

Marijuana Legalization: Design Considerations & Data Needs

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About RAND

- **Non-partisan, non-profit research organization with largest PhD in Policy Analysis program in the U.S.**
- **About 1,800 staff from 45+ countries**
- **Focus on the major policy issues of our time**
- **Do not have an official position on marijuana**

Roadmap

- **Unprecedented changes in marijuana policy**
- **Design considerations for legal marijuana**
- **Thinking seriously about data collection**

OCCASIONAL PAPER

Altered State?

Assessing How Marijuana Legalization in California Could Influence Marijuana Consumption and Public Budgets

Beau Kilmer, Jonathan P. Caulkins, Rosalie Liccardo Pacula, Robert J. MacCoun, Peter H. Reuter



MARIJUANA LEGALIZATION

WHAT EVERYONE NEEDS TO KNOW

JONATHAN P. CAULKINS, ANGELA HAWKEN,
BEAU KILMER, MARK A.R. KLEIMAN

Addiction FOR DEBATE

doi:10.1111/j.1360-0443.2011.03561.x

Design considerations for legalizing cannabis: lessons inspired by analysis of California's Proposition 19

Jonathan P. Caulkins¹, Beau Kilmer², Robert J. MacCoun³, Rosalie Liccardo Pacula² & Peter Reuter⁴

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OCCASIONAL PAPER

Reducing Drug Trafficking Revenues and Violence in Mexico

Would Legalizing Marijuana in California Help?

Beau Kilmer, Jonathan P. Caulkins, Brittany M. Bond, Peter H. Reuter

RAND INTERNATIONAL PROGRAMS and DRUG POLICY RESEARCH CENTER

Office of National Drug Control Policy

What America's Users Spend on Illegal Drugs

American Journal of PUBLIC HEALTH

RAND

Definitions matter



Prohibition

Decriminalization

Medical

Legalization



Definitions matter



Prohibition

Decriminalization

Medical

Legalization



Reduce penalty
for small transactions

Possession of
small amounts a
civil rather than
criminal offense

Definitions matter



Prohibition



Legalization

Decriminalization

Reduce penalty
for small transactions

Possession of
small amounts a
civil rather than
criminal offense

Medical

Legal to
possess,
distribute,
and
produce

Definitions matter



Prohibition

Decriminalization

**Reduce penalty
for small transactions**

**Possession of
small amounts a
civil rather than
criminal offense**

Medical

**Remove criminal
sanctions for
medical use**

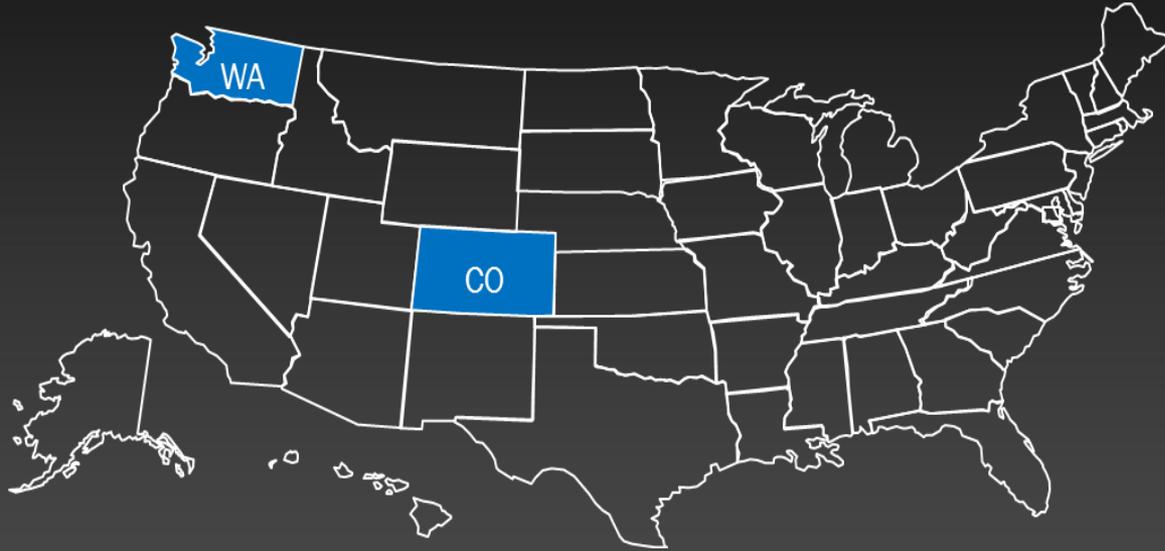
**Access through
home cultivation
and/or dispensaries**



Legalization

**Legal to
possess,
distribute,
and
produce**

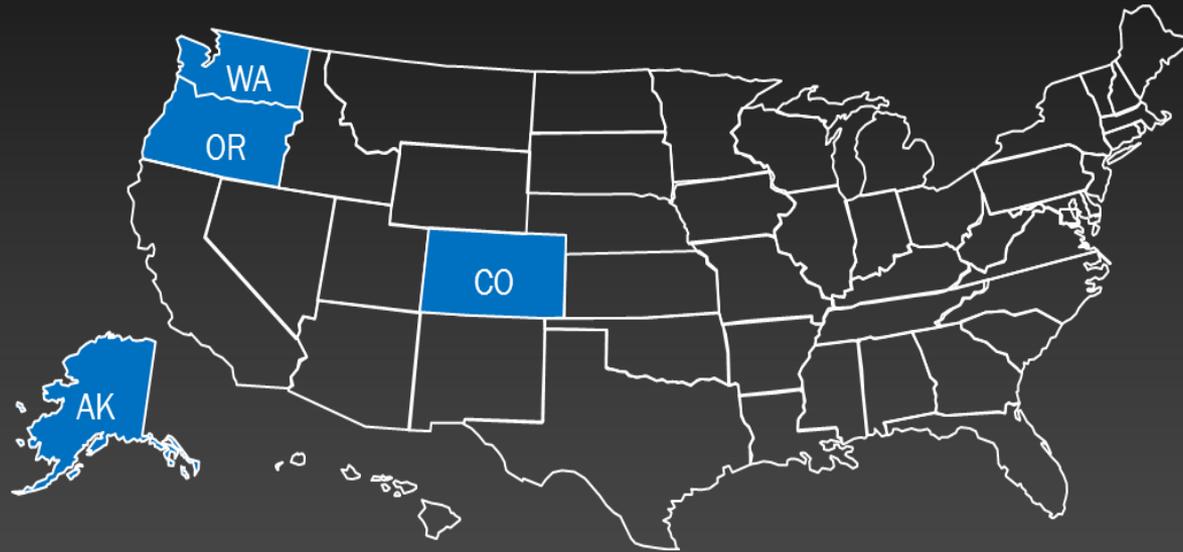
What is happening in the U.S. is unprecedented



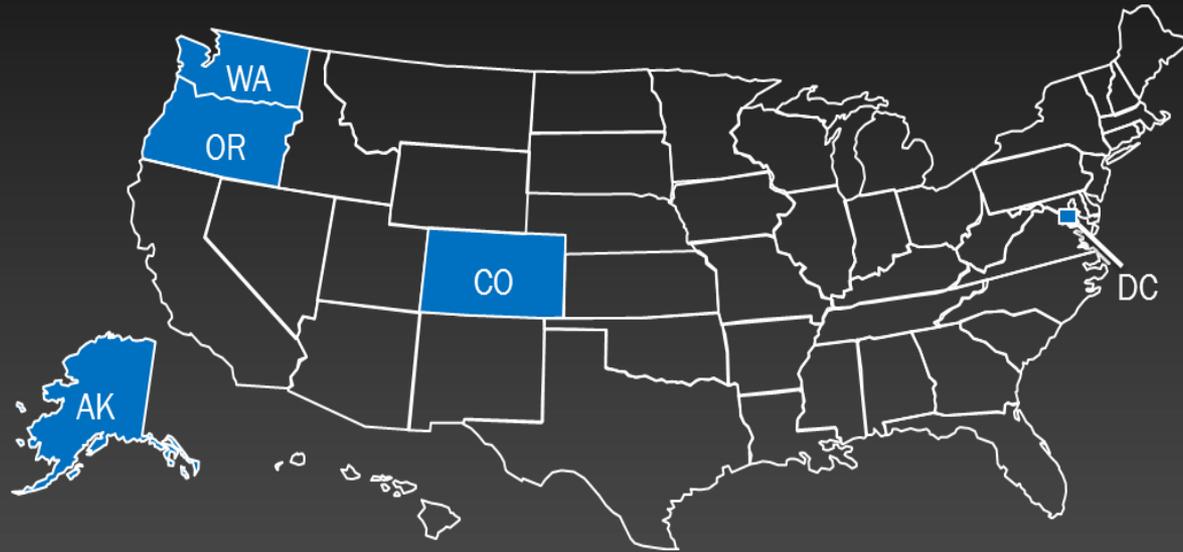
Not even the Netherlands goes this far



Voters in Alaska and Oregon also passed initiatives to create for-profit marijuana industry



Voters in Washington DC passed an initiative to legalize home growing and “gifting”



Other states will consider legalization

- **State legislators in U.S. could also introduce bills**
- **Will likely be on the ballot in California and other states in 2016**

But this is still illegal under U.S. federal law

- **U.S. Department of Justice has decided not to block implementation**
- **Federal policy can change**
- **Sent a signal to other states and other countries**

Not just a U.S. phenomenon



Roadmap

- **Unprecedented changes in marijuana policy**
- **Design considerations for legal marijuana**

Design considerations: The 10 P's

1. Production
2. Profit Motive
3. Promotion
4. Prevention & Treatment
5. Policing & Enforcement
6. Penalties
7. Potency
8. Purity
9. Price
10. Permanency

Design considerations: The 10 P's

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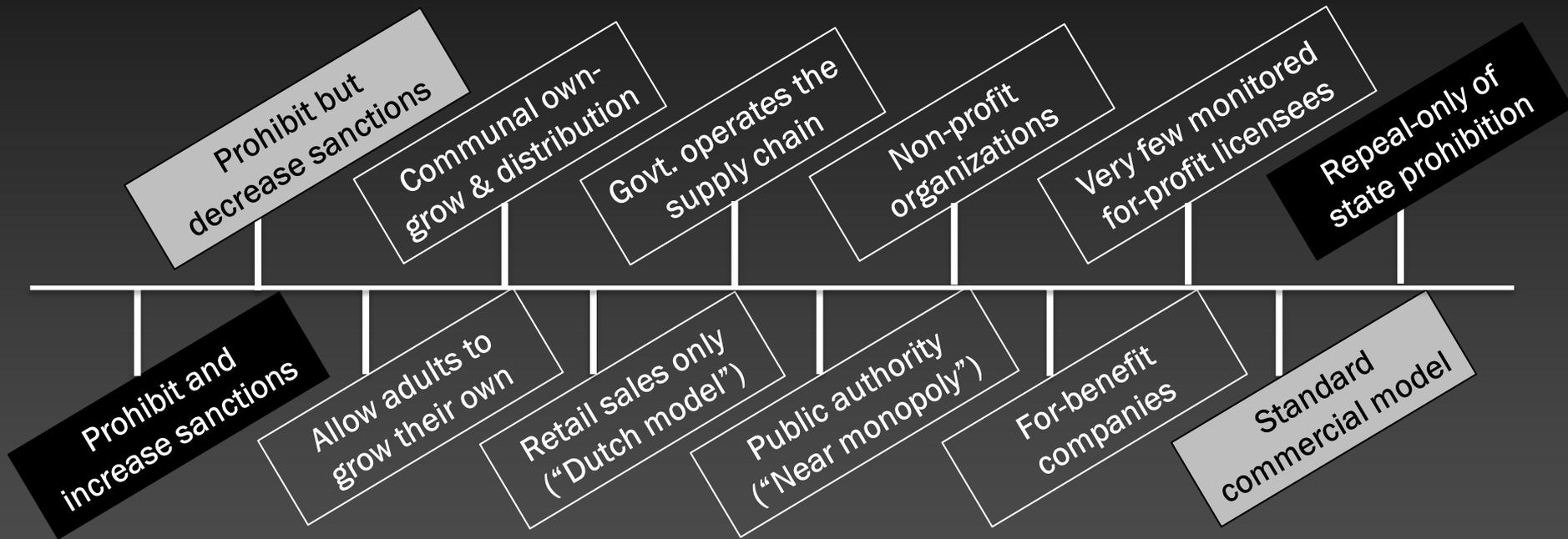
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10. Permanency

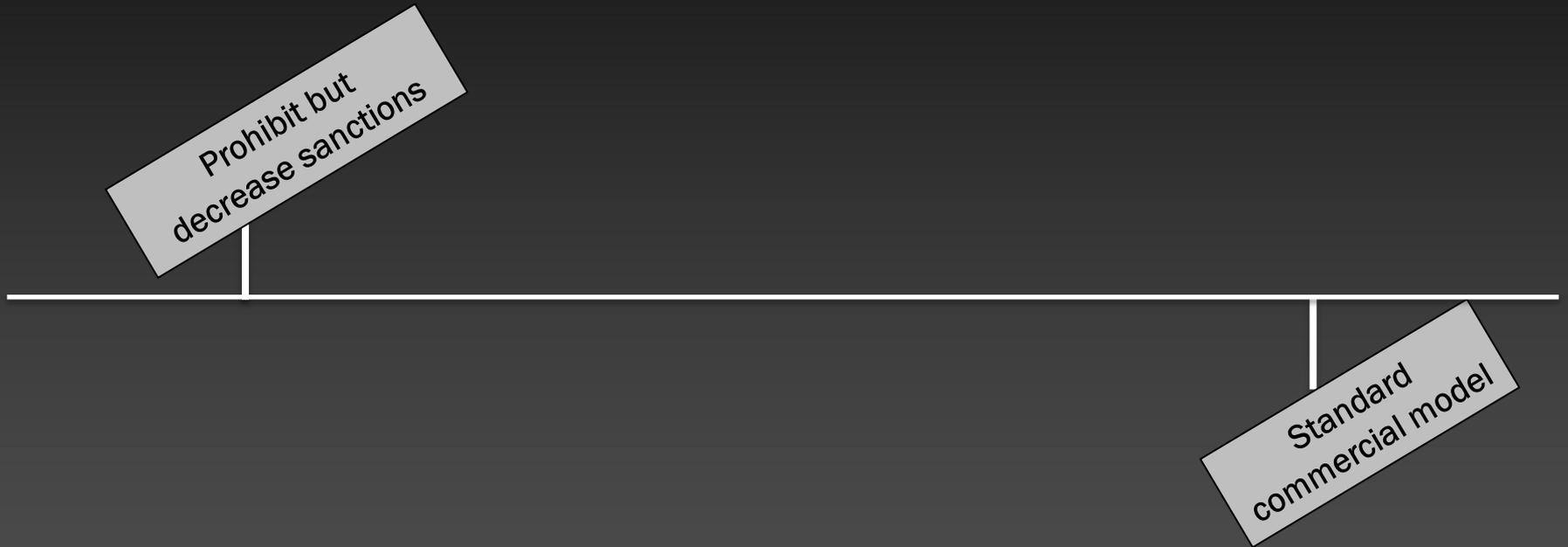
Is the commercial alcohol model desirable?

- **Heavy users drive market for alcohol**
 - 80/20 rule (Cook, 2008)
 - Same for marijuana (Kilmer et al., 2014)
- **Creates strong profit motive for private companies to maintain and nurture heavy users**
- **Powerful lobby that fights regulations and taxes**

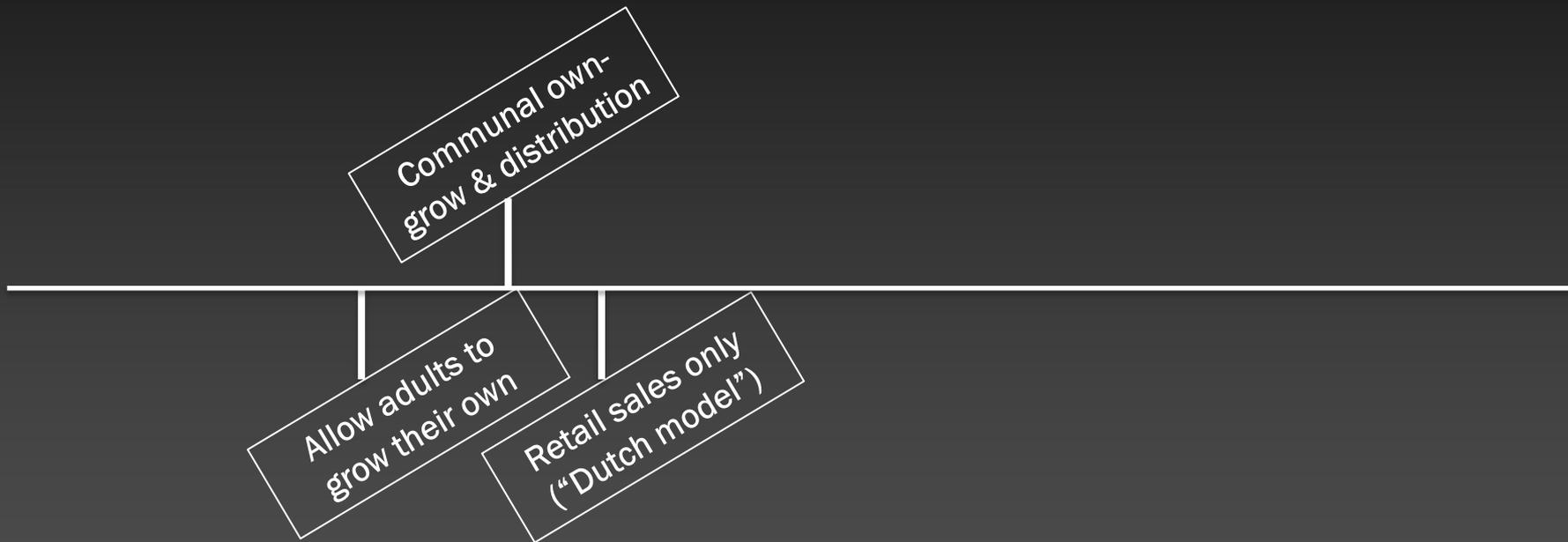
Many alternatives to status quo prohibition



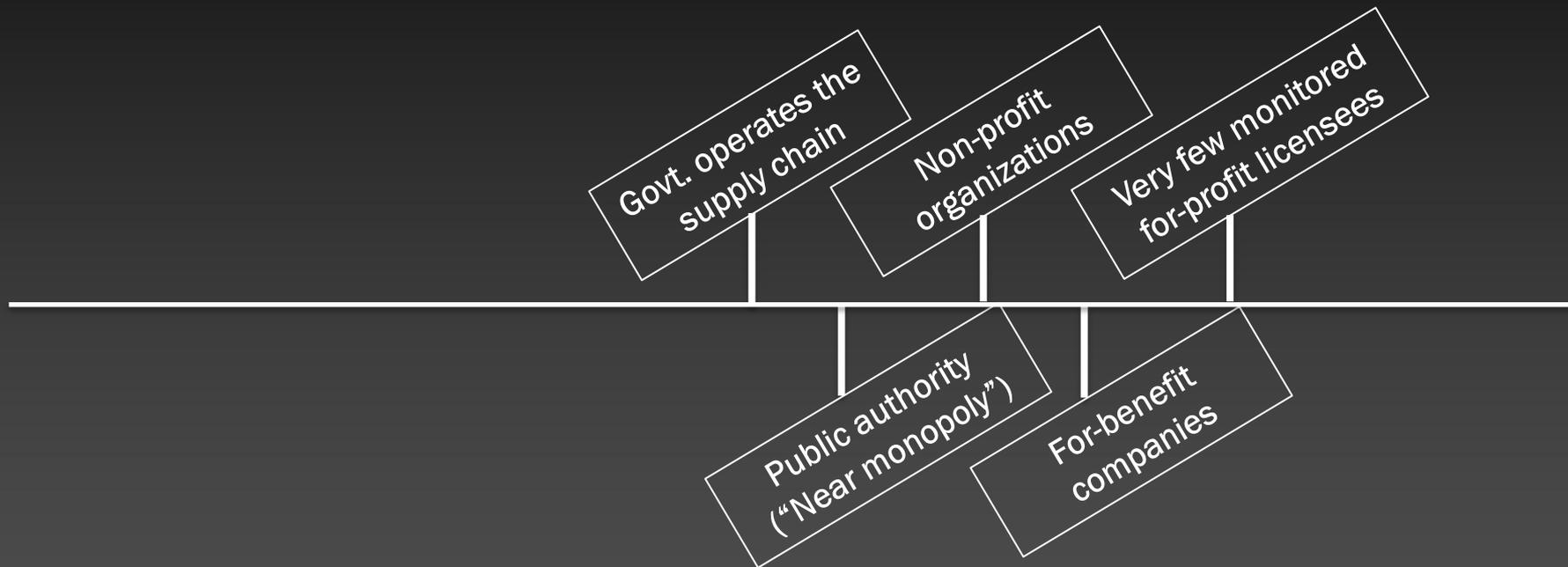
Commonly-discussed options in the US



Middle-ground options (small scale)



Middle-ground options (large scale)



Design considerations: The 10 P's

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Price matters

- Influences consumption and revenues
- 10% decline in price leads to ~3% increase in marijuana participation (Pacula, 2010; Gallet, 2013)
 - Would be better if we had price per unit of THC

Options to elevate price

Require product testing

Reduce competition

Impose taxes



Need to think hard about marijuana taxes

- If taxes are too high, there will be evasion
- Will taxes be applied to the medical market?
- There are alternatives to taxing by value
 - E.g., By weight, % THC, THC:CBD ratio

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How easy will it be to change policies?

- Early adopters will probably suffer growing pains and want to make changes
- Raises questions about how much flexibility to build into the taxation and regulatory regime

Another idea to consider: Sunset clause

- **As sunset date approaches, legislature or voters could vote to sustain the law or try something else**
- **Would give jurisdictions an escape clause, a chance—by simply sitting still—to overcome the lobbying muscle of the new industry**

Roadmap

- **Unprecedented changes in marijuana policy**
- **Design considerations for legal marijuana**
- **Thinking seriously about data collection**

Data needs if you are thinking about policy change

- **What is the size of the market?**
 - Total amount consumed
 - Total expenditures

Data needs if you are thinking about policy change

- **What is the size of the market?**
- **How reliable are your drug use surveys?**
 - **Critical for sizing the market**
 - **Important for policy evaluation**

Data needs if you are thinking about policy change

- **What is the size of the market?**
- **How reliable are your drug use surveys?**
- **What is the price per unit of THC?**
 - **Must think beyond price per gram**
 - **Critical for making realistic projections**

Concluding thoughts

- You will continue to hear a lot about marijuana

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- Reasonable people can disagree about marijuana

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- You will continue to hear a lot about marijuana
- Reasonable people can disagree about marijuana
- These “10 P’s” are a good place to start for those who want to engage in debate, design, and analysis



Drug Policy Research Center

Estimating the size of a marijuana market



Begin with
national drug
survey



Adjust for
survey bias



Determine how
much marijuana
is consumed
on a “use day”

*¿Cuánta marihuana usa usted en un día normal?
(How much marijuana do you use in a typical day?)*

