Taxing Cannabis

Delivered to the NCSL Task Force On State & Local Taxa
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About ITEP

The Institute on Taxation and Economic Policy (ITEP)

- Non-profit, non-partisan research organization
- Federal, state, and local tax policy issues

Mission:

- Ensure elected officials, media, and general public have
  accurate, timely, and straightforward information that a
  understand the effects of current and proposed tax poli
  emphasis on tax-incidence analysis.

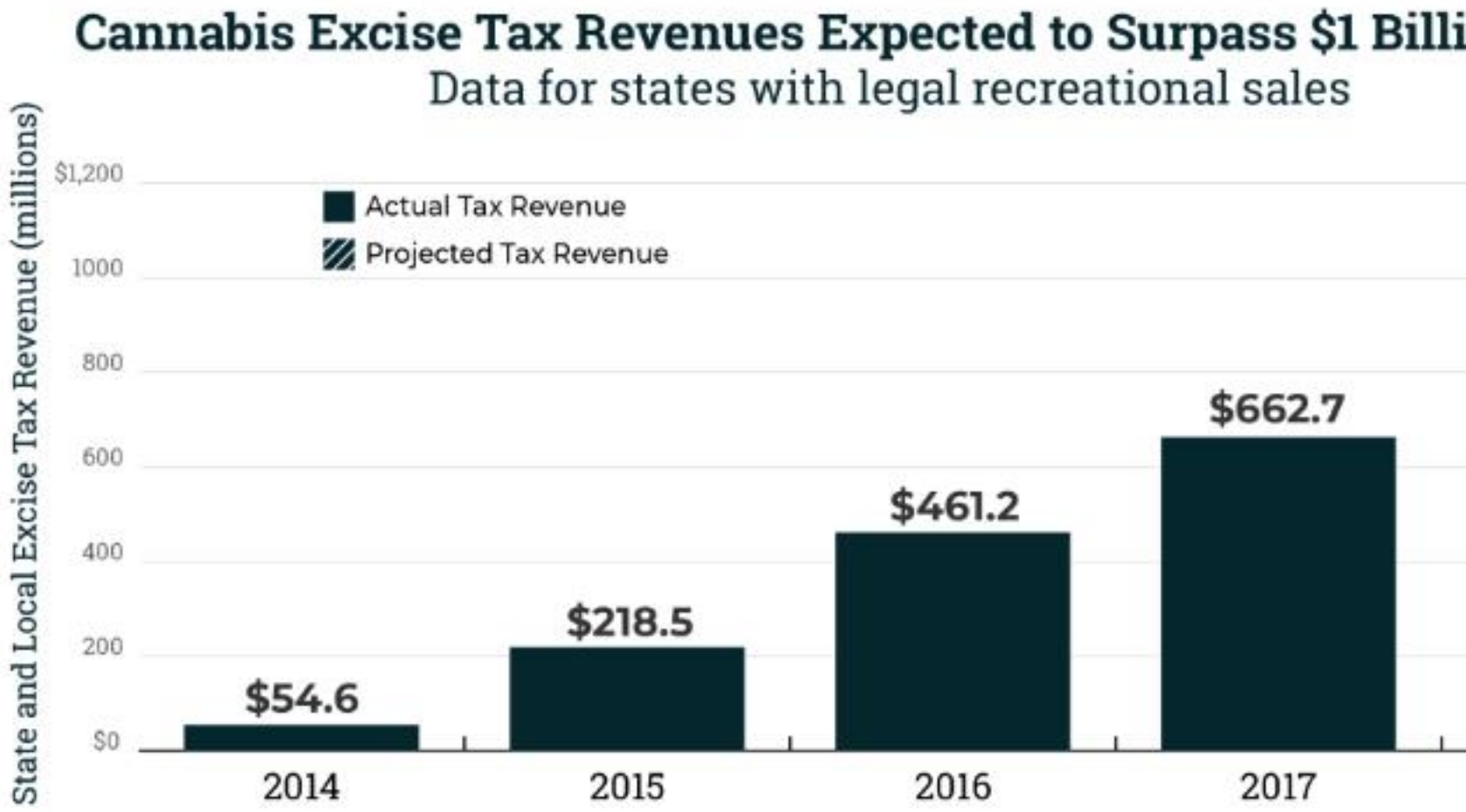
ITEP research published January 2019 takes a deep dive into cannabis taxation:

- Summarizes every state's cannabis tax structure, tax rates, and revenue earmarking practices.
- Examines every month of tax revenue data reported through January 2019. (Nearly five years of data in Colorado!)
- Summarizes state revenue totals and puts those revenues into context with comparisons to other excise taxes: alcohol and tobacco.
- Explores state revenue trends to offer guidance on the revenue trajectory states can expect if they opt to legalize and tax cannabis sales.
- Calculates the potential yield of cannabis taxes in all 50 states and the District of Columbia, using Washington State's actual experience as a guide.
- Offers recommendations for achieving sustainable cannabis tax revenues over time.
- Available online at: www.itep.org/taxing-cannabis/

What I'll be talking about today

- Background on revenue performance and trends, as well as s structures.
- Tax structure debate: Taxing the price vs. weight of cannabis
  - Plus, what lies ahead for cannabis prices?
- Explaining the California experience
- Policy recommendations for states

Figure 5



Source: ITEP analysis of state revenue data in six states with legal sales of recreational cannabis (Alaska, California, Colorado, Nevada, Oreg
in Massachusetts began in November 2018 but the state is not yet reporting tax data. Data are reported for calendar years. Figure does n
through general sales taxes, gross receipts taxes, license fees, income taxes, or other levies. Revenue projections generally assume that c
of 2018 continue at the level reported in the most recent month for which data are available.

Figure 6

Excise Tax Revenue from Cannabis Rivals Alcohol Re in States with Legal Retail Sales of Cannabis

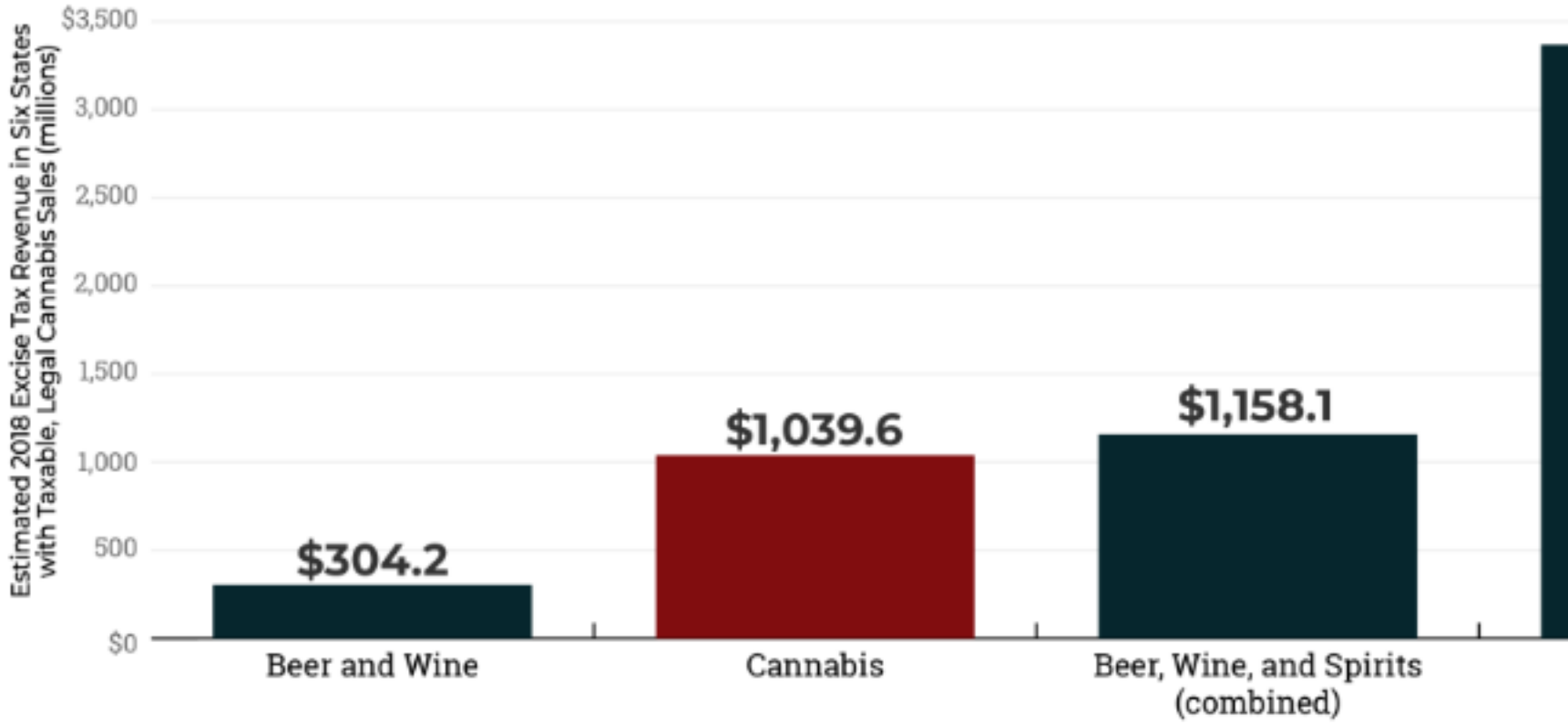


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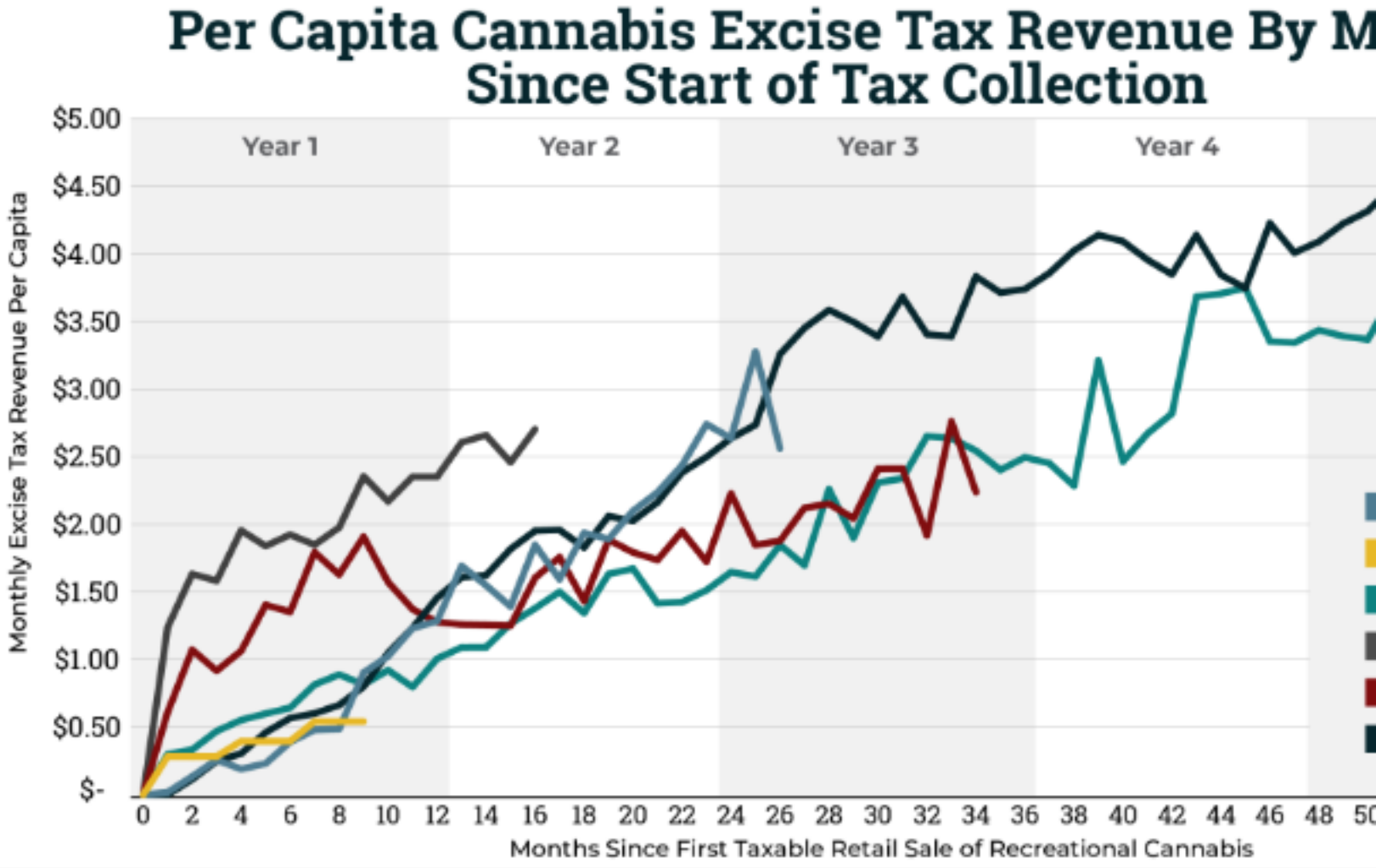
Figure 8

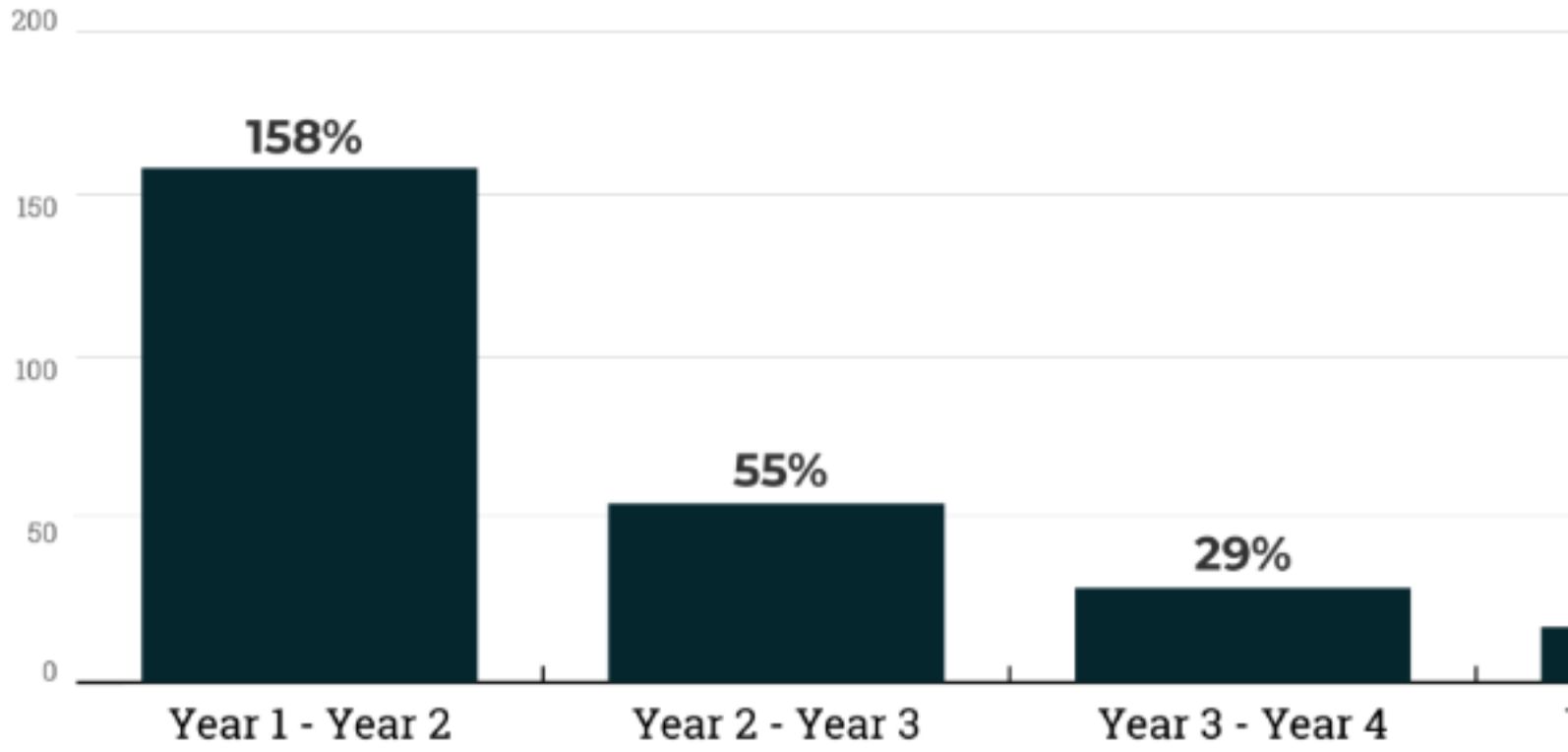


Source: ITEP analysis of state revenue reports and U.S. Census population data. Revenue data include state and local excise taxes apply
Excludes state and local general sales taxes, gross receipts taxes, license fees, income taxes, and other levies. Most of the data in this ta
with California's quarterly reports being the only exception.

Figure 9

Average Annual Growth Rate for Cannabis Excise Tax R

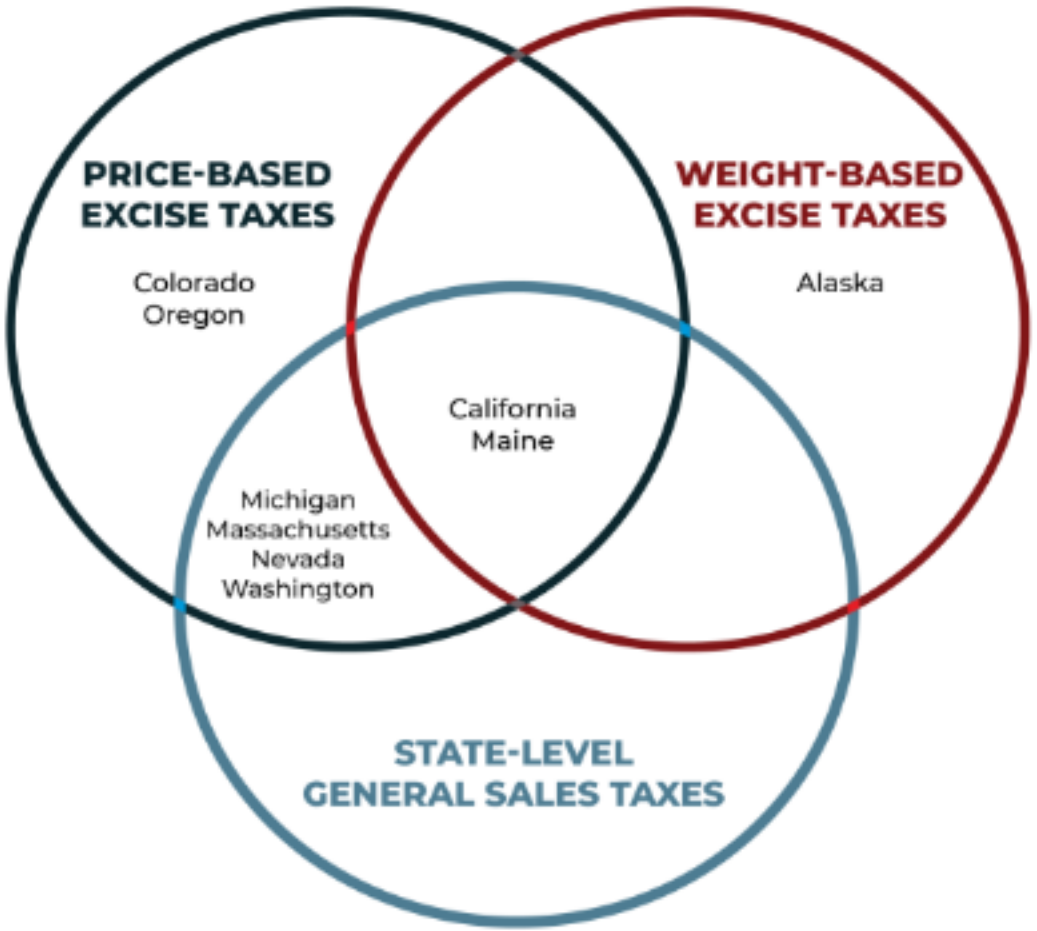
Revenue Collections Tend to Grow Fastest in Early Years as Legal Market Becom



Source: ITEP analysis of state excise tax revenue data. Data represent unweighted averages across states for which sufficient data are a
growth rates. Year 1-2 growth rate is an average of growth rates in Alaska, Colorado, Oregon, and Washington. Year 2-3 includes Colora
Year 3-4 includes Colorado and Washington. Year 4-5 includes only Colorado.

Figure 2

State-Level Tax Structures Applying to Recreational Cannabis



Source: ITEP analysis of information reported by state revenue offices. Note that legal sales have yet to begin in Maine and Michigan. Note also that while Colorado and Nevada's excise taxes are based mostly on price, the administration of these taxes involves a weight-based component since the weight being sold is multiplied by a statewide average price to calculate the base against which the tax is applied.

Advantages of Price Taxes and Taxes

Price-Based

- Slightly higher rates on more potent products and/or premium products.
- No need for inflation indexing.
- Familiar structure as consumers and lawmakers are accustomed to price-based general sales taxes.
- Certain administrative advantages.

Weight-Based

- Immune to revenue dramatic price cuts underway and sure
- No tax cut for peopl bulk, or employees discounts.
- Familiar structure a with how excise tax levied (tobacco, alc fuel).
- Certain administrati

Price-based taxes are not espe good at taxing more potent can at higher rates

Significant increases in potency lead to only small increases in

If a gram of cannabis at 10% potency (THC) costs $7.00…

Then a gram of 15% potency is expected to cost between $7.75

Tax charged rises only slightly despite a 50% increase in potenc

Research by Caroline Weber (University of Washington) and Ben Hansen and Keaton Miller (Un
shared by Pat Oglesby at the Center for New Revenue.

Tax Administration of Price and Weight Taxes

Advantages of weight-based taxes:

- For distributor-level taxes, it's much easier to figure out weight as of product transferred within a vertically integrated firm.
- No need to write rules preventing bundling.

Advantages of price-based taxes:

- No need to establish and enforce product categories (bud, trim, ab

Advantages of distributor-level taxes generally:

- Fewer collection points and fewer entities to audit.
- Establishes a record of product earlier in the process, lessening div

Something to keep in mind: 5 out of 9 states with legal recreational s
their taxes using a weight-based method (AK, CA, and ME have true
while CO and NV partly administer price-based taxes using weight-ba

Other major excise taxes alway
include a quantity-based

- 50 out of 50 states tax cigarettes per pack
- 50 out of 50 states tax motor fuel per gallon
- 50 out of 50 states tax beer per gallon
- 47 out of 47 states tax wine per gallon
  - Three states sell wine through state stores instead of taxing private sales
- 33 out of 33 states tax liquor per gallon
  - 17 states sell through state stores instead of taxing private sales
- Sometimes these states add price-based taxes on top of their quan
  But quantity-based tax rates form the foundation of their excise ta

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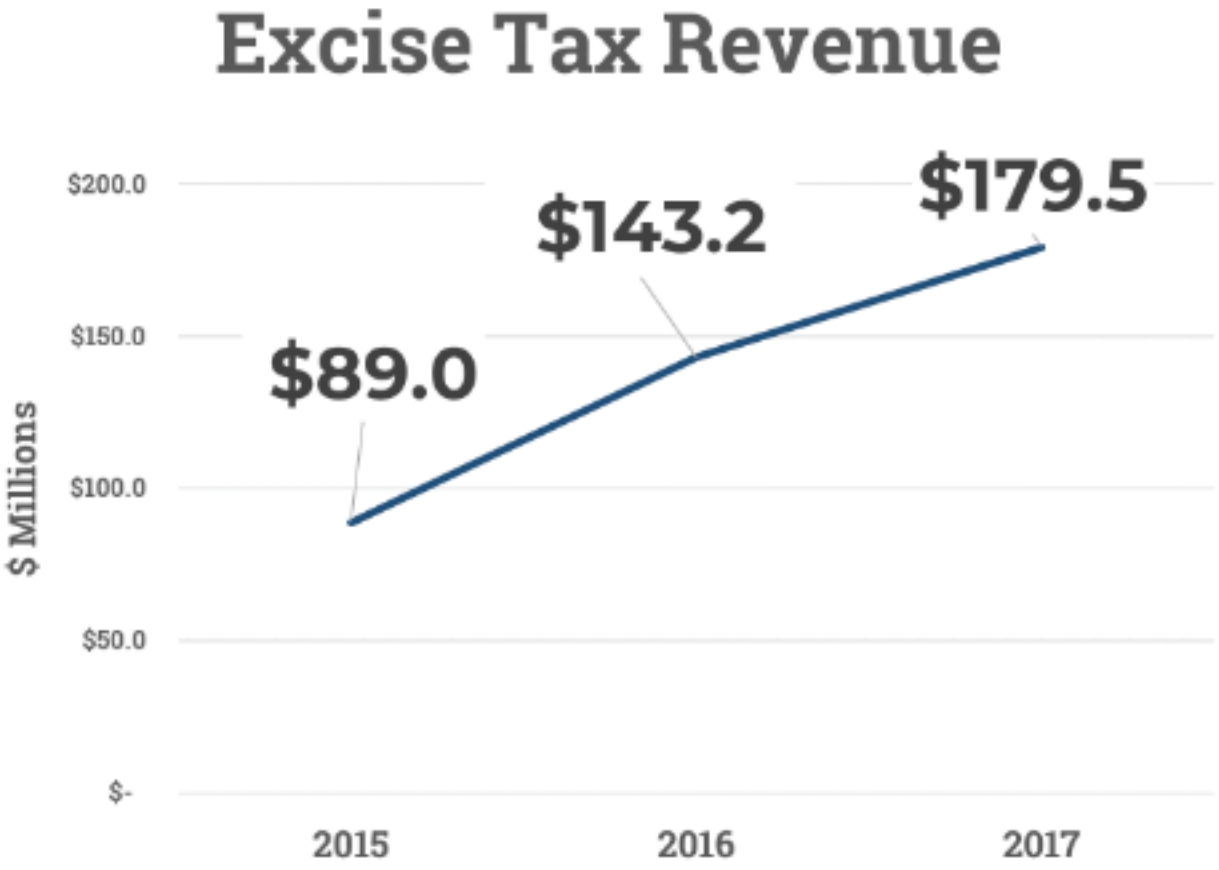
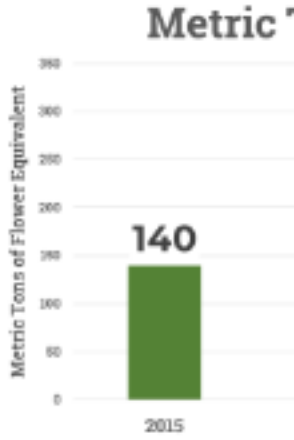
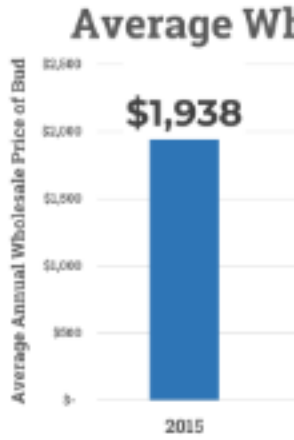
Prices will collapse. Here's wh

1. Business efficiency will improve with experience
2. More businesses will open, improving competition
3. Consumer preferences are shifting toward oils and concen
   lend themselves to larger, cheaper growing operations
4. Federal restrictions adding to cost are likely to be loosene
   - Banking access will improve
   - Cannabis industry will receive tax deductions for more of their rou
   - Interstate movement of product will be allowed
5. State restrictions adding to cost are likely to be loosened
   - Licensing rules (How many stores? What types of stores? And whe

Market Changes:
Increases in Quantity Sold, but Decreases in Price (and
Per Unit Sold

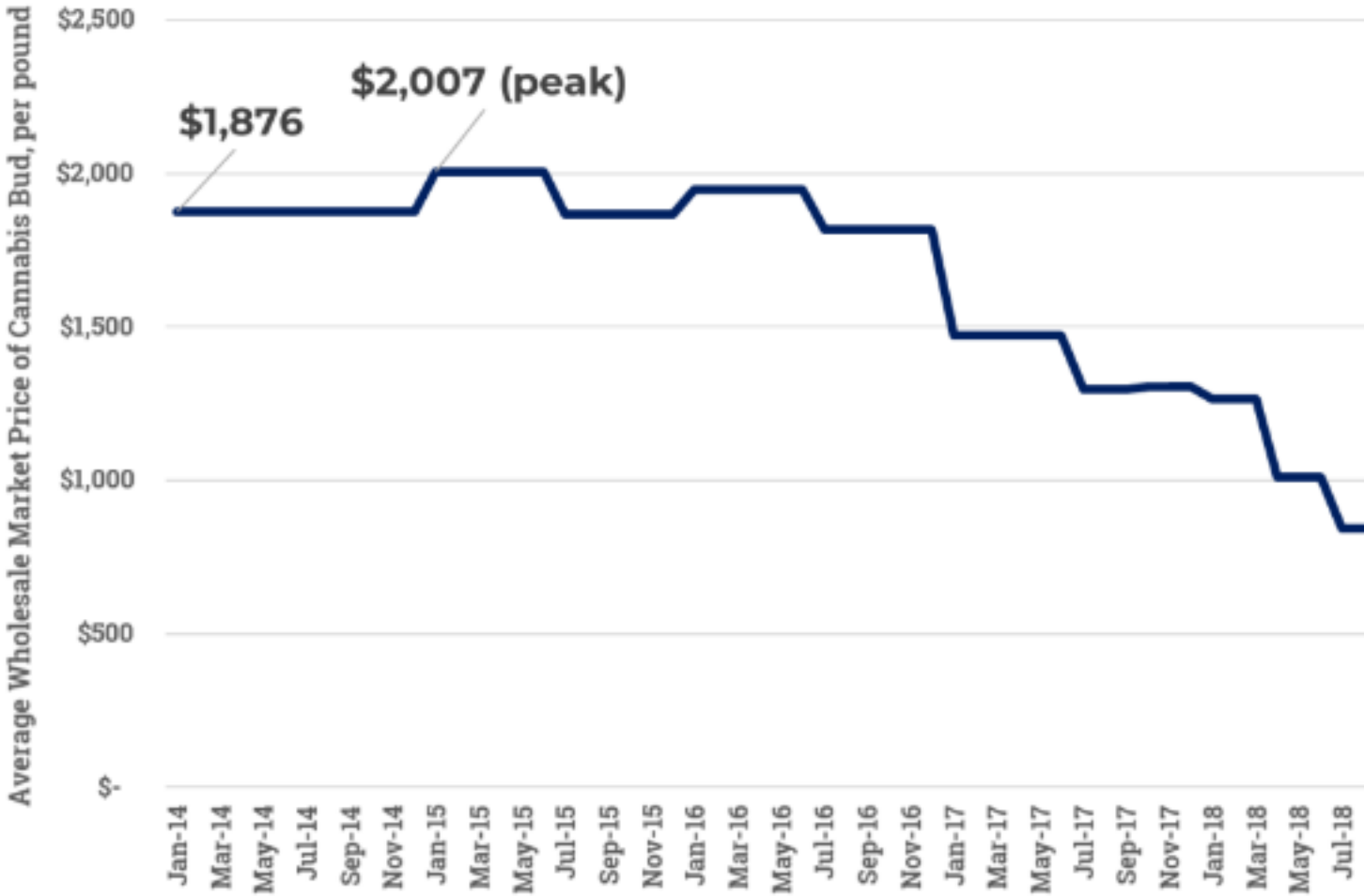






Source: Institute on Taxation and Economic Policy (ITEP) compilation of data from the Colorado Department of Revenue, Marijuana F
Boulder, Leeds School of Business. Excise tax revenue for 2017 shown here is lower than reported, as ITEP adjusted these data down
that controls for the fact that Colorado increased its excise tax rate in July 2017.

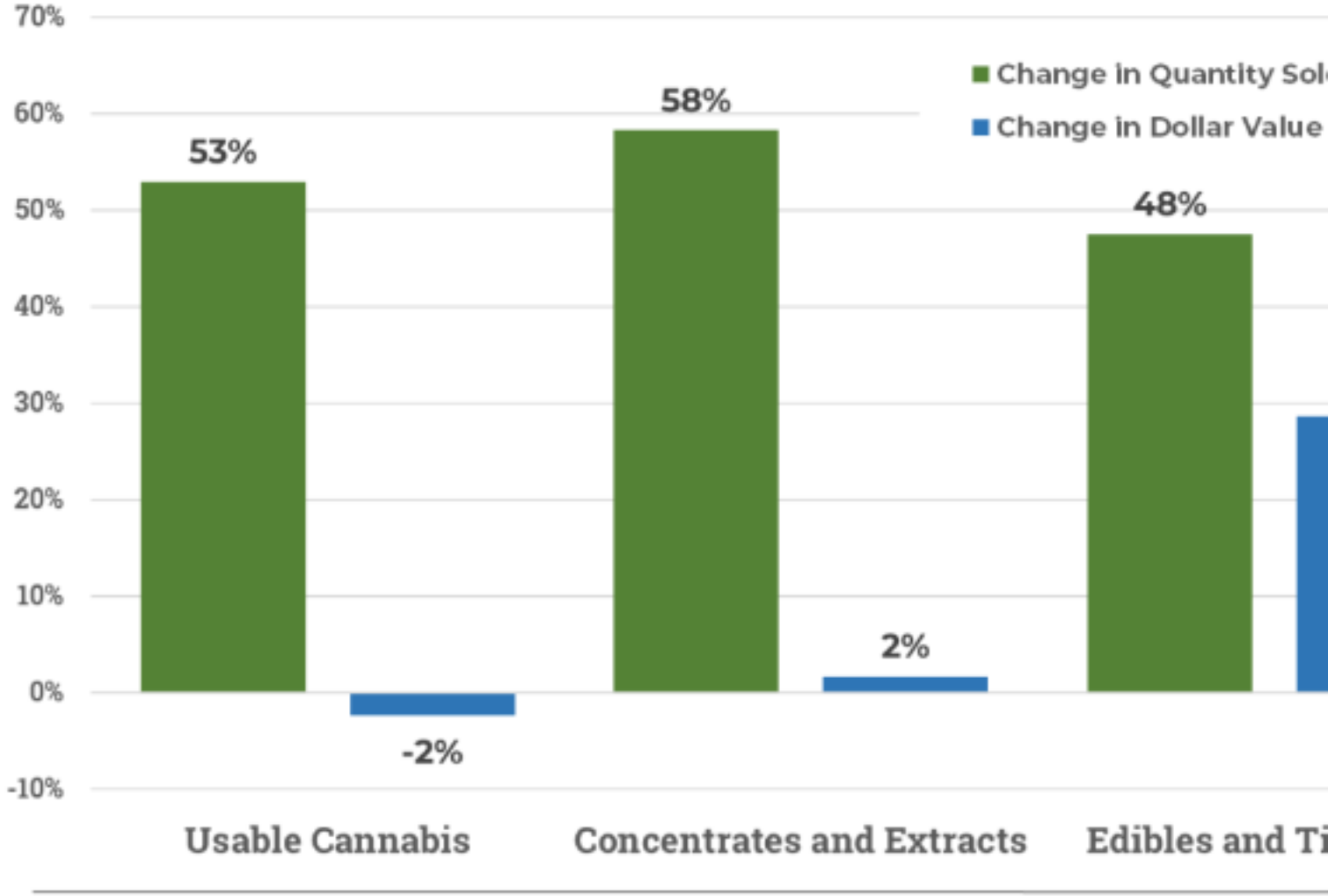
Wholesale Cannabis Prices in Colorado Since Legalization of Recreational Sales



Source: Colorado Department of Revenue

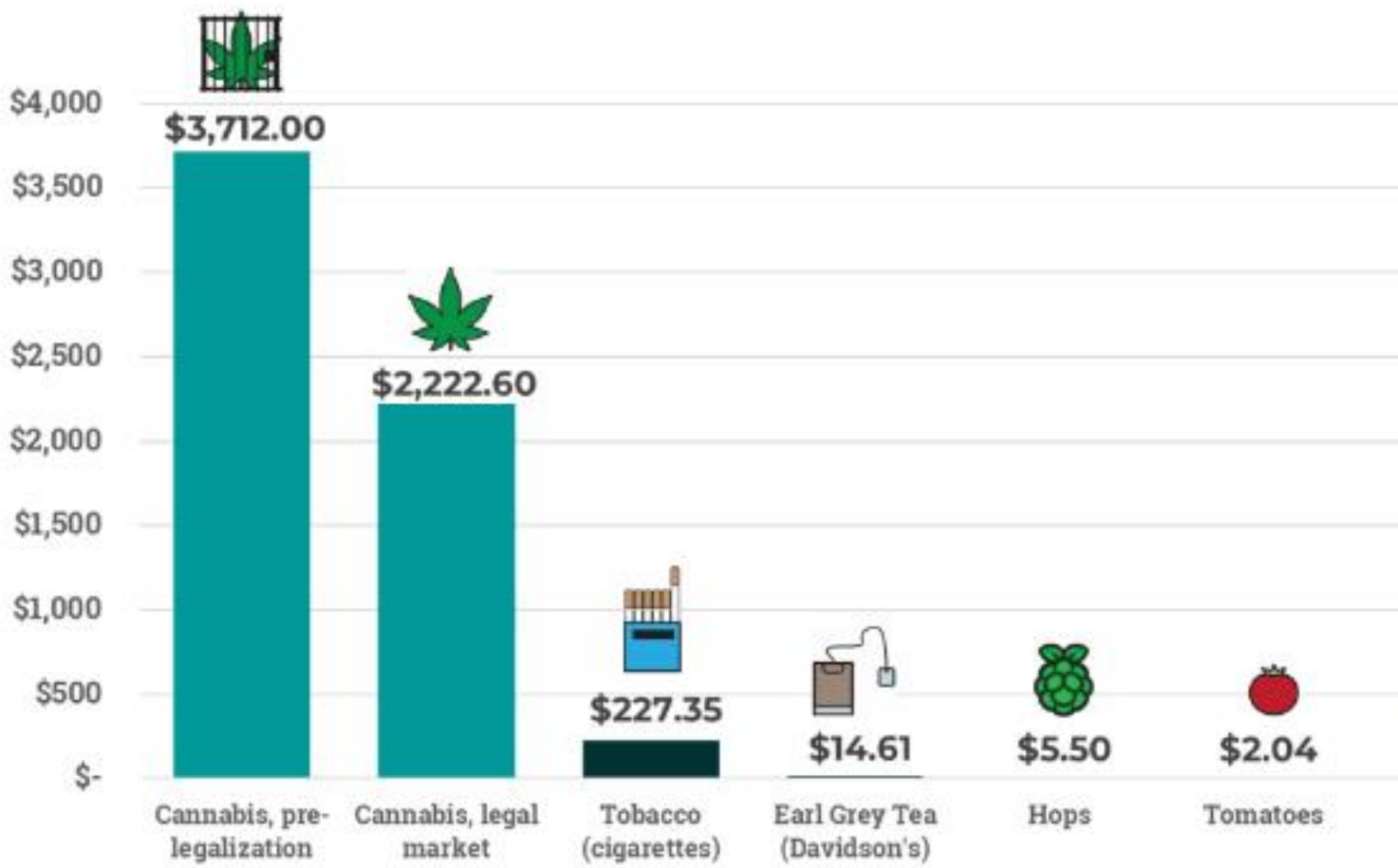
Quantity of Cannabis Sold in Oregon is Surging, but the Dollar Value of those Sales Hasn't Kept Pace

Comparing February 2018 to February 2019



Source: Institute on Taxation and Economic Policy (ITEP) review of information compiled by the Oregon Liquor Control Commi

Price Per Pound of Various Agricultural Products in Washington State



Institute on Taxation and Economic Policy (ITEP). Cannabis consumers in Washington State are limited to buying one ounce per
the hypothetical retail price that consumers would eventually pay for a full pound. ITEP scaled up Headset's March 2019 estimate
retail cannabis costs $4.90. The pre-legalization price in this chart comes from PriceOfWeed.com, which reported a July 2014 aver
$232 per ounce.

Regulations aside, how much could it really cost to grow cannabis?

Consider the following:

- Tomatoes cost $10,000 per acre to grow
- Cannabis and tomatoes require comparable amounts of effort to grow and harvest.
- Cannabis yields 1,000 pounds per acre, or more.
- Therefore, 1,000 pounds of cannabis could theoretically be grown for just $10,000. The result would be:

$10/lb cannabis

Thanks to Jonathan Caulkins, professor at Carnegie Mellon University, for this example. Much deeper analysis available in: "Considering Marijuana Legalization" and "Marijuana Legalization: What Everyone Needs to Know."

Market is shifting toward canna extracts. This has long-run implications for prices.

A few datapoints:

- Colorado, share of cannabis sales (by weight) comprised of smokable plant material:
  - 2014 = 66.1%
  - 2017 = 54.1%
- Oregon, share of cannabis sales (by value) comprised of smokable plant material:
  - Feb 2017 = 70%
  - Feb 2019 = 52%

- The shift toward extracts will push the market toward larger, and ultim grow operations because these products require large amounts of bio important that each plant be top-notch. Quantity > quality in the prod
- Traditional smokable cannabis, by contrast, generally needs to be tend carefully to yield a high-quality final product fit to be sold as-is.

The Mercury News

California made $345 million, not predicted $1 billi cannabis in 2018

Industry supporters say high taxes, black market to blame.

But are taxes really to blame?

Effective tax rates on cannabis retail sales along the West Coast:

	46.32%	**32.25%**	**2**
	Washington State (assuming average local rate)	**California** (Orange County)	
Cigarettes:	*106% State & Local*	*109% State & Local*	*40*

What's actually happening in California?

1. **Overpromised short-term revenue gain. A $1 billion tax haul was unre**
   - A temptation to avoid in the push for legalization.

2. **There aren't enough legal stores open yet.**
   - Compare 620 retail stores in California vs. 562 stores in Colorado, which is one-si
     - 80 percent of municipalities have banned brick and mortar stores. Home delivery may
     - In many of the other municipalities, there's a backlog of people wanting to open store processes.

3. **The supply chain faces problems, which reduces product selection an**
   - Not enough legal growers. Backlog of 3,300 growers who want licenses but have
   - Strict lab testing requirements are delaying product arrival.

4. **California faces one of the most established black markets in the cou**
   - Prior to adult-use legalization: growers produced 15.5 million pounds; residents

5. **Lax enforcement against illegal businesses.**
   - Head of CA Bureau of Cannabis Control admits state must "step up" and "get mo
   - Federal DEA spokesman says "We've got our hands full with the opioid epidemic
   - NYTimes: "businesses that list themselves as churches and advertise marijuana a

ITEP's Recommendations to St

1. Don't oversell the short-term revenue potential.

2. Base the tax at least partly on weight. Price-based taxes are
   but are unsustainable when taken on their own.

3. Weight-based tax rates should be indexed to inflation.

4. Don't allow fear of a persistent illicit market to lead to enac
   permanently low rate of tax. Consider automatic, gradual p
   rates instead, so that taxes can be low as legal industry gets
   will rise as market matures and prices come down.

5. Earmarking of revenue should be done sparingly and should
   causes with a direct relation to cannabis.

Read More:

www.itep.org/taxing-cann