Minimizing the Illegal Market for Marijuana

Recreational and medical marijuana legalization in the United States has served to reduce the size of illegal markets in legalized jurisdictions. However, despite these reductions, a very sizeable illegal market for marijuana continues to thrive in every legalized jurisdiction and undermines the benefits which legalized marijuana offers. Illegal markets for marijuana rob state and local government of tax dollars while continuing to drive up policing and incarceration costs as unregulated market participants amass large volumes of unbanked revenue. Additionally, there is ample evidence in cities throughout North America that when illegal markets exceed low levels, policing efforts consistently fail to remedy the situation (see, e.g. San Jose, Santa Ana, Detroit, Toronto). The primary driver of marijuana illegal markets is the combination of: (i) policies which overly restrict the availability and ease of purchasing marijuana through legal channels, (ii) high effective tax rates and compliance costs on legal marijuana and (iii) insufficient quantity and quality of legal marijuana for sale in a market.

As elected officials, regulators and voters move towards more defined legalization on a state and local level, it is critical that marijuana policy reforms be designed with a goal of reducing illegal markets.

Estimations of Current Illegal Market in Selected Cities

The table in Appendix A illustrates for comparison some of the current estimated illegal market levels in other cities and corresponding data on dispensary density, pricing and taxation. Estimations of illegal market rates range from 30% in Denver, Boulder and Colorado Springs where dispensary density ranges from 1/2887 to 1/4126 and effective tax rates historically hovered above 30% to 50-60% in Seattle where dispensary density is roughly 1/10695 and the effective tax rate is 47.1%. In each of the cities we reviewed, illegal market pricing generally ranged significantly lower than that of legal market pricing with the trend being more exaggerated in those markets where higher illegal market rates persist.

Factors that Contribute to Illegal Markets

Low Dispensary Density: Restrictive caps and zoning rules impede access and inflate costs, often forcing consumers to turn to illegal marijuana markets. While more data needs to be compiled, initial studies have found that density of marijuana dispensaries is unrelated to property and violent crimes.[1]

Limitation to In-State or In-City Operators or Employees: Prohibiting actors from outside the applicable jurisdiction to either own, operate or finance marijuana businesses immediately either (i) drives these operators to operate in the illegal market or (ii) forces them to utilize handshake deals, licensing or management agreements or other marked up services to extract de facto ownership economics. Both outcomes lead to a loss of control for the jurisdiction. Washington State has some of the most restrictive out-of-state ownership and lending rules and this has made it extremely difficult for small operators to access expansion or startup capital. We have also had discussions with multiple operators in California and Oregon who "shadow own" large operations in Washington through a variety of mechanisms.

Well-Funded Incumbents Losing Licensing: Artificially limiting the number of licenses at the state or local level could effectively force otherwise compliant, safe, and experienced businesses outside of the legal market. Many of these operators are well funded and, in many cases, have been paying taxes in an

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[1] Freisthler, Bridget, William R. Ponicki, Andrew Gaidus, and Paul J. Gruenewald. "A micro-temporal geospatial analysis of medical marijuana dispensaries and crime in Long Beach, California." *Addiction* 111, no. 6 (2016): 1027-035. doi:10.1111/add.13301.

attempt to achieve legitimacy. These operators will have the capital and the experience to quickly open legal operations.

Constrictions on Accessing Capital (Debt or Equity): Inability to access capital to either start legalized operations or expand and professionalize increases illegal operators and hurts the compliance levels of legal operators. Capital constrictions commonly happen due to the following: (i) limitations on lenders or investors from outside the jurisdiction, (ii) requirements that lenders or minority investors go through rigorous qualification as a license owner, and (iii) rules that would prohibit lenders from taking control of assets in the event of a bankruptcy or insolvency.

Strong Desire by Incumbents to Remain: In informal discussions with numerous dispensary, cultivation and processing operators, there has been a consistent theme that (i) overly restrictive regulation may take away their only source of livelihood and (ii) operators who are left without licensing will continue to attempt to operate in whatever manner possible.

High Effective Tax Rate: High effective tax rates place the legal market at a significant competitive disadvantage relative to the illegal market. Recognizing the relationship between high effective tax rates and the strength of the illegal market, states such as Washington and Oregon have moved to reduce tax rates on the industry, and ballot initiatives across the nation have adopted lower tax rates as well.[2] If tax levels are not appropriately set and narrowly tailored, the price of legal marijuana will dramatically increase as will the incentive for consumers to turn to the illegal market.

Over-Restriction of Advertising: There is a need for advertising limits to reduce public nuisance and to ensure advertising isn't attempting to target children; however, many states' advertising restrictions go too far and make it difficult for legal operators to differentiate themselves from illegal operators while hurting the ability to build consumer trust and awareness around safe, lab tested brands. Advertising restrictions that broadly limit advertising on certain mediums (e.g. billboards, radio) or having professional store signage provide limited public benefit while forcing operators to appear more like speakeasies than licensed shops. Additionally, despite wildly varying advertising restrictions in Washington, Oregon, California and Colorado, there are almost no discernable differences in youth usage rates or similar harm indicators – which only underscores the limited benefit of these ad restrictions.

Lower Supply Quality: Experienced operators with expertise with specific industry sectors or products should be allowed to enter the legal market. Established brands with lab testing and consumer loyalty are a natural combatant to illegal market sales. Marijuana consumers have traditionally shown a willingness to buy the best product regardless of source.

Constraints on Supply: Most top brands are not currently operated by dispensary owners. Without licensing independent cultivators, manufacturers and processors, supply levels will drop and price levels will rise as most existing dispensary licensees lack the expertise and facilities to provide sufficient marijuana products to meet estimated market demand.

Lack of Lounge or Social Consumption Venues: In Barcelona and Amsterdam, marijuana social lounges have both prevented public nuisance and reduced illegal markets by allowing legal points of sale to justify higher costs with a social meeting space and not permitting the consumption of products bought outside the premises. Denver is now moving forward with the same model. Reducing, eliminating, or

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[2] Henchman, Joseph, and Morgan Scarboro. "Marijuana Taxes: Lessons from Colorado and Washington." Tax Foundation. February 16, 2017. Accessed June 01, 2017. https://taxfoundation.org/marijuana-taxes-lessons-colorado-washington/.

not considering these spaces removes one of the key areas in which legal cannabis retailers can gain a competitive advantage over their illegal counterparts.

Policy Recommendations

To reduce and ultimately eliminate illegal markets, five key objectives should form the basis of marijuana regulatory policy:

1. **Ensuring Sufficient Access**: The number of marijuana businesses needs to create sufficient levels of access via dispensary density, hours of operation and delivery service such that legal access is reasonably convenient. Some local governments restrict the points of purchase for marijuana below that of any other consumer or pharmaceutical good while others have adopted complete bans.

   - Policy Recommendations:

     - Zoning rules that ensure a ratio of at least one dispensary or delivery service per every 7000 residents.
     - Set strong health and consumer protection standards while allowing for broad participation within the regulatory framework. Welcoming all businesses that can demonstrate compliance with the law to participate provides consumers greater access to safe and licensed marijuana.
     - Limitations should not be placed on operators or managers living in the jurisdiction; or if needed, should only apply to 25% or less of such individuals.
     - Those who have been subject to criminal conviction solely for the manufacturing, cultivation or sale of marijuana should not be disqualified from receiving permits.
     - Applications for permits should be reviewed and permits be issued within 30 to 90 days. Correspondingly, attempts to shut down existing operators should be commenced only after the issuance of the new licenses to avoid encouraging additional illegal operators.
     - There should be enough testing labs to meet the needs of local marijuana business, and guidelines for responsible lab operations should be developed.
     - Finally, local governments should authorize dispensaries to have on-site consumption lounges to reduce public nuisance and encourage purchase from legal sources.

2. **Tailored Taxation Models**: Tax policies should be established with ample flexibility to be adjusted upward and downward quickly based on illegal market conditions, and tax proposals should only be made with a full understanding of how the resulting effective tax rate would contribute to either fueling or subduing the illegal market.

   - Policy Recommendations:

     - State and local governments should set tax rates at levels that appropriately balance tax revenue generation and illegal market reduction. Research shows that effective tax rates (inclusive of state, local, and supply-chain taxes) exceeding 20% have diminishing returns for tax revenue generation but significantly increase the size of the illegal market.[3]

- Taxes should generally only be placed on the sale to consumer to avoid multiplicative taxation through the supply chain.
- To the extent that state and local governments seek to generate revenue from up-supply chain operators (e.g. lab testing facilities, cultivators, manufacturers and processors), a flat annual licensing fee model as opposed to a taxation model should be adopted for these operators. Data from cities across the US shows a strong correlation between inflated effective tax levels on these operators and outsized illegal markets. Additionally, due to the federal 280E rules, legislators should be mindful that these businesses already have inflated tax rates.
- In the case of the annual licensing fee for cultivators, consider setting the fee on a price per square foot of cultivation space model with such fee not to exceed $15.00 per square foot.
- State and local regulatory agencies should review and adjust tax rates annually based on several factors including illegal market levels.

3. **Providing for Safe and Diverse Supply**: Limits in regulated marijuana supply can cause legal marijuana prices to skyrocket while illegal markets can find alternative sources more fluidly. Despite this, the effect of price differences can be mitigated if there are higher quality products and desired brands being sold through legal channels. To accomplish this, there should be a trend towards more cultivation and processing licenses to ensure robust competition to create premium products and sufficient supply to legal points of sale.

➢ Policy Recommendations:

- Do not limit the number of cultivation, processing, manufacturing and distribution permits. Instead use zoning rules that are narrowly tailored to ensure that there are low barriers to entry to the legal market, which—unlike the unregulated market—is subject to inspection, monitoring and taxation rules. Cities can create a thriving export business to other parts of the State as well as enable operators to become innovators and leading operators within the industry.
- Allow co-location and sublicensing of cultivation, processing and manufacturing permits on compliant premises to ensure that the hundreds of brands and companies operating can deal with possibly limited space for operation without resorting to the illegal market.
- Provide permits for processing using both volatile and non-volatile solvents. Consumer taste for concentrate products overwhelmingly leans towards BHO and other products utilizing volatile solvents. Additionally, there is a growing body of evidence that the products made using these extraction methods have a more diverse set of therapeutic uses including for the treatment of PTSD and opioid dependence. Failure to permit and allow for processing using volatile solvents will drive a massive underground market.

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[3] C.D. Howe Institute. *Intelligence Memos: With Legal Weed the Government Must Choose Revenue or Regulated Market, Not Both*, April 10, 2017 https://www.cdhowe.org/sites/default/files/blog_Rosalie_0410.pdf.

- Mandate an open-source Seed-to-Sale tracking system to monitor inventories and movement and enable identification of any suspicious patterns; such system could be the same as that mandated by the State.
- Ensure the ability to conduct spot audits during regular business hours on marijuana products at any point in the supply chain to carry out lab testing or look for safety issues.
- Allow cultivators, processors and manufacturers to obtain lab testing and directly distribute their products to retail points of sale.

4. **Effective Advertising Policies That Are Analogous to Alcohol**: The rush by jurisdictions to place draconian advertising laws can thwart the move to reduce illegal operations while providing little social benefit. The end result is legalization that appears like "half legalization" and legal operators choosing other jurisdictions where they can operate their businesses in a normalized professional manner. The other side cost of over-restricting advertising is that businesses have weaker trademark protection and brands that are less suitable for licensing into other jurisdictions.

   ➢ Policy Recommendations:

   - Generally look for parity in alcohol and marijuana advertising restrictions. Allow marijuana brands and dispensaries enough advertising options to create brand recognition for trademark protection purposes and to differentiate themselves from illegal operators.
   - Restrict advertising that depicts people under the age of 21 consuming marijuana or that is predominantly targeted to children. Adopt a touch and feel approach to advertising rules as opposed to carte blanche restrictions on the use of cartoon logos or whimsical trademarks.
   - Allow dispensaries to have visible storefronts and have signage commensurate with liquor establishments to force them to compete on store quality, cleanliness and curbside appeal. This has the added benefit of increasing buildout expenditure by dispensary owners which, in turn, increases their desire to maintain compliance.
   - Follow the federal advisory guidelines for alcohol advertising and only allow advertising in channels where it is reasonably believed that 71.6% of the viewers are 21 and over.

5. **Ensuring Access to Capital**: Failure to ensure sufficient access to capital creates a less professionalized industry and leaves illegal operators without the means to enter the legal market. Additionally, more open access to capital can help ensure that business ownership is not just limited to high net worth individuals and encourage local small business owners.

   ➢ Policy Recommendations:

   - Only place ownership restrictions and registration requirements on persons who own 20% or more of the applicable business.
   - Do not place in-state ownership or lending requirements, or if there is a feeling such policies are needed, only have such rules apply to a percentage of the licenses.
   - Ensure that lenders have the ability to take control and operate licenses in the event of a bankruptcy or insolvency. Provide an accelerated path for lenders to liquidate and

transfer licenses to purchasers who have been approved by the applicable regulatory authority.

- Allow for the free transfer of licenses in the secondary market subject to approval of the purchaser by the licensing authority.
- Set aside a portion of state tax revenue for a financing fund to provide startup financing for minority or women-owned license operators.

6. **Ability to Reactively Adjust Policy**: The legal marijuana market is still in its early stages of development and continues to evolve rapidly. Accordingly, policy should enable regulators to adjust density and operation of marijuana businesses to quickly respond to spikes in illegal market usage.

   - Policy Recommendations:

     - Organize a dedicated marijuana regulatory agency that is authorized to increase the number of operators on a rolling schedule based on several factors including illegal market operating levels, and has the ability to offer licensing in regions where data shows illegal markets remain high.
     - Review tax rates and distribution of marijuana points of sale and adjust to minimize remaining illegal market levels.

7. **Efficient Data, Monitoring and Safety**: The illegal market for marijuana is poorly understood in most jurisdictions. Regulators must be given robust and real-time data to quickly adjust marijuana policy to effectively undercut illegal markets before they become rooted. At the same time, the data collected must be well tailored to avoid driving up already high administrative and compliance costs for operators.

   - Policy Recommendations:

     - Regulators at the state and local level should be required to review data and adjust the foregoing to meet a series of criteria including illegal market levels.
     - Marijuana regulatory agencies and local governments should prepare annual reports on the estimated illegal market levels in the city which identifies key causes and geographic areas where illegal sales are a concern. Licensing, zoning, taxation and other rules should be reviewed and adjusted considering these findings.
     - All marijuana businesses should be required to provide periodic data to the marijuana regulatory bodies that includes volume and tracking data from the Seed-to-Sale systems as well as retail data from point of sale systems.
     - To the extent on-site consumption is permitted, dispensaries should be liable for intoxicated patrons after they leave the establishment in the same manner as bars.
     - Marijuana businesses should be required to have security measures which are at least commensurate with those for alcohol and pharmaceutical products. These security requirements should not place crippling cost or administration requirements on the businesses but should be at least sufficient to enable accurate monitoring and control by law enforcement.

Appendix A

Updated August 18, 2017

Jurisdiction	Estimated Illegal Market Level	Points of Sale per Person (legal and grey)[i]	Delivery Services	Estimated Effective Tax Rate (aggregate)	Estimated Legal Market Price per Ounce/Eighth (Excluding Tax)[ii]	Estimated Illegal Market Price per Ounce/Eighth[iii]
Los Angeles, CA (under Prop D)	70-80%	1/29454[iv]	Mixed	15[v]	260-300/35-50	150-200/20-35
Los Angeles, CA (1,771 points of sale)	Proj. 25-35%	1/2245	Yes – from bricks and mortar	Est. 40-45[vi]		
Denver, CO	20-30%[vii]	1/2152	No	37.15[viii] (35.05% prior to July 2017)	170-250/20-40	150-200/20-35
Boulder, CO	20-30%[ix]	1/2300	No	38.5[x] (36.4% prior to July 2017)	165-200/28-40	150-180/20-45
Seattle, WA	50-60%[xi]	1/11938	No	47.1[xii]	280-420/30-55	160-200/20-45
San Francisco & Oakland	TBD	1/7684	Yes	8.5[xiii]	280-360/40-60	220-260/20-40
Santa Ana, CA	55%[xiv]	1/16711	Yes - existing selected collectives and cooperatives can deliver		230-400/35-60	150-240/35-45
San Jose, CA	80%[xv]	1/53966	Yes – only 3 licensed delivery services.[xvi]	18.75[xvii] (>45 under Prop 64)	270-320/35-55	200-250/25-40
Anaheim, CA	100% (Given consumption estimates 53K residents are buying from illegal market annually)	No Licensed Operators	No – Anaheim banned all marijuana licensees in 2017[xviii]		N/A	150-240/35-45
Long Beach, CA[xix] (under Measure MM)	50-60%[xx]	1/14692	Deliveries will be allowed by licensed dispensaries.	15.75[xxi] (>45 under Prop 64)	260-360/30-60	200-320/25-55
Portland, OR	35%[xxii]	1/4475	Yes[xxiii]	20[xxiv]	160-260/25-55	140-190/20-30
Las Vegas, NV	TBD	1/10549	Yes	36.25[xxv]	240-325/30-55	170-270/30-50
Phoenix, AZ	58%[xxvi]	1/42500	Not covered in city ordinance.[xxvii]	8.6[xxviii]	200-360/35-55	160-240/25-45

Notes

[i] Figures determined by dividing2016 Census population data by the number of listings on Weedmaps (unless noted otherwise).
[ii] Data generated from Weedmaps' databases.
[iii] Data generated from average of data points on craigslist and market survey during the period of July 2016.
[iv] Assumes 135 dispensaries.
[v] 9% sales tax rate in LA county plus 6% marijuana gross receipt tax rate.
[vi] Los Angeles tax estimate includes state taxes imposed by Proposition 64 (15 percent retail excise tax, $9.25 tax per dry-weight ounce of cannabis flower, and $2.75 per dry-weight ounce of cannabis leaves), Los Angeles sales tax (8.75 percent), and local cannabis taxes authorized by Measure M.
[vii] Downs, David. "The Economist: pot legalization is crushing black market in Colorado." SF Gate. February 17, 2016. Accessed May 8, 2017. http://blog.sfgate.com/smellthetruth/2016/02/17/economist-pot-legalization-is-crushing-black-market-in-colorado/.
[viii] This number is calculated by adding the 15 percent state marijuana excise tax, the 15 percent state marijuana tax, the 3.65 percent Denver general sales tax, and the 3.5 percent Denver special tax. Colorado Department of Revenue, Taxpayer Service Division. *Excise 23: Excise Tax on Retail Marijuana*, June 2016 https://www.colorado.gov/pacific/sites/default/files/Excise23.pdf; Colorado Department of Revenue, Taxation Division. "Sales Tax Rates," June 2017 https://www.colorado.gov/pacific/tax/sales-tax-rates; and City of Denver. *City and County of Denver, Colorado Tax Guide, Topic No. 95: Marijuana—Medical and Retail*, April 2015 https://www.denvergov.org/content/dam/denvergov/Portals/571/documents/TaxGuide/Marijuana-Medical_and_Retail.pdf.
[ix] Downs, "The Economist: pot legalization is crushing black market in Colorado."
[x] This number is calculated by adding the 15 percent state marijuana excise tax, the 15 percent state marijuana tax, the 3.5 percent Boulder city sales and use tax, and the 5 percent Boulder city excise tax on cultivation. Colorado Department of Revenue, Taxpayer Service Division. *Excise 23: Excise Tax on Retail Marijuana*, June 2016 https://www.colorado.gov/pacific/sites/default/files/Excise23.pdf; Colorado Department of Revenue, Taxation Division. "Sales Tax Rates," June 2017 https://www.colorado.gov/pacific/tax/sales-tax-rates; and City of Boulder Colorado. "Recreational Marijuana Businesses," (accessed June 2017) https://bouldercolorado.gov/tax-license/recreational-marijuana-businesses.
[xi]Washington State provides mid-range and high-end estimates for the overall market value of their cannabis industry of $1.33 billion and $1.61 billion, respectively. Unlike Washington State, we estimate that the actual market size was over $2bn based on comparison of its population to those in parts of California and the consumption rate in those regions. In FY 2016, sales from licensed marijuana dispensaries totaled $786.4 million. We estimate, as does Washington State, that remaining sales went to illegal and gray market operators. Washington State Liquor and Cannabis Board. "Marijuana Dashboard: Sales and Excise Tax Totals," https://data.lcb.wa.gov/stories/s/WSLCB-Marijuana-Dashboard/hbnp-ia6v/; and BOTEC. *Estimating the Size of the Medical Cannabis Market in Washington State*, December 2015, p. 2.
[xii] This number is calculated by adding the 37 percent state marijuana excise tax and the 10.1% Seattle sales and use tax. Washington State Department of Revenue. "Taxes due on marijuana," August 26, 2016. Accessed May 8, 2017. http://dor.wa.gov/Content/FindTaxesAndRates/marijuana/Default.aspx; and Washington State Department of Revenue. "Local Sales and Use Tax Rates by City/County, Tax Rates Effective July 1 – September 30, 2017," Accessed July 24, 2017 http://dor.wa.gov/Docs/forms/ExcsTx/LocSalUseTx/LocalSlsUseFlyer_17_Q3_alpha.pdf.
[xiii] Downs, David. "San Francisco Dispensaries' Annual Sales Estimate: $41 Million." East Bay Express. February 24, 2017. Accessed May 8, 2017. http://www.eastbayexpress.com/LegalizationNation/archives/2012/01/31/san-francisco-dispensaries-annual-sales-estimate-41-million.
[xiv] Staggs, Brooke Edwards, and Jessica Kwong. "Santa Ana's black market for pot: The city has twice as many unlicensed marijuana shops as legal ones." Orange County Register. March 29, 2016. Accessed May 8, 2017. http://www.ocregister.com/2016/03/29/santa-anas-black-market-for-pot-the-city-has-twice-as-many-unlicensed-marijuana-shops-as-legal-ones/.
[xv] Survey of local market participants.

[xvi] Kendall, Marissa. "San Jose lifts ban on cannabis delivery, allowing startup to start up." The Cannifornian. April 12, 2017. Accessed May 08, 2017. http://www.thecannifornian.com/cannabis-business/san-jose-lifts-ban-cannabis-delivery-allowing-startup-start/.
[xvii] Includes 8.75 percent San Jose sales tax and 10 percent Marijuana Business Tax and Prop 64 estimate includes state taxes imposed by Proposition 64 (15 percent retail excise tax, $9.25 tax per dry-weight ounce of cannabis flower, and $2.75 per dry-weight ounce of cannabis leaves).
[xviii] Joseph Pimentel. "Anaheim Is the Latest Orange County City to Ban Marijuana-Related Businesses," in *The Orange County Register*, April 26, 2017 http://www.ocregister.com/2017/04/26/anaheim-latest-orange-county-city-to-ban-marijuana-related-businesses/.
[xix] Long Beach is implementing Measure MM, approved by voters in November, 2016. Though the city currently bans dispensaries, estimates are based off 32 licensed dispensaries allowed pursuant to Measure MM.
[xx] While Long Beach is lifting a ban on dispensaries, the 32 dispensaries allowed under Measure MM will likely not be sufficient to meet patient demand. The illegal market estimate is based of illegal market rates in similar jurisdictions.
[xxi] Includes 9.75 percent Long Beach sales tax rate and 6 percent marijuana tax as authorized by Measure MM and Prop 64 estimate includes state taxes imposed by Proposition 64 (15 percent retail excise tax, $9.25 tax per dry-weight ounce of cannabis flower, and $2.75 per dry-weight ounce of cannabis leaves).
[xxii] Iboshi, Kyle. "Legal pot businesses struggle to compete with black market." KGW Portland. February 24, 2017. Accessed May 8, 2017. http://www.kgw.com/news/investigations/legal-pot-businesses-struggle-to-compete-with-black-market/413653533.
[xxiii] City of Portland, Oregon Charter, Code, and Policies. Title 14, Chapter 14B.130. https://www.portlandoregon.gov/citycode/69071.
[xxiv] This number is calculated by adding the 17 percent state marijuana excise tax and the 3 percent Portland marijuana sales tax. City of Portland Oregon. "Portland Marijuana Tax," Accessed July 24, 2017. https://www.portlandoregon.gov/revenue/article/620894.
[xxv] This number is calculated by adding the 15% state wholesale excise tax, the 10% state retail excise tax, the 8.25% state/local sales tax, and the Clark County business license fee of up to 3% of gross sales. Clark County. "FAWs for Retail Marijuana," June 29, 2017. Accessed July 24, 2017 http://www.clarkcountynv.gov/business-license/announcements/Pages/FAQs-for-Retail-Marijuana.aspx.
[xxvi] Estimated black market provided by Weedmaps survey, based on 74 responses.
[xxvii] City of Phoenix, Arizona. Ordinance G-6151. May 9, 2016. Accessed May 8, 2017. https://www.phoenix.gov/pddsite/Documents/G-6151.pdf
[xxviii] Arizona Department of Health Services. "Medical Marijuana FAQs – Qualifying Patients," Accessed July 24, 2017 http://www.azdhs.gov/licensing/medical-marijuana/index.php#faqs-patients; and State of Arizona Department of Revenue. "Tax Rate Details,"