



FISCAL IMPACT STUDY MARIJUANA LEGALIZATION AND NEW YORK'S LAW ENFORCEMENT AND EMERGENCY SERVICES

*A Study by Smart Approaches to Marijuana- NY
in Cooperation with the New York State Sheriff's Association
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EXECUTIVE SUMMARY

The proposed legalization of marijuana in New York will result in higher costs to state and local law enforcement and emergency services. Towns and cities across the state will face increased budgetary pressures at a time when New York's tax burden is already a serious drag on the economy. In fact, according to the Tax Foundation, New York has the highest state and local tax burden in the country as a percent of the economy (12.7 percent) and fourth highest per person property tax burden (\$2,782).¹

Marijuana legalization in New York will have both significant budgetary and societal costs. **In fact, law enforcement and emergency services costs could account for a majority of the revenue projected by the office of New York Governor Andrew Cuomo, to be realized by legalization.**

First, marijuana legalization will be a major cost driver for state and local law enforcement and emergency services agencies. Keeping New York's roads (from DWIs) and communities (from black market operations) safe will require additional drug policing with Drug Recognition Experts (DREs), drug testing equipment, and drug-sniffing dogs all of which will likely require expensive new equipment acquisitions and training. Also, dealing with the consequences of increased impaired driving, and the corresponding increase in car crashes will lead to higher costs to law enforcement and emergency services.

**\$190.3 to \$235.2
Million**

Upfront Costs to Taxpayers

**\$157.5 to \$192.2
Million**

Annual Costs to Taxpayers

¹ Tax Foundation. <https://taxfoundation.org/state/new-york/>

Overall, upfront budgetary costs to law enforcement and emergency services could range from \$190.3 to 235.2 million (Table 1). Ongoing annual estimated costs range from \$157.5 to \$192.2 million. Car crashes would cost another \$44 million between 2018 and 2028 (Table 2).

Second, car crashes have a broader negative societal impact in terms of increased hospitalizations (paid for, in part, by public health agencies), emergency departments, and deaths.

Overall societal costs between 2018 and 2028 would mean \$388 million in hospitalization charges (of which \$34.5 million will be paid for by public funded sources such as Medicaid and Medicare), \$253 million in emergency department visits, and \$4.3 billion in the value of lost lives (Table 3).

In the end, marijuana legalization will create numerous destructive waves through New York ranging from significant budgetary hardship to law enforcement and emergency services to the shattered lives of people involved in car crashes. New York's law enforcement and emergency services will bear the immediate brunt of these circumstances which will create tradeoffs from reducing other existing services potentially impacting public safety, to increasing local budgets and taxes, boosting New York's already highest-in-the-nation level of taxation.

BUDGETARY IMPACTS OF MARIJUANA LEGALIZATION

Current experience in states with legalized marijuana, such as Colorado, Washington, and Oregon, shows that there will be more people driving under the influence and that the black market for marijuana will get larger. Consequently, the budgetary needs for law enforcement will increase.

COSTS ASSOCIATED WITH DRUGGED DRIVING

It has been a long-standing transportation goal to make New York's roads as safe as possible for drivers, pedestrians, and bicyclists among others. Factors such as technological improvements and public policy have helped create a percent decline in crashes and injuries between 2009 and 2017. However, the legalizing marijuana will likely erode these gains in safety based on data from other states.

At the forefront will be New York's law enforcement and emergency services who will tend and mend the vehicles and lives of those involved in Driving While Impaired (DWI) crashes. As such, Marijuana legalization will increase numerous costs to the state's local law enforcement and emergency services such as Emergency Medical Services (EMS) and fire departments.

The first line of defense in keeping New York's roads safe are the patrol men and women who are on the lookout for drivers who may be impaired. However, even when there is a strong suspicion of impairment, it is not an easy task to determine the level of impairment given the wide availability and use of drugs, both legal and illegal.

In the aftermath of a traffic stop on the suspicion of impairment, the officer must use their own knowledge and experience, such as being an Advanced Roadside Impaired Driving Enforcement (ARIDE) or a Drug Recognition Expert (DRE) trained officer, and tools, such as a breathalyzer, to make a more definitive judgement. Let's examine each of these.

ARIDE and DRE trained officers: An ARIDE or DRE trained officer has received special training to being able to determine impairment caused by drugs. Marijuana is already the single most identified drug through DRE evaluations—35 percent of all evaluations in 2017.²

Currently in New York, there are approximately 1,803 ARIDE trained officers and 347 DRE trained officers.^{3 4} To become ARIDE certified, each officer must complete 1 day of training. To become DRE certified, each officer must complete 15 days of training and 1 day of training thereafter to maintain certification.

While the ARIDE and DRE training is free to the officer, there are costs to their agency of paying the officer to attend and paying another officer(s) to cover their assignments while they are away.⁵ This expense is on average \$11,069 for the initial DRE training and \$1,107 for the yearly maintenance.⁶ There is also the cost of accommodations and meals to the agency.⁷

Between 2012 and 2018, Colorado increased the number of DREs by 66 percent to 214 from 129.⁸ If New York experiences the same increase, the number of DREs would increase by 229 officers to 576 from 347 and would cost an additional \$4.7 million (Table 1) for the initial training and an annual maintenance cost of \$313,128.

² “Drug Evaluation and Classification Program 2017 Annual Report,” International Association of Chiefs of Police, 2017. <https://www.theiacp.org/sites/default/files/pdf/2017-DECP-report.pdf>

³ <http://www.safeny.ny.gov/DRE/DREListWebPageList.pdf>

⁴ The estimated ARIDE total is based on the number of yearly trained ARIDE officers as published in the “Drug Evaluation and Classification Program Annual Report” 2013 to 2017 editions. The ARIDE program began in 2009. In order to estimate the number of ARIDE officers between 2009 and 2013, the share of New York’s trained officers to the national total for 2013 and 2017 was calculated and then applied to the national total for 2009 and 2013.

⁵ The DRE training is a program under the Governor’s Traffic Safety Committee which has an annual budget of \$20,493,000 that is paid via a grant from the federal government. <https://www.budget.ny.gov/pubs/archive/fy20/exec/agencies/appropData/MotorVehiclesDepartmentof.html>

⁶ This conservatively assumes that the officer who is away at training can have his time filled by shifting remaining officers to fill the missing shift(s). However, in smaller agencies, this may not be possible without paying existing officers’ overtime which would significantly increase the cost to the agency—creating a larger hardship to agencies least able to afford it.

⁷ This analysis assumes \$200 for hotel and \$20 per meal per day (3 meals per day, \$260 total cost). Not all of the travel costs will be incurred by the officer’s agency as, in some instances, the New York State Drug Evaluation & Classification Program has covered those expenses in the past depending on location of training—whether this would continue to be an option is unknown.

⁸ “Impacts of Marijuana Legalization in Colorado,” Colorado Department of Public Safety, Division of Criminal Justice, Office of Research and Statistics, October 2018, pg. 2. https://cdpsdocs.state.co.us/ors/docs/reports/2018-SB13-283_Rpt.pdf

Assuming a similar 66 percent increase in the need for ARIDEs, New York would have to add another 1,188 ARIDEs at an expense of \$1.6 million (travel, accommodations, agency backfill only).

However, Colorado's situation may not translate directly to New York because of significant differences in the characteristics of each state. New York has more than 3 times the population and has numerous large population centers stretching across the state. As such, the number of DREs needed may be significantly higher. According to Chief John Aresta, President of New York State Association of Chiefs of Police, New York agencies may have to train as many as 650 new DREs which would cost \$13.3 million for the initial training and an annual maintenance cost of \$888,508.⁹

Additionally, training these new ARIDEs and DREs will be a significant challenge considering only 1,525 DREs and 16,432 ARIDE's were trained nationwide in 2017--New York had only 12 ARIDE schools with 265 students, 2 DRE schools with 40 students, and 28 DRE instructors.¹⁰

New York will have to hire significant new numbers of DRE instructors to handle the initial training and yearly maintenance training for all the new DREs and ARIDEs.¹¹ Using the 2017 ratio of DRE Instructors to DRE students (1.4), it will take an estimated 160 (at 229 new DREs) to 455 (at 650 new DREs) new DRE instructors.¹² The compensation costs of a hiring a new DRE instructor is approximately \$92,576 yielding a total cost of \$14.8 million (at 229 DREs) to \$42 million (at 650 DREs).^{13 14 15}

⁹ Aresta, John, "New York State Police Chiefs Opposed to Legalization of Marijuana," New York State Associations of Chiefs of Police, Press Release, 2019. <https://www.nychiefs.org/publications/press-releases/227-new-york-state-police-chiefs-opposed-to-legalization-of-marijuana>

¹⁰ "Drug Evaluation and Classification Program 2017 Annual Report," International Association of Chiefs of Police, 2017. <https://www.theiacp.org/sites/default/files/pdf/2017-DECP-report.pdf>

¹¹ While the current DRE program is paid for by a federal grant, it is unlikely that federal funds will be available to expand the program beyond its current size. Therefore, this analysis assumes that any expansion will be paid for by the State of New York and/or local law enforcement agencies.

¹² This analysis assumes that these new DRE instructors will also be able to train all the new ARIDEs and annual DRE maintenance training.

¹³ According to the Census Bureau, in 2017 New York state and local police officers (without the power of arrest) earned \$54,908 in salary and wages. To factor in benefits, this analysis used the average of state and local government benefits such as health insurance, pensions, paid leave, etc. (as a percent of salary and wages) for the years 2007 to 2016, as reported by the Bureau of Economic Analysis, which was 66 percent. Adding 66 percent of \$54,908 (\$37,669) to \$54,908 yields annual compensation of \$92,576.

¹⁴ Note that the Bureau of Economic Analysis accounts for New York's unfunded pension liability into benefit costs. As such, today's dollar cost of hiring a new law enforcement officer may be lower than this estimate, but in the future this unfunded pension liability will have to be paid. As such, this estimate reflects the true, long term, cost of hiring a new officer.

¹⁵ This cost could be lower if some portion of the new DREs and ARIDEs can be trained in other states without the need for new in-state instructors. However, the savings would be partially offset by needing more time away from job for training and higher travel costs.

NEW BREATHALYZER EQUIPMENT

Currently, there is no marijuana equivalent to the alcohol breathalyzer that has been effectively deployed to combat alcohol related DUI. There is at least one breathalyzer in development that is close to commercialization called the Hound Marijuana Breathalyzer (HMB).¹⁶ The HMB will be dual-purpose in that it will be able to detect alcohol and marijuana and according to news reports would cost \$5,000 per unit and \$15 per replaceable single-use cartridge.¹⁷

While predicting how many HMBs may eventually be purchased is difficult, considering they are still experimental, a reasonable assumption is that every ARIDE and DRE would need at least one at their disposal which would cost between \$17.8 million (with 2,991 ARIDEs and 576 DREs) to \$19.9 million (with 2,991 ARIDEs and 997 DREs).¹⁸

Additionally, there is also significant on-going annual costs of the single-use cartridges used by the marijuana breathalyzer. Assuming every marijuana DUI arrest with reasonable suspicion of impairment and every car crash would result in the use of at least 1 cartridge, then that would cost \$8.7 million (see methodology section). This is a bare minimum use assumption since many traffic stops will also involve the use of the marijuana breathalyzer.

Assuming 1 cartridge is used by each ARIDE and DRE per day on average would mean annual costs of \$28.3 million (with 2,991 ARIDEs and 576 DREs) to \$30.6 million (with 2,991 ARIDEs and 997 DREs).

Assuming 3 cartridges are used by each ARIDE and DRE per day on average would mean annual costs of \$67.3 million (with 2,991 ARIDEs and 576 DREs) to \$74.2 million (with 2,991 ARIDEs and 997 DREs).

POLICING THE BLACK MARKET

Legalizing marijuana will not eliminate the black market for marijuana. In fact, by normalizing its use, there will be a bigger overall market for marijuana making it easier for the black market to hide within. This is already happening in other legalized states.

For example, consider the situation with cigarettes where tax rate differentials among the states encourage extensive smuggling. This is a battle that New York is very familiar with as the high cigarette excise tax rate, especially in New York City, makes it a very attractive target for smugglers (including terrorists). A recent study concluded:

¹⁶ For more information visit their website here: <https://houndlabs.com/product-overview/>

¹⁷ The prices for the HMB are obviously speculative since it is still in development. The source for the \$5,000 per unit costs is from here: https://www2.bostonglobe.com/news/marijuana/2019/04/26/calif-company-offers-answers-impaired-driving-with-marijuana-breathalyzer/fkCcRvtdQzyVeDZXWMua8I/story.html?s_campaign=bostonglobe%3Asocialflow%3Atwitter The source for the \$15 per single-use cartridge is from here: <https://www.nanalyze.com/2017/06/marijuana-breathalyzer-hound-labs/>

¹⁸ The marijuana breathalyzer is unable to determine impairment, so in the field it would have to be used in conjunction with an ARIDE/DRE.

“Our most recent estimates, using the latest available data at the time of this writing — through 2014 — find the states with the highest inbound smuggling rates are New York (55.4 percent), Arizona (49.6 percent), New Mexico (46.2 percent), Washington (45.2 percent), Minnesota (35.5 percent), California (30.9 percent), Massachusetts (29.3 percent), Utah (26.8 percent), Wisconsin (26.6 percent) and Texas (25.9 percent). The state of New York has been a perennial number one in our rankings. Its high state excise tax rate of \$4.35 per pack combined with New York City’s \$1.50 tax per pack and its proximity to lower taxed states (Pennsylvania and Virginia, for example) all contribute to its high smuggling rate.”¹⁹

Even if marijuana became legal in all 50 states, as is the case with cigarettes, a black market will always exist. Colorado’s experiment is already proving this out as shown in the recent in-depth expose by Rocky Mountain PBS called “Cultivating Crime.”²⁰

Keeping New York’s communities safe from the criminal elements that operate in the black market requires significant policing resources. One police resource that will be negatively impacted by increased black market activity will be New York’s narcotic K-9 teams which are currently trained to detect all forms of illicit drugs.

Given the expected growth in New York’s black market for marijuana, it is premature to simply assume that the dogs in the current K-9 teams will be retired early and replaced. Quite the contrary, as shown by the experience in Colorado and other legalized states, their services will still be very much in demand.

As a result, new narcotics dogs that are not sensitive to marijuana will have to be acquired in order to continue to police other illicit drugs without the legal problems existing dogs would bring. Since dogs can only have one dedicated handler, any new dogs will also mean additional officers.

According to the National Police Dog Foundation, the cost of a new dog is \$8,000 and training would cost another \$12,000.²¹ The compensation cost of hiring of a new officer is approximately \$143,902 for a combined first-year cost of \$163,902 per K-9 team.^{22 23}

¹⁹ LaFaive, Michael; Nesbit, Todd; Drenkard, Scott, “Cigarette Taxes and Smuggling: A 2016 Update,” Mackinac Center for Public Policy, 2016. <https://www.mackinac.org/archives/2016/s2016-09.pdf>

²⁰ <http://www.rmpbs.org/insight/cultivating-crime/>

²¹ <https://nationalpolicedogfoundation.org/faqs/>

²² According to the Census Bureau, in 2017 New York state and local police officers (with the power of arrest) earned \$85,349 in salary and wages. To factor in benefits, this analysis used the average of state and local government benefits such as health insurance, pensions, paid leave, etc. (as a percent of salary and wages) for the years 2007 to 2016, as reported by the Bureau of Economic Analysis, which was 66 percent. Adding 66 percent of \$85,349 (\$58,553) to \$85,349 yields annual compensation of \$143,902.

²³ There are other costs associated with equipping a new K-9 unit such as purchasing and/or improving the patrol car to transport the dog, building new kennels, etc. that are not accounted for in this estimate.

While we don't know at this juncture how many new K-9 teams will be needed, a preliminary examination of expected need shows the cost could be significant. Based on the most recent Census of State and Local Law Enforcement Agencies, there were 514 policing agencies in New York (Sheriffs, City Police Departments, etc.). To ensure 100% coverage, each of these agencies will need access to at least 1 new K-9 team which would cost up to \$84 million with an annual cost of maintaining these new K-9 teams would be up to \$75 million.^{24 25}

Of course, there are other non-monetary costs that must be examined as well. For instance, will enough new dogs be available immediately after legalization? If not, many parts of New York may not be able to police the black market. Such a circumstance can lead to legal issues, stress on existing dog teams and exacerbate costs as well.

DRUGGED DRIVING INCREASES AND ASSOCIATED COSTS

Car crashes in New York already exact a tremendous toll. Preliminary 2018 data shows that there were 310,833 crashes involving property damage, 10,955 people with serious injuries, 156,651 people with evident/possible injuries, and, most tragically, 906 people killed.

According to recent scholarly analysis, Colorado has already seen a 7.4 percent increase in car crashes due to the higher levels of impaired driving stemming from their marijuana legalization experiment. This is a sobering statistic and will only continue to worsen as marijuana use is further normalized. Extrapolating Colorado's experience to New York's car crashes from 2018 to 2028 would mean an additional 255,037 crashes with property damage, 7,939 people with serious injuries, 115,123 with evident/possible injuries, and 650 killed.

These crashes will adversely impact New York's local law enforcement and emergency services by demanding more of their time, energy, and budgets every year. Over the 2018 to 2028 time-period, EMS, fire, and police will spend at least another \$44 million just tending to these additional crashes (Table 2).

Ultimately, this increased workload on local law enforcement and emergency services will have to be paid for by either reducing services elsewhere, tearing the fabric of public safety, or by increasing local taxes, especially property taxes. To help local policymakers better understand the budgetary impact of increased car crashes due to marijuana legalization, the law enforcement and emergency services have been broken down by county (Tables 2 and 3). With approximately 60 percent of New York's counties experiencing long-term population decline, any upward pressure on services or taxes will pose significant budgetary challenges.

SOCIETAL COSTS OF MARIJUANA LEGALIZATION

²⁴ This does not necessarily mean each agency will have their own new K-9 team as some may have none while others may have several. Yet, to achieve 100 percent coverage, it is reasonable to assume 1 new K-9 team will have to be available to every law enforcement agency should marijuana legalization become a reality.

²⁵ Annual maintenance assumes \$2,000 to maintain dog. Does not include estimates for annual pay raises to officer and/or changes to benefits.

In 2014, car crash injuries cost \$499.3 million in hospitalization charges (of which \$44.3 million was charged to publicly funded programs such as Medicaid and Medicare) and \$308.8 million in emergency department visits.

With the increase in marijuana-related crashes, hospitalization charges would increase by \$388 million (\$34.5 million publicly funded) and \$253 million in emergency department visits further straining the resources of New York's hospital and safety net system (Table 3, also shown by county).

The greatest societal loss occurs when a person is killed in car crash which means all future economic output is lost. The additional 650 deaths related to marijuana legalization will cost New York nearly \$4.3 billion (Table 3, also shown by county).

Keep in mind, this study only quantifies the most direct costs associated with the crash itself. There are many other local costs associated with car crashes that aren't quantified here – costs of crash related congestion to other drivers, criminal and civil court cases, DUI incarceration expenses, law enforcement and emergency personnel hurt/killed while tending crashes, etc.

CRASH ESTIMATE METHODOLOGY

There are two components to estimating the emergency service costs of crashes—the costs of each crash and the number of crashes.

First, the costs associated with each crash was derived from a study titled “Costs of Crashes to Government, United State, 2008.”²⁶ The costs were in 2009 dollars and are national estimates necessitating two adjustments—one for rising costs and the other for cost-of-living differences.

Rising costs were estimated from 2009 to 2017 using police and fire salaries and wages reported in the Census Bureau's Annual Survey of Government Employment and Payroll.²⁷ Total wages and salary was divided by total full- and part-time employment for police and fire to get a per worker average. The police and fire estimates were then averaged together and the emergency costs were multiplied by the yearly increase from 2009 to 2017 (the final year of available data). Yearly growth estimates post-2017 were based on a linear extrapolation of the police and fire wages and salary estimates over the 2009 to 2017 time-period.

To adjust the national emergency costs for differences in the cost-of-living, the costs were multiplied by the Bureau of Economic Analysis's Regional Price Parities.²⁸ In 2016, the most recent data available, New York's cost-of-living was 15.6 percent higher than the national average. As such, emergency service costs were multiplied by 15.6 percent.

²⁶ Miller, Ted; Bhattacharya, Soma; Zaloshnja, Eduard; Taylor, Dexter, Bahar, Geni; David, Iuliana, ‘Costs of Crashes to Government, United States, 2008,’ Annals of Advances in Automotive Medicine, Vol. 55, October 2011, pp. 347-355. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3256813/>

²⁷ <https://www.census.gov/programs-surveys/apes.html>

²⁸ <https://apps.bea.gov/itable/iTable.cfm?ReqID=70&step=1>

Second, to extrapolate the number of increased crashes between 2018 and 2028, a baseline of crashes was created. A time-series of data was collected from the New York State Traffic Safety Statistical Repository (TSSR) for the years 2009 to 2018 and was then linearly extrapolated to 2028.²⁹ Using the results from a recent Insurance Institute for Highway Safety study which showed a 7.4 percent increase in crashes due to marijuana legalization in Colorado, the baseline was multiplied by 7.4 percent to derive the estimated increase in crashes.³⁰

The crash costs estimates were apportioned to the counties based on their 2018 crash statistics as reported by the TSSR.

The 2014 data for hospitalization charges and emergency department charges are from the New York State Department of Health.³¹ For the purposes of this analysis, the 2014 data was divided by the number visits to derive a per visit charge. Between 2014 and 2018, the per visit charge was increased by the rate of the personal consumption expenditure price index as reported by the Bureau of Economic Analysis.³² Between 2018 and 2028, the per visit charge was increased by the rate of the personal consumption expenditure price index as reported by the Congressional Budget Office.³³

Hospitalization costs were calculated by taking the estimated number of serious injuries that required hospitalization—in 2014 that was 66 percent. The extrapolated number of serious injuries was then multiplied by 66 percent and then by the per visit charge. The emergency department charges were calculated in the same manner. Publicly funded hospital costs were calculated by dividing the publicly funded costs by the total hospital costs with the resulting percentage applied to the total hospital costs—in 2014, that was 8.9 percent.

Hospitalization, publicly funded, and emergency department costs were apportioned to the counties in proportion to where the crashes occurred (which does not necessarily coincide with the hospital location where the crash victim was sent).

The estimate for value of human life lost is based on the Department of Transportation's value of \$6.6 million (in 2016 dollars).³⁴

²⁹ The crash data comes from the New York State Traffic Safety Statistical Repository (TSSR).
<https://www.itsmr.org/TSSR/>

³⁰ Monfort, Samuel S., "Effect of Recreational Marijuana Sales on Police-Reported Crashes in Colorado, Oregon, and Washington," Insurance Institute for Highway Safety, October 2018.
<https://www.iihs.org/frontend/iihs/documents/masterfiledocs.ashx?id=2173>

³¹ https://www.health.ny.gov/statistics/prevention/injury_prevention/traffic/new_york_state/nys_crash_fs.pdf

³² <https://apps.bea.gov/iTable/iTable.cfm?reqid=19&step=2#reqid=19&step=2&isuri=1&1921=survey>

³³ <https://www.cbo.gov/system/files/2019-01/51135-2019-01-economicprojections.xlsx>

³⁴ US Department of Transportation, Treatment of the Economic Value of a Statistical Life in Departmental Analyses: 2011 Interim Adjustment (2011), https://www.transportation.gov/sites/dot.gov/files/docs/Value_of_Life_Guidance_2011_Update_07-29-2011.pdf.

HARDWARE CARTRIDGE ESTIMATE METHODOLOGY

The number of marijuana DUI arrests was determined by first estimating the number of people in New York that regularly use marijuana. According to data from the Substance Abuse and Mental Health Services Administration (SAMHSA), 1.592 million people in New York reported using marijuana in the last month in 2017—8.13 percent of the population.³⁵ The analysis assumes that under marijuana legalization, New York’s monthly marijuana use rate would increase to Colorado’s at 13.6 percent yielding 2.665 million people.

According to a study by the Institute for Traffic Safety Management and Research (ITSMR), the probability of a drunk driver being arrested is 0.0021 percent.³⁶ Multiplying this by the annual number of marijuana-use episodes 31,982 million (2.665 million times 12 months) yields 67,162 marijuana DUI arrests.

The total number of car crashes is the actual number of car crashes in 2018 plus the estimated increase in car crashes due to marijuana-use as described in the preceding section—a total of 514,817 car crashes. It is assumed at least one person in each crash would be tested for marijuana as they would also be tested for alcohol.

Overall, at least 581,979 marijuana cartridges would be used for a total cost of \$8.7 million.

Of course, many more cartridges would be used in the course of a suspected marijuana impaired-driving stop that did not result in an arrest. For this estimate the analysis assumes that every ARIDE and DRE will use 1 to 3 cartridges per day.

³⁵ <https://www.samhsa.gov/data/report/2016-2017-nsduh-state-specific-tables>

³⁶ “Drinking and Driving Behavior of Motorists in New York State,” Institute for Traffic Safety Management and Research, ITSMR Research Note, November 2009. <https://www.itsmr.org/wp-content/uploads/2019/05/DD-Research-Note-Behavior-Nov-09-Blue.pdf>

Table 1	
Budgetary Costs to Law Enforcement Due to Marijuana Legalization	
Program	Cost
(1) ARIDEs/DREs Initial Training (Value of Time + Accommodations)	\$6.3 to \$15 million
(A) DREs Annual Maintenance Training (Value of Time + Accommodations)	\$313,128 to \$888,508
(2) ARIDE/DRE In-State Training Program Expansion	\$14.9 to \$42.1 million
(3) Breathalyzer (Unit)	\$17.8 to \$19.9 million
(4) Annual Breathalyzer (Cartridge)	
(a) 1 Cartridge per day	\$28.3 to \$30.6 million
(b) 3 Cartridges per day	\$67.3 to \$74.2 million
(5) K-9 Units Cost (Initial Procurement and Training)	\$84 million
(B) Annual K-9 Unit Maintenance Cost	\$75 million
Minimum Costs	
First Year Law Enforcement Costs (1+2+3+4(a)+5)	\$151.3 to 191.6 million
Post-First Year Annual Law Enforcement Costs (A+2+4(a)+B)	\$118.5 to 148.6 million
Maximum Costs	
First Year Law Enforcement Costs (1+2+3+4(b)+5)	\$190.3 to 235.2 million
Post-First Year Annual Law Enforcement Costs (A+2+4(b)+B)	\$157.5 to 192.2 million

Table 2
Budgetary Costs to Law Enforcement and Emergency Services Due to Increased Car Crashes from Marijuana Legalization by County 2018 to 2028

Jurisdiction	Emergency Services			
	Police	EMS	Fire	Total
State	\$17,554,840	\$19,407,466	\$7,108,183	\$44,070,489
Albany	\$339,871	\$375,126	\$135,842	\$850,839
Allegany	\$41,069	\$51,828	\$20,573	\$113,470
Bronx	\$1,147,373	\$1,197,251	\$423,087	\$2,767,711
Broome	\$174,280	\$203,989	\$76,880	\$455,149
Cattaraugus	\$64,166	\$78,159	\$30,468	\$172,793
Cayuga	\$72,278	\$88,555	\$34,798	\$195,631
Chautauqua	\$105,731	\$126,018	\$48,669	\$280,418
Chemung	\$69,538	\$83,981	\$32,594	\$186,112
Chenango	\$40,228	\$48,597	\$18,784	\$107,609
Clinton	\$69,302	\$82,776	\$31,323	\$183,401
Columbia	\$67,114	\$79,143	\$30,087	\$176,344
Cortland	\$52,543	\$60,224	\$22,070	\$134,837
Delaware	\$45,478	\$57,175	\$22,832	\$125,485
Dutchess	\$297,296	\$343,804	\$130,322	\$771,422
Erie	\$956,452	\$1,054,456	\$386,927	\$2,397,834
Essex	\$37,782	\$46,254	\$17,936	\$101,972
Franklin	\$44,277	\$52,555	\$19,786	\$116,618
Fulton	\$42,063	\$49,336	\$18,717	\$110,115
Genesee	\$76,229	\$89,850	\$33,948	\$200,027
Greene	\$50,924	\$66,692	\$27,540	\$145,157
Hamilton	\$7,130	\$8,319	\$3,034	\$18,482
Herkimer	\$47,061	\$55,645	\$21,015	\$123,721
Jefferson	\$103,890	\$120,657	\$44,755	\$269,302
Kings	\$1,909,264	\$1,995,501	\$707,196	\$4,611,961
Lewis	\$26,160	\$30,738	\$11,416	\$68,314
Livingston	\$57,547	\$67,250	\$25,080	\$149,877
Madison	\$52,688	\$62,564	\$23,849	\$139,101
Monroe	\$703,028	\$798,407	\$295,844	\$1,797,279
Montgomery	\$48,283	\$55,771	\$20,568	\$124,622
Nassau	\$1,654,388	\$1,775,737	\$633,212	\$4,063,337
New York	\$994,148	\$1,072,762	\$385,415	\$2,452,325
Niagara	\$174,122	\$203,550	\$78,233	\$455,905
Oneida	\$189,491	\$231,049	\$90,866	\$511,406
Onondaga	\$489,393	\$571,330	\$215,111	\$1,275,834
Ontario	\$108,768	\$128,839	\$48,737	\$286,344
Orange	\$412,262	\$470,417	\$175,980	\$1,058,660
Orleans	\$25,006	\$30,126	\$11,672	\$66,803
Oswego	\$96,622	\$117,475	\$45,627	\$259,725
Otsego	\$55,880	\$67,117	\$25,593	\$148,590
Putnam	\$100,077	\$115,500	\$43,358	\$258,935
Queens	\$2,039,009	\$2,136,523	\$752,874	\$4,928,405
Rensselaer	\$136,102	\$158,071	\$59,302	\$353,474
Richmond	\$358,260	\$381,411	\$134,800	\$874,471
Rockland	\$302,941	\$331,900	\$120,494	\$755,335
Saratoga	\$191,029	\$230,095	\$88,794	\$509,917
Schenectady	\$140,909	\$161,182	\$60,022	\$362,113
Schoharie	\$35,038	\$55,697	\$26,408	\$117,144
Schuyler	\$16,173	\$19,050	\$7,104	\$42,327
Seneca	\$32,539	\$39,474	\$15,169	\$87,181
St. Lawrence	\$100,811	\$119,905	\$45,219	\$265,935
Steuben	\$80,210	\$95,505	\$36,202	\$211,917
Suffolk	\$1,602,931	\$1,773,945	\$656,397	\$4,033,274
Sullivan	\$85,620	\$105,984	\$42,327	\$233,931
Tioga	\$40,542	\$47,607	\$17,890	\$106,039
Tompkins	\$87,037	\$105,524	\$40,756	\$233,316
Ulster	\$197,681	\$233,074	\$89,476	\$520,232
Warren	\$73,369	\$87,582	\$33,638	\$194,589
Washington	\$47,742	\$62,545	\$25,894	\$136,181
Wayne	\$67,827	\$84,511	\$33,845	\$186,183
Westchester	\$806,367	\$885,395	\$321,280	\$2,013,042
Wyoming	\$40,079	\$48,869	\$18,971	\$107,920
Yates	\$23,422	\$29,094	\$11,581	\$64,096

Table 3
Societal Costs Due to Increased Car Crashes from Marijuana
Legalization by County
2018 to 2028

Jurisdiction	Hospitalization Costs	Publicly Funded Hospitalization	Emergency Department Visits	Value of Lost Life
State	\$388,376,420	\$34,458,393	\$253,257,084	\$4,288,966,000
Albany	\$6,558,616	\$581,908	\$4,497,286	\$61,541,455
Allegany	\$1,878,955	\$166,709	\$317,041	\$18,935,832
Bronx	\$18,222,317	\$1,616,761	\$20,299,014	\$170,422,490
Broome	\$4,289,689	\$380,599	\$1,828,438	\$66,275,413
Cattaraugus	\$2,446,186	\$217,036	\$632,405	\$28,403,748
Cayuga	\$2,552,542	\$226,472	\$738,085	\$42,605,623
Chautauqua	\$3,616,102	\$320,836	\$1,211,130	\$47,339,581
Chemung	\$1,914,407	\$169,854	\$717,955	\$42,605,623
Chenango	\$1,772,599	\$157,272	\$394,204	\$9,467,916
Clinton	\$1,843,503	\$163,563	\$573,693	\$23,669,790
Columbia	\$1,559,887	\$138,400	\$714,600	\$33,137,706
Cortland	\$1,099,011	\$97,509	\$506,595	\$9,467,916
Delaware	\$1,666,243	\$147,836	\$414,334	\$33,137,706
Dutchess	\$8,260,311	\$732,890	\$3,836,364	\$123,082,909
Erie	\$24,745,481	\$2,195,523	\$14,389,302	\$189,358,322
Essex	\$1,418,079	\$125,818	\$317,041	\$14,201,874
Franklin	\$638,136	\$56,618	\$370,720	\$23,669,790
Fulton	\$1,524,435	\$135,254	\$469,690	\$9,467,916
Genesee	\$2,198,023	\$195,018	\$754,860	\$23,669,790
Greene	\$1,914,407	\$169,854	\$449,561	\$56,807,497
Hamilton	\$177,260	\$15,727	\$46,969	\$0
Herkimer	\$1,347,175	\$119,527	\$442,851	\$14,201,874
Jefferson	\$2,233,475	\$198,163	\$977,963	\$28,403,748
Kings	\$33,112,148	\$2,937,849	\$34,012,298	\$274,569,567
Lewis	\$425,424	\$37,745	\$208,006	\$9,467,916
Livingston	\$1,453,531	\$128,963	\$535,112	\$14,201,874
Madison	\$1,630,791	\$144,691	\$533,434	\$18,935,832
Monroe	\$16,130,650	\$1,431,179	\$8,662,434	\$203,560,196
Montgomery	\$1,099,011	\$97,509	\$454,593	\$9,467,916
Nassau	\$26,411,724	\$2,343,359	\$24,918,755	\$265,101,651
New York	\$20,668,503	\$1,833,797	\$15,184,421	\$127,816,868
Niagara	\$6,629,520	\$588,199	\$2,333,355	\$61,541,455
Oneida	\$7,267,656	\$644,817	\$2,085,090	\$104,147,077
Onondaga	\$14,145,339	\$1,255,034	\$5,253,823	\$142,018,742
Ontario	\$2,942,514	\$261,072	\$1,019,899	\$37,871,664
Orange	\$11,309,181	\$1,003,398	\$5,337,696	\$123,082,909
Orleans	\$1,205,367	\$106,945	\$263,362	\$4,733,958
Oswego	\$3,722,458	\$330,272	\$925,961	\$37,871,664
Otsego	\$2,446,186	\$217,036	\$484,788	\$4,733,958
Putnam	\$3,367,938	\$298,818	\$1,192,678	\$18,935,832
Queens	\$27,049,859	\$2,399,977	\$34,297,467	\$326,643,106
Rensselaer	\$4,289,689	\$380,599	\$1,492,945	\$28,403,748
Richmond	\$5,707,768	\$506,417	\$5,409,827	\$33,137,706
Rockland	\$6,948,588	\$616,508	\$4,405,025	\$47,339,581
Saratoga	\$7,196,752	\$638,526	\$1,897,214	\$66,275,413
Schenectady	\$3,899,718	\$345,999	\$1,694,241	\$33,137,706
Schoharie	\$709,040	\$62,909	\$315,364	\$132,550,826
Schuyler	\$354,520	\$31,454	\$132,520	\$4,733,958
Seneca	\$1,205,367	\$106,945	\$271,749	\$9,467,916
St. Lawrence	\$2,587,994	\$229,618	\$845,443	\$33,137,706
Steuben	\$2,198,023	\$195,018	\$717,955	\$28,403,748
Suffolk	\$34,211,159	\$3,035,358	\$24,932,175	\$591,744,757
Sullivan	\$3,545,198	\$314,545	\$964,543	\$56,807,497
Tioga	\$1,453,531	\$128,963	\$394,204	\$4,733,958
Tompkins	\$4,076,977	\$361,727	\$801,829	\$14,201,874
Ulster	\$7,622,175	\$676,272	\$2,392,066	\$61,541,455
Warren	\$1,985,311	\$176,145	\$764,924	\$37,871,664
Washington	\$2,907,062	\$257,927	\$446,206	\$33,137,706
Wayne	\$2,056,215	\$182,436	\$728,020	\$61,541,455
Westchester	\$18,435,029	\$1,635,633	\$11,443,672	\$118,348,951
Wyoming	\$1,595,339	\$141,545	\$365,688	\$14,201,874
Yates	\$496,328	\$44,036	\$238,200	\$23,669,790