502 left in place the normal powers of local governments to regulate within their jurisdictions” (Attorney General Opinion No. 2, 2014, page 5). He concluded, “I-502’s drafters could have structured the initiative to explicitly require local governments allow marijuana businesses, but did not, and that the state legislature is free add this requirement to state law if it chooses.” The WSLCB responded to Ferguson's opinion with the following statement:

The legal opinion will be a disappointment to the majority of Washington's voters who approved Initiative 502...If some local governments impose bans it will impact public safety by allowing the current illicit market to continue. It will also reduce the state’s expectations for revenue generated from the legal system we are putting in place (WSLCB 2014).

The WSLCB decided to have a fixed number of 334 retail licenses for the state. Retail locations were allocated two ways: 1) the most populous cities within each county, and 2) licenses not assigned to a specific city were given “at large” status within the county. The specific locations will be selected by a lottery process if the number of applications for
retail licenses is more than the number allowed for the cities and county. However, there is no limit to the number of producer and processor licenses that will be issued. Applications for all license types were accepted from November 18, 2013 to December 19, 2013 (WSLCB 2014).

At the time that this research was conducted, there were no apparent regulations issued on whether non-Washington residents could purchase marijuana. This is an issue that has been addressed in Colorado. Containment and hypothesized secondary effects on surrounding states has been a concern (Caulkins et al. 2012: 20-26; Crick et al. 2013: 6).
CHAPTER III: Theoretical Framework

The theoretical and methodological approach for this study is grounded upon three basic frameworks: governance theory, policy analysis, and comparable land uses. These frameworks served as lenses by which to approach the study.

Governance Theory

The overarching theoretical framework for this study is urban governance. While the meaning and use of the term “governance” varies (Rhodes 1996; Stoker 1997), there is general agreement that it refers to new governing styles that change the traditional relationship between the public and private sectors (Stoker 1998). At its core, governance theory focuses on “creation of a structure or an order which cannot be externally imposed but is the result of the interaction of a multiplicity of governing and each other influencing actors” (Kooiman & Van Vliet 1993: 64). Governance theory recognizes the shift in responsibility away from government entities toward the private and voluntary sectors, and more broadly, the citizen (Stoker 1998).

The movement to legalize recreational use of marijuana in Washington State exemplifies this shifting relationship between the public and private sectors. As a ballot initiative, I-502 was not lead by political elites, but rather by various private sector actors. It follows on a populist tradition of citizen-led legislation in the state, going back to 1912 (Seattle Times 2012).

Policy Analysis

Similarly, planners and policy makers in Washington State use a variety of legal tools, adapted to fit this governance construct, to regulate and control controversial land uses in communities in order to protect public health and safety for decades (e.g. Ashe et al.
2003; Hanna 2005; Salkin 2011). Thus, this study is placed within a second theoretical lens; that of a policy analysis framework. In a planning context, policy tools regulate the location, density, and/or behavior of a controversial land use in hopes of lessening potential negative effects. Land use planning tools have been used to control alcohol, tobacco, medical marijuana dispensaries (MMD), adult entertainment, and many other controversial land uses such as urban agriculture and back yard burials.

I-502 is, in essence, an attempt to create a safe, regulated legal marijuana economy, designed to allow law enforcement resources to focus on other public safety concerns, generate new tax revenue, take marijuana out of the hands of illegal drug organizations, and prevent youth access (I-502 2011). Although unintended consequences of I-502 are still largely unknown, those that are apparent relate to land use and zoning requirements, along with general confusion among local policy makers and planners resulting from the complex nature of the issue, legislation, and uncertainty around federal drug law enforcement.

**Comparable Land Uses**

Because a legalized recreational marijuana drug economy has never before been created in the U.S., and since there are no pre-existing models, similar land uses and regulation tools were examined with the hope that they might provide useful comparative guidance. Based on article searches and literature reviews, four comparable uses were identified: medical marijuana, tobacco, alcohol, and controversial land uses (e.g. adult entertainment). These comparable land uses provided a third lens by which to approach the study. Land use regulations and policy tools have been used to control and regulate these activities and to protect residents from perceived negative externalities (Ashe et al.
2003; Freisthler, Kepple, Sims, & Martin 2012; Klonoff et al. 1998; Salkin & Kansler 2010; Whittman 2007; York & Hahn 2007).

**Medical Marijuana Dispensaries (MMDs)**

Medical marijuana land uses such as medical marijuana dispensaries (MMDs) and collective gardens are perhaps the closest comparable uses to recreational marijuana in Washington cities. In medical marijuana use (MMU) states, the legal production, distribution, and retail sales of medical marijuana parallel the emerging recreational marijuana industry (Caulkins et al. 2012b: 190). Additionally, the recent federal decision to not enforce federal laws regarding recreational marijuana is similar to past decisions on medical marijuana (Caulkins et al. 2012b: 190). The federal-state mismatch with MMU mirrors the current situation with recreational marijuana legalization, with Deputy Attorney General Cole issuing a similar statement in 2013 regarding federal action towards recreational marijuana in states that had passed legalization legislation as Deputy Attorney General David Ogden issued in 2009 regarding medical marijuana.

Medical marijuana has raised a number of regulatory land use questions for planners and policy makers who are tasked with protecting public health, safety, and welfare (Salkin & Kansler 2010). These questions, compiled from academic literature on medical marijuana (Boggess, Pérez, Cope, Root & Streteisky, 2014; Bryant 2012; Freisthler et al. 2012; Kepple & Freisthler 2012; Salkin & Kansler 2010), address the following:

- Whether state law preempts local zoning for medical marijuana uses;
- Whether distance restrictions are an effective way to regulate medical marijuana uses;
- What kinds of special use permit considerations can be applied to medical
marijuana uses;

- Whether medical marijuana qualifies as an agricultural crop;
- Is there an association between crime rates and MMDs;
- Whether loosening medical marijuana laws will create a drug dependent culture;
- Whether MMDs behave like locally undesirable land uses; and
- Whether density controls are effective at regulating medical marijuana uses.

Four studies (Bryant 2012; Freisthler et al. 2012; Salkin 2011; Salkin & Kansler 2010) looked specifically at what local jurisdictions were doing to address the land use challenges surrounding MMU. Common regulatory tools found to control medical marijuana uses included; moratoria, nuisance laws, zoning definitions, distance restrictions, limiting the number of MMDs, licenses and permits, operational restrictions, security requirements, signage restrictions, visibility restrictions, special use permits, conditional use permits, square footage restrictions, restrictions on the number of patients, restrictions on hours of operation, limitations on the size of cultivation, and restrictions on the types of growing systems used for indoor cultivation (Salkin & Kansler 2010; Freisthler et al. 2012).

Salkin & Kansler (2010) found that a number of local jurisdictions had enacted moratoria on medical marijuana, noting that moratoria are often used as a tool to “buy some time to study and develop appropriate regulations” (Salkin & Kansler 2010: 3). Courts have upheld the use of moratoria as a legitimate planning tool (Salkin & Kansler 2010: 3).

Both Bryant (2012) and Salkin & Kansler (2010) found that clear definitions were crucial when writing a successful medical marijuana ordinance. Bryant (2012) found that
“Some laws specify these definitions, but others brush over the definitions” (98). Some municipalities allow all medical marijuana uses, while others only allow certain forms. A well-formulated definitions section in a zoning ordinance was found to be the “most important part” of medical marijuana land use ordinances (Salkin & Kansler 2010: 3).

Distance restrictions, or distance buffers, have been commonly used to regulate medical marijuana. The purpose of distance buffers is to “limit geographic availability of marijuana as well as reduce problems typically assumed to co-occur in proximity to dispensary locations, such as crime” (Freisthler et al. 2012: 279). Most state MMU laws also include distance restrictions, ranging from 300 to 1,000 feet (Freisthler et al. 2012: 279). Local jurisdictions have also included distance restrictions in their zoning ordinances (Salkin & Kansler 2010: 4-5). Types of locations that are typically buffered from medical marijuana uses include locations associated with children or youth activities, like schools and parks, and places with “high risk clientele,” like other MMDs and drug or alcohol rehabilitation facilities (Freisthler et al. 2012: 279).

The majority of MMU states do not regulate the number of MMDs that are allowed to operate, rather they allow local municipalities to set their own density controls (Freisthler et al. 2012: 279). Density controls are typically based on the population of areas.

Freisthler et al. (2012) found that most states do not include site-specific requirements for medical marijuana uses such as security plans (279). Most states give local municipalities the power to include controls on operating hours, security, square footage, signage, and other site-specific operations and local policies vary greatly (Freisthler et al. 2012: 279-280; Salkin & Kansler 2010). The wide range of local regulations undertaken by municipalities to address medical marijuana uses has made it
difficult to evaluate the full impact and effectiveness of the policies (Freisthler et al. 2012: 280).

Although the number of MMDs in the U.S. has steadily increased over the past 15 years, there have been few studies on their impact to the surrounding community (Boggess et al. 2014: 1; Kepple & Freisthler 2012: 523). However, three peer-reviewed studies were found that investigated the perceived secondary effects of MMDs. Two of the studies looked at the association between MMDs and crime (Freisthler et al. 2012; Kepple & Freisthler 2012) and one looked at the question of whether MMDs behaved like locally undesirable land uses (LULUs) (Boggess et al. 2014). The results of the studies showed that crime that did occur may be more attributed to the location of the medical marijuana dispensary then the dispensary itself (Freisthler et al. 2012), that the density of MMDs was not associated with crime (Kepple & Freisthler 2012), and that MMDs did not take on the qualities of LULUs (Boggess et al. 2014). However, all three studies relied on data from a single city.

On the relationship between medical marijuana legislation and drug use, Gorman & Huber (2007) found that enacting medical marijuana legislation did not lead to an increase in marijuana use, finding no statistically significant differences in drug use between pre-medical marijuana law and post-medical marijuana law, despite concern.

In regards to preemption, the US Supreme Court established in Gonzales v. Raich (2005) that federal marijuana laws do trump state and local laws. To rephrase, the federal government has the right to enforce federal marijuana prohibition, despite a state having legalized medical marijuana. However, the Gonzales v Raich ruling does not void medical marijuana laws at the state level. Although the federal courts have established that the federal government can enforce federal marijuana laws, they have not explicitly addressed
the question of whether federal law is preemptive of state law (Caulkins et al. 2012c: 16).

**Tobacco**

Tobacco use and secondhand smoke has been linked to numerous negative public health effects, including cancer, premature death, emphysema, chronic bronchitis, low birth weights, and coronary artery disease (American Lung Association 2011). Estimates attribute tobacco use to nearly 1 in 5 deaths in the United States overall, 30% of all cancer deaths, and 438,000 premature deaths per year (Clokkinides, Bandi Ward, Jemal & Thun 2006: 135). Local governments have used the connection between tobacco and negative health impacts to justify exercising their authority to mitigate these effects (Ashe et al. 2003: 1407).

Local government control over tobacco generally takes the form of regulation of tobacco outlet sales practices (Ashe et al. 2003: 1406). These controls commonly include prohibiting the sale of tobacco to minors, banning self-service sales, regulation of the minimum price of tobacco, excise taxes, and implementing smoke-free zones, (Ashe et al. 2003: 1406; Clokkinides et al. 2006: 141). Pokorny et al. (2002) outlined four policy areas that may be most useful for tobacco control: 1) licensing of tobacco outlets; 2) setting and adhering to tobacco sales laws; 3) distribution and location of tobacco products, and; 4) youth possession of tobacco (17). Similarly, Ashe et. al (2003) suggests four approaches local governments use to exert their authority to mitigate the secondary harms caused by tobacco: 1) require that tobacco outlets be located away from places frequented by children; 2) restrict discounted tobacco outlets to industrial zones as a way to limit access to cheap cigarettes among “price-sensitive populations”; 3) limit the total number of tobacco outlets allowed in the a jurisdiction, and; 4) limit the proximity of tobacco outlets
to each other (1407). Ashe et al. (2003) noted that since most states do not have laws that preempt local laws regulating tobacco sales, local communities have more flexibility to implement land use controls focused on regulating tobacco sales and mitigating the secondary effects associated with tobacco (1406).

Smoke-free laws have recently been enacted by the federal, state, and local levels as a way to reduce the negative effects of secondhand smoke (York & Hahn 2007: 185). Smoke-free policies typically ban smoking in workplaces, restaurants, bars, and public spaces. York & Hahn (2007) propose that communities evaluate their “stage of readiness” before implementing smoke-free ordinances in order to successfully implement the intervention, especially if they are a tobacco producing community (185).

Local initiatives to prevent youth access to tobacco have generally proven effective, with studies showing youth living in towns with local tobacco control ordinances are less likely to become smokers than youth in towns without such ordinances (Siegel et al. 1999; Forster et al. 1998). However, Clokkinides et al. (2006) argues that tobacco regulation at the state level has also been effective in preventing tobacco use by youth and in preventing harms from second hand smoke (141). Policies that limit secondhand smoke exposure also have positive health effects and lower smoking prevalence and average daily cigarette consumption (York & Hahn 2007: 184).

Ashe et al. (2003) noted a difficulty facing local governments in limiting the availability of tobacco, citing the US Supreme Court’s decision in Lorillard v Reilly which severely decreased a local governments power to limit tobacco advertising (1407). This means that local governments are increasingly turning to other means, such as land use controls to mitigate the negative health impacts associated with tobacco.
Two papers (Klonoff et al. 1998; Pokorny et al. 2002) presented evaluation tools to assess the quality of local tobacco ordinances. Pokorny et al. (2002) focused on measuring the quality of laws for limiting youth access to tobacco, and was based on the scale developed in Klonoff et al (1998). Klonoff et al. (1998) developed an evaluation tool to assess the effectiveness of tobacco control laws in limiting youth access and lowering tobacco related health impacts. The tool focuses on four main areas of policy control; environmental tobacco smoke (e.g. prohibiting smoking in the work place), advertising and promotion (e.g. banning billboards), youth access (e.g. licensing tobacco outlets), and “other” issues (e.g. taxes) (809). The evaluation of local recreational marijuana ordinances discussed later in this chapter was adapted in part from the evaluation tool proposed by Klonoff et al. (1998).

State preemption has been an issue in the area of smoke-free policy. Generally the public health community has found that preemption has an adverse impact on tobacco control (Mowery et al. 2012; Pertschuk et al. 2012). In a study assessing the impact of state preemption on local tobacco control policies, Mowery et al. (2012) found that state preemptive laws were associated with less smoke-free policies at the local level (3-5). Mowery et al. (2012) suggest that state preemptive laws may have adverse effects that could hinder the advancements of tobacco control policies at the local level, and the authors note the importance of “preserving local authority in this area “ (6). Similarly, Pertschuk et al. (2012) write that preemption can have negative consequences for public health, both in the long and short term (214). The authors argue that preemption can eliminate the ability to “adopt innovative solutions to public health problems, eliminate the flexibility to respond to the needs of diverse communities, undermine grassroots public
health movements, and concentrate the power of industry lobbyists” (Pertschuk et al. 2012: 214). Pertschuk et al. (2012) also compare the local community to “laboratories” in which innovative policies in public health can be tested (217). Preemptive laws that take away authority from lower jurisdictions, the authors argue, limit this ability to innovate.

**Alcohol**

In Washington State, the WSLCB is the agency charged with implementing marijuana legalization. As the WSLCB is the same government agency that regulates state liquor sales and licenses, it is not surprising that the structure adopted by the WSLCB for retail licenses is similar to the state liquor store licensing process. Additionally, the number of state liquor stores is set at 331 for the entire state and the number of state marijuana retail licenses is set at 334 (WSLCB 2014). Because of the similarities in the number of licenses and the regulatory and licensing systems, it is reasonable to assume that local governments may treat state liquor stores and marijuana retail stores in a similar manner.

Another similarity between marijuana and alcohol land uses can be seen in the public health and safety concerns that surround them. Alcohol related problems include the following: vehicle crashes, violent crimes, dependence, youth access, and binge drinking (Ashe et al. 2003; Campbell et al. 2009). Related risks associated with marijuana include the following: dependence, vehicle crashes, respiratory problems, mental health problems, social functioning, and youth access (Caulkins 2012b: 54; MacCoun & Reuter 2011: 64). However, the exact health and safety effects of marijuana remain largely uncertain and difficult to quantify. Caulkins et al. (2012b) write that part of the problem stems from that fact that, “it is difficult to determine whether marijuana use causes negative consequences or just happens to be correlated with them” (55). While measuring alcohol related
problems has also been found to be complex (Flynn & Wells 2014: 145), it has is also a standardized good that has been regulated for decades. Thus, there are many more academic studies on the relationship between alcohol availability and alcohol related harms (e.g. Freisthler, Guenewald, Treno & Lee 2003; Campbell et al. 2009; Flynn & Wells 2014; Wittman 2007). It is generally agreed that alcohol consumption is more dangerous than marijuana in that it is strongly tied to vehicle crashes, violent crimes, and other adverse effects (Kilmer in Caulkins et al. 2012b: 244).

Alcohol policy can also help in understanding how different types of regulations ultimately affect consumption and use behaviors (MacCoun & Reuter 2011; 68). Generally, the literature agrees that total alcohol prohibition in the United States reduced alcohol consumption in the beginning, but also was connected to an increase in illegal activities, specifically organized crime (Dills, Jacobson, & Myron 2005; Hall 2010; MacCoun & Reuter 2011; 68). Research on the effects of partial alcohol prohibition, in the form of age-based restrictions on access to alcohol, found that people over 21 reported drinking on 21% more days than those who were just under 21, and as a result that such restrictions had an immediate public health benefit (1). Since alcohol consumption is linked with higher rates of vehicle crashes and mortality, Carpenter & Dobkin’s (2009) conclude that policy interventions targeted on reducing youth drinking can have public health benefits and mitigate some of the related negative effects of alcohol consumption.

The public health field has long explored the impact of local policy interventions as a way to address negative effects of alcohol consumption on communities (e.g. Campbell et al. 2009; Holder & Reynolds 1997). Holder (2001) writes, “prevention initiatives at the community level suggest that effective strategies will often be quite different from national
or state policies” (1). Because local governments are tasked with protecting public health and safety, the research results showing a connection between alcohol availability and alcohol related harms supports local municipalities enacting zoning and land use regulations for alcohol related land uses. Ordinances related to alcohol land uses have generally included such restrictions as limiting the concentration of alcohol outlets, limiting the total number of alcohol outlets in a jurisdiction, implementing distance buffers between alcohol outlets and other land uses like schools and parks, restricting the hours of operation, and regulating signage (Ashe et al. 2003: 1406). Holder et al. (2000) found that zoning and distance buffers limiting alcohol access lead to fewer alcohol related injuries and lower alcohol consumption. However, Freisthler et al. (2012) notes a critique of implementing zoning and distance restrictions in that these policies “contribute to the marginalization of social space” and are often used to exclude alcohol related uses, and their clientele, from more wealthy residential areas (280).

There are legal similarities between alcohol and recreational marijuana. All 50 states have established a legal structure for regulating and controlling alcohol, usually in the form a licensing system along with set of operational requirements (Mosher & Treffers 2013: 400). State law determines how much licensing authority is given, or shared, between local governments and the state governments. It is generally agreed that local licensing is a more “powerful tool” then local zoning (Mosher & Treffers 2013: 400). In California, the courts have found that local regulation of alcohol related land uses is allowable (Ashe et al. 2003: 1406). These rulings are generally based on studies that point to the adverse effects on public health and safety in relation to alcohol density. Courts have confirmed the authority of local jurisdictions to regulate alcohol “despite the state’s
exclusive authority over alcohol sales” (Ashe et al. 2003: 1406). This means that courts have upheld local authority even in situations where state law has preempted local law.

State preemption is the “legal doctrine that determines the extent to which states allow local governments to adopt policies and enact legislation” (Mosher & Treffers 2013: 399). Preemption has created a climate of confusion regarding the implementation of alcohol control policies at the local and community level. Some in the public health field have argued that preemption can have negative effects as it eliminates local governments’ authority to implement innovative solutions and respond to community health needs (Pertchuk, Pomeranz, Aoki, Larkin & Poloma 2012: 214). Mosher & Treffers’ article on state preemption and alcohol retail outlet density regulation, categorized the level of state preemption that existed in each state (401). The five categories ranged from “exclusive or near-exclusive state preemption” to “extensive local control.” Mosher & Treffers’ found that there was significant variation in the level of local authority given to regulate alcohol and note that each state had a unique combination of local and state authorities (402-403). Washington state was characterized as having “near exclusive preemption,” meaning that local governments were generally not included in the licensing process and local powers like zoning and restrictions are prohibited or limited (Mosher & Treffers 2013; 401). Preemption is a concern for municipalities in Washington as they develop ordinances for recreational marijuana. The issue still has to come before Washington courts.

Although the secondary effects, use patterns, and public health and safety concerns for marijuana and alcohol may not be perfectly symmetrical, the findings from alcohol land uses provide a basis for hypothesizing some of the potential concerns, challenges, effects, and conflicts that may arise with marijuana land uses.
Controversial Land Uses

Land use regulations have been used to lessen the negative effects of a number of other controversial land uses, such as firearms dealers (Ashe et a. 2003), fast food outlets (Ashe et al. 2003), adult entertainment (Hanna 2005), bars, backyard burials, off-campus fraternity and sorority housing, and tattoo parlors (Salkin 2011). Generally, these uses are considered controversial because they tend to generate concerns from adjacent property owners and community members (Salkin 2011: 527). Recreational marijuana land uses are comparable to these for a number of reasons. The first is they all are commonly perceived as having negative effects on public health and safety, property values, or community morals (Hanna 2003: 117; Salkin 2011: 527). The second is they can be viewed as a "lightning rod for controversy" in communities (Hanna 2003: 117). And third, there has been a history of sensationalism and misperceptions surrounding some of these uses, specifically adult entertainment, while the exact impacts remain misunderstand, or unclear (Hanna 2003: 117). Salkin (2011: 527) notes several general methods that local municipalities employ to regulate controversial land uses:

- Limiting hours of operation;
- Buffering;
- Zoning;
- Special use permits; and
- Conditional use permits.

There are several legal issues at play when planning for controversial land uses. Ashe et al. (2003) notes that a key legal issue is "whether there is a rational basis for the zoning decision" (1407). Similarly, Salikin (2011) states that municipalities can regulate
these uses by exercising their zoning and police powers, as long as they fall within the confines of federal and state constitutions and are not arbitrary (541). Public participation is also encouraged when designing local regulations (Salkin 2011: 541). This is to better understand community concerns surrounding the land use and thus better assess how land use controls may be used to mitigate impacts.
CHAPTER IV: METHODOLOGY AND PROCEDURES

While there is literature both on how municipalities are dealing with controversial land uses (e.g. Ashe et al. 2003; Bryant 2012; Freisthler et al. 2012) and the hypothesized effects of state legalized marijuana (e.g. Caulkins et al. 2012a; Crick et al. 2013; MacCoun & Reuter 2011), no study has yet looked into the policy content of municipal land use ordinances relating to recreational marijuana uses. The goal of this research is to address this gap, as the topic is rapidly evolving and emerging.

Research Questions

This research is guided by the following questions:

1. How have Washington State's most populated jurisdictions responded to recreational marijuana legalization in their land use ordinances?

2. What factors describe the similarities and differences that exist in these recreational marijuana ordinances?

I-502 and the WSLCB do not provide specific guidelines or direction for municipalities. I-502 established distance requirements for recreational marijuana land uses, and that any stores will have to comply with existing local land use and zoning regulations (WSLCB 2014). I-502 also allows for cities to object to any proposed marijuana producer, processor, or retail licenses. Given the vague guidance in I-502 and local authority given to municipalities to address land uses in their jurisdictions, it is reasonable to expect a high level of variation in the content of the ordinances. However, the federal guidelines and WSLCB have outlined goals those municipalities will assumingly respond to. Marijuana use has also been associated with adverse secondary effects, and the exact effects of legalization are still unknown. It is anticipated that municipalities will try to
mitigate the associated public health and safety concerns through land use controls and zoning.

**Research Design**

A content analysis methodology was used to evaluate how Washington State municipalities were addressing recreational marijuana use in their land use ordinances. Drawing from protocols and conventions in the policy evaluation literature (Baynham & Stevens 2013; Klonoff et al. 1998), six categories were identified to evaluate the ordinances: Fact Base, Goals, Definitions, Locational Control Policies, Operational Control Policies, and Other policies. For each category, a set of indicators were identified based on literature on medical marijuana control policies, tobacco-control policies, alcohol control policies, and controversial land use control policies, along with Washington state and federal marijuana laws and policies. Combined, a total of 53 indicators were grouped into the six categories (see Appendix A).

**Population and Ordinance Selection**

The overall population for this study was the 39 counties and 281 incorporated cities in the state of Washington. Since the WSLCB’s plan is to distribute licenses based on population, and given the need to confine the analysis to the time and resource constraints of the researcher, the population was further restricted by prioritizing high population counties and cities (Martin, 1996). Adapted from a previous study on ordinance and plan evaluation by Baynham & Stevens (2014), the ordinances selected for evaluation represent the state’s most populous cities and counties. Ordinances from these jurisdictions were also generally expected to be more robust because they had larger planning departments and “greater capacity for examining contemporary issues” (Baynham & Stevens 2014: 566).
However, it admittedly results in some degree of bias, due to the study population and the state population not being identical (Deming, 1990).

Thus, the study population was comprised of the 23 ordinances from the municipalities within the five most populated counties in the state that had adopted interim or permanent land use ordinances relating to recreational marijuana before or on April 1\textsuperscript{st}, 2014. Ordinances that established moratoriums or prohibitions were not evaluated, as one aim of this study is to examine what local governments are doing to accommodate recreational marijuana land uses in order to begin to define what should be included in an effective ordinance. Although prohibitions and moratoriums are valid local land use control policies, they are not the focus of this study.

Based on population estimates from the Washington State Office of Financial Management (OFM), the most populous counties in the state are; Clark (435,500), King (1,981,900), Pierce (814,500), Snohomish (730,500) and Spokane (480,000). These counties represented 65\% (4,442,400) of the state's total population (6,882,350) in 2013 (OFM 2013). There are 105 different jurisdictions within the study area, including 100 municipalities and the five counties. The five most populated cities in Washington (Seattle (626,600), Spokane (211,300), Tacoma (200,400), Vancouver (164,500), and Bellevue (132,100)) are included in these 100 municipalities (OFM 2013). Similarly, these five counties also will receive the most state licensed recreational marijuana retail licenses because the WSLCB based the allocation on population (WSLCB 2014). Combined, 48\% (160) of the total 334 WSLCB issued marijuana retail licenses will be within these five counties (WSLCB 2014).

Copies of current ordinances pertaining to recreational marijuana were obtained
from databases maintained by the Municipal Research and Services Center (MRSC 2014b; MRSC 2014c). MRSC is “attempting to provide accurate and complete data from all jurisdictions” within Washington state. MRSC has compiled summary tables and links to current ordinances showing how various jurisdictions are dealing with recreational marijuana land uses. At the time of this research, of the 105 jurisdictions in the five study counties, 11 adopted permanent ordinances; 12 interim ordinances; 42 took no action; 3 prohibited marijuana land uses in their jurisdictions; and 37 enacted moratoria.

Table 1 lists the jurisdictions that had either adopted permanent or interim ordinances. These were the jurisdictions evaluated in the study. Not included were jurisdictions that took no action, enacted outright prohibitions, or had enacted moratoria.

**Evaluation Instrument**

Land use ordinances relating to recreational marijuana were evaluated using 53 indicators distributed across six categories. The indicators were synthesized from various research articles related to the following:

- Local tobacco control policies (Ashe et al. 2003; Klonoff et al. 1998);
- Local alcohol control policies (e.g. Ashe et al. 2003; Flynn & Wells 2014; Whittman 2007);
- Local medical marijuana dispensary policies (Boggess et al. 2014; Freisthler et al. 2012; Salkin & Kansler 2011);
- Marijuana legalization considerations (Caulkins et al. 2012b; Caulkins et al. 2012a; MacCoun & Reuter 2011); and
- Regulation of controversial land uses (Hanna 2005; Salkin 2011).
Table 1: Jurisdictions within the sample area that have enacted interim or permanent land use ordinances related to recreational marijuana uses.

<table>
<thead>
<tr>
<th>Jurisdiction</th>
<th>Population (2013)*</th>
<th>Interim Ordinance**</th>
<th>Permanent Ordinance**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bellevue</td>
<td>132,100</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Burien</td>
<td>48,030</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Cheney</td>
<td>11,070</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Covington</td>
<td>18,100</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Des Moines</td>
<td>29,730</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Eatonville</td>
<td>2,815</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Edgewood</td>
<td>9,460</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Everett</td>
<td>104,200</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Gig Harbor</td>
<td>7,670</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>King County</td>
<td>1,981,900 †</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Kirkland</td>
<td>81,730</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Lynnwood</td>
<td>35,960</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Millwood</td>
<td>1,790</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Monroe</td>
<td>17,510</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Mountlake Terrace</td>
<td>20,160</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Mukilteo</td>
<td>20,440</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Normandy Park</td>
<td>6,350</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Seattle</td>
<td>626,600</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Snohomish County</td>
<td>730,500 †</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Spokane</td>
<td>211,300</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Spokane County</td>
<td>480,000 †</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Tacoma</td>
<td>200,400</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Tukwila</td>
<td>19,160</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

Total 12 11

*Population is for the entire county, including incorporated and unincorporated areas.
*Population estimates from the Office of Financial Management.
**Ordinances collected from the Municipal Research and Services Center website.
Author: Hollenhorst 2014.
Along with:

- State requirements for obtaining a marijuana license outlined by the WSLCB in Chapter 314-55 of the Washington Administrative Code (Washington State Administrative Code 314-55, 2013); and

The 53 indicators were grouped into six categories: Fact Base, Goals, Definitions, Locational Control Policies, Operational Control Policies, and Other. The first category, Fact Base, includes the general background knowledge and legal context of marijuana legalization, public health and safety concerns, the relevance of the issue, and the legislative history of I-502. Fact base issues may also refer to impact and vulnerability studies that inform local land use decisions. The Goals category refers to the objectives that the ordinance is trying to achieve, such as public health and safety, complying with federal policies, or preventing youth access. The Definitions category includes a list of terms commonly referred to in I-502, for example “marijuana producer” and “usable marijuana.” The Locational Control Policies category includes regulatory approaches to the spatial location of marijuana uses including; zoning designations, land use, distance buffers, and density controls. The indicators in the Operational Control Policies category include regulatory approaches that focus on how marijuana related businesses are required to operate. These include security requirements, along with operational restrictions on hours of operation restrictions, signage, and the maximum square feet. The last category, Other, includes miscellaneous indicators that didn’t fit the other six categories.

The final evaluation instrument included 10 Fact Base items, 5 Goals items, 15 Definition items, 12 Locational Control Policies items, 6 Operational items, and 5 Other
items (Appendix A).

Evaluation Procedures and Scoring Protocol

Each of the 23 ordinances was evaluated on how they addressed recreational marijuana land uses in their jurisdiction. A high level of variability was expected in the way that the ordinances addressed marijuana land uses. Indicators were evaluated using a point system adapted from Baynham & Stevens (2014) and Klonoff et al. (1998). If the ordinance met the criteria for the indicator, a point was given. Within each category, indicators were given a point based on the following scale:

1. Fact Base: 0 = not mentioned; 1 = mentioned
2. Goals: 0 = not mentioned; 1 = mentioned
3. Definitions: 0 = not defined; 1 = defined specifically and clearly
4. Locational control policies: 0 = not mentioned; 1 = mentioned
5. Operational control policies: 0 = not mentioned; 1 = mentioned
6. Other: 0 = not mentioned; 1 = mentioned

The categories were unweighted, with every indicator receiving equal treatment. This was done because this research is primarily descriptive in nature, and not prescriptive or evaluative. Furthermore, because there is still much emerging around the topic and since community or stakeholder participation was not within the scope of this study, giving weights to the categories or the indicators seemed premature.

A separate list of “innovative measures” that had been undertaken by jurisdictions to control marijuana land uses, but had not been included as indicators, was also collected. Additional information collected during the scoring procedure included the zoning designation that each ordinance assigned to marijuana related uses.
Scores and Frequencies

After the assessment process, the number of indicator “points” that an ordinance received was totaled. This total is known as the score. The highest score that an ordinance could receive is 53, because there are 53 indicators, and thus, 53 possible indicator points that could be counted. The higher an ordinance’s score, the more indicators were included in the ordinance.

Scores were also collected for categories. These scores are known as category scores. Category scores comprise of the sum of the indicators in that category that the ordinance received a point for. For example, the highest category score for the Fact Base category that an ordinance could receive is 10, because there are 10 indicators in the Fact Base category (see Appendix A). If, for example, an ordinance included 5 of the indicators in the Fact Base category, then the category score for Fact Base for that ordinance would be 5. Each ordinance receives six category scores, the sum of which would equal the total score.

Indicators were reported using frequencies. The indicator frequency is the number of times that the indicator was included in the 23 ordinances reviewed. For example, if every ordinance received a point for a specific indicator, that indicator’s frequency would be 23. However, if 10 of the 23 ordinances received a point for a specific indicator, then that indicator’s frequency would be 10.

Both scores and frequencies were used to compare and characterize the ordinances. However, the scores are in no way indicative of “good” or “bad” ordinances. Nor are the indicators in anyway prescriptive, consultative, or recommended. They serve merely as descriptors to the current state of land use policies related to recreational marijuana in Washington State.
Criteria for Judging the Credibility and Trustworthiness of Results

The 23 ordinances in the study area were assessed using a content analysis process combined with the evaluation instrument. This involved the researcher reading, coding, and scoring each ordinance. To address reliability, a team of two coders (including the researcher) independently read, coded, and scored two test ordinances from outside of the sample before the sample ordinances were coded and scored. This was done to ensure scoring accuracy and consistency (Baynham & Stevens 2014; Klonoff et al. 1998). For the two test ordinances, a 95% and 91% agreement on scoring was reached, respectively. Disagreements and questions were discussed between the two coders.

Based on the testing experience and results, revisions to the indicators were made to improve reliability. The researcher then proceeded to code score the 23 ordinances in the sample.
CHAPTER V: FINDINGS AND ANALYSIS

Ordinance Enactment

Table 2 describes how communities in each of the study area counties responded to I-502 in their land use ordinances. Of the 105 incorporated jurisdictions, inclusive of the county governments, 11 (10.5%) enacted permanent ordinances, 12 (11.4%) interim ordinances, 3 (2.9%) prohibitions, 37 (35.2%) moratoria, and 42 (40%) had taken no action.

Table 2: How communities within the study area counties are responding to legalized recreational marijuana.

<table>
<thead>
<tr>
<th>County</th>
<th># of Jurisdictions**</th>
<th>Permanent Ordinance</th>
<th>Interim Ordinance</th>
<th>Prohibition</th>
<th>Moratorium</th>
<th>No Action</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>#</td>
<td>#</td>
<td>%</td>
<td>#</td>
<td>%</td>
<td>#</td>
</tr>
<tr>
<td>Clark</td>
<td>9</td>
<td>0</td>
<td>0.0%</td>
<td>0</td>
<td>0.0%</td>
<td>4</td>
</tr>
<tr>
<td>King</td>
<td>40</td>
<td>5</td>
<td>12.5%</td>
<td>4</td>
<td>10.0%</td>
<td>1</td>
</tr>
<tr>
<td>Pierce</td>
<td>21</td>
<td>1</td>
<td>4.8%</td>
<td>3</td>
<td>14.3%</td>
<td>2</td>
</tr>
<tr>
<td>Snohomish</td>
<td>21</td>
<td>3</td>
<td>14.3%</td>
<td>3</td>
<td>14.3%</td>
<td>0</td>
</tr>
<tr>
<td>Spokane</td>
<td>14</td>
<td>2</td>
<td>14.3%</td>
<td>2</td>
<td>14.3%</td>
<td>0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>105</td>
<td>11</td>
<td>10.5%</td>
<td>12</td>
<td>11.4%</td>
<td>3</td>
</tr>
</tbody>
</table>

* Ordinances collected from the Municipal Research and Services Center website.
** All incorporated jurisdictions, including the county.
Author: Hollenhorst 2014.

Indicators

The 23 jurisdictions that enacted interim or permanent ordinance were reviewed using the indicators discussed in Chapter IV. The scores of each ordinance are summarized in Figure 1. The highest score possible was 53 (53 out of 53 indicators) and the lowest possible score was 0 (0 out of 53 indicators). The total score ranged from a high of 40
(75%) to a low of 12 (23%), with an average total score of 24.5 (46%).

![Bar chart showing total scores across ordinances](chart.png)

**Figure 1. Total scores across ordinances. Author: Hollenhorst 2014.**

For each ordinance, the score was also calculated for each indicator category and are summarized in Table 3 and Table 4. The Fact Base category had the highest mean score, with an average of 5.96 out of 10 (60%) of the indicators being included in the ordinances. This was followed by the Definitions category, with an average of 8.3 out of 15 (56%) indicators included in the ordinances. The Goals category had the third highest mean score, with 2.26 out of the 5 indicators (45%) included in the ordinances. The Locational Control Policies indicators averaged 5.0 out of the possible 12 (42%). Operational Control Policies were the least likely to be included in the ordinances, with an average of only 1.3 out of the 6 indicators (22%). Five miscellaneous indicators comprised the Other category. On
average, the ordinances included 1.9 (38%) of these indicators.

Table 3: Summary of recreational marijuana ordinance comprehensiveness.

<table>
<thead>
<tr>
<th>Category</th>
<th># of Indicators</th>
<th>Lowest Score</th>
<th>Highest Score</th>
<th>Mean Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fact Base</td>
<td>10</td>
<td>1 (10%)</td>
<td>9 (90%)</td>
<td>6.0 (60%)</td>
</tr>
<tr>
<td>Goals</td>
<td>5</td>
<td>0 (0%)</td>
<td>4 (80%)</td>
<td>2.3 (45%)</td>
</tr>
<tr>
<td>Definitions</td>
<td>15</td>
<td>0 (0%)</td>
<td>15 (100%)</td>
<td>8.3 (56%)</td>
</tr>
<tr>
<td>Locational Control Policies</td>
<td>12</td>
<td>2 (17%)</td>
<td>9 (75%)</td>
<td>5.0 (42%)</td>
</tr>
<tr>
<td>Operational Control Policies</td>
<td>6</td>
<td>0 (0%)</td>
<td>4 (67%)</td>
<td>1.3 (22%)</td>
</tr>
<tr>
<td>Other</td>
<td>5</td>
<td>0 (0%)</td>
<td>5 (100%)</td>
<td>1.9 (38%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>53</strong></td>
<td><strong>12 (23%)</strong></td>
<td><strong>40 (75%)</strong></td>
<td><strong>24.5 (46%)</strong></td>
</tr>
</tbody>
</table>

Author: Hollenhorst 2014.

Table 4: Indicators mentioned least and most often in recreational marijuana ordinances by category.

<table>
<thead>
<tr>
<th>Category</th>
<th>Frequency Range (out of 23 possible ordinances)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fact Base</td>
<td>Least: 6 (vulnerability)</td>
</tr>
<tr>
<td></td>
<td>Most: 23 (role of WSLCB)</td>
</tr>
<tr>
<td>Goals</td>
<td>Least: 5 (federal compliance)</td>
</tr>
<tr>
<td></td>
<td>Most: 13 (public safety; state compliance)</td>
</tr>
<tr>
<td>Definitions</td>
<td>Least: 8 (child care centers; game arcade; playground; public transit center; residence)</td>
</tr>
<tr>
<td></td>
<td>Most: 21 (marijuana; marijuana retailer)</td>
</tr>
<tr>
<td>Locational Control Policies</td>
<td>Least: 0 (locally imposed density controls for marijuana processors)</td>
</tr>
<tr>
<td></td>
<td>Most: 23 (zoning – marijuana retailer)</td>
</tr>
<tr>
<td>Operational Control Policies</td>
<td>Least: 1 (security)</td>
</tr>
<tr>
<td></td>
<td>Most: 10 (outdoor vs. indoor production)</td>
</tr>
<tr>
<td>Other</td>
<td>Least: 2 (conditional use)</td>
</tr>
<tr>
<td></td>
<td>Most: 12 (medical marijuana)</td>
</tr>
</tbody>
</table>

Author: Hollenhorst 2014.

**Fact Base Indicators**

Of the ten indicators in the Fact Base category, the lowest scoring indicator was the vulnerability indicator, which looks at whether the ordinances call out a specific population, business sector, or geographic area that may be disproportionately affected by
marijuana land uses (Table 4). Of the 23 ordinances, only 6 received included this indicator. These ordinances framed children (e.g. Mukilteo Municipal Code §1342), residential homes (e.g. Lynwood Municipal Code §3041), and rural lands (Snohomish County Municipal Code §13-086) as being vulnerable to negative impacts of legalized marijuana land uses. The highest scoring indicator was acknowledging the role of the WSLCB in implementing the provisions in I-502. As an example of what was typical in the ordinances, the city of Spokane’s ordinance states that I-502 “requires the Washington State Liquor Control Board to adopt procedures and criteria by December 1, 2013 for issuing licenses to produce, process and sell marijuana” (Spokane Municipal Code §C-35037). All 23 ordinances in the sample received a point for this indicator. In addition, 22 ordinances received a point for the legislative context indicator. Beyond these two indicators, however, there was an 80% range between the ordinance scores, meaning that wide differences exist between communities in terms of how they are addressing these Fact Base indicators.

**Goal Indicators**

Wide differences also existed in the degree to which communities addressed the goal indicators, with an 80% range between ordinance scores. Some ordinances had no clearly stated goals related to marijuana legalization, while others clearly stated four of the five goals. The public safety and state compliance goals were most likely to be included, with each mentioned in 13 of the 23 ordinances. The high frequency for the public safety indicator may stem from the interaction between local government interest in protecting public health, safety, and welfare on one hand, and the perceived potential negative impacts of marijuana on these attributes. The high frequency for the state compliance indicator may be the result of the high visibility of WSLCB regulation and implementation
efforts.

The lowest goal indicator was federal compliance, with only 22% of ordinances addressing it. Many ordinances did mention that marijuana is illegal under federal law, but far fewer framed being compliant with the federal guidelines as a goal of the ordinance. Given the relatively few studies on marijuana, specifically the legalization of marijuana, only 9 of the ordinances included goals related to researching, analyzing, or evaluating the potential effects of the ordinance in the future.

**Definitions Indicators**

Wide differences (from 0% to 100%) also existed in the inclusion of definitional indicators in the ordinances. Some ordinances included no definitions, while others clearly defined all of the terms or explicitly stated that all definitions in RCW 69.50.101 and WAC 314-55-010 would apply. “Marijuana” and “marijuana retailer” were the most commonly defined terms, with 21 of the 23 ordinances defining them. This finding is not surprising considering that marijuana retailers have never been legally allowed until now. The same is true for recreational marijuana use and marijuana possession. Local governments were obviously adapting to this new legalization environment. What is somewhat surprising is that while marijuana legalization was the catalyst for these ordinances, two did not define marijuana.

“Child care center,” “library,” “playground,” “public transit center,” and “residence” were only defined by 8 of the 23 ordinances. However, the exclusion of these terms from the other ordinances could be because they were defined in other sections of the jurisdictions’ municipal codes, so the ordinance chose not to explicitly include them.

The evaluation process found that ordinances were not just defining the terms
included in the definitions category. Other terms that were found to be included in ordinances included “marijuana business” (Mountlake Terrace Municipal Code, §2635), “marijuana related uses” (Edgewood Municipal Code, §13-0395), “perimeter” (Gig Harbor Municipal Code, §1271), “indoor agriculture” (Seattle Municipal Code, §124326), “marijuana activity major” (Seattle), and “urban horticulture” (Tacoma Municipal Code, §28182).

**Locational Control Policies Indicators**

The locational control policies category was the only category, aside from fact base, that every ordinance in the sample included at least one category. The indicator scores in this category ranged from 2 (17%) to 9 (75%) indicators, and thus had the smallest range amongst the ordinances (58%). The locational control policies category was the only category in which an indicator, locally imposed density controls for marijuana processors, was not addressed by any ordinance. The second lowest indicator, locally imposed density controls for marijuana producers, was include in only one ordinance. The highest scoring indicators in this category related to zoning, with all 23 ordinances specifying the zones in which marijuana retailers could locate or could not locate. This is not surprising considering the WSLCB’s impending June 2014 roll out for marijuana retail licenses and locations, and the fact that these licenses are being allocated to local jurisdictions. As for zoning restrictions for marijuana producers and processors, they were each mentioned in 20 of the 23 ordinances.

Five ordinances (22%) established distance restrictions from uses other than those mandated by the state. Some examples included distance restrictions from medical marijuana collective gardens (Bellevue Municipal Code, §6133 B-1), churches, synagogues,
or chapels (Covington Municipal Code, §10-13), trails (Covington Municipal Code, §10-13), correctional facilities, court houses, drug rehabilitation facilities, substance abuse facilities, and detoxification centers (Tacoma Municipal Code, §28182), walk to school routes (Kirkland Municipal Code, §O-4439), and other established marijuana related businesses (Everett Municipal Code, §3347-13; Mukilteo Municipal Code, §1342). The distance restrictions required in the ordinances varied from 1,000 feet to 2,500 feet.

**Operational Control Policies Indicators**

The scores in the operational control policies category ranged from 0 to 4 (67%). The indicator with the lowest frequency was security, which was addressed by only one ordinance. This could be largely because local governments are choosing to defer to the security provision required by WSLCB in order to qualify for a state license.

The indicator with the highest frequency was specific operational requirements for outdoor and indoor marijuana production. While many ordinances opted to not differentiate between the two production options, 10 ordinances did. Many of the ordinances that included this indicator did so because they specifically stated that outdoor production would not be allowed and all marijuana activities had to take place indoors. For example, the City of Bellevue’s ordinance stated, “Marijuana shall be grown in a structure. Outdoor cultivation is prohibited” (Bellevue Municipal Code, §6133 B-1). King County allows for outdoor production, greenhouse production, and indoor production provided that it is not taking place within a non-dwelling structure (King County Code, §17725). Additionally, King County provides street setback, interior setback, and fencing requirements for outdoor production. The majority of the Municipal Codes made no distinction between indoor and outdoor production (e.g. Tukwila Municipal Code, §2407).
Other Indicators

The scores for the group of miscellaneous indicators that made up the Other category ranged from 0 to 5, resulting in an 100% range. This means that some ordinances addressed every indicator in the category, while others addressed none. The highest scoring indicator in the category was medical marijuana, which was addressed in 12 of the ordinances. The way in which medical marijuana was handled varied between ordinances. For example, the City of Cheney declared there would be no separate limits on the number of permits for medical marijuana outlets and recreational marijuana outlets and established that the two uses are equivalent (Cheney Municipal Code, §W-17). The city will allow two permits at any given time, regardless of whether they are for medical or recreational outlets.

Another approach observed was integrating recreational marijuana uses into the existing sections in the code on medical marijuana (e.g. Normandy Park Municipal Code, §902). Commonly, these ordinances also established a ban on medical marijuana collective gardens in the city (e.g. Edgewood Municipal Code, §13-0395).

The lowest scoring indicator in the other category was conditional uses, with only two ordinances explicitly addressing conditional use permits in relation to recreational marijuana uses.

Other Noteworthy Findings

During the coding and scoring of the ordinances, noteworthy provisions not captured by any of the 53 indicators were recorded. Consistent with the findings in the Fact Base, Goals, Definitions, Locational Control Policies, Operational Control Policies, and Other categories, there was a wide range of such items that communities included in their
Seven ordinances referred to odor from marijuana being a concern. King County’s ordinance required that marijuana business submit an “odor management plan” for the areas that will be used for the indoor production or processing of marijuana (King County Code, §17710). Similarly, the city of Bellevue included in their ordinance that if any odor from marijuana can be smelled from any abutting property, the marijuana business owner will be required to implement measures like installing ventilation equipment (Bellevue Municipal Code, §6133 B-1). Mukilteo also specified that odors from marijuana will not “migrate beyond the interior portion of the structure” (Mukilteo Municipal Code, §1342).

Kirkland’s ordinance focused on marijuana businesses impact on Kirkland’s School Walk Routes (Kirkland Municipal Code, §0-4439). The ordinance specified that marijuana retail outlets shall not be located on property that is abutting a street segment or public right of way segment that includes a Kirkland School Walk Route. The reasoning behind this, was that it was unknown if there would be vehicular and pedestrian traffic impacts on Kirkland School Walk Routes as a result of proximity to marijuana retail outlets and that there were unknown public safety risks associated with such operations.

Vesting was found to be a concern for some communities. Vesting refers to the vested rights doctrine in Washington State that establishes that a land use application will be considered only under the land use regulations and ordinances in effect at the time of that the application was submitted (MRSC 2013). Everett’s ordinance stated that the city must adopt the measures in the ordinance as a “stopgap” measure in order to “to avoid marijuana business establishing vested rights contrary to and inconsistent with any revision the City may make to its regulatory scheme as a result of the City’s study of this
matter” (Everett Municipal Code, §3347-13).

Few ordinances were found to include operational related provisions above and beyond what was captured in the indicators. However, Tacoma’s ordinance did specifically prohibit drive through, exterior, and off site marijuana sales (Tacoma Municipal Code, §28182). Mountlake Terrace’s ordinance similarly clarified that no off-site signage was allowed (Mountlake Terrace Municipal Code, §2635). Snohomish County (Snohomish County Municipal Code, §13-086) and King County (King County Code, §17710) included specific zoning restrictions for marijuana processing in conjunction with marijuana production. Everett chose to make distinctions between the different levels of producer licenses. Everett’s ordinance specifies that Tier 2 and Tier 3 marijuana producers may not locate within the city. King County’s ordinance had specific zoning requirements for “marijuana processor I” and “marijuana processor II.” It should be noted that the WSLCB does not make a distinction between different kinds of processors, and that King County’s ordinance didn’t define “recreation marijuana processor I” or “recreational marijuana processor II” in the ordinance reviewed, but rather only specified zoning requirements for them. Research revealed that these terms had been defined by King County earlier (King County Code, Chapter 21A.06). “Recreational marijuana processor I” was defined as processing that is limited to drying, curing, and trimming and packaging. “Recreational marijuana processor II” includes all elements of processing, including those activities allowed under “recreational marijuana processor I”.

**Relationship Between Population and Local Government Response**

It was hypothesized that ordinances from more populous municipalities would be more robust than those of from lower populations. To test this hypothesis, correlation
coefficients of determination ($R^2$) were calculated to determine the relationship between population and the scores of each ordinance. The three counties were excluded from the analysis since their populations were conflated with the municipalities. $R^2$ values were calculated between population and each indicator category score, as well as the total scores.

Table 5 shows the resulting $R^2$ values. No category had an $R^2$ value greater than 0.17.

<table>
<thead>
<tr>
<th>Indicator Category</th>
<th>$r$</th>
<th>$R^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fact Base</td>
<td>0.23</td>
<td>0.05</td>
</tr>
<tr>
<td>Goals</td>
<td>0.42</td>
<td>0.17</td>
</tr>
<tr>
<td>Definitions</td>
<td>-0.26</td>
<td>0.07</td>
</tr>
<tr>
<td>Locational Control Policies</td>
<td>0.25</td>
<td>0.06</td>
</tr>
<tr>
<td>Operational Control Policies</td>
<td>0.21</td>
<td>0.04</td>
</tr>
<tr>
<td>Other</td>
<td>-0.38</td>
<td>0.15</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>0.007</td>
<td>0.000049</td>
</tr>
<tr>
<td><strong>Total w/o Definitions and Other</strong></td>
<td>0.40</td>
<td>0.16</td>
</tr>
</tbody>
</table>

The Definitions category was negatively correlated with population ($r = -0.26, R^2 = .07$), as was the Other category ($r = -0.38, R^2 = .15$). The overall $R^2$ was 0.000049.
Total ordinance score and population were plotted. No discernable patterns could be detected (Figure 2). However, it was speculated that the negative correlation of the Definitions and Other categories might have offset the positive correlation of the other categories. The Definitions and Other categories were therefore removed from the total scores (Figure 3), the scatterplot re-plotted, and the $R^2$ calculated (Figure 4). The result was a positive relationship between total ordinance score and population, and an improved $R^2$ of 0.16.

![Scatterplot of Total Score vs Population](image)

**Figure 2. Total ordinance score by population. Source: Hollenhorst 2014.**

From the scatterplot, it was clear that the data was correlated in a non-linear fashion. A logarithmic transformation of the population data was therefore calculated, along with the related trend line and $R^2$ (Figure 5). The resulting fitted line improved the $R^2$ value to 0.36. This suggests that total ordinance score (without Definitions and the
Figure 3. Total modified ordinance scores (without the Definitions or Other categories) across ordinances. Source: Hollenhorst 2014.

Figure 4. Total modified ordinance scores (without the Definitions or Other categories) by population. Source: Hollenhorst 2014.
Other Categories) increased at a steep rate as populations moved towards 100,000. After that, total score flattened out and increased only slightly. It can be concluded that the larger the population, the more likely municipalities were to adopt ordinances with more Fact Base, Goal, Locational Control, and Operational Control dimensions. This could be because larger communities had more resources to research, develop, and implement more comprehensive ordinances. One could argue that since the indicators included in the Other category were “miscellaneous,” they should not have been included in the total scores or the first round of correlation testing, as they did not fit thematically like the other categories.

However, smaller communities were more likely to adopt ordinances that included Definitions and the miscellaneous indicators comprising the Other category. This may have
been because their land use ordinances, being generally less comprehensive than those of larger municipalities, were less likely to include these definitions prior to I-502. They therefore had to add them whereas larger communities already had them in place.
CHAPTER VI: CONCLUSION

Discussion

This research has been guided by two primary research questions: how have Washington State’s most populated jurisdictions responded to recreational marijuana legalization in their land use ordinances? And, what factors describe the similarities and differences that exist in these recreational marijuana ordinances?

This analysis found that of the 105 jurisdictions representing 65% (4,442,400) of Washington state’s total population in 2013, 23 (21.9%) had enacted either permanent or interim ordinances relating to recreational marijuana land uses. In regards to the second research question, the results were mixed, showing a wide range in the way local governments were addressing the issue. This research revealed several interesting trends in the way Washington State’s most populated jurisdictions are responding to legalized recreational marijuana land uses:

1. Local governments are reactively responding to state level legislation;
2. There is a lack of specific knowledge on potential secondary impacts of legalized marijuana land uses;
3. There is a high level of variation in the terms that are defined in ordinances;
4. Few jurisdictions included monitoring and evaluation plans in their ordinances;
5. Medical marijuana and recreational marijuana systems have yet to be reconciled;
6. Most local jurisdictions are controlling marijuana land uses through zoning restrictions, specifically marijuana retailers. They were less likely to use zoning restrictions to regulate production and processing operations;
7. High variance existed in the comprehensiveness of local ordinances.

The following sections discuss these trends, and how they are impacting local land use planning at the local level, in more detail.

**Land Use Ordinances as a Reactive Response by Local Governments**

Local marijuana land use ordinances are indicative of jurisdictions reactively responding to the I-502. Two Fact Base indicators, legislative context and the role of the WSLCB, had very high frequencies, suggesting that local governments are highly aware of and had a high level understanding of recent change in state law and the state’s authority over recreational marijuana policies and regulations. In addition, the Operational Controls category had the lowest score across the categories, with a mean score of 1.3 (22%). This indicates that local governments were relying heavily on the WSLCB’s established operational requirements of perspective business owners before they can receive a state license to produce, process or sell marijuana. Few local governments chose to go above and beyond these requirements, or even made specific references to, WSLCB’s restrictions on signage, advertising, operating hours, security, visibility, etc. Similarly, the stated goals of the ordinances tended to emphasize compliance with state policy and deference to the will of the voters in passing I-502. These results are not particularly surprising considering I-502 was the catalyst for ordinances being needed in the first place and that the WSLCB is the government agency implementing and overseeing the licensing process.

In contrast, relatively few ordinances listed meeting federal requirements as a Goal of the ordinances, despite the majority referencing the federal position on marijuana. This omission does not suggest that local governments are unaware of federal policies on recreational marijuana; but rather a high level of comfort and security in the legality of the
state legislation that legalized recreational marijuana and demonstrates local governments exercising their preemptive rights. One can hypothesize that if the ordinances that established prohibitions or moratoriums were reviewed, that federal compliance may be mentioned more frequently or prominently.

Lack of Knowledge

Although the Fact Base category had the highest score across the categories, only 8 ordinances (34.7%) referred to recreational marijuana businesses as a controversial land use or acknowledged the unknown nature of legalized marijuana. Further, only 6 (23%) referenced potential vulnerable populations (see Appendix A). While these Fact Base indicators were absent, the majority of ordinances did frame recreational marijuana as an issue generally, and as a public health and safety issue in particular. This suggests that the majority of local governments may very well understand some of the overarching issues surrounding legalizing recreational marijuana, yet are less certain of the exact impacts. Although there is literature on marijuana legalization in theory, there are few population level studies looking at the impacts of recreational marijuana land uses, so citing specific examples is difficult, if not impossible. The low frequencies may also suggest that secondary effects of legalized marijuana are not viewed as a major concern for local communities.

Additionally, there is very little language defending the regulations being enacted in the ordinances. For example, there were no studies on why a 1,000 foot distance restriction would better protect a community from the perceived secondary negative impacts of a marijuana business any better then a 500 foot distance restriction, or if 1,000 feet is adequate.
Lack of Definitions

A well-formulated definitions section in a zoning ordinance has been found to be the “most important part” of medical marijuana land use ordinances (Salkin & Kansler 2010: 3), it was assumed that this would also be important and common in recreational marijuana ordinances. However, not all jurisdictions included definitions sections in their ordinances. There are several possible explanations for this finding. First, some jurisdictions already had the definitions included in their municipal code, so the definitions did not need to be included in the ordinances. Second, jurisdictions may not be aware of the importance of having a robust definitions section, or didn’t have the time and resources to create a definitions section. Third, jurisdictions were just defaulting, although many not explicitly, to the definitions articulated in WAC 314-55-010.

Additionally, the analysis revealed that smaller jurisdictions were more likely to adopt definitions. However, during the recording of “noteworthy” previsions in ordinances, it was found that some ordinances were including other definitions to accommodate marijuana land uses. For example, Seattle’s ordinance defined “marijuana activity, major” although this term was not defined in state legislation (Seattle Municipal Code, §124326). This suggests that perhaps ordinances were including definitions, just not terms included in the Definitions category.

Lack of Monitoring and Evaluation Plans

Frequencies for the future research and analysis indicators were fairly weak, with only 9 ordinances (39%) including explicit mention of a plan for further research and analysis on the effects of the ordinance provisions in order to assess their effectiveness and appropriateness. Most of the ordinances that did include monitoring, research, or
evaluation plans tended to be interim measures. Further review was described as a necessary step before making them permanent. The general low frequencies were somewhat surprising considering the lack of previous experience, case law, and reliable information upon which to base policies. The omission could be explained by the fact that local governments do not have the time or financial resources to implement a monitoring and evaluation plan. Or, it could be that local governments do not see evaluation and monitoring as within their scope, deferring instead I-502, which earmarked funding for evaluation by the Washington State Institute of Public Policy (Caulkins et al. 2012c: 28). It could also suggest that local governments are not viewing potential secondary effects of legalized marijuana as a major concern.

**Incorporation of Medical and Recreational Marijuana Systems**

Although medical marijuana ordinances were outside the scope of this study, subsequent research and analysis found that many ordinances (52%) referred to medical marijuana land uses. Often, this took the form of banning medical marijuana collective gardens (e.g. Normandy Park Municipal Code, §902). Other ordinances synchronized medical and recreational marijuana regulations, such as prohibiting recreational marijuana land uses within 1,000 feet of medical marijuana collective gardens (e.g. Bellevue Municipal Code, §6133 B-1). Conversely, some ordinances had no separate limits on the number of permits for medical marijuana and recreational marijuana outlets (Cheney Municipal Code, §W-17). Overall, it appears the two marijuana supply systems still need to be reconciled.

**Zoning as a Primary Regulatory Tool, Specifically for Marijuana Retailers**

Jurisdictions opted to control marijuana land uses through zoning at a much higher rate than other land use tools, like distance restrictions. This is not surprising considering
zoning is a primary land use planning policy tool. Almost all of the ordinances (91%) established specific zoning regulations for marijuana retailers. In comparison, 83% of the ordinances established zoning designations specific for marijuana producers and marijuana processors. This difference suggests that jurisdictions are responding to the WSLCB’s allocation of retail licenses to communities based on population. In contrast, the WSLCB does not have a set number of licenses for producers or processors. The higher frequency of zoning for marijuana retailers is indicative of jurisdictions reactively responding to the state-level licensing process.

Few ordinances employed other planning tools such as density and distance restrictions. One possible explanation for this is the lack of experience and case study upon which to base policies. Another reason might be that zoning is a very common tool in land use policy (Babcock 1966) that local jurisdictions are familiar with. As such, jurisdictions are comfortable addressing the new land use through zoning. Additionally, I-502 and WSLCB has a host of regulations pertaining to where a marijuana business can locate and how they can operate, leaving little room for local governments to employ other land use control tools.

Another reason for the dominance of zoning might be that there has been no case law that have addressed the legality of the regulatory measures enacted by local governments to control these land uses. As such, it is too early to tell if such policies will in fact be legally permissible. Generally, zoning has been accepted as a legally sound land use control tool. However, one can assume that a business owner who received an approved marijuana business license from the WSLCB will challenge a jurisdiction if they are unable to locate or operate due to the local regulations. And questions are already being asked
about the legal validity of distance restrictions, especially if they make it too restrictive for a marijuana business to locate in a jurisdiction. Once the courts rule on these issues, some of the uncertainties as to the extent of local authority will be clearer. A court ruling pertaining to the prohibitions of marijuana land uses can also be expected, which would further define the scope of local governments' regulatory authority.

**High Variation Across Ordinances**

As the findings in Chapter V show, there is wide range in how Washington communities are framing the issues, what they are including in their land use ordinances, and how they are justifying their actions. One factor that this research suggests may be influencing this is population. The findings suggest that the larger the population, the more likely municipalities were to adopt more extensive ordinances with more Fact Base, Goal, Locational Control, and Operational Control dimensions. This could be because larger communities had more resources to research, develop, and implement more comprehensive ordinances. Conversely smaller communities appeared to be more likely to adopt recreational marijuana related definitions and miscellaneous regulations.

Another factor influencing the variability in ordinances, but outside the scope of this research, is demographics and community context. Each local ordinance is written for a unique population and jurisdiction with a unique history, mix of age groups, ethnicities, business, land uses, and political forces. As such, it can be assumed that each ordinance will respond specifically to their community's distinctive set of needs. Although this variation can be seen in the scores across the indicator categories, it is also seen in the “noteworthy” observations that were recorded during the evaluation process.
Moratoria, Prohibitions, and No Actions

Of the 105 jurisdictions in the study population, 37 enacted recreational marijuana moratoria, 3 enacted prohibitions, and 42 took no action. Although jurisdictions that undertook these actions were outside the scope of this research, it is nonetheless worth discussing why these communities may have employed these approaches. First, many of the 23 ordinances evaluated were repealing previous moratoria while simultaneously establishing land use regulations dealing with recreational marijuana land uses. This change, along with the fact that moratoria are often used to “buy some time to study and develop appropriate regulations” (Salkin & Kansler 2010: 3) and that courts have upheld the use of moratoria as a legitimate planning tool (Salkin & Kansler 2010: 3), suggest that many of the jurisdictions that currently have moratoria will eventually enact permanent zoning regulations. They may just have other regulatory priorities, or may not have the resources to act. Additionally, they may be waiting to learn from the experiences of jurisdictions that have adopted interim or permanent ordinances before enacting their own.

In contrast, jurisdictions that have enacted prohibitions have decided that recreational marijuana land uses are not compatible with their community. As such, they have blocked marijuana related uses from happening in their communities. Washington State Attorney General Ferguson’s opinion states that I-502 does not prevent counties, cities, or towns from banning marijuana related businesses within their jurisdictions. According to Ferguson, I-502 did not include any indications that it was meant to “preempt local authority to regulate such businesses. We therefore conclude that I-502 left in place the normal powers of local governments to regulate within their jurisdictions.” (Attorney
General Opinion No. 2, 2014, page 5). However, there has been no formal court ruling on this issue as of yet. These communities may feel that compliance with federal drug policy is more important then complying with Washington state law or Washington state voters. Or they may feel that there are adverse secondary effects associated with recreational marijuana land uses that cannot be adequately controlled by land use policies or regulations. Whatever the motivation, prohibitions demonstrate local governments exercising their preemptive rights.

It may turn out that these communities are in the beginning of a process that begins with prohibition, eventually leads to interim legalization measures, and finally permanent regulation. As discussed in Chapter II, marijuana has had a long history of prohibition, and with that comes uncertainty, assumptions, and fear. Legalization represents a dramatic shift in American drug policy. It is therefore not surprising that some communities look upon it with reservation and are moving slower to adopt legalization measures.

As for communities that have taken no action, they may have done so for a number of reasons. The first is that, like those jurisdictions that adopted moratoria, they may simply be waiting to learn from jurisdictions that had more time and resources to enact permanent or interim ordinances. To re-phrase, since there are no case studies and there for no best practices or case law, they may be hoping that other Washington state jurisdictions will serve as case studies that they can learn from. Another possibility is that the “no-action” jurisdictions do not view marijuana land uses as a pressing concern for their communities, and as such do not see the value in investing time and resources into developing local land use ordinances. A third hypothesis is that these jurisdictions have decided to rely on the WSLCB to control every aspect of marijuana land uses and do not see
it as within their role to regulate them. It should be noted that although jurisdictions were listed as “no action” within the parameters of this study, they very well may have, or be developing, land use ordinances to address recreational marijuana uses.

However, the scope of this research and analysis did not include contacting the jurisdictions individually to inquire into their reasoning, motivations, or process for developing, or not developing, marijuana land use ordinances. To fully understand how communities are addressing legalized marijuana on the local level, further research is needed on community participation, stakeholder participation, and outreach.

**Recommendations**

Given the challenges currently facing local governments when effectively planning for marijuana land uses, a number of specific aspects of the land use ordinances under study could be strengthened:

1. *Provide solid background information and rationale to support the ordinance.* This study revealed that the justification and context for enacting marijuana land use ordinances is not fully understood from a public health and safety perspective, but is fully understood from a legislative viewpoint. Both of these facts should be communicated within local land use ordinances. Increased support for marijuana legalization in Washington State, Colorado and nationally has led to support for capacity and knowledge building on drug legalization policies. As non-profits, academia, and even the federal government (Kamen & Itkowitz 2014) continue to examine the issue, it may follow that local governments begin to incorporate other regulation strategies into their ordinances. Organizations like Municipal Resource Service Center and the Association of Washington Cities exist to provide
municipalities with tools, research, current information, and resources to assist
cities with land use planning issues, including now recreational marijuana land uses.

2. Connect policies and actions with community goals: In order for land use regulations
to be successful, they should be tied to accurate estimates regarding the impacts
that are being mitigated. Few of the evaluated land use ordinances included
estimates or findings on land uses or populations that would be effected by
marijuana land uses. Of those that did, none mentioned specific studies, research, or
findings.

3. Provide a clear framework for implementation: One way to build the accountability
and integrity of local marijuana land use ordinances is through robust
implementation. Few plans included clear action plans, priorities, timelines, or
identification of responsible agencies.

4. Recognize roles, responsibilities, and positions of the different levels of government
and of different government agencies: Perhaps the main source of confusion
regarding the implementation of a legalized recreational marijuana system is the
mismatch of drug policy at the different levels of government. Improving local
governments’ grasp of state and federal policies could help prevent confusion.
Working with state officials could also add transparency to the regulatory and legal
environment.

5. Consult city attorneys and legal resources: Since the legalization of the sale,
processing and distribution, and use of recreational marijuana is still somewhat of a
legal gray area, as is the regulation of related land uses, local governments should
consult with city attorneys and other legal resources before enacting any policies.
This may be especially true for issues such as state and federal preemption and exclusionary zoning.

6. *Communicate, learn, and inform:* Additionally, sharing experiences with other levels of governments, academics, agencies (especially those in the drug policy and public health fields), non-profits, community members, and stakeholders will help create a better understanding of the impacts of a legalized recreational drug economy at a local scale, along with understanding of what regulations and policies work and don’t work. Discussing concerns, challenges, positives, and general experiences at the local level will also raise awareness for policy initiatives in the future. Washington State communities, along with Colorado, will undoubtedly serve as case studies for other states who choose to legalize recreational marijuana. It is important to learn from the experiences.

7. *Be flexible.* Since so little is concretely documented and known about legalizing marijuana and the potential impacts on the economy, health, and safety, both at the personal, local community, and national scale, it is almost certain that there will be mistakes. At the time of this research, no jurisdiction that enacted a recreational marijuana ordinance had a WSLCB licensed business located there. Once marijuana businesses do locate, there will most likely be need for revisions, especially as case law begins to mold the process. It is important to remember that as a new land use, there is no way to know exactly how best to plan for the future. Instead, jurisdictions should learn and adapt to new challenges and findings in order to best serve their communities.

8. *Local governments should be involved and informed in state-level legalization*
proposals. This research is limited to the Washington State experience. Yet it is suggestive of the complexity of establishing a legalized recreational marijuana system at the state level. Legalization efforts in the United States differ widely from state to state, which will have consequences on the pricing, availability, arrest-risk, use, and subsequently, public health (Caulkins et al. 2012c). None of the state level legalization proposals in 2012 gave regulatory authority to municipalities (Caulkins et al. 2012c). As such, if local governments want more of a say in the implementation and regulatory process, they may have to make a conscious effort early on in the legislative process.

Methodology and Scale Revisions

Although this research has provided insights into how Washington State communities are approaching marijuana land uses, it should be noted that, to the researchers knowledge, this is the first study of its kind and the research and methodology have yet to be validated and replicated. Due to resource and time constraints, the data used for the analysis in Chapter V was the result of only one “rater,” who evaluated each ordinance. Although measures were taken to ensure the data’s reliability (see Chapter IV), future ordinance evaluation efforts should consider the following improvements to the instrument and process (Baynam & Stevens 2014; Klonoff et al. 1998):

1. Train a minimum of two independent raters, with attention to how discrepancies, questions, and protocol will be discussed and reconciled;
2. Ensure that the two raters understand the scale in a similar and satisfactory way;
3. The jurisdictions should be anonymous during the rating process. This could be accomplished by redacting the jurisdiction name and other identifying information
(e.g. names of neighborhood and other geographic features); and

4. The raters should review each anonymous ordinance independently, but with opportunity afterward to discuss questions and uncertainties and make adjustments.

These additional steps would increase the validity and trustworthiness in several ways. First, by training evaluators and having opportunity to discuss questions and uncertainties, problems would be resolved in a consistent way. Second, by making the ordinances anonymous, the chance for bias by the raters is removed. And third, by having multiple raters review all of the ordinances, the levels of can be calculated for each ordinance and for each indicator. The level of agreement for the indicators could be used to determine where there was a lack of clarity in the scale or in the ordinances themselves. Additionally, mean scores and frequencies could be compared to individual raters, thus providing further insight into the accuracy, usability, and effectiveness of the scale as a future evaluation tool.

From this experience, there are several changes to the assessment indicators that may improve its usefulness. The first is to reassess the Definitions category. Although the literature points to definitions being very important in local ordinances, there was a wide range in how local governments included them. Some relied on the State definitions, while others created their own. Some jurisdictions already had definitions defined in other local municipal documents, while others had a hybrid. Revising the protocol for what should and should not be included is needed.

Second, it may be advisable to create a new Legal Issues category that contains indicators such as “vesting,” “police power,” “nuisance,” and “preemption.”
Third, as medical marijuana was included in so many of the ordinances, incorporating aspects of medical marijuana land use controls and definitions would increase the understanding of the conflict between these two land uses, and the concerns revolving around both. A better understanding of how local governments are addressing both marijuana systems may help lead to reconciliation.

A fourth revision would be to address the fact that many ordinances explicitly banned outdoor production. This analysis recorded ordinances that established bans on outdoor production under the “outdoor vs. indoor production” indicator in the Operational category.

Finally, this study has assumed that all indicators are equally important. A better approach may be to weight the indicators and categories. In this study each indicator was a single point, but each category is made up of an unequal number of indicators. More analysis and research is needed to understand what indicators and categories are the most important to include, or not include and what weight, if any, would be appropriate. However, it should be noted that the purpose of this research was to describe and characterize the current state of land use policies in relation to recreational marijuana. Evaluating for appropriateness or effectiveness was not the aim.

**Future Research**

The scope of the research does not include exploration of the factors underlying the comprehensiveness of the ordinances. These may include differences in decision markers’ values and experiences, community values and experiences, access to information and resources, demographics, prevalence of crime, local public health concerns, familiarity with the issue, and familiarity with alternatives. Future research should examine the influence of
variables such as local planning capacity, perceptions of marijuana legalization, and community context on ordinance comprehensiveness. The hypothesis that communities with greater planning capacity would have generally more comprehensive and better quality ordinances was partially born out in this study, but needs replication and expansion. A second hypothesis worth exploring is that an increase in community risk factors is positively correlated with the overall strength of the ordinance. Conversely communities with populations that look more favorably on marijuana use may have lower quality and/or less comprehensive plans. These communities may rely only on the minimum requirements, or the WSLCB, to regulate marijuana land uses.

To further the analysis performed in this research, more ordinances could be reviewed. Although the ordinances that were reviewed represent a census of the jurisdictions within the most populous counties of Washington State that had enacted interim or permanent ordinances, the final number was relatively small at 23. Perhaps all of the ordinances that had enacted land use ordinances in Washington State could be studied. Or a modified scale could be developed to assess those ordinances that enacted prohibitions and moratoria. This may further understanding of the relationships between community characteristics and ordinance comprehensiveness. Additionally, reviewing ordinances across the entire state may reveal regional differences. And while the enactment of recreational marijuana land use ordinances is currently only taking place in the states of Colorado and Washington, a comparison across other states may be worthwhile in the future.

The underlying objective of this research was to describe how local governments were addressing recreational marijuana use. The resulting scores or frequencies are in no
way indicative of “good” or “bad” ordinances. Additionally, because the exact impacts of recreational marijuana are yet largely unknown and undocumented, the scale indicators are in no way prescriptive, consultative, or recommended. They serve merely as descriptors of the current breadth and comprehensiveness of recreational marijuana land use policies in Washington State. Bearing this in mind, future research could modify the indicators to be suggestive of or referencing “best practices.” That way the current “scores” and “frequencies” would be more reflective of ordinance quality, and more comparable to a “score” or a rating. However, it would be difficult to accurately measure and quantify effectiveness at this stage in the legalization process. Future studies and experiences in the arenas of public health, drug policy, and urban planning will hopefully lead to more concrete recommendations for local policy makers.

Perhaps one of the clearest findings from this research is that local governments are responding reactively to state level legalization efforts. Further research might explore proposals and legislation across states to see how local governments were considered, or not considered, in the legalization process. This would aid in the understanding of why conflicts arise, when they arise, and how they may be avoided or mitigated.

Although this research has only addressed preemption broadly as that topic may be best left to those in the legal field, a better understanding is needed of how the courts may apply preemption to marijuana legalization. Future research could assess local ordinances and/or state marijuana legalization proposals to highlight where conflict may arise and how it could be resolved.

A Final Thought

Caulkins et al. (2012) wrote in regards to marijuana legalization, “the future will
make today’s projections appear foolish in retrospect” (25). Perhaps the only thing that is known about planning for marijuana legalization at the local level is that Washington State planners and policy makers live in interesting times. Local governments have responded to a huge challenge and made commendable steps forward despite the tangled web that surrounds marijuana legalization. Federal drug policy, legal issues, a roller-coaster history, and a lack of consensus regarding the impacts, are just a few of the hurdles that surround recreational marijuana legalization. Although I-502 may have seemed straightforward and binary for voters, it has been anything but for the local planning community.
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Appendix A: Indicator Descriptions by Category.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Description – “The Ordinance...”</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fact Base</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Issue, generally</td>
<td>Frames legalization as a pressing issue facing the jurisdiction.</td>
<td>14</td>
</tr>
<tr>
<td>2 Public health issue</td>
<td>Frames legalization as an issue that may affect public health.</td>
<td>14</td>
</tr>
<tr>
<td>3 Public safety issue</td>
<td>Frames legalization as an issue that may impact public safety.</td>
<td>14</td>
</tr>
<tr>
<td>4 Controversial land use</td>
<td>Frames marijuana land uses as potentially creating conflict in the jurisdiction.</td>
<td>8</td>
</tr>
<tr>
<td>5 Unknown nature</td>
<td>Acknowledges the legal novelty of I-502 in the U.S. and the associated uncertainty.</td>
<td>8</td>
</tr>
<tr>
<td>6 Role of WSLCB</td>
<td>Acknowledges the role of the WSLCB in implementing I-502 (i.e. distributing licenses, setting and timing regulations, etc.)</td>
<td>23</td>
</tr>
<tr>
<td>7 Federal position</td>
<td>Acknowledges potential conflict between federal and state marijuana laws.</td>
<td>15</td>
</tr>
<tr>
<td>8 Legislative context</td>
<td>Includes reference to I-502.</td>
<td>21</td>
</tr>
<tr>
<td>9 Impacts</td>
<td>States that legalization may have secondary effects that may impact the community.</td>
<td>13</td>
</tr>
<tr>
<td>10 Vulnerability</td>
<td>Mentions area, population, or business type that may be disproportionately affected.</td>
<td>6</td>
</tr>
<tr>
<td><strong>Goals</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Public health</td>
<td>Frames meeting public health goals and requirements as a priority.</td>
<td>13</td>
</tr>
<tr>
<td>2 Public safety</td>
<td>Frames meeting public safety requirements and goals as a priority.</td>
<td>14</td>
</tr>
<tr>
<td>3 State compliance</td>
<td>Frames compliance with licensing provisions outlined by I-502 and the WSLCB as a priority.</td>
<td>12</td>
</tr>
<tr>
<td>4 Federal compliance</td>
<td>References the eight federal guiding policy goals pertaining legalization.</td>
<td>5</td>
</tr>
<tr>
<td>5 Research and analysis</td>
<td>References the need for further research and analysis on the effects of the ordinance provisions in order to assess the effectiveness and appropriateness of the ordinance.</td>
<td>9</td>
</tr>
<tr>
<td><strong>Definitions</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Marijuana</td>
<td>Defines “marijuana.”</td>
<td>21</td>
</tr>
<tr>
<td>2 Marijuana processor</td>
<td>Defines “marijuana processor.”</td>
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</tr>
<tr>
<td>3 Marijuana producer</td>
<td>Defines “marijuana producer.”</td>
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<tr>
<td>4 Marijuana-infused products</td>
<td>Defines “marijuana-infused products.”</td>
<td>17</td>
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<tr>
<td>5 Marijuana retailer</td>
<td>Defines “marijuana retailer.”</td>
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</tr>
<tr>
<td>6 Usable marijuana</td>
<td>Defines “usable marijuana.”</td>
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</tr>
<tr>
<td>7 Child care center</td>
<td>Defines “child care center.”</td>
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</tr>
<tr>
<td>8 Game arcade</td>
<td>Defines “game arcade.”</td>
<td>9</td>
</tr>
<tr>
<td>Indicator</td>
<td>Description – “The Ordinance...”</td>
<td>Frequency</td>
</tr>
<tr>
<td>-----------</td>
<td>---------------------------------------------------------------------------------------------------</td>
<td>-----------</td>
</tr>
<tr>
<td>9</td>
<td>Library</td>
<td>8</td>
</tr>
<tr>
<td>10</td>
<td>Playground</td>
<td>8</td>
</tr>
<tr>
<td>11</td>
<td>Public park</td>
<td>9</td>
</tr>
<tr>
<td>12</td>
<td>Public transit center</td>
<td>8</td>
</tr>
<tr>
<td>13</td>
<td>Recreation center or facility</td>
<td>9</td>
</tr>
<tr>
<td>14</td>
<td>Residence</td>
<td>8</td>
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<tr>
<td>15</td>
<td>School</td>
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**Locational Control Policies**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Description</th>
<th>Frequency</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>Zoning - producers</td>
<td>19</td>
</tr>
<tr>
<td>2</td>
<td>Zoning - processors</td>
<td>19</td>
</tr>
<tr>
<td>3</td>
<td>Zoning - retailers</td>
<td>21</td>
</tr>
<tr>
<td>4</td>
<td>Zoning - outdoor vs. indoor cultivation</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>Residential</td>
<td>10</td>
</tr>
<tr>
<td>6</td>
<td>Distance restrictions - state</td>
<td>14</td>
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<tr>
<td>7</td>
<td>Distance restrictions - local</td>
<td>5</td>
</tr>
<tr>
<td>8</td>
<td>Distance restrictions - measurement</td>
<td>9</td>
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<td>9</td>
<td>Density controls - producers, local</td>
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<td>10</td>
<td>Density controls - processors, local</td>
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<tr>
<td>11</td>
<td>Density controls - retailers, local</td>
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</tr>
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<td>12</td>
<td>Density controls - retailer, state</td>
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**Operational Control Policies**

<table>
<thead>
<tr>
<th>Indicator</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Advertising and signage</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>Hours of operation</td>
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<tr>
<td>3</td>
<td>Outdoor vs. indoor production</td>
<td>10</td>
</tr>
<tr>
<td>4</td>
<td>Security</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>Square footage</td>
<td>3</td>
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<tr>
<td>6</td>
<td>Visibility</td>
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</table>

**Other**

<table>
<thead>
<tr>
<th>Indicator</th>
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<tbody>
<tr>
<td>1</td>
<td>Conditional use</td>
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<tr>
<td>Indicator</td>
<td>Description – “The Ordinance...”</td>
<td>Frequency¹</td>
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<tr>
<td>2 Home occupation</td>
<td>Addresses home occupation.</td>
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<tr>
<td>3 Medical marijuana</td>
<td>Addresses medical marijuana uses.</td>
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<tr>
<td>4 Nonconforming uses</td>
<td>Addresses non-conforming uses.</td>
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</tr>
<tr>
<td>5 Public nuisance</td>
<td>Addresses public nuisance law.</td>
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</tbody>
</table>

¹ Out of 23 possible ordinances.