MARIJUANA LEGALIZATION: DESIGN CONSIDERATIONS & DATA NEEDS
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
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, and Peter Reuter

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

Jonathan P. Caulkins, Beau Klimer, Robert J. MacCoun, Rosalie Liccardo Pacula, and Peter Reuter

Reducing drug trafficking revenues and violence in Mexico. Would legalizing marijuana in California help?

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

American Journal of Public Health

What America's Users Spend on Illegal Drugs

Office of National Drug Control Policy

dprc.rand.org
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

Decriminalization

Reduce penalty for small transactions
Possession of small amounts a civil rather than criminal offense

Medical

Legal to possess, distribute, and produce

Legalization
Definitions matter

Prohibition

Decriminalization

Medical

Legalization

- Reduce penalty for small transactions
- Possession of small amounts a civil rather than criminal offense
- Legal to possess, distribute, and produce

- Remove criminal sanctions for medical use
- Access through home cultivation and/or dispensaries
- 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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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

Prohibit but decrease sanctions
Communal own-grow & distribution
Govt. operates the supply chain
Non-profit organizations
Very few monitored for-profit licensees
Repeal-only of state prohibition

Prohibit and increase sanctions
Allow adults to grow their own
Retail sales only (“Dutch model”)
Public authority (“Near monopoly”)
For-benefit companies
Standard commercial model

Source: Caulkings, Kilmer, Kleiman et al., 2015
Commonly-discussed options in the US

Prohibit but decrease sanctions

Standard commercial model

Source: Caulkins, Kilmer, Kleiman et al., 2015
Middle-ground options (small scale)

Communal own-grow & distribution

Allow adults to grow their own

Retail sales only ("Dutch model")

Source: Caulkins, Kilmer, Kleiman et al., 2015
Middle-ground options (large scale)

Govt. operates the supply chain

Non-profit organizations

Very few monitored for-profit licensees

Public authority ("Near monopoly")

For-benefit companies

Source: Caulkins, Kilmer, Kleiman et al., 2015
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
Design considerations: The 10 P’s

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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
Concluding thoughts

- You will continue to hear a lot about marijuana
- Reasonable people can disagree about marijuana
Concluding thoughts

• 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
Estimating the size of a marijuana market

1. Begin with national drug survey
2. Adjust for survey bias
3. 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?)