



**INSURANCE  
INFORMATION**  
INSTITUTE

# Property/Casualty Insurance: A Brief Tour

University of Missouri  
Columbia, Missouri  
September 9, 2019

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# I.I.I. Mission Statement

Improving public understanding  
of insurance...

...what it does and how it works.



# How Insurance Drives Economic Growth

## Safety/ Security



1. Insurers are financial first responders



2. Insurers are risk mitigators

## Economic/ Financial Stability



3. Insurers are capital protectors



4. Insurance is a partner in social policy



5. Insurance sustains the supply chain



6. Insurers are capital infusers

## Development



7. Insurers are community builders



8. Insurance enables infrastructure improvements



9. Insurers are innovation catalysts



10. Insurers are credit facilitators

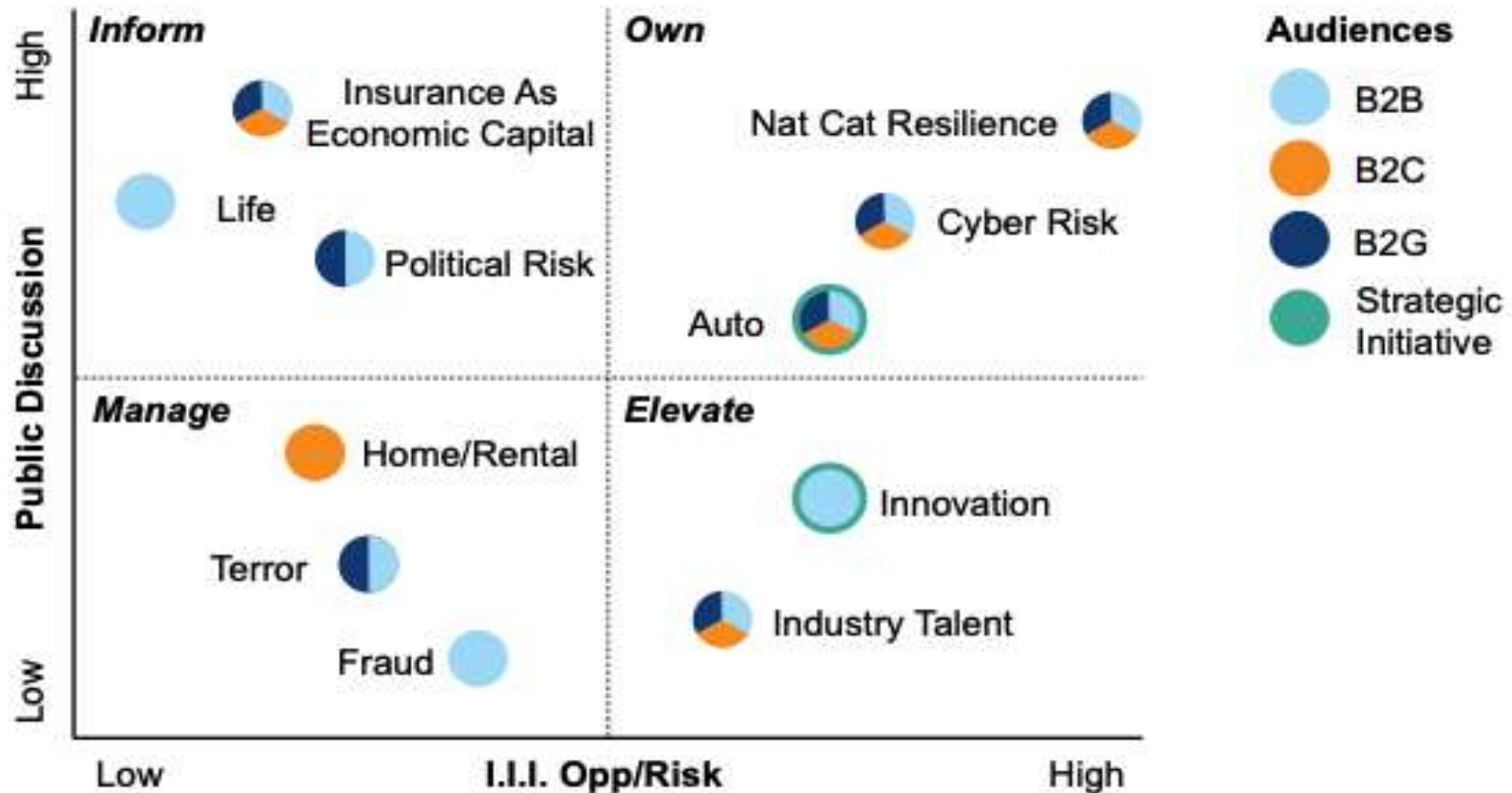


# Insurance and Agriculture





# Our Priorities In 2019 Continue To Reflect Where Industry & Customer Conversations Are Focused



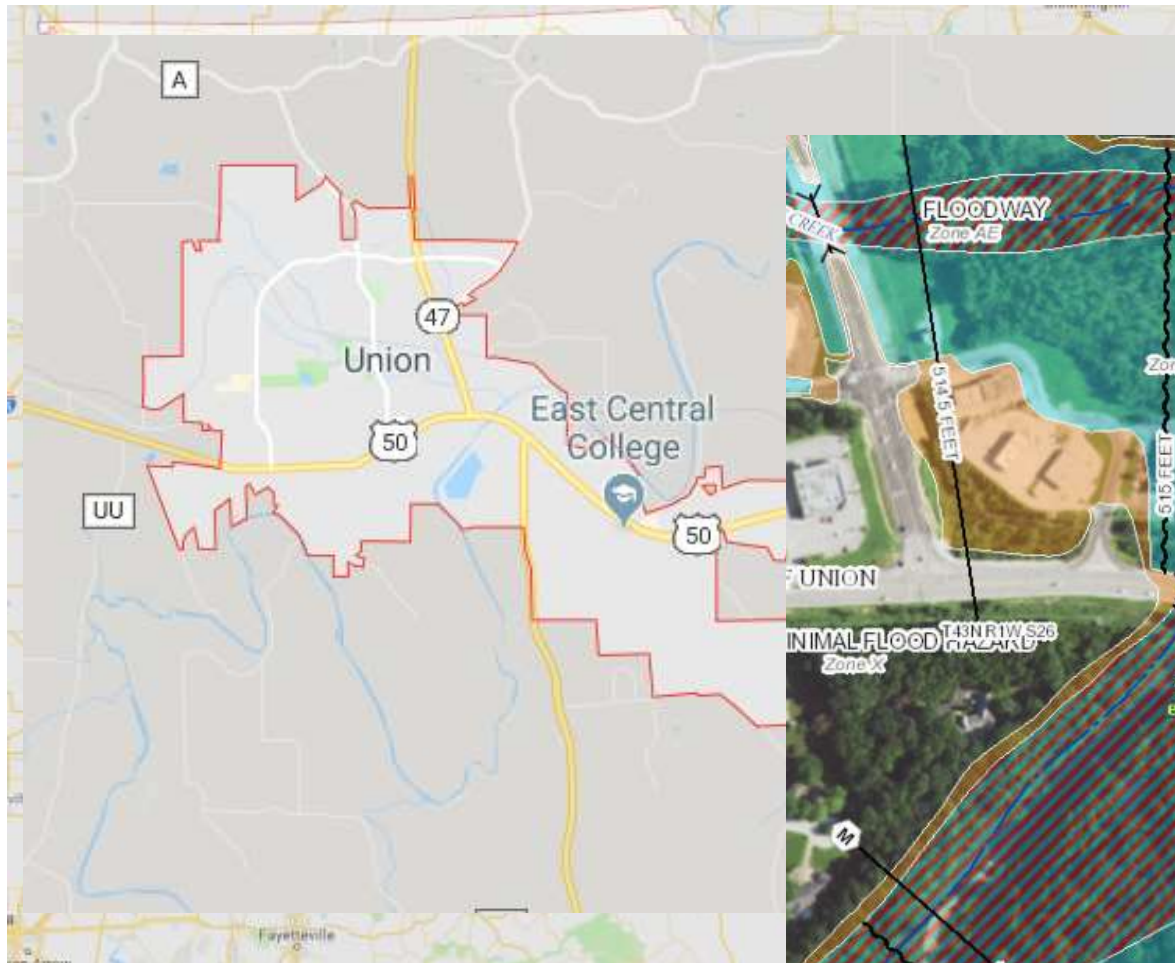


# The Need for Resilience

Extreme Weather Threatens Union



# A Small Town in Missouri





# 1982 Union, Missouri, Flood

## A Storm for the Ages



Bourbeuse River  
Record Crest  
33.8 feet  
12/5/1982





# 2015 Union, Missouri, Flood

## A Storm for the Ages



Bourbeuse River  
Record Crest  
34.3 feet  
12/29/2015



Sources: CBSnews.com; fox2news.com



# 2017 Union, Missouri, Flood

“Unfortunately, it’s a river and Mother Nature.  
And we can’t control her.”

Bourbeuse River  
Crest  
29.4 feet  
May 2-3, 2017



	Crest (feet)	Year
1	0.40	1936
2	0.40	1948
3	0.40	1948
4	0.50	1976
5	0.55	<b>2014</b>
6	0.64	<b>2012</b>
7	0.68	<b>2000</b>
8	0.78	<b>2001</b>
9	0.80	1996
10	1.14	<b>2007</b>



Source: eMissourian.com, National Weather Service.



# 2019: Union, Missouri, Embraces Resilience

## Community Hardening

### Dickey Bub Berm



### Shopping on One Side



### Park on the Other





# Extreme Events: A Troubling Trend

Rank	Date	Event	Cause	Insured Loss (1) (\$ millions)
1	Aug. 2005	Hurricane Katrina	Hurricane	\$41,100
<b><u>2</u></b>	<b><u>Sep. 2017</u></b>	<b><u>Hurricane Maria (2)</u></b>	<b><u>Hurricane</u></b>	<b><u>25,000-30,000</u></b>
<b><u>3</u></b>	<b><u>Sep. 2017</u></b>	<b><u>Hurricane Irma (2)</u></b>	<b><u>Hurricane</u></b>	<b><u>20,000-25,000</u></b>
4	Sep. 2001	September 11 Events	Terrorism	18,779
5	Oct. 2012	Hurricane Sandy	Hurricane	18,750
<b><u>6</u></b>	<b><u>Aug. 2017</u></b>	<b><u>Hurricane Harvey (2)</u></b>	<b><u>Hurricane</u></b>	<b><u>16,000-19,000</u></b>
7	Aug. 1992	Hurricane Andrew	Hurricane	15,500
8	Jan. 1994	Northridge, CA earthquake	Earthquake	12,500
9	Sep. 2008	Hurricane Ike	Hurricane	12,500
10	Oct. 2005	Hurricane Wilma	Hurricane	10,300

(1) Dollars when occurred.

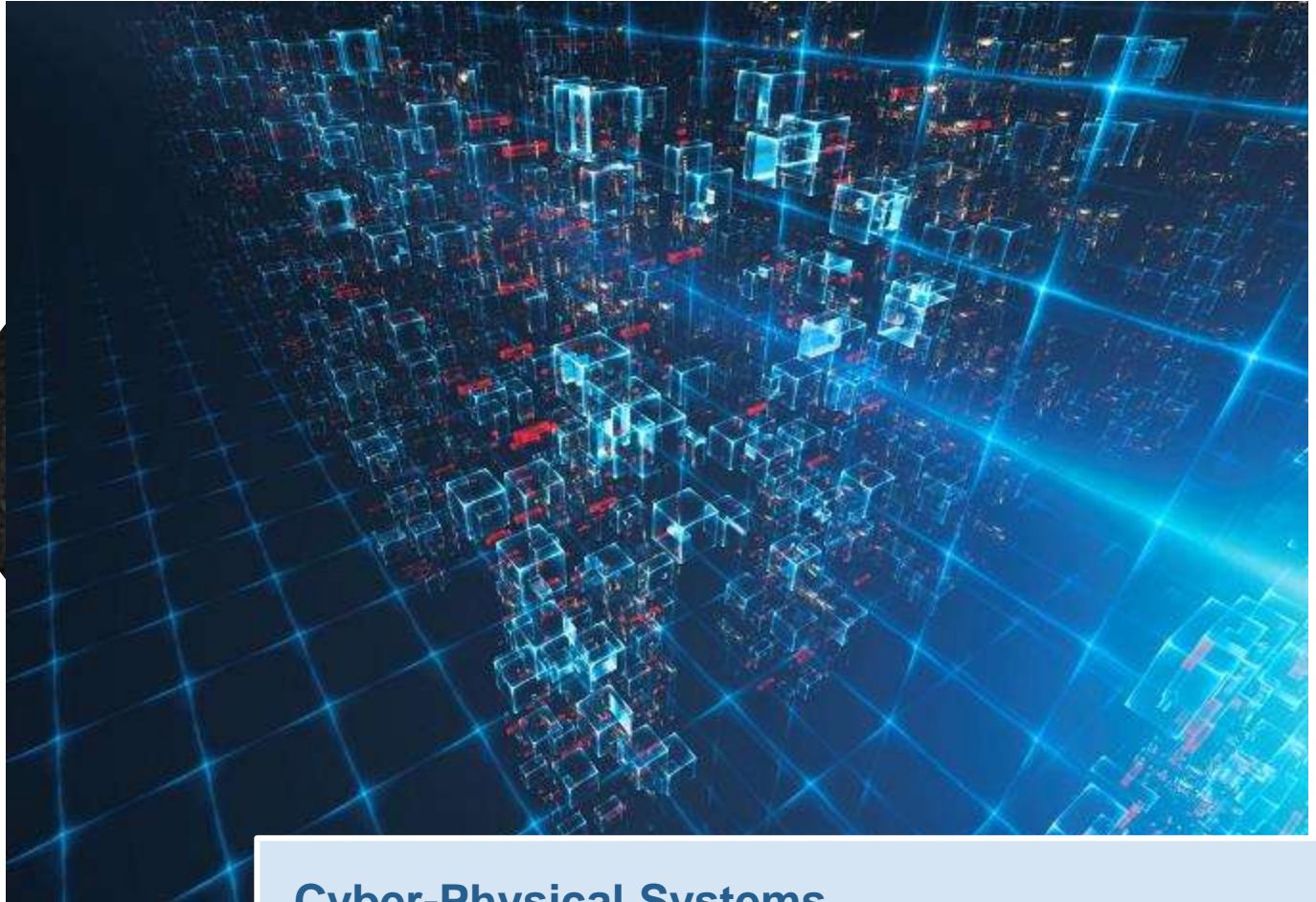
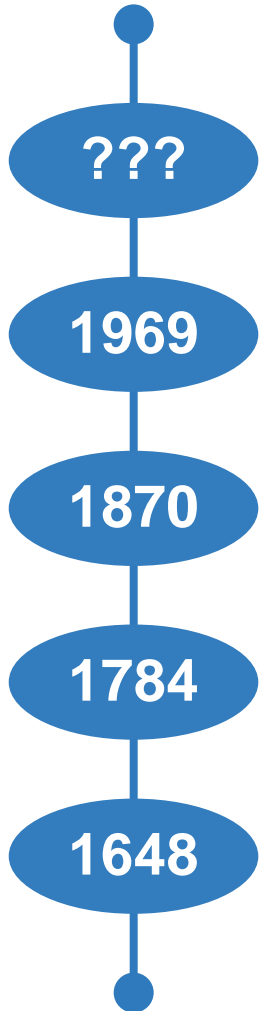
(2) Insurance Information Institute estimate based on data from catastrophe risk modelers, the Property Claims Services unit of Verisk Analytics, et al.

Source: Insurance Information Institute, catastrophe risk modelers, The Property Claim Services® (PCS®) unit of ISO®, a Verisk Analytics® company, et al.





# Insurance Leading Throughout History



Cyber-Physical Systems

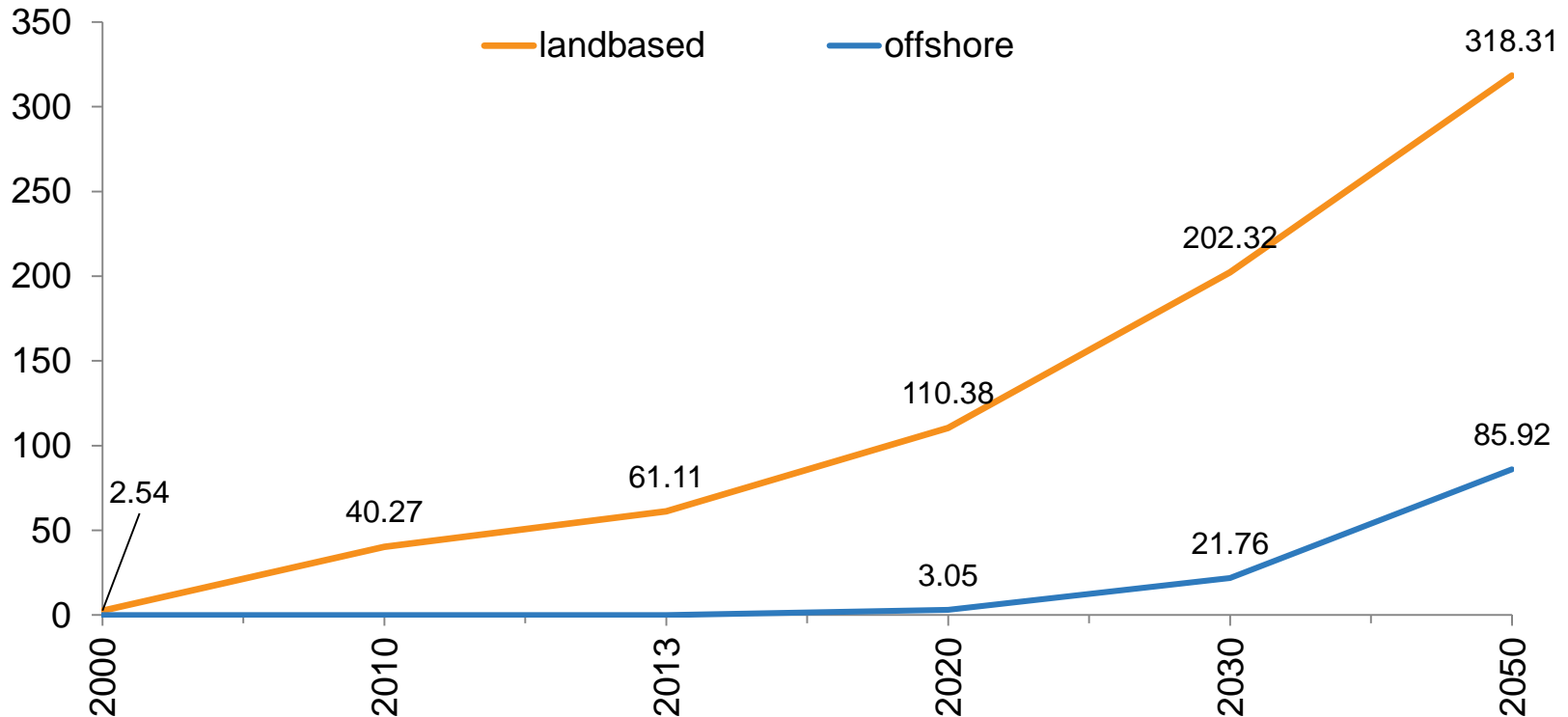


# Case Study: Offshore Wind Power



# Growth of Wind Power Capacity in the U.S.

## Gigawatts



**By 2050 total wind power capacity across 48 states will be 404.25 gigawatts, an increase of 180.15 gigawatts from 2030**

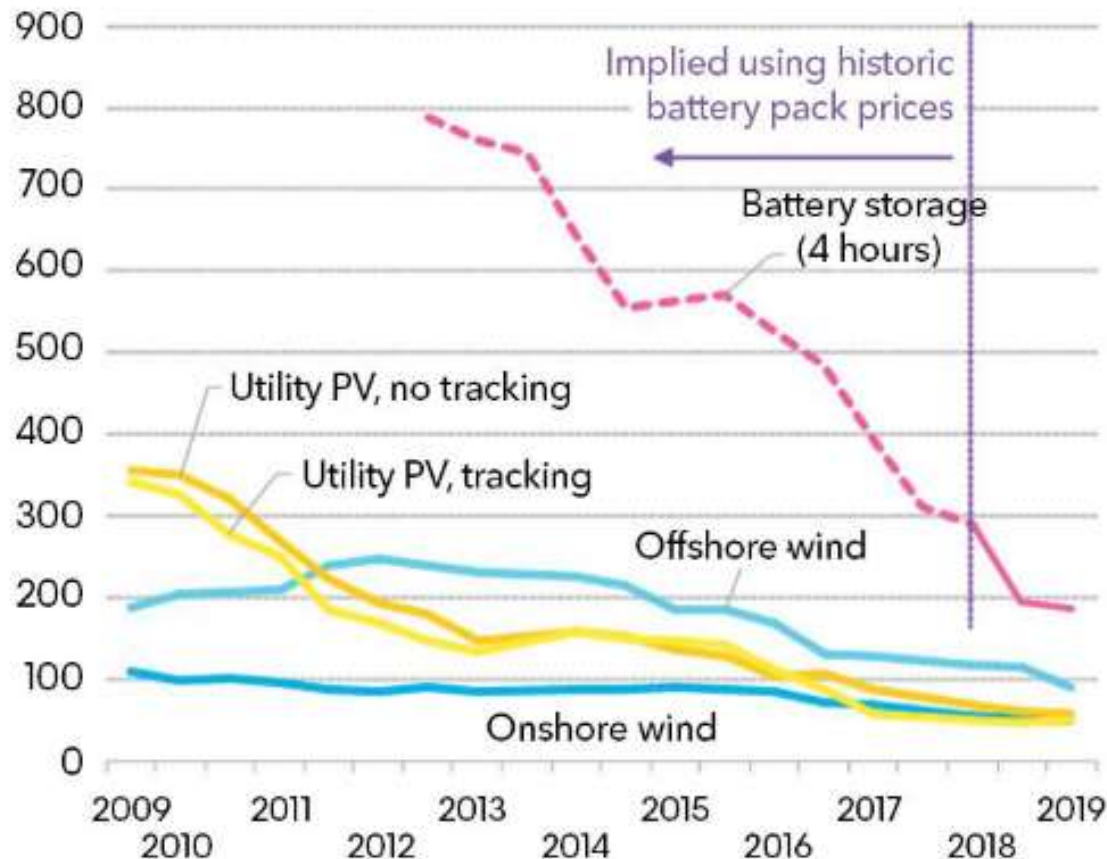




# Cost of Alternative Energies is Falling

Global benchmarks - PV, wind and batteries

LCOE (\$/MWh, 2018 real)



LOCO: Levelized cost of energy – cost of producing MWh of electricity, accounting for cost of development, construction and equipment, financing, feedstock, operation and maintenance

Source: BloombergNEF.





# Offshore wind farms pros and cons



## Pros

- ▲ Offshore wind speeds are faster and steadier than on land
- ▲ Meet energy needs of high-density coastal areas
- ▲ Renewable energy with no pollution
- ▲ Domestic energy source
- ▲ Jobs

## Cons

- ▲ Expensive and difficult to build and maintain
- ▲ Effects on marine animals and birds are not fully understood
- ▲ May be unpopular with residents



# Key risks faced by wind farms



Risk	Insurance
Cargo in transit	Marine
Construction problems	Construction delay cover
Mechanical, cable issues	Property damage cover
Lightning strike	Business interruption
Terrorism	Political risk
'Wind drought'	Weather hedge

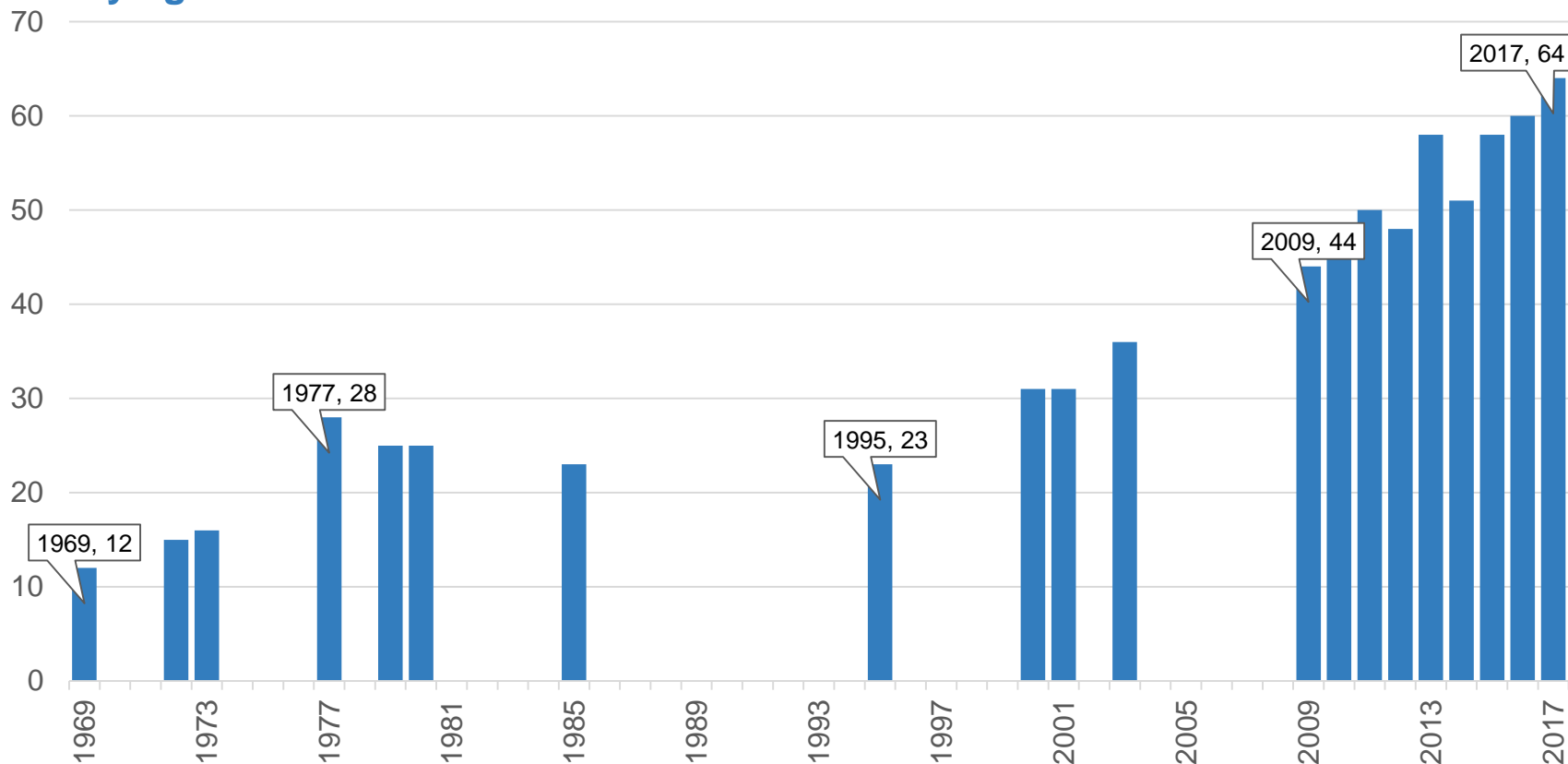


# Cannabis and Insurance



# Support for Legalization Grows

% Saying Yes



**“Do You Think the Use of Marijuana Should Be Made Legal, Or Not?”**



No survey in years where no data appears.

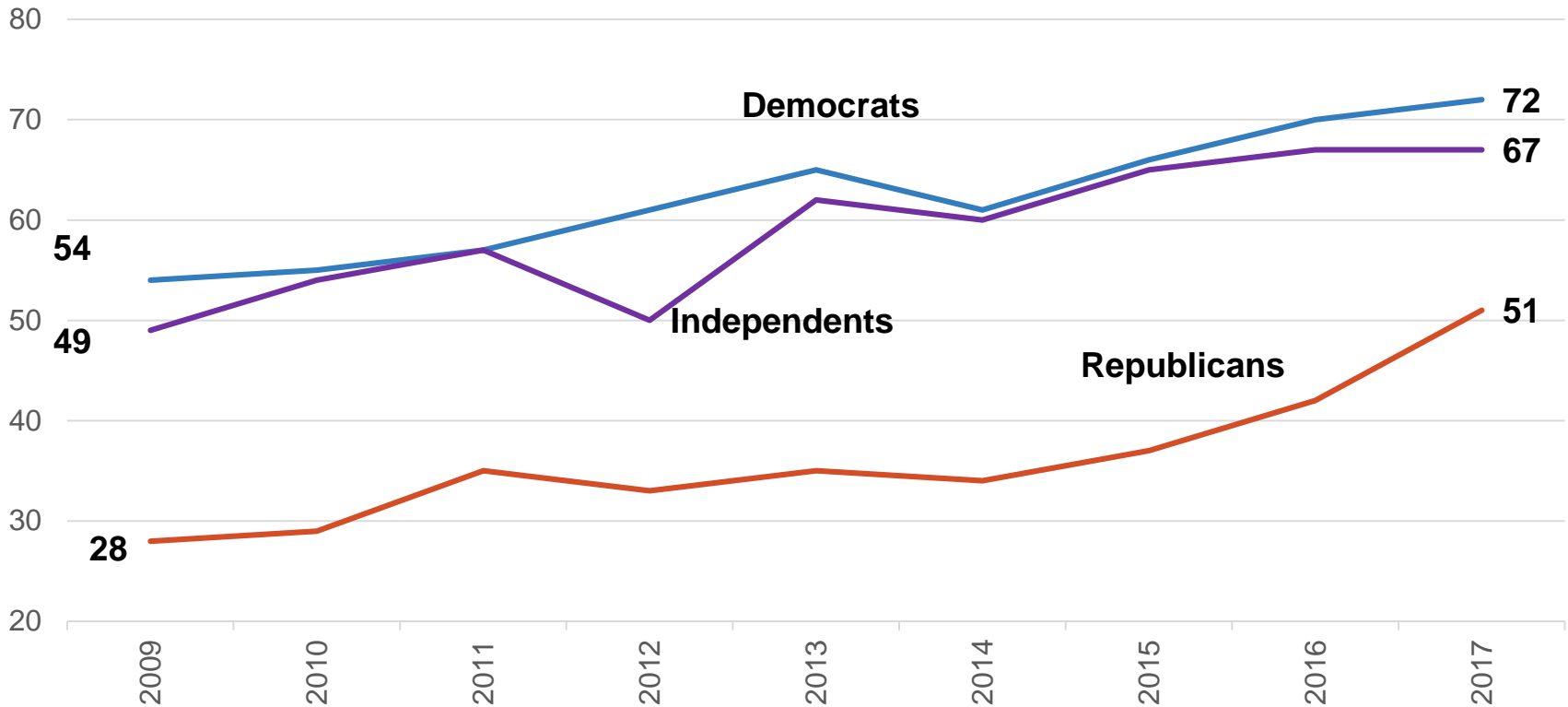
SOURCES: Gallup Poll Social Series, <http://news.gallup.com/file/poll/221027/171025Marijuana.pdf>.



# Support for Legalization Grows

% Saying Yes

— Democrats — Independents — Republicans



**“Do You Think the Use of Marijuana Should Be Made Legal, Or Not?”**



SOURCES: Gallup Poll Social Series, <http://news.gallup.com/poll/221018/record-high-support-legalizing-marijuana.aspx>

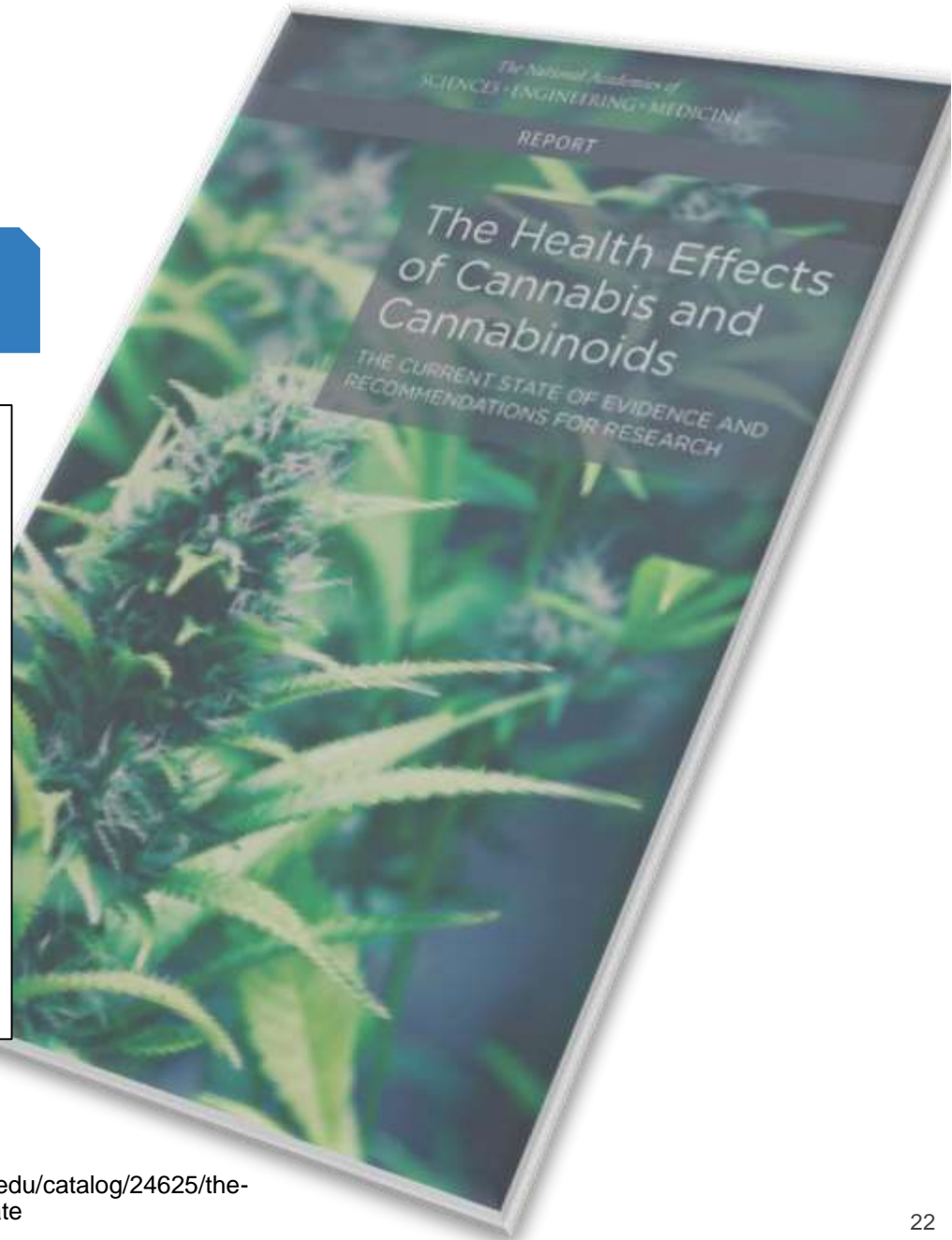


# Driving While High

## The Science

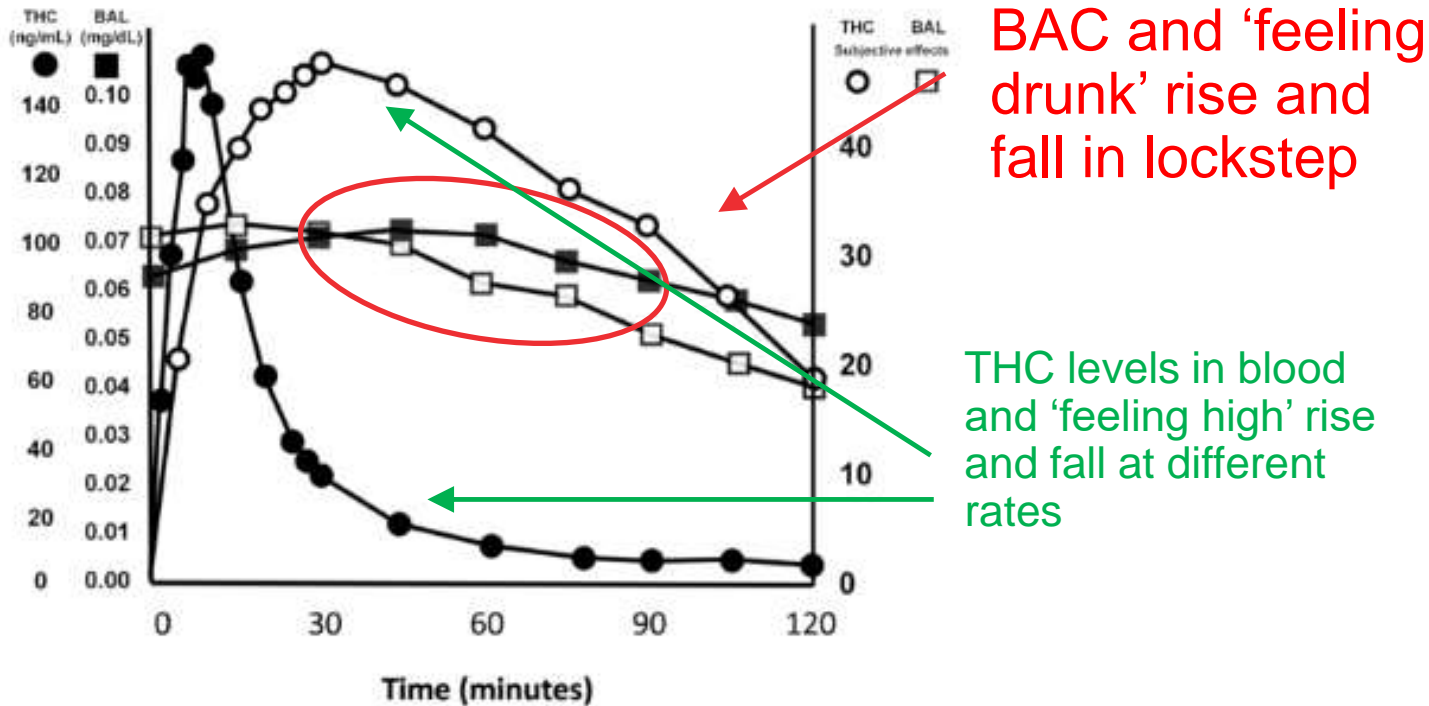
### Review of Literature

- ▲ Conclusive evidence
  - ▲ Improves the lot of adults in chronic pain.
- ▲ Substantial evidence
  - ▲ Increases the risk of motor vehicle crashes.





# THC Levels not an Accurate Indication of Impairment

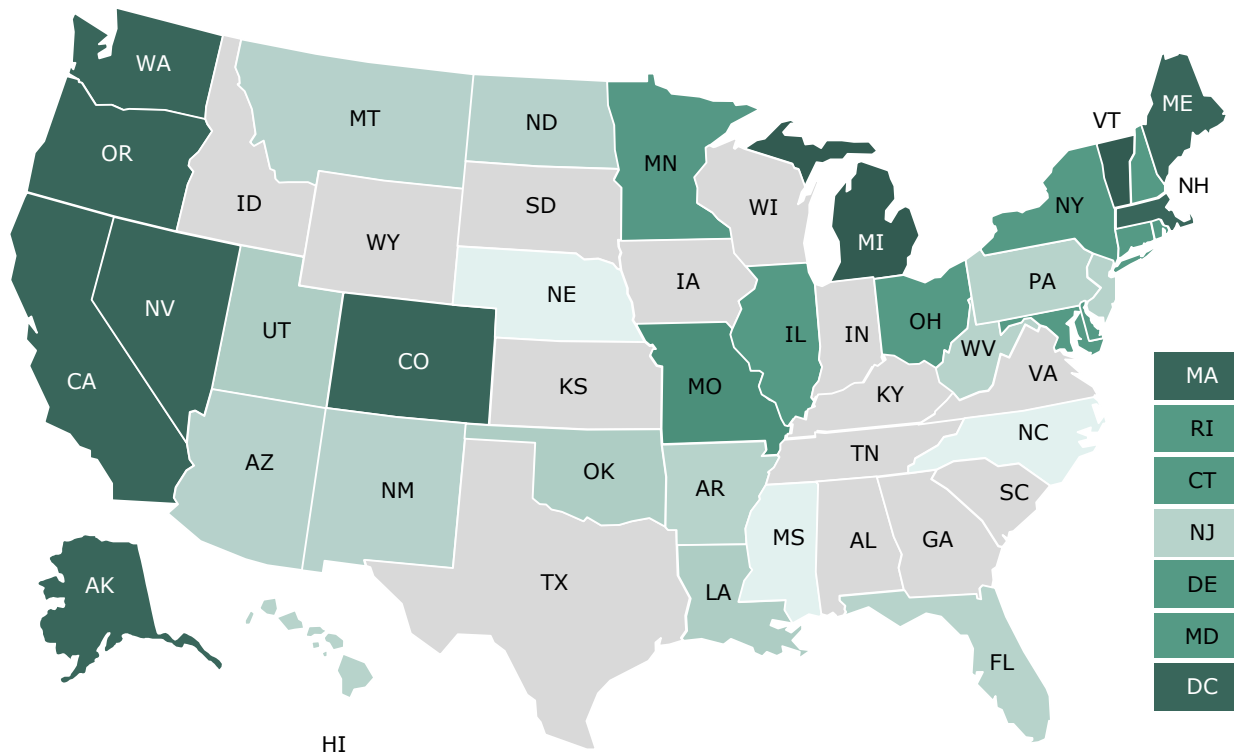




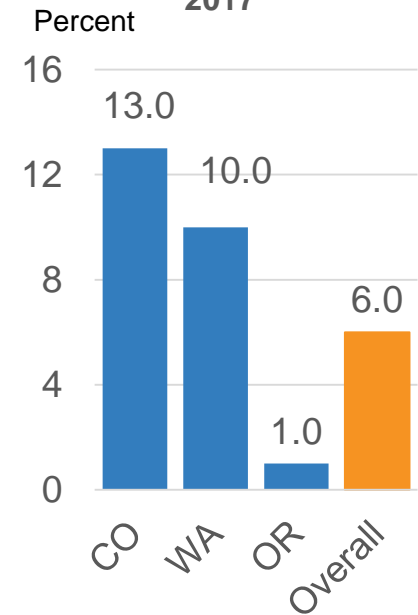
# Weed Spreads Like Wildfire. Insurers Caught in the Middle

## Current marijuana laws by state

Fully legal
  Medical use legal and recreational use decriminalized
  Medical use legal
  Recreational use decriminalized
  Fully illegal



### Change in Collision Frequency, 2012-2017\*



\* Vs. Neighboring States.

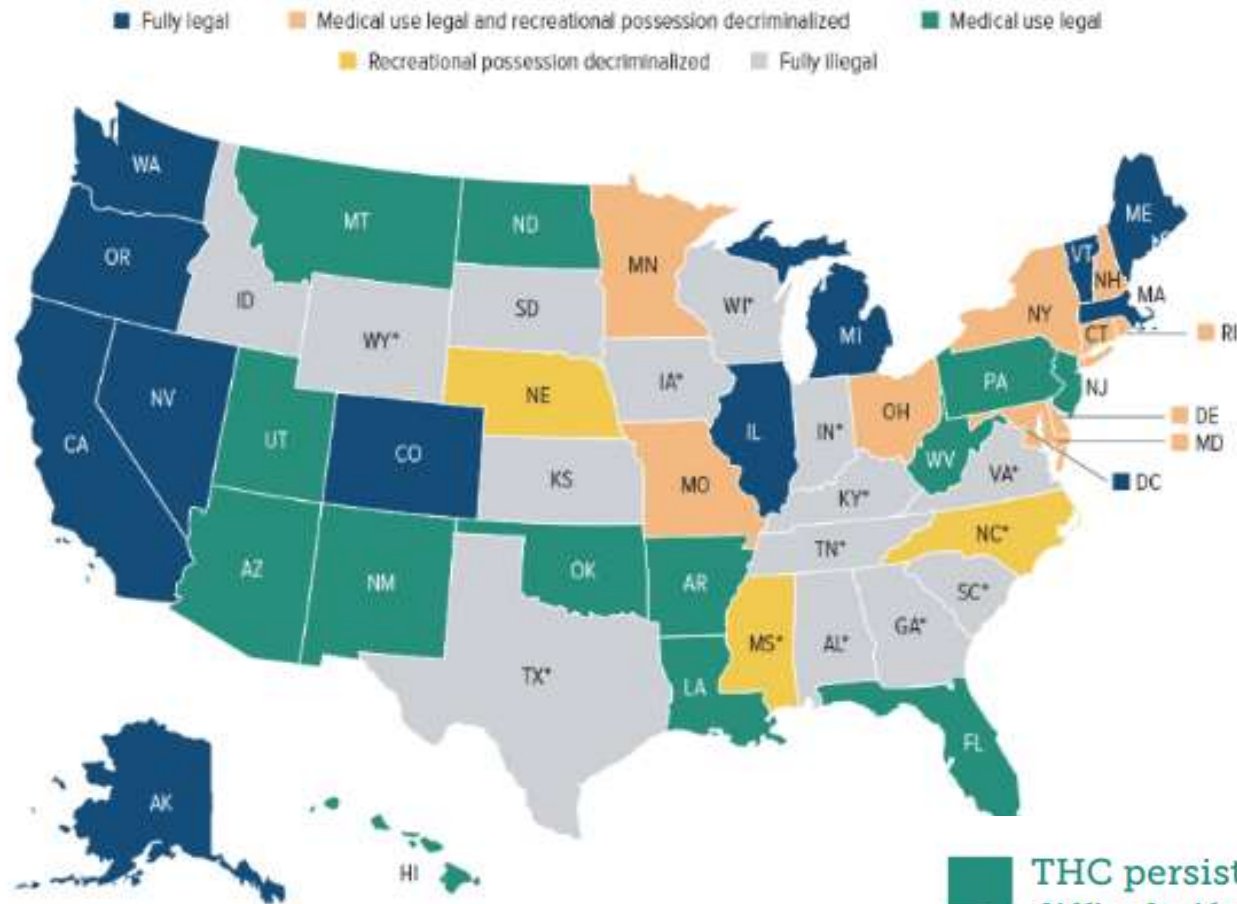
Sources: – Map - National Journal; Ballotpedia, 2019

Collision Frequency – IIHS, LEGAL POT: Crashes are up in states with retail sales, October 18, 2018





# Current Marijuana Laws by State



THC persistence makes it difficult, if not impossible, to determine whether a worker with a positive test was intoxicated at the time of an accident.



# What Do We Know About Workplace Safety in the Age of Legal Marijuana?



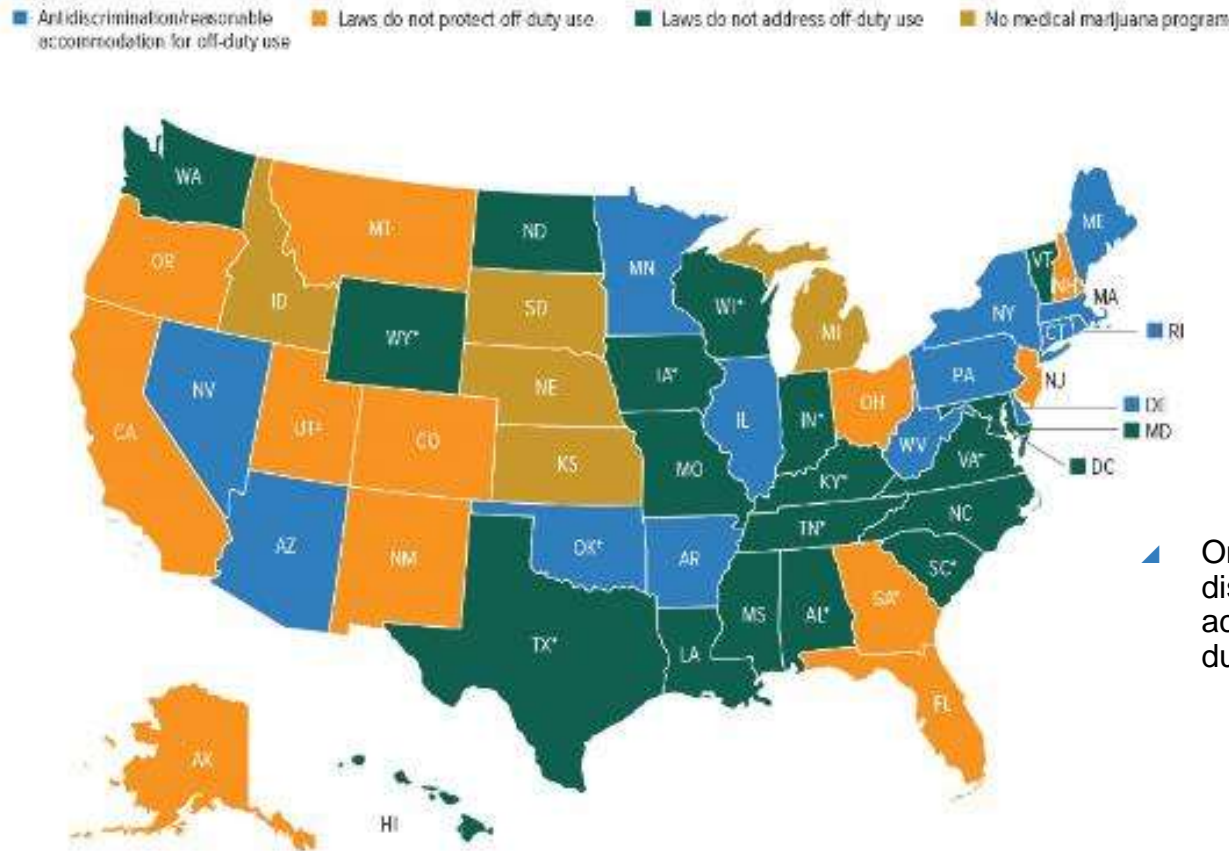
Marijuana intoxication impairs coordination, memory, associative learning, attention, cognitive flexibility and reaction time.

Many factors influence impairment onset, intensity, and duration

- ▲ Product potency – THC levels
- ▲ Method of consumption and type of product
- ▲ User characteristics



# Off-duty Medical Marijuana Use and Employment Protections



- Only 13 states have anti-discrimination/reasonable accommodation for off-duty marijuana use

\*CBD/Low THC medical program. †Oklahoma has not yet released its final medical marijuana rules. ‡Provides limited protections to state employees.

Source: Insurance Information Institute, 2019.



# Medical Marijuana is not a Prescription Drug

## Medical marijuana is:



- ▲ Not prescribed but recommended for a qualifying patient by a physician.
- ▲ Not approved by the FDA as a safe and effective drug.
- ▲ Not dispensed through pharmacies.

## Prescription drugs are:



- ▲ Supported by research that identifies dosages and plans of care.
- ▲ Regulated by the FDA.
- ▲ Procured from a licensed pharmacist.



# Marijuana And Workplace Accidents

- Most states restrict benefits if employee was intoxicated or if intoxication was proximate cause of injury
- Some states limit compensation if employee refuses drug test
- Presumption of positive drug test indicating impairment
- Rebuttable presumption



## Recreational marijuana and the workplace

No state protects on-duty recreational marijuana use. State laws will often explicitly state that recreational marijuana laws do not affect an employer's drug-free workplace policy.



# Is Medical Marijuana Covered by Comp?

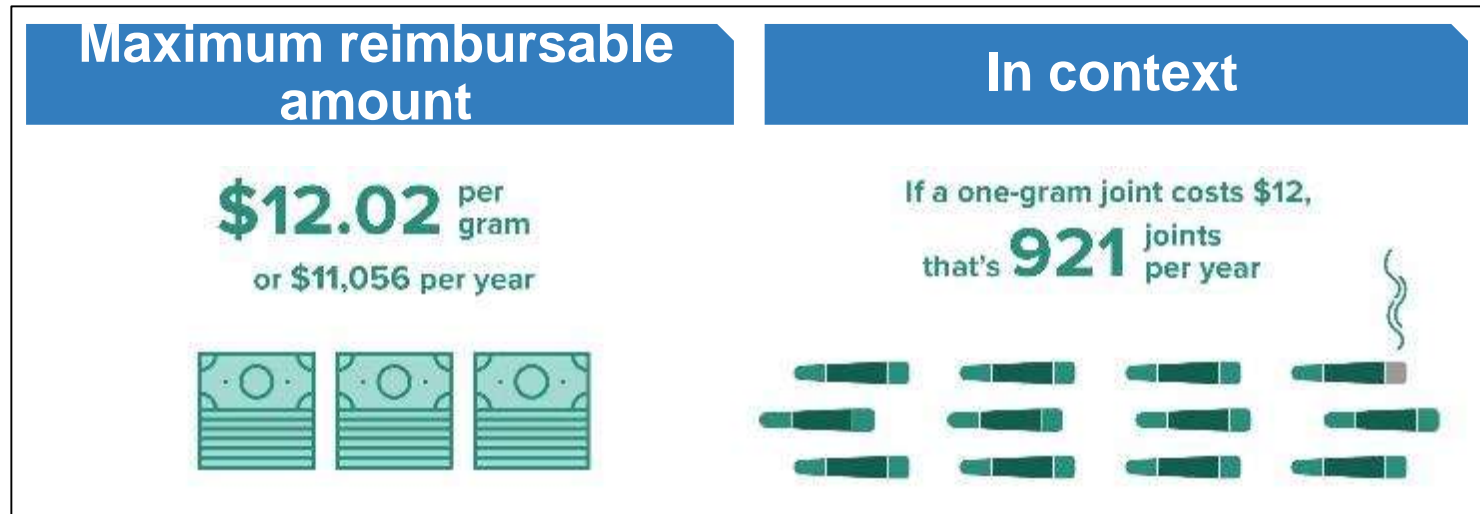
- Reimbursable in a handful of states
- Unclear whether reimbursable in many states
- Reimbursement not required
- Reimbursement prohibited or ineligible



Many state medical marijuana laws specifically exempt certain entities from the reimbursement requirement, usually health insurance providers.



# New Mexico is the Only State That Provides a Fee Schedule for Medical Marijuana<sup>1</sup>





# Reimbursement Complications

- Cash-only business
- Proper dosages poorly understood, non-standardized
- No standardized “serving” of marijuana. Potency levels non-standardized
- Expenses can vary widely



Many state medical marijuana laws specifically exempt certain entities from the reimbursement requirement, usually health insurance providers.





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Thank you for your time  
and your attention!