

Economics of the Michigan Cannabis Industry

A presentation for: Michigan House of Representatives Committee on Regulatory Reform October 5, 2021







Presentation Overview

I. About Anderson Economic Group

- Insights from the Alcoholic Beverage and Automotive Industries
- Automobile, Alcoholic Beverages, and Cannabis During the Pandemic
- II. Status of Legal Cannabis Among States
- III. The Market for Legal Cannabis in the U.S. and Michigan
 - Michigan Cannabis Industry Timeline
 - Consumer Demand by Source
 - Cannabis Tax Revenue



About Anderson Economic Group

Anderson Economic Group is a boutique research and consulting firm founded in 1996. The company has offices in East Lansing, Michigan & Chicago, Illinois.

Patrick L. Anderson

Mr. Patrick L. Anderson founded Anderson Economic Group and serves as the company's principal and CEO in our East Lansing offices.

Mr. Anderson has written over 100 published works, including *Economics of Business Valuation* from Stanford University Press. Five of his articles have won prestigious awards for outstanding writing from the National Association of Business Economics. The most recent of these, awarded in 2019, was for the paper "Blue Smoke and Seers: Measuring Latent Demand for Cannabis Products in a Partially Criminalized Market."



Patrick L. Anderson



Andrew Miller

Mr. Andrew Miller is a consultant in the public policy and economic analysis practice area at Anderson Economic Group.

Mr. Miller has conducted economic and fiscal impact analyses, housing market studies, and tax and regulatory analyses for clients across the country. His work also includes the *AndCan® Index*, which measures consumer demand for cannabis in all 50 states. Mr. Miller's cannabis market commentary has appeared in several media outlets and news publications, including S&P *Global Market Intelligence, Benzinga*, and WTTW's *Chicago Tonight*.



Andrew Miller



About Anderson Economic Group



About Anderson Economic Group





Cannabis Market Expertise

Pioneering Cannabis Industry Expertise

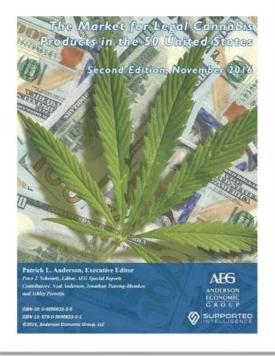
In 2015, AEG presented one of the first assessments of legal cannabis demand in the modern era at the National Association of Forensic Economics conference in Amsterdam.

That same year, AEG released its first 50-state cannabis market report with estimated demand for every state. A second edition was released in 2016.



Valuation, Risk, and Damages in an Emerging Legal Marijuana Products Industry: Early Evidence and Sober Projections

Patrick Anderson Anderson Economic Group East Lansing, Michigan USA





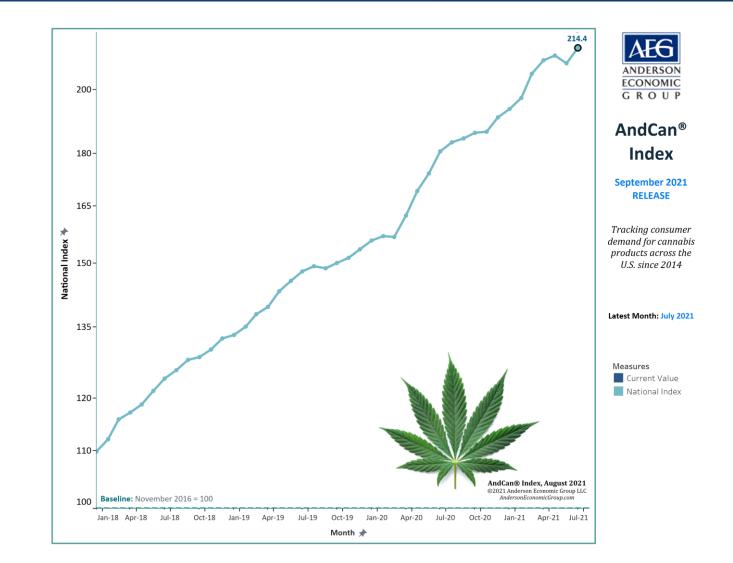
Cannabis Market Expertise

AndCan[®] Index

AEG's AndCan[®] Index is the only nationwide index of consumer demand for cannabis for all 50 states.

The Index is based on an award-winning methodology and has been cited by research institutions that include the Federal Reserve Bank of St. Louis.

AEG offers *AndCan*[®] data to clients across the country.





Alcoholic Beverage, Automotive, and Cannabis Market Expertise

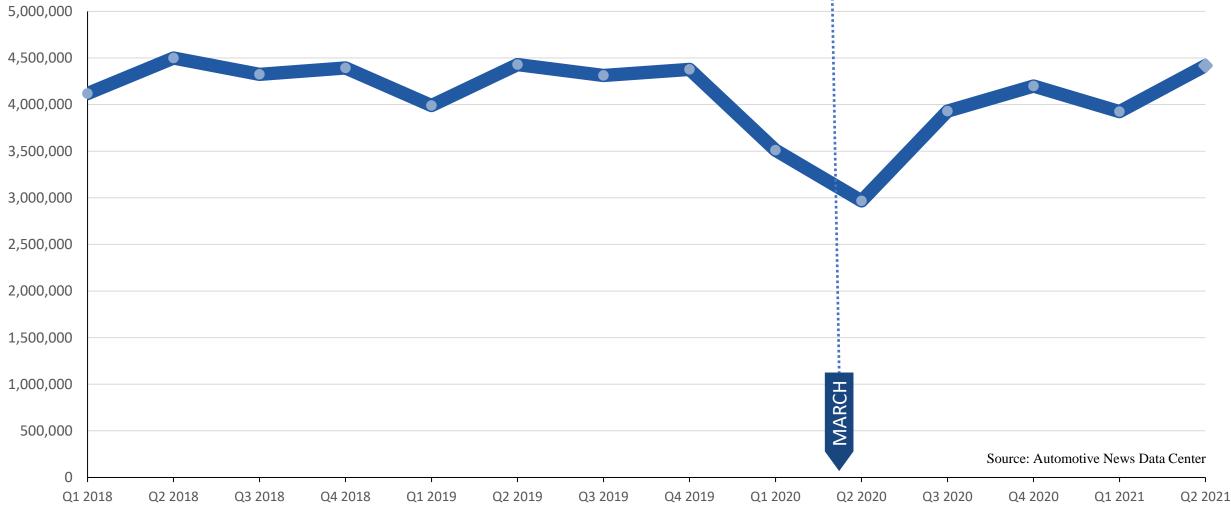
Anderson Economic Group relies upon rigorous methodology and a 25-year track record for quantifying:

- 1. Fundamental indicators of consumer demand for specific markets.
- 2. Industry-specific demand for consumer products such as:
 - Automobiles and trucks
 - Beer, wine, and spirits
 - Legal cannabis products

Let's look at demand for automobiles, alcoholic beverages, and cannabis during the pandemic...

Demand During the Pandemic: Automobiles

U.S. Quarterly Light Vehicle Sales, 2018 - 2021





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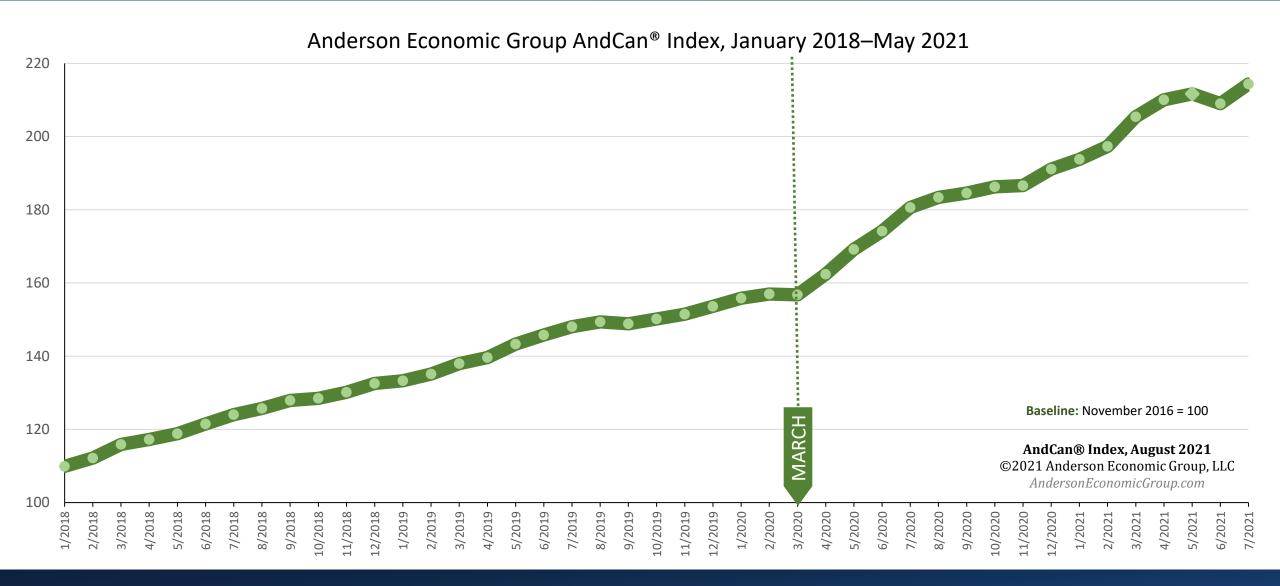
Demand During the Pandemic: Alcoholic Beverages

Beer, Wine, and Liquor Store Retail Sales (Millions), January 2018–July 2021 (seasonally adjusted) \$6,500 \$6,000 \$5,500 2/1/2020, \$4,901 7/1/2021, \$5,724 \$5,000 \$4,500 \$4,000 \$3,500 <u>c</u> \triangleleft Note: Does not include alcohol sales at bars or restaurants \geq Source: U.S. Census Bureau Monthly Retail Trade Report \$3,000 1-2018 2-2018 11-2018 12-2018 4-2019 10-2019 11-2019 12-2019 2-2020 3-2020 4-2020 5-2020 10-2020 11-2020 3-2018 4-2018 5-2018 6-2018 7-2018 8-2018 9-2018 10-2018 1-2019 2-2019 3-2019 5-2019 6-2019 7-2019 8-2019 9-2019 1-2020 6-2020 7-2020 8-2020 9-2020 12-2020 1-2021 2-2021 3-2021 4-2021 5-2021 6-2021 7-2021

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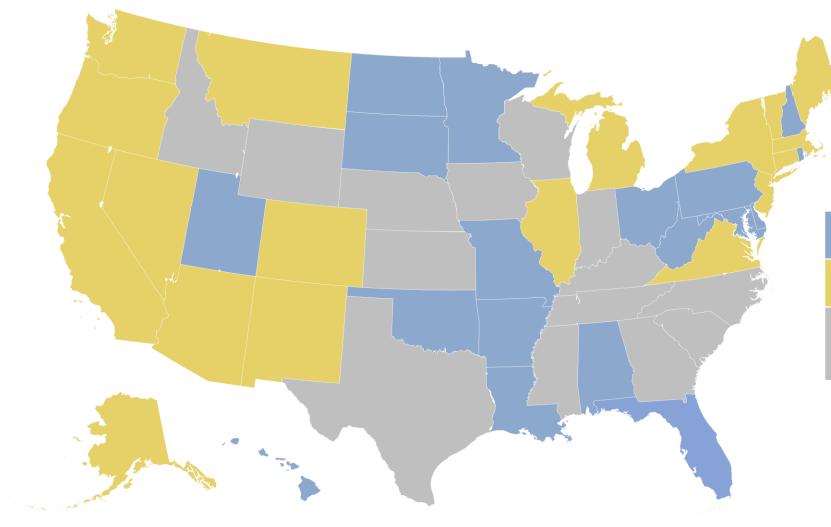
Demand During the Pandemic: Cannabis



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Cannabis Legalization Status by State, September 2021



Source: AEG analysis of State statutes.

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Medical Only (18) Medical & Adult-use (18) None (14) [May allow low-THC CBD products]

*South Dakota adult-use status pending Supreme Court ruling.

*Mississippi ballot initiative overturned by Supreme Court.



Year	Event	
2008	Medical marijuana legalized by initiated law.	
2016	Michigan legislature passes framework for medical marijuana provisioning centers.	
2018	First medical marijuana provisioning centers open.	
2018	Adult-use cannabis legalized by initiated law.	
2019	First adult-use retail stores open.	



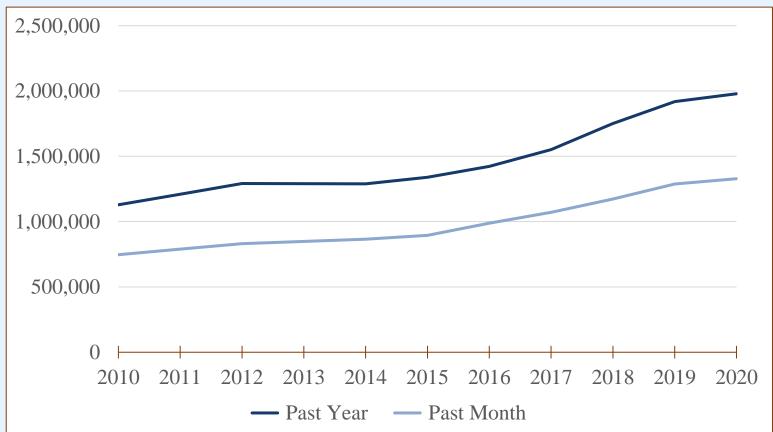
The 2018 initiated law:

- 1. Makes marijuana legal to possess and consume for adults over age 21 [sec 5];
- 2. Licenses, regulates, and taxes marijuana businesses [sec 8, 12, 13, 14];
- 3. Provides a local community option to allow or disallow commercial sales within a community's borders [sec 6] and allows businesses and property owners to regulate use on premises [sec 3, 4].
- 4. Provides for the safety of marijuana products [sec 8].

An explicit purpose of the law was to "remove the commercial production and distribution of marihuana from the illicit market" [sec 2].

Demand in Michigan is growing steadily.

- One in five Michiganders • report cannabis use in the past year in 2020.
- AEG's AndCan[®] Index • also shows steady growth in demand.



Implied number of Michigan residents using cannabis in the past year/month

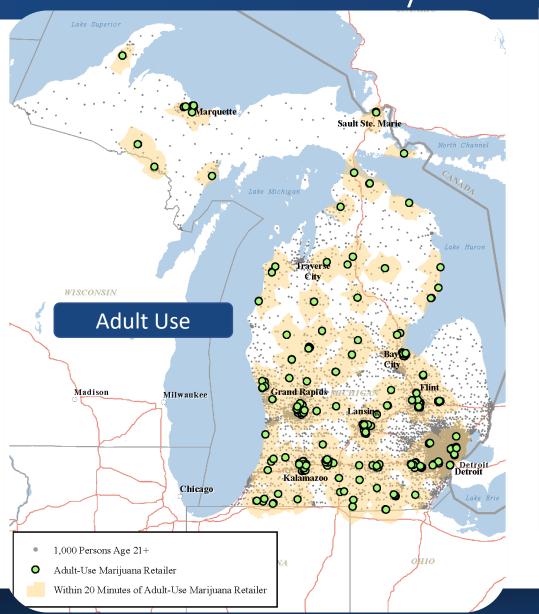
Source: Anderson Economic Group analysis of data from the National Survey on Drug Use and Health.

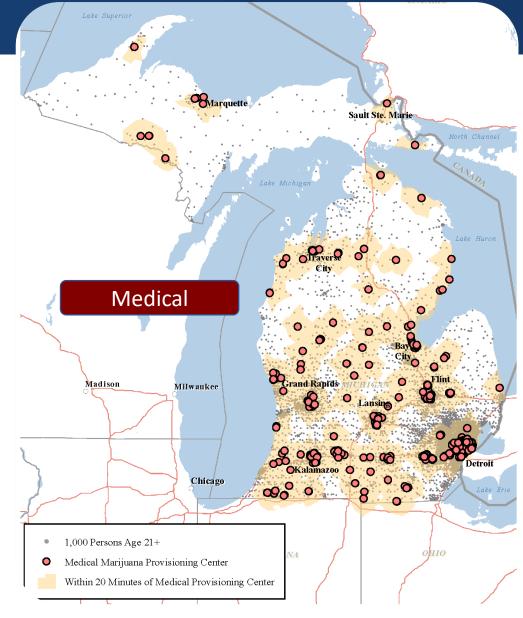


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Over 80% of Michigan Residents live within a 20 minute drive of a medical or adult-use retailer.

Source: AEG drive time analysis using MRA data.





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Michigan consumers have multiple options for procuring cannabis:

1. Licensed Retail Stores

- a) Purchasing from a medical provisioning center
- b) Purchasing from an adult-use store

2. Other Sources

- a) Home cultivation
- b) Acquiring cannabis from a medical caregiver
- c) Purchasing from an illicit seller



Michigan cannabis market size by segment, 2020

Segment		Total Demand, 2020 (Millions)	Percent of Market Size
Adult-Use Stores		\$510.7	15%
Medical Provisioning Centers		\$474.0	16%
Caregiver & Medical Home Cultivation ^a		\$930.1	30%
Illicit Sales & Adult-use Home Cultivation ^b		\$1,241.5	39%
	Total:	\$3,156.3	100%

Source: Anderson Economic Group cannabis demand model.

^aIncludes cannabis procured from caregivers and medical home cultivation. Some purchases made by medical patients may not be for medical use.

^bAdult-use home cultivation is legal in Michigan. Sale of home-cultivated cannabis by unlicensed persons is not legal.

Note: Only sales by adult-use retailers and medical provisioning centers are reported by the Marijuana Regulatory Agency.

Cannabis Tax Revenue

"Pot Won't Fix the Potholes"

Our analysis of the 2018 initiative correctly noted that legal cannabis is not the fiscal panacea promised by campaign signs.

Nonetheless, legal cannabis cultivation and sales in 2020 contributed over \$169M in taxes and fees, consistent with our 2018 projections for net tax revenue.¹



"Pot won't fix the potholes," said economist Patrick Anderson, CEO of the Anderson Economic Group in East Lansing.

Anderson's firm published a fiscal analysis of Proposal 1 last week that estimates the sale of recreational marijuana and end of taxes on medicinal cannabis would produce \$50 million to \$74 million in net tax revenue in 2020 and between \$81 million and \$175 million in the fourth year once the market has matured.

1. Net tax revenue estimated by AEG in 2018 accounted for cannibalized alcoholic beverage tax revenue.

crainsdetroit.com/government/cannabis-vs-road-costs-tax-money-unlikely-be-panacea-pavement November 2, 2018



Cannabis-Specific Revenues by Source, Calendar Year 2020

Tax Source		Revenue (\$Millions)
Sales Tax		\$62.1
Excise Tax		\$51.1
Medical Facility Licensing		\$31.1
Adult-Use Licensing		\$19.3
Medical Marijuana Patient Fees		\$5.5
	Gross Tax & Fee Total:	\$169.1

Source: Anderson Economic Group analysis of base data from the Marijuana Regulatory Agency and Michigan House Fiscal Agency.

Cannabis Transaction Taxes

Source of Cannabis	Taxes Collected/Reported		
Adult-Use Store	10% Excise Tax ^a 6% Sales Tax ^b		
Medical Provisioning Center	6% Sales Tax (not exempted as prescription drugs) ^c		
Caregiver	6% Use Tax (self-reported by user) ^d		
Home Cultivation	None		
Illicit Purchase	None		

Notes:

(a) See MCL 333.27963(1) Michigan Regulation and Taxation of Marihuana Act.

(b) See MCL 205.52(1) General Sales Tax Act.

(c) See Dept. of Treasury Revenue Admin. Bulletin 2018-2.

(d) See MCL 205.93(1) Use Tax Act.

Individuals and businesses are also liable for other specific and general taxes.

Other Taxes Paid by Cannabis Businesses

Cannabis businesses and their employees also pay:

General Taxes
Real and Personal Property Taxes
Income Tax on Employee Earnings
Income Taxes on Business Income

Note: See AEG State Business Tax Burden Studies



Summary

- 1. There is durable and growing demand for cannabis in Michigan.
 - One in five Michiganders used cannabis in 2020.
 - *AndCan*® *Index* shows stable, steady growth in demand.
 - Over 80% of Michiganders now live within a 20-minute drive of an adult-use store or medical provisioning center.
- 2. Michigan cannabis users consumed \$3.2 billion in cannabis in 2020.
 - Approximately 70% of this consumption occurred outside of retail stores.
- 3. Sales by licensed providers produce excise, sales, and use tax revenue.
- 4. Transactions in the illicit market do not produce tax revenue.

Thank You

Anderson Economic Group

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Sec. 2. The purpose of this act is to <u>make marihuana legal under state and local law</u> for adults 21 years of age or older, to make industrial hemp legal under state and local law, and to <u>control the commercial production and distribution of marihuana under a system that licenses, regulates, and taxes the businesses involved</u>. The intent is to prevent arrest and penalty for personal possession and cultivation of marihuana by adults 21 years of age or older; <u>remove the commercial production</u> and distribution of marihuana from the illicit market; prevent revenue generated from commerce in marihuana from going to criminal enterprises or gangs; prevent the distribution of marihuana to persons under 21 years of age; prevent the diversion of marihuana to illicit markets; <u>ensure the safety of marihuana and marihuana-infused products</u>; and ensure security of marihuana establishments.

Actual petition: michigan.gov/documents/sos/Petition - Coalition to Regulate Marijuana Like Alcohol 572185 7.pdf



Relevant Anderson Economic Group analyses:

- 1. AEG's quarterly <u>AndCan® Index</u> is available on our website at <u>AndersonEconomicGroup.com/expertise/cannabis-industry</u>.
- 2. <u>"Blue smoke and seers: measuring latent demand for cannabis</u> products in a partially criminalized market" (2019).
- <u>"Revenues from Legalizing Recreational Marijuana in Michigan</u>" (2018).



Anderson Economic Group's Michigan cannabis demand model uses multiple data sources and econometric methods to estimate the size of the cannabis market, including:

- 1. Data on Michigan resident cannabis use.
- 2. Data on quantity of cannabis consumed from multiple studies, including past AEG research and the AndCan® Index.
- 3. Medical provisioning centers and adult-use stores sales data.
- 4. Illicit market price data.
- 5. Data on registered caregivers and medical marijuana patients.
- 6. Observed spending habits in other cannabis markets outside Michigan.