

Licensed Cannabis Retail Access and Traffic Fatalities

WASHINGTON STATE INSTITUTE FOR PUBLIC POLICY

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WASHINGTON STATE INSTITUTE FOR PUBLIC POLICY

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OUR WORK

Our role is to provide **rigorous, non-partisan research** on topics of legislative interest. Common types of research assignments include:

- ✓ Evidence reviews (*What works?*)
- ✓ Outcome evaluations (*Does it work?*)
- ✓ Benefit-cost analysis (*What pays off?*)
- ✓ Descriptive studies (*What is happening?*)

Reports are publicly available at [wsipp.wa.gov](http://www.wsipp.wa.gov)

WSIPP'S INITIATIVE 502 (I-502) ASSIGNMENT

RCW 69.50.550

WSIPP shall conduct cost-benefit evaluations for the implementation of [this act]...The evaluations shall include, but *not necessarily be limited to*:

- Public health and health care,
- Public safety,
- Substance use,
- Criminal justice,
- Economic impacts, and
- Administrative costs and revenues

Report deadlines: 2015, 2017, 2023, and 2032

abbreviated assignment language

OVERVIEW

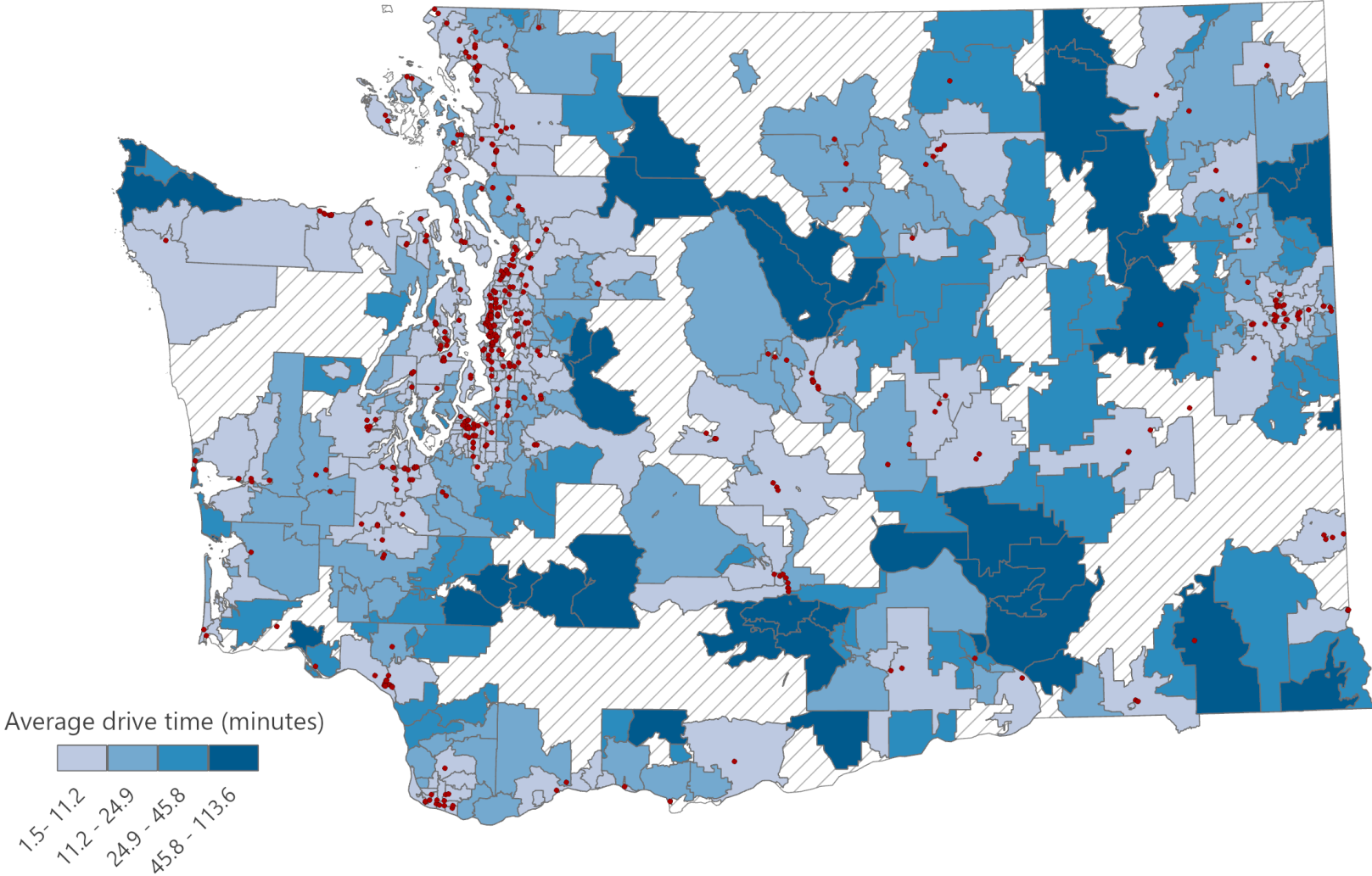
Outcomes Evaluated (*September 1, 2023*)

- Reported cannabis use
- Cannabis, opioid, and alcohol use disorder diagnoses
- Cannabis possession convictions
- Traffic fatalities

NON-MEDICAL CANNABIS RETAIL ACCESS

- Non-medical cannabis (NMC) retail market started in July 2014
 - Rolled out over several years, with varying accessibility across regions
 - The impact of NMC retail on cannabis use and subsequent outcomes may differ depending on retail accessibility
- Access measured as the average drive time (in minutes) to the nearest retailer for the average resident in a ZIP code.

Average Drive Time to Nearest Retailer in Minutes, ZIP codes 2019



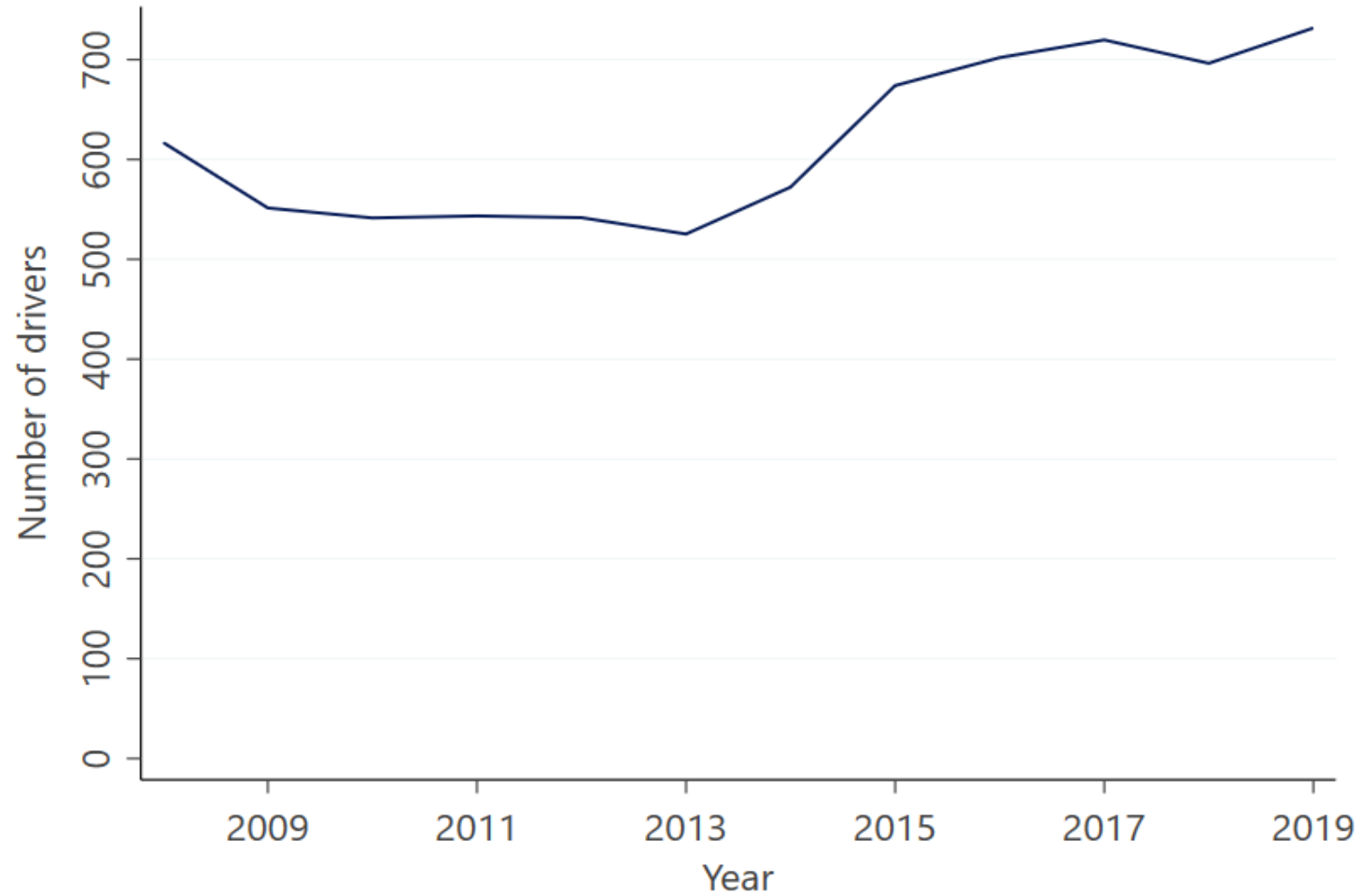
REPORTED CANNABIS USE: CANNABIS RETAIL ACCESS

- Estimated the relationship between drive time to the nearest NMC retailer and adult reported cannabis use
- A shorter drive time to a licensed retailer relates to a higher probability of reported cannabis use among legal-aged adults
 - E.g., a 50% reduction in drive time increases the probability of reporting heavy past-month use by 8.6%

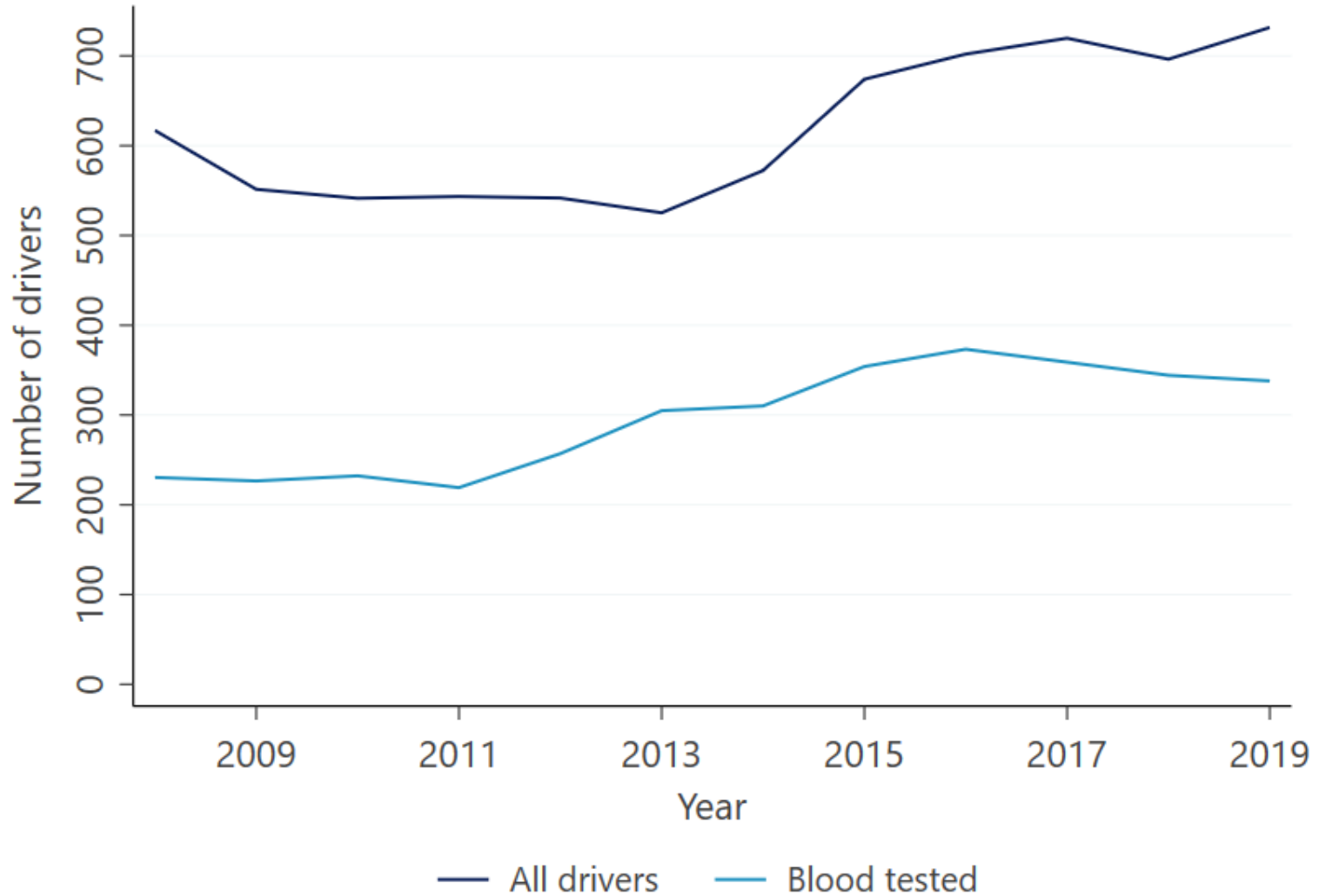
FATAL TRAFFIC CRASHES: CANNABIS RETAIL ACCESS

- Examined if changes in local access to licensed NMC retailers over time predict changes in the prevalence of annual traffic fatalities
- **Data**
 - Washington Coded Fatal Crash (CFC) data files
 - Outcomes include:
 - Number of drivers involved in a fatal traffic collision
 - Among drivers who are tested:
 - » The number with a (Delta-9) THC-positive blood test
 - » The number of drivers who test positive for THC and alcohol
 - » The number of drivers with BAC over 0.08

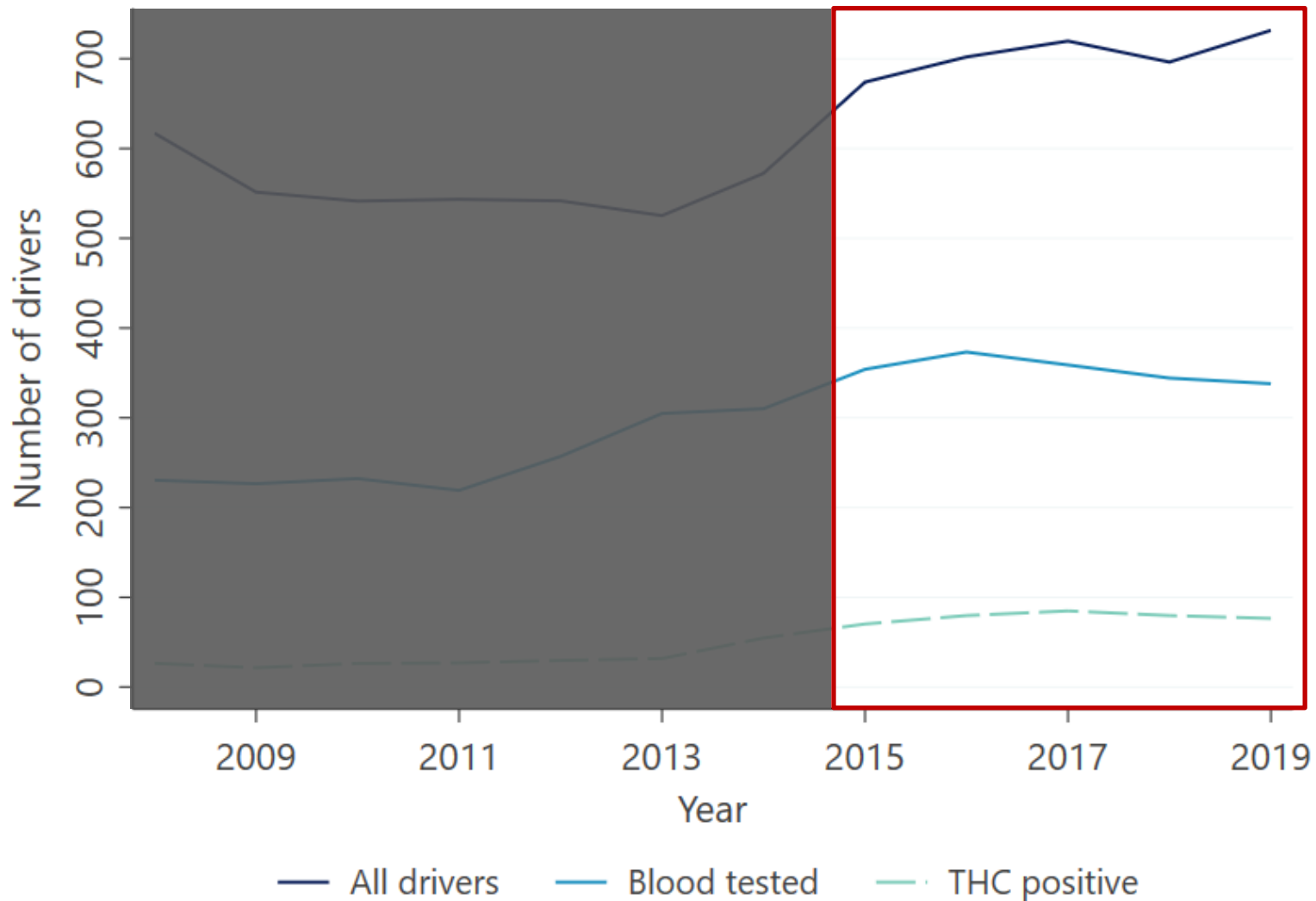
Annual Number of Drivers Involved in Fatal Traffic Accidents, 2008-2019



Annual Number of Drivers Involved in Fatal Traffic Accidents, 2008-2019



Annual Number of Drivers Involved in Fatal Traffic Accidents, 2008-2019



FINDINGS

- A shorter drive time to a licensed retailer relates to a modest increase in the number of drivers involved in a fatal traffic crash
 - E.g., a 50% reduction in the average drive time to the nearest retailer predicts about 46 more drivers involved in a fatal crash annually
- A shorter drive time to a licensed retailer relates to an increase in the prevalence of drivers who test THC-positive
 - E.g., a 50% reduction in the average drive time to the nearest retailer predicts about 13 more THC-positive drivers annually
- A shorter drive time to a licensed retail does not significantly relate to
 - The number of drivers who test positive for the presence of both THC and alcohol.
 - The number of drivers with a BAC of 0.08 or greater.

DISCUSSION

- Results suggest a modest relationship between retail access and the number of THC-positive drivers involved in a traffic fatality.

Limitations

- Retailers are not randomly located throughout the state
- Results do not necessarily generalize to traffic collisions and safety more broadly
 - Only about half the drivers receive a blood test

PUBLICATIONS

Full Report:

[Initiative 502 and Cannabis-Related Public Health and Safety Outcomes: Third Required Report](#)

Supplemental Reports:

[Technical Report—Licensed Cannabis Retail Access and Substance Use Disorder Diagnoses](#)

[Technical Report— Initiative 502 and Cannabis-Related Convictions](#)

[Technical Report— Licensed Cannabis Retail Access and Traffic Fatalities](#)

[Technical Report— The Relationship Between Initiative 502 and Reported Substance Use](#)

THANK YOU!

Questions?

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