



Advancing Science
& Practice in the
Retail Environment

The Tobacco Retailer Environment: Implications for Health and Equity

ToPCon: May 11, 2021

Amanda Kong, PhD, MPH
University of North Carolina at Chapel Hill

Ilana Raskind, PhD
Stanford Prevention Research Center



STANFORD PREVENTION
RESEARCH CENTER
the science of healthy living



Washington
University in St. Louis



Center for Public Health
Systems Science
Brown School



GILLINGS SCHOOL OF
GLOBAL PUBLIC HEALTH

Acknowledgements & Disclosures

National Cancer Institute (P01CA225597; T32CA128582), National Heart, Lung, and Blood Institute (T32HL007034)

The content is solely the responsibility of the authors and does not represent the official views of the funders or the National Institutes of Health.





Advancing Science & Practice in the Retail Environment (**ASPiRE**)

Goal: to build a rigorous, scientific evidence base for effective tobacco control in the retail environment to reduce the public health burdens of tobacco use



Advancing Science & Practice in the Retail Environment (**ASPiRE**)

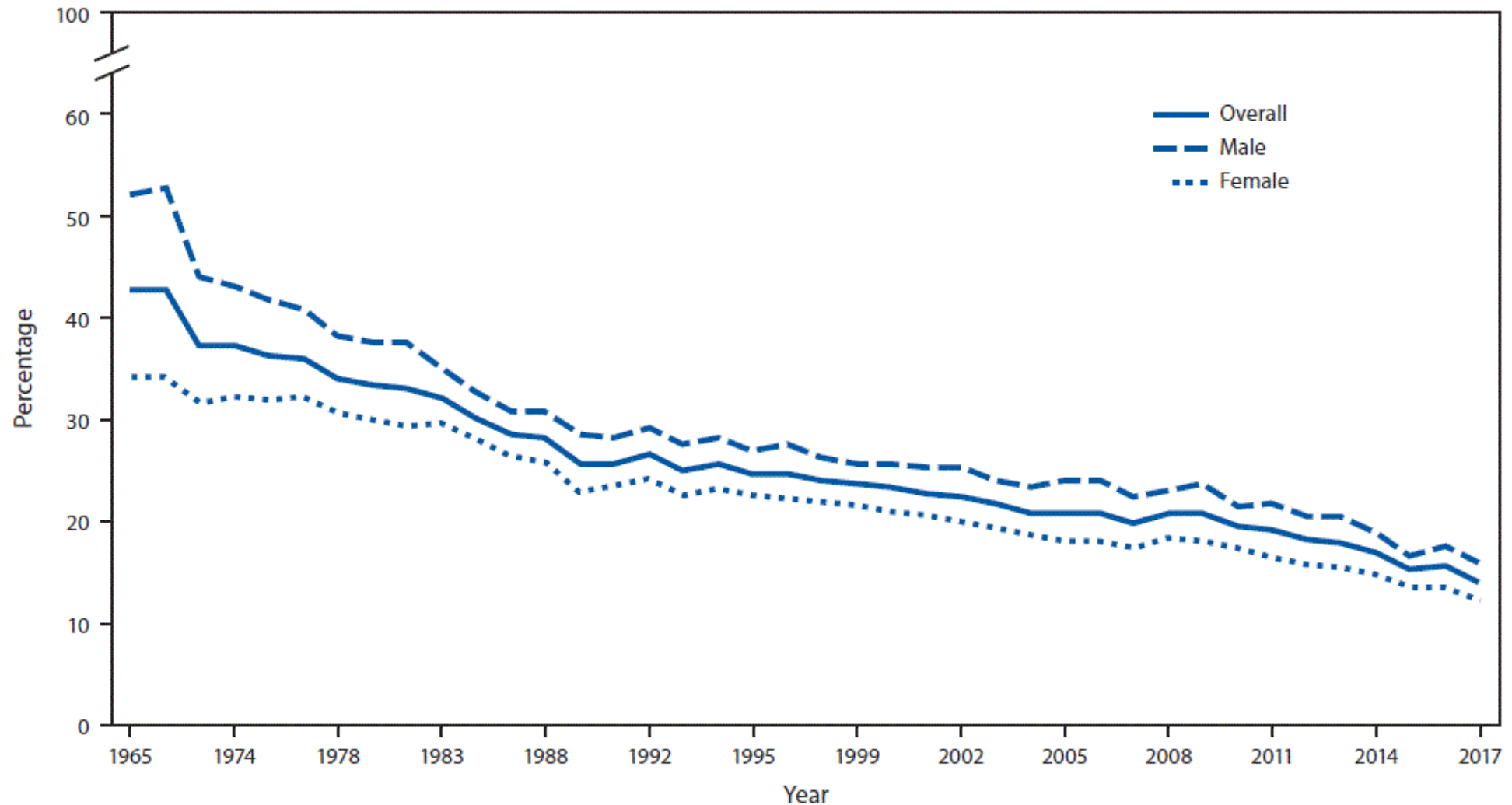
Goal: to build a rigorous, scientific evidence base for effective tobacco control in the retail environment to reduce the public health burdens of tobacco use

Breakout Session 3: 3D — The built environment for tobacco: Retailer density, proximity, and strategies to reduce availability (Combs, Chaitan)

Learning Objectives

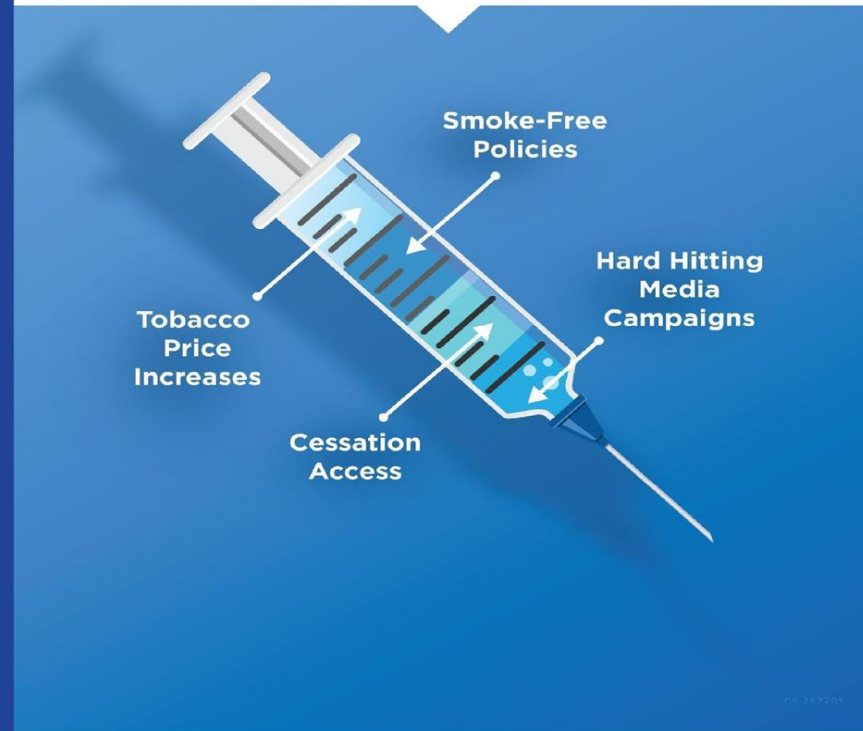
Describe how the tobacco **retailer environment** may impact tobacco use **behaviors and health**, and explain **policy strategies** to reduce tobacco retailer availability and **promote equity**.

Percentage of adults (18+) who were current cigarette smokers – National Health Interview Survey, United States, 1965-2017



TOBACCO CONTROL

THE TOBACCO CONTROL VACCINE



tobaccocontrol.bmj.com

BMJ

Cigarette smoking is down, but about
34 MILLION
American adults still smoke

Cigarette smoking remains high
among certain groups



Men



Adults 25-64
years old



Lower education



Below
poverty level



Midwest
and South



Uninsured
or Medicaid



Disabled



Serious
psychological
distress



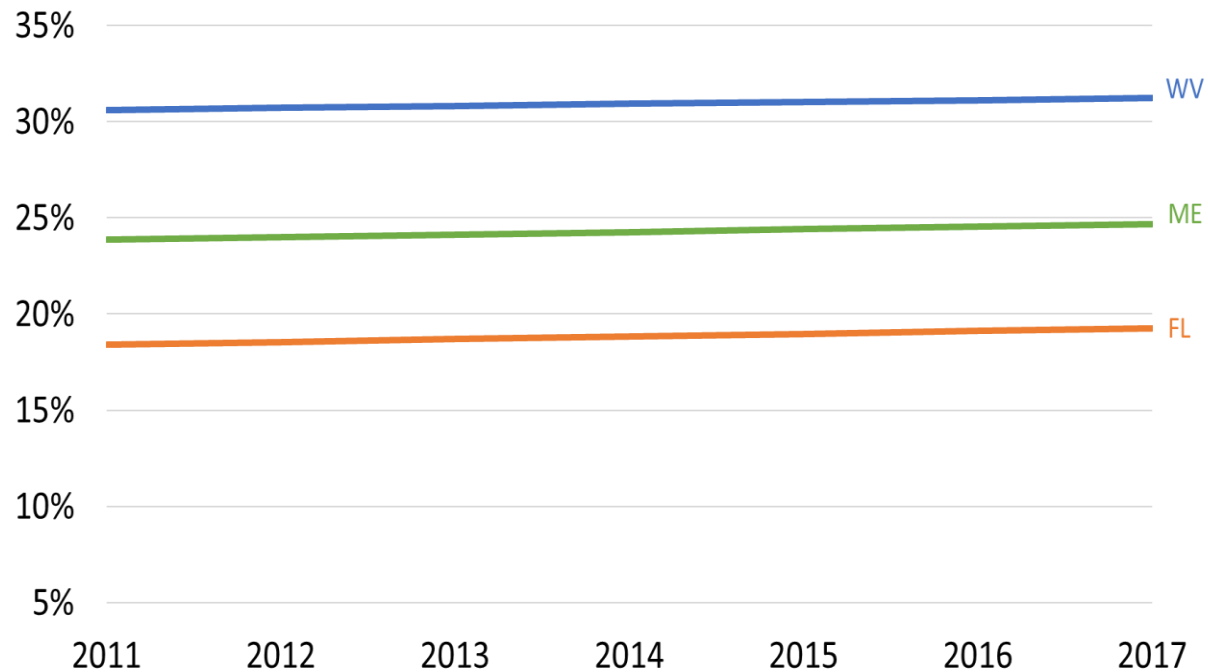
American Indians,
Alaska Natives and
Multiracial



Lesbians, gays,
and bisexuals

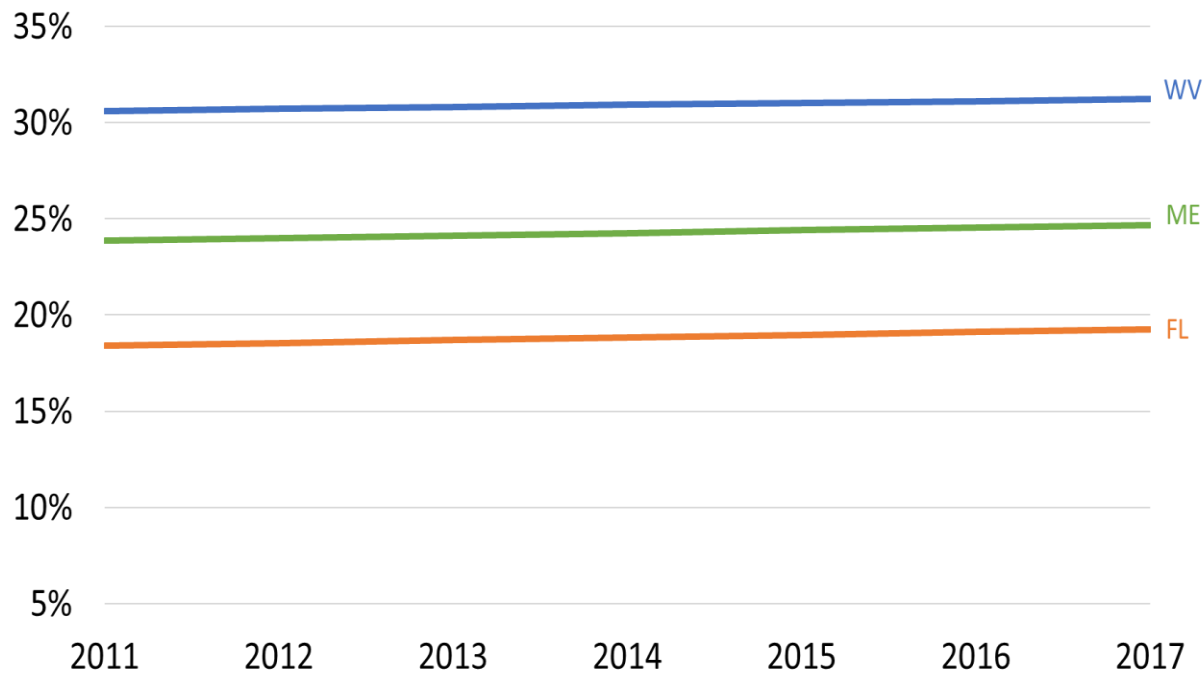
Income-based disparities in smoking prevalence widened in 3 states (West Virginia, Maine, Florida)

\$ income households

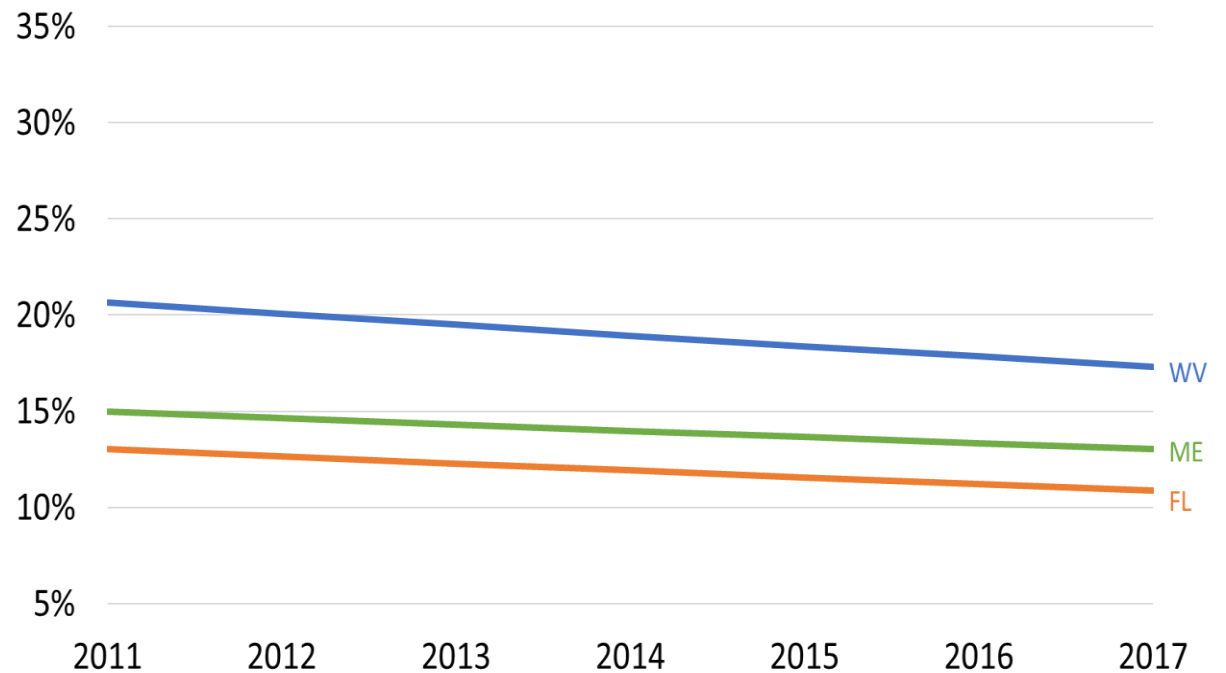


Income-based disparities in smoking prevalence widened in 3 states (West Virginia, Maine, Florida)

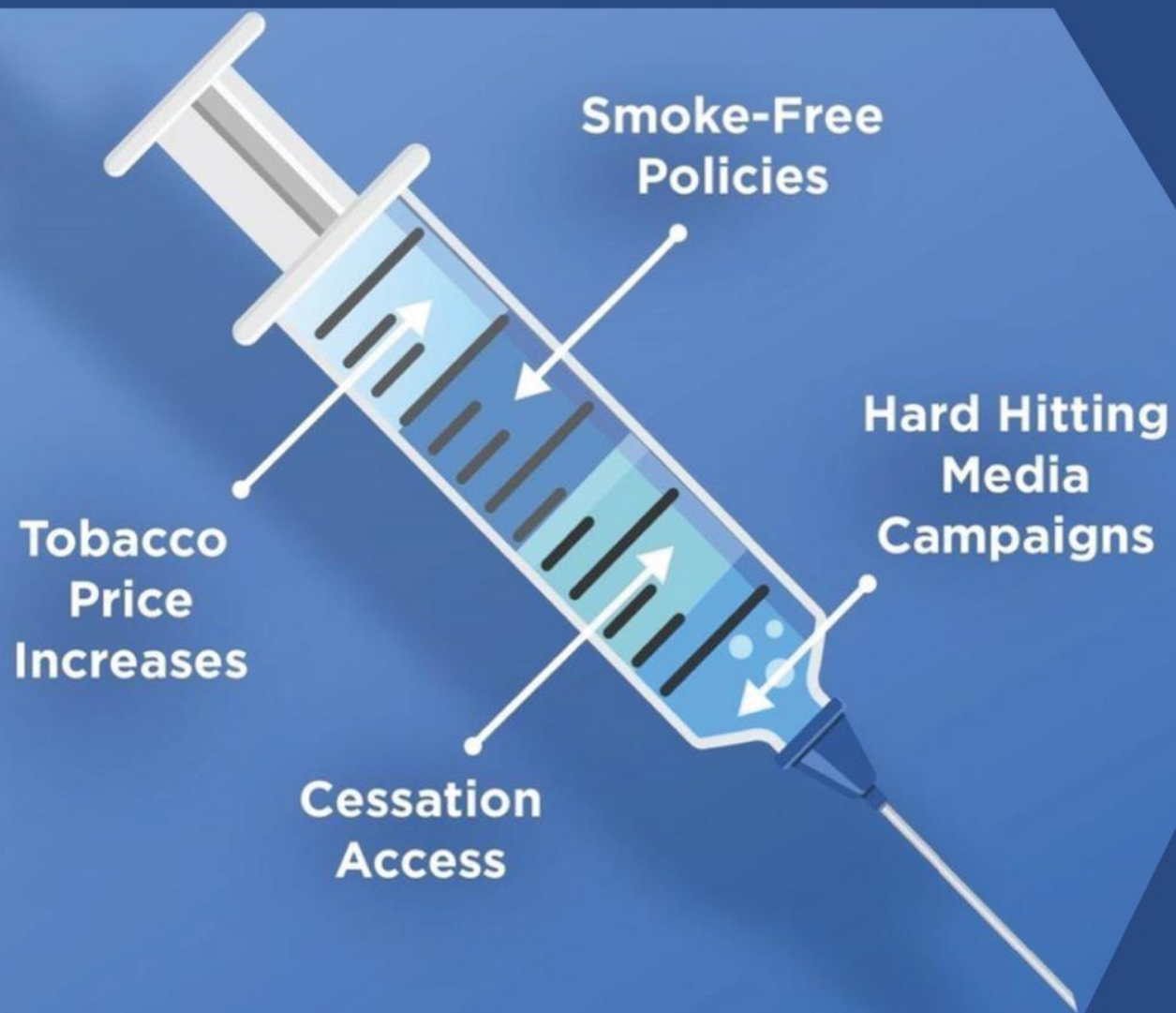
\$ income households



\$\$\$ income households



We Know What Works



?

Sources: 1) King BA, Graffunder C. The Tobacco Control Vaccine: a population-based framework for preventing tobacco-related disease and death. Tobacco Control 2018;27:123-124. 2) Kong AY, King BA. Boosting the Tobacco Control Vaccine: recognizing the role of the retail environment in addressing tobacco use and disparities. Tobacco Control 2020.

In 2018, there were approximately
325,884 tobacco retailers.

In 2018, there were approximately
325,884 tobacco retailers.



In 2018, there were approximately
325,884 tobacco retailers.



Numerous retailer types sell tobacco products



Warehouse



Tobacco



Pharmacy



Discount



Alcohol

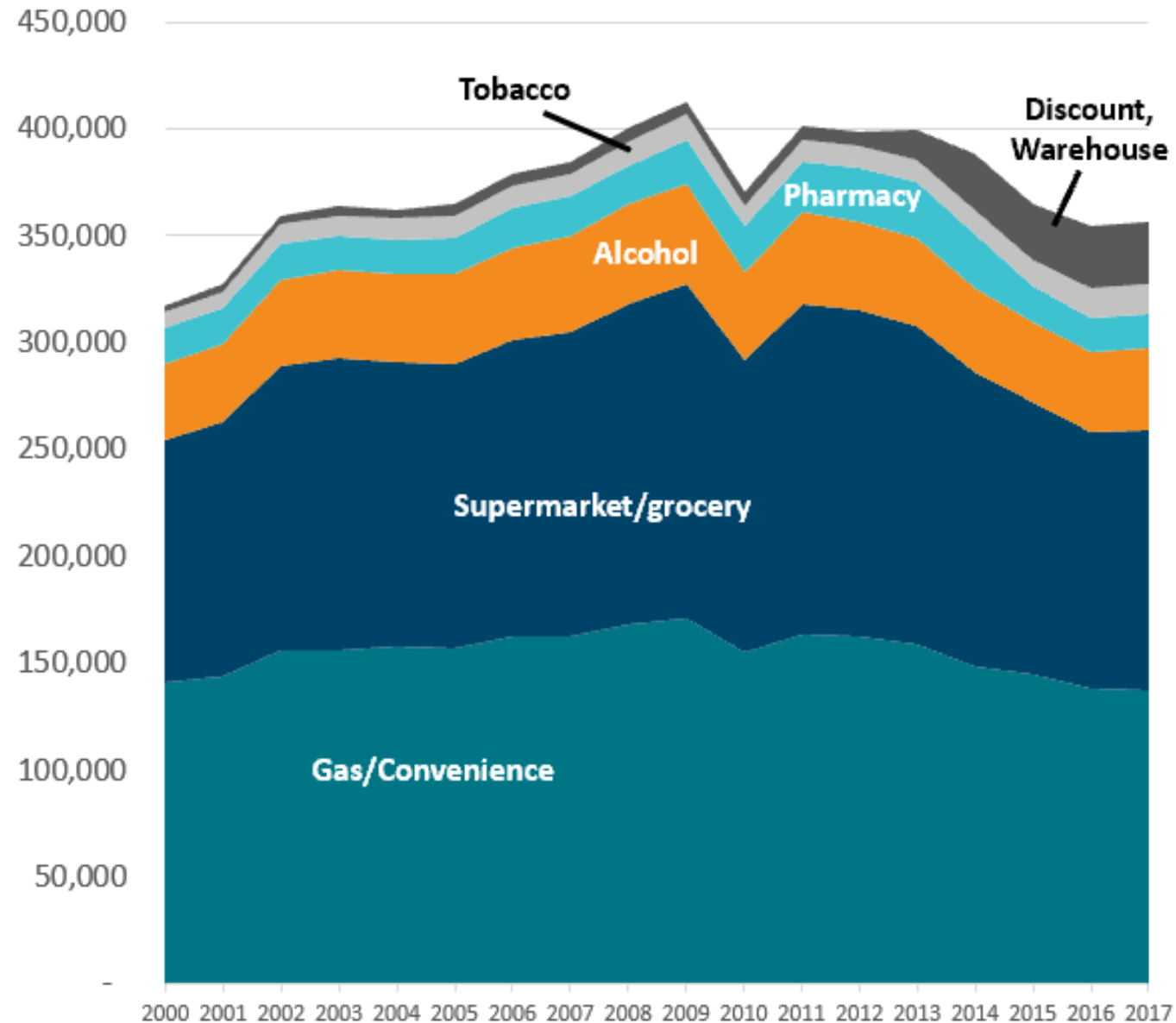


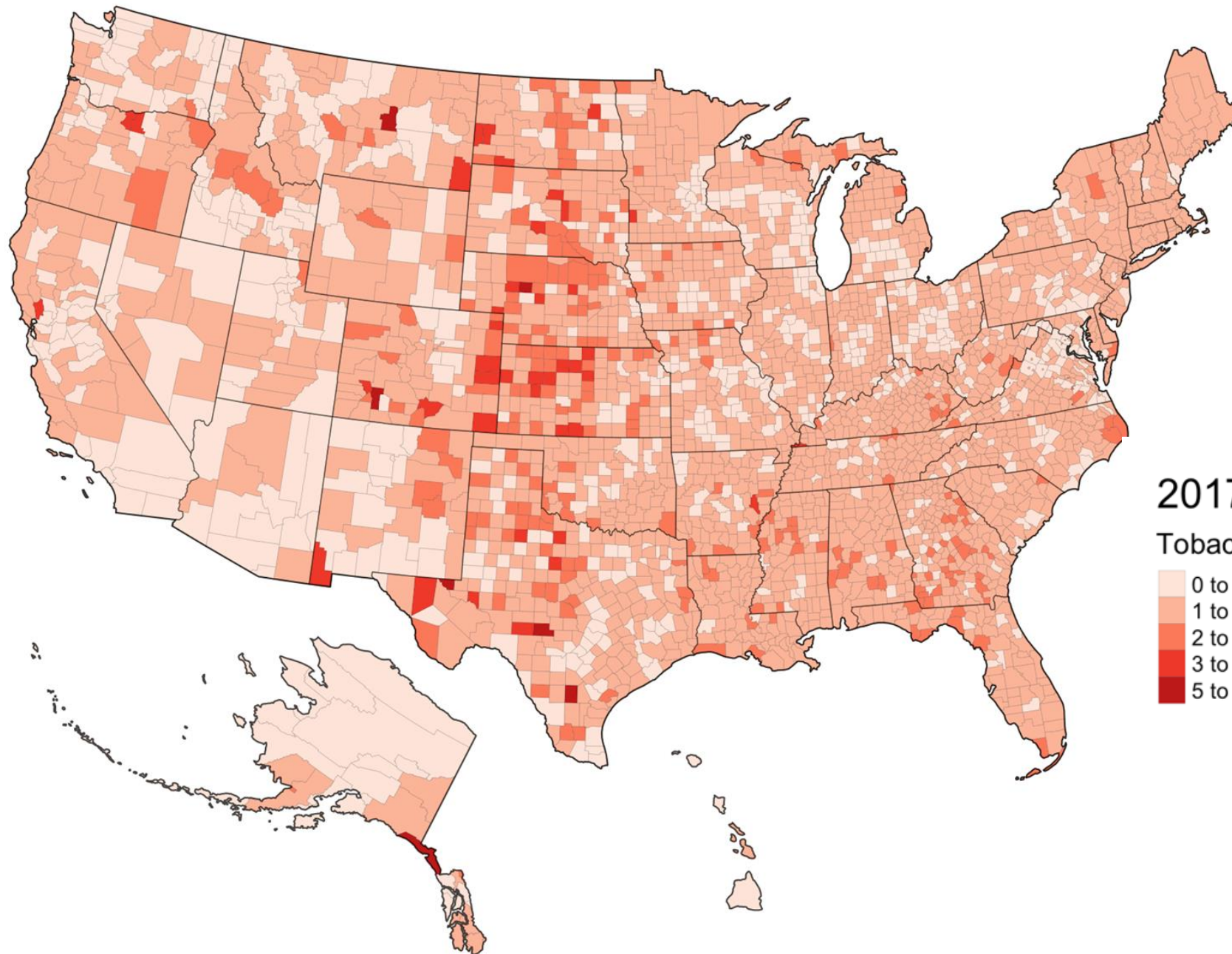
Grocery



Gas/Convenience

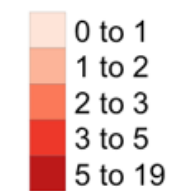
Count of Tobacco Retailer Types, 2000-2017





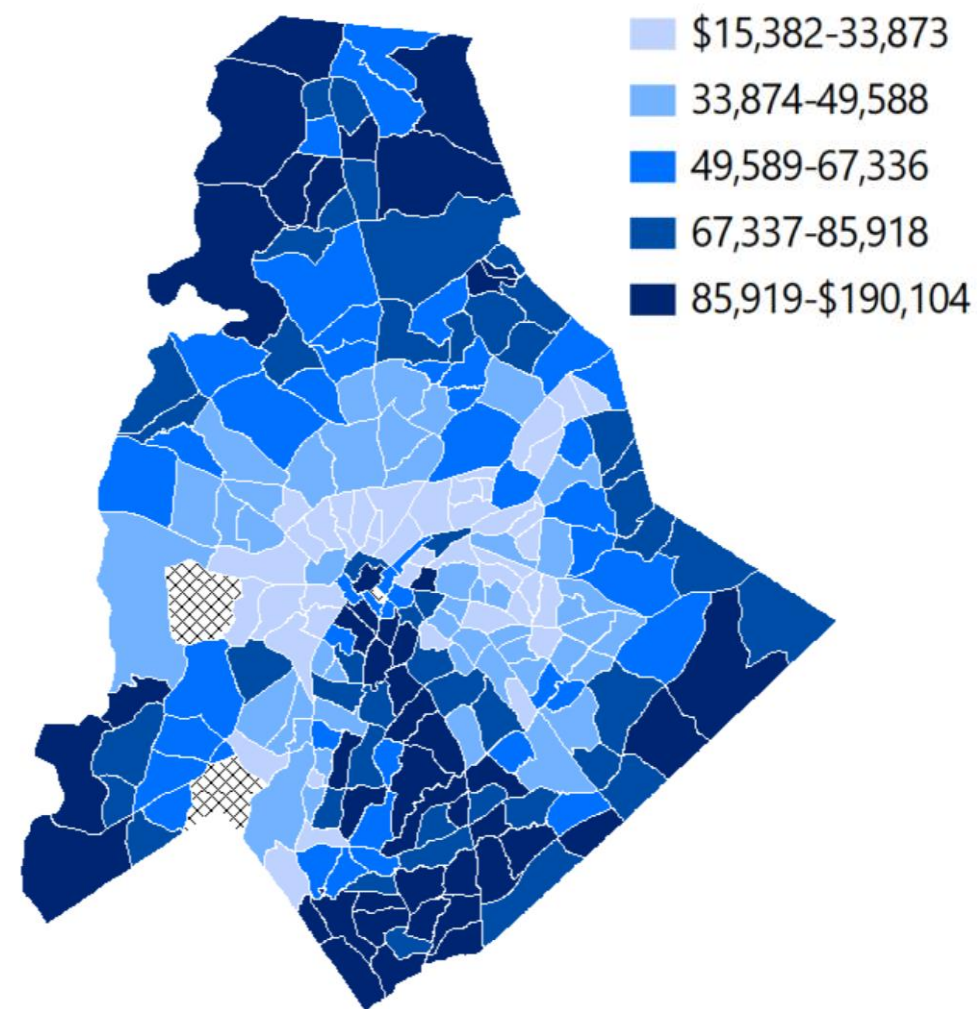
2017

Tobacco Retailers per 1,000 People

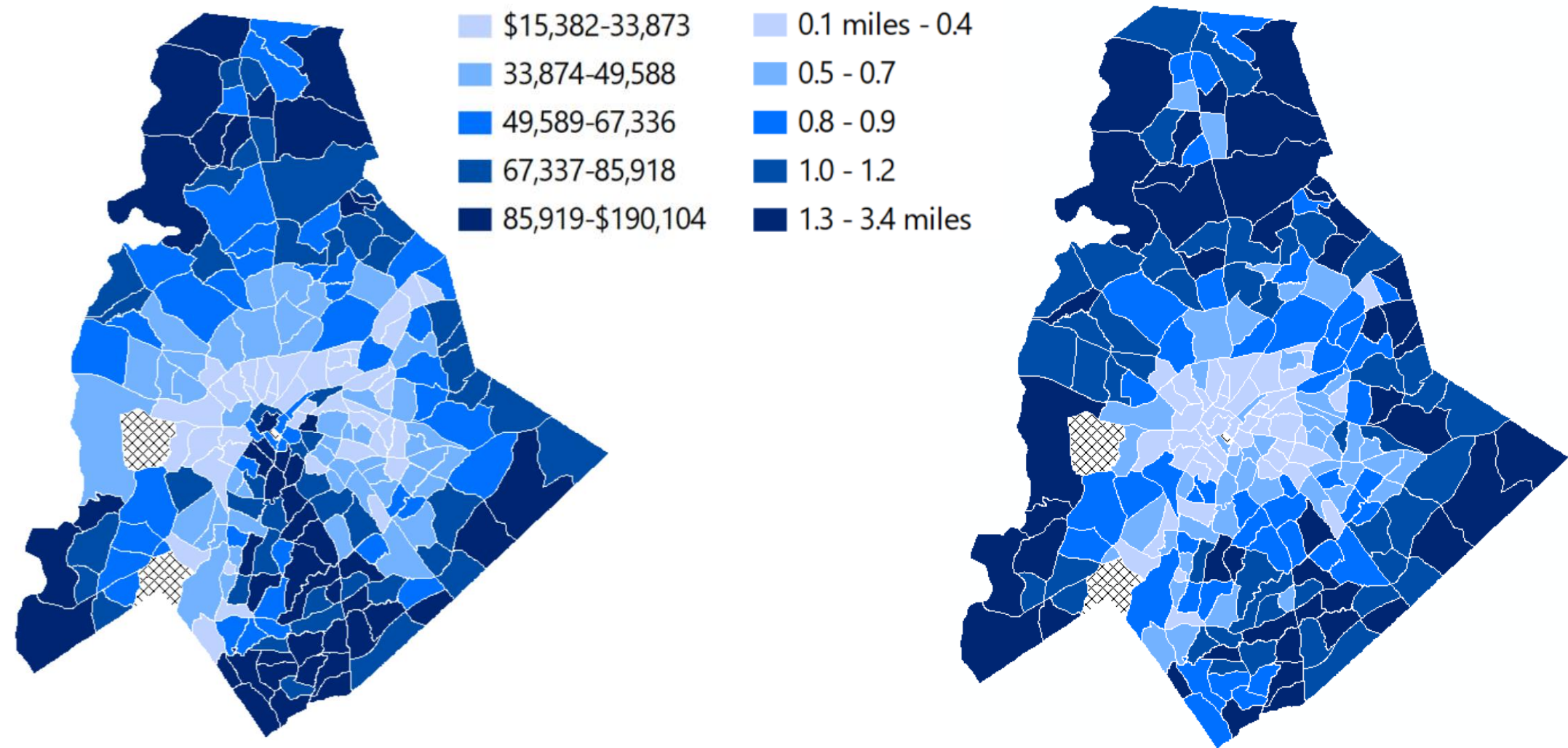


**Tobacco retailers are not
equitably distributed.**

Mecklenburg County, North Carolina




People living in **lower income** neighborhoods live **closer** to tobacco retailers.



Predictors of tobacco outlet density nationwide: a geographic analysis

Daniel Rodriguez,¹ Heather A Carlos,² Anna M Adachi-Mejia,^{2,3} Ethan M Berke,^{2,4}
James D Sargent^{2,3}

Neighborhood Inequities in Tobacco Retailer Density and the Presence of Tobacco-Selling Pharmacies and Tobacco Shops

Amanda Y. Kong, PhD¹ , Paul L. Delamater, PhD¹,
Nisha C. Gottfredson, PhD¹, Kurt M. Ribisl, PhD¹,
Chris D. Baggett, PhD¹, and Shelley D. Golden, PhD¹

Inequalities in tobacco outlet density by race, ethnicity and socioeconomic status, 2012, USA: results from the ASPiRE Study

Joseph G L Lee,^{1,2} Dennis L Sun,³ Nina M Schleicher,⁴ Kurt M Ribisl,^{2,5}
Douglas A Luke,⁶ Lisa Henriksen⁴



ASPiRE Community Advisory Board

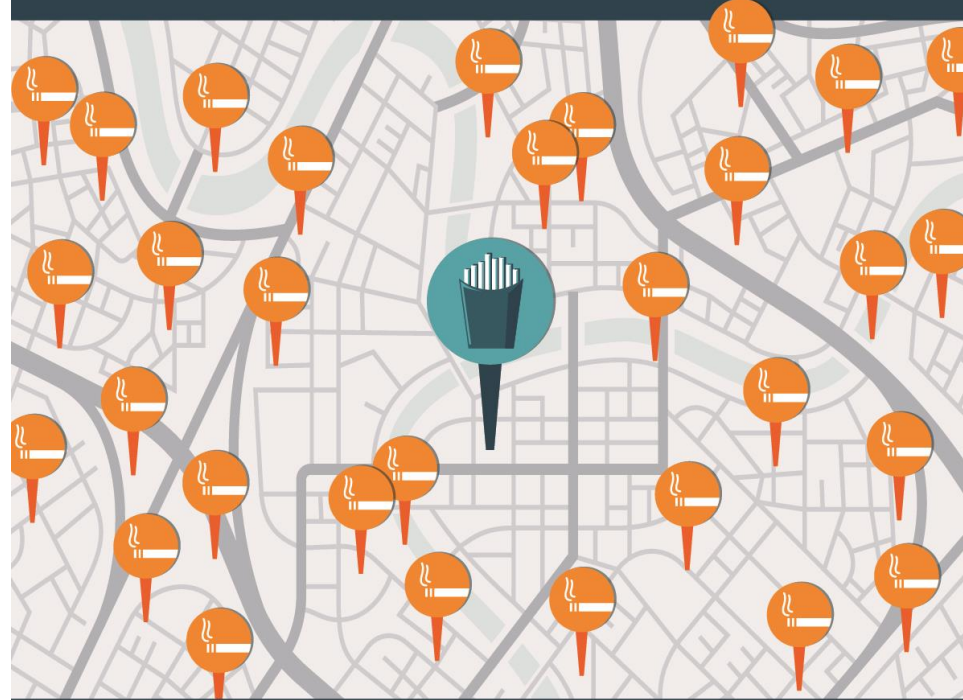
30 Big Cities



Organizations



Across 30 U.S. cities there are:



31x more tobacco retailers
than McDonald's





50 percent of tobacco retailers within 500 feet of another retailer

Average of **1.5 blocks** between tobacco retailers





of schools in 30 cities are within
1,000 ft of a tobacco retailer









THE KANSAS CITY BEACON
 Nonprofit, public-service journalism that Kansans and Missourians trust.

DONATE


Q

COVID-19 CIVIC ENGAGEMENT ECONOMICS EDUCATION ENVIRONMENT

■ EDUCATION

Looking for a cigarette? Chances are it's a block away from a Kansas City public school

A recent study found that local public schools in Kansas City are often located near tobacco retailers.



News Products Contact

News in Focus Business & Money Science & Tech Lifestyle & Health Policy & Public Interest People & Culture

New Study: 87% of Public Schools in Baltimore Are Within 1,000 Feet of Tobacco Retailers; City Is Home to 63 More Times Tobacco Retailers Than McDonald's


CBS Minnesota

NEWS WEATHER SPORTS CBS+ VIDEO INFO & MORE



54° Q

Study Finds Tobacco Retailers Continue To Target Kids & Low-Income Neighborhoods In Minneapolis

August 12, 2020 at 10:51 am Filed Under: [Minneapolis](#), [New Study](#)





DONATE



Phoenix 50 Years Ago
Hear what life was like in the Valley in 1971.

Donate

Subscribe

[Latest News On COVID-19](#) | [Map: Vaccines, Cases And Deaths](#) | [FAQ On Getting](#)

Analysis Finds 41% Of Phoenix Public Schools Are Within 1,000 Feet Of A Tobacco Retailer

By [Mark Brodie](#)
Published: Friday, August 14, 2020 - 12:15pm


CPR News

COVID-19 POLITICS MONEY ARTS ENVIRONMENT SCHEDULE

Tobacco Retail Is Concentrated Near Denver Schools And Low-Income Neighborhoods, A New Study Finds

By  John Daley | August 13, 2020

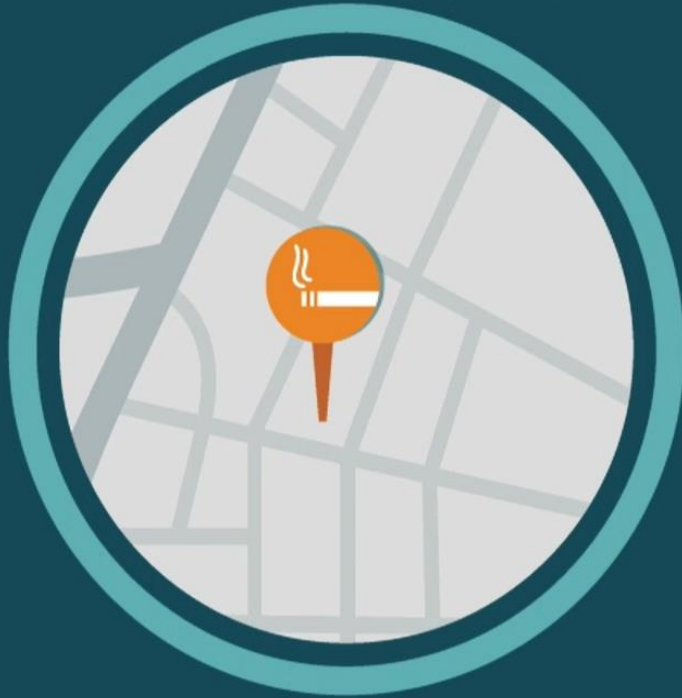


[Inicio](#)
[Video](#)
[Tiempo](#)
[Política](#)
[Trabajos](#)
[Lotería](#)
[Contigo](#)
[Más](#)

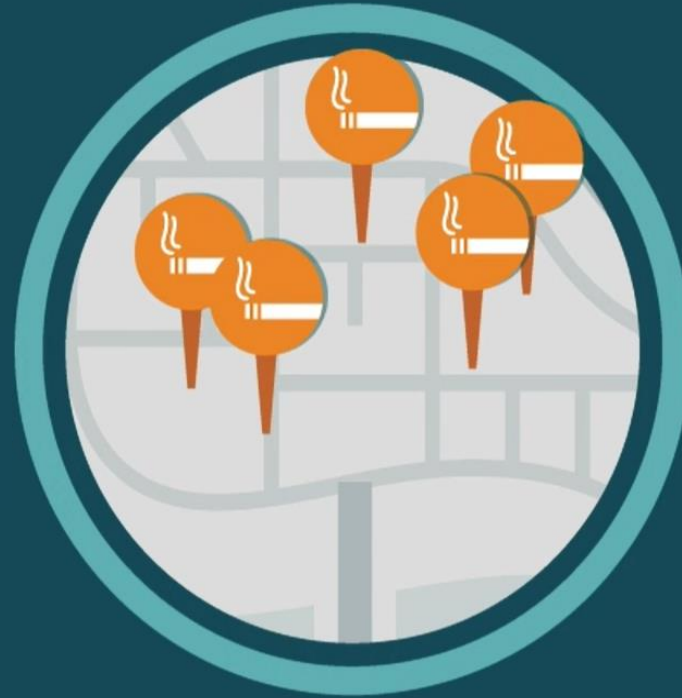
Consumo de tabaco en escuelas públicas, un riesgo que aumenta para niños y adolescente

Patricia Sosa, directora de la campaña para niños libres de tabaco, explica la facilidad con la que los estudiantes pueden tener acceso a estos productos tanto en las escuelas como en el entorno social. Te habla sobre las estrategias para evitar el consumo.

HIGHEST-INCOME AREA

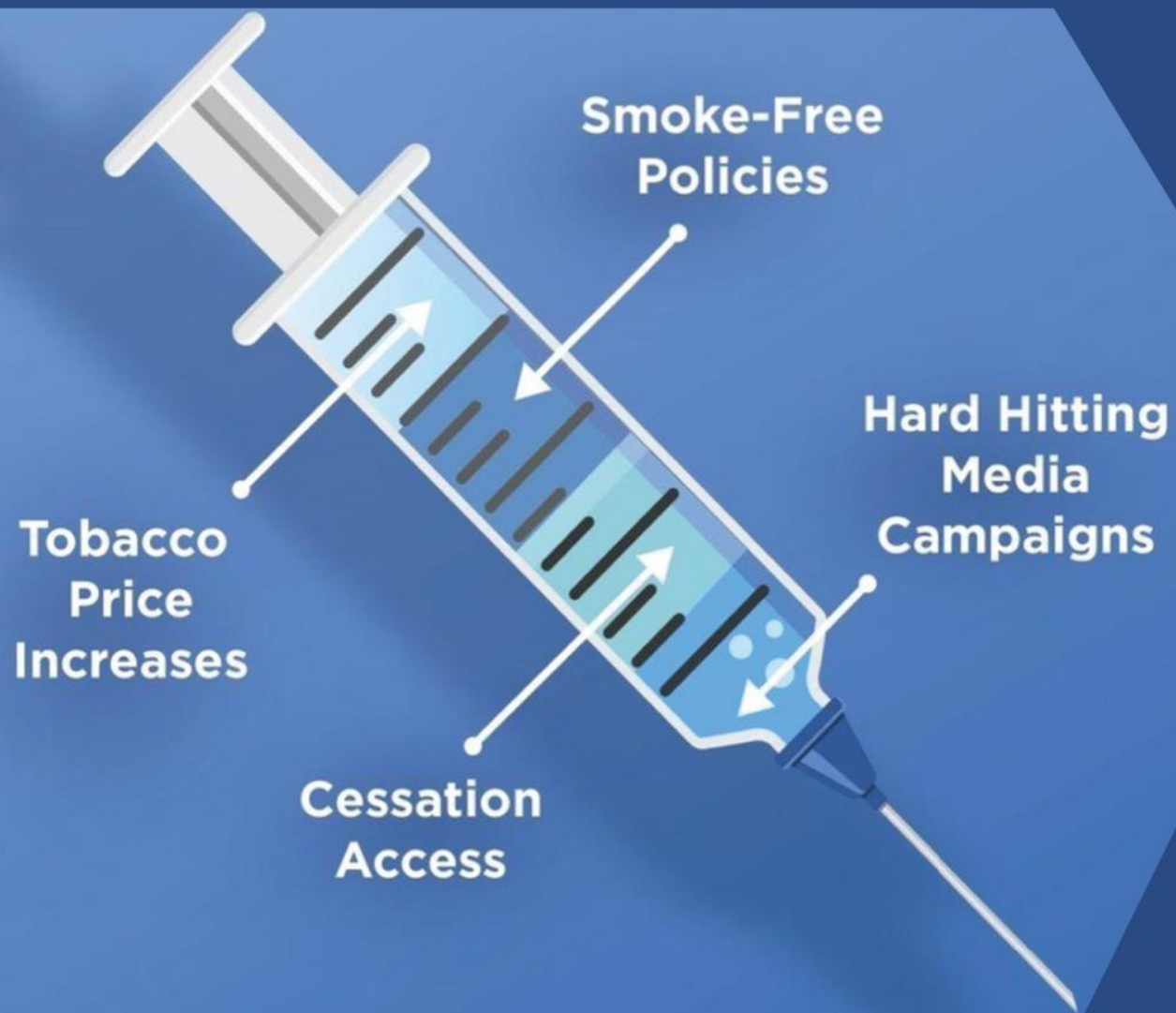


LOWEST-INCOME AREA



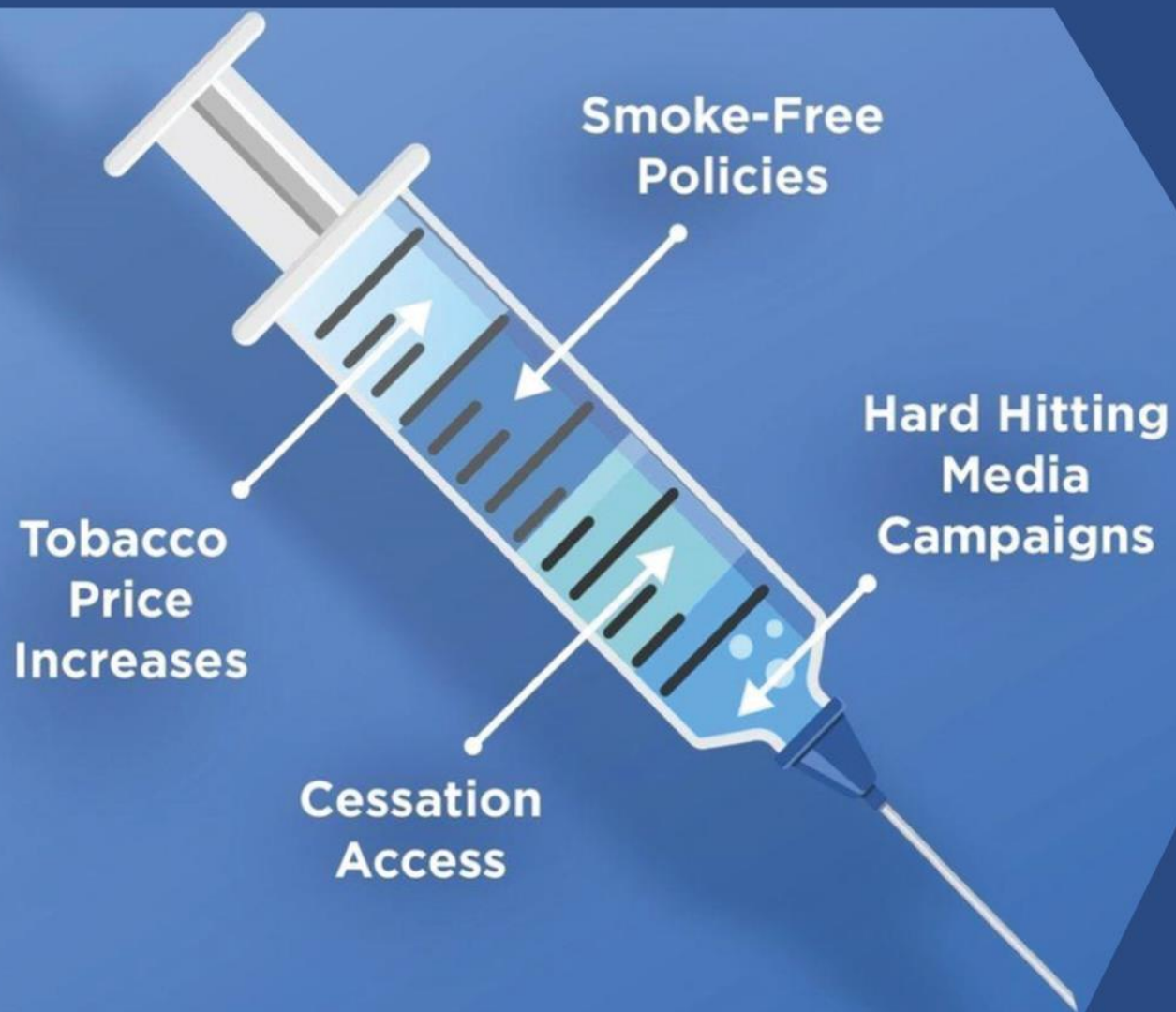
5x more tobacco retailers are located in the
lowest-income than **highest-income** neighborhoods

We Know What Works



?

We Know What Works



Vaccine Booster



Product Availability



Pricing and Promotion



Advertising and Display



Age of Sale



Retail Licensure



STANFORD PREVENTION
RESEARCH CENTER
the science of healthy living

Tobacco retailer density/proximity and youth smoking: Systematic review

Marsh L, Vaneckova P, Robertson L, Johnson TO, Doscher C, Raskind IG, Schleicher NC, Henriksen L. Association between density and proximity of tobacco retail outlets with smoking: A systematic review of youth studies. Health & Place 2021;67:102275.

Retail environment for tobacco & youth smoking

Does exposure to tobacco retailers impact youth smoking behaviors?

- Does it matter **where** youth encounter tobacco retailers?
- Does it matter **how many** tobacco retailers youth encounters?
- Does it matter **how close** youth are located to tobacco retailers?

Does it matter where youth encounter tobacco retailers?



Home

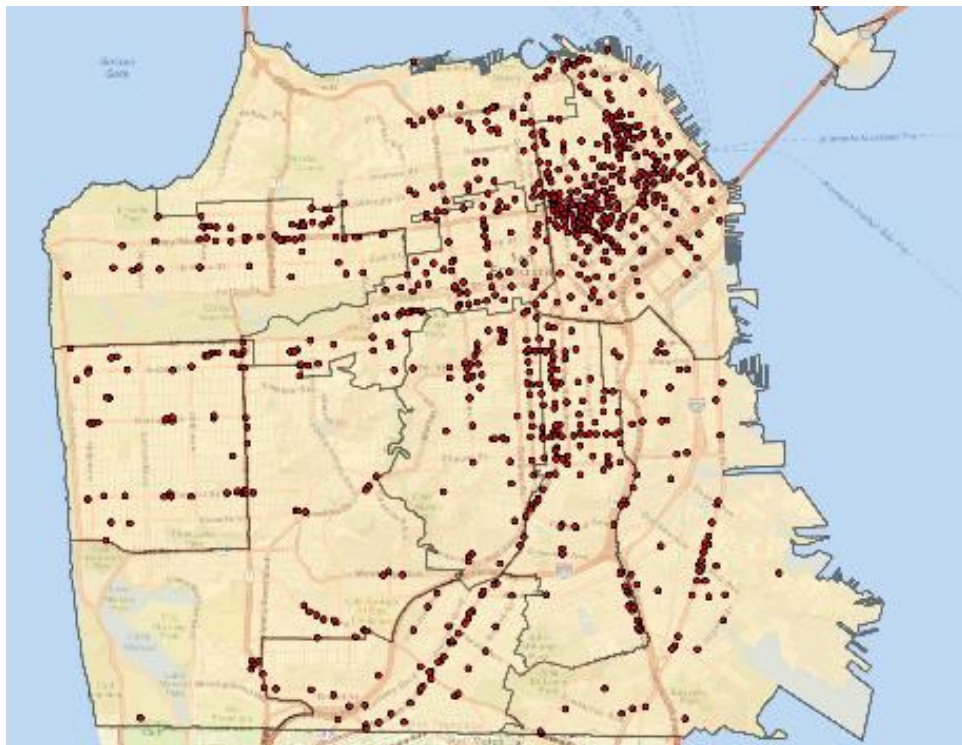


School



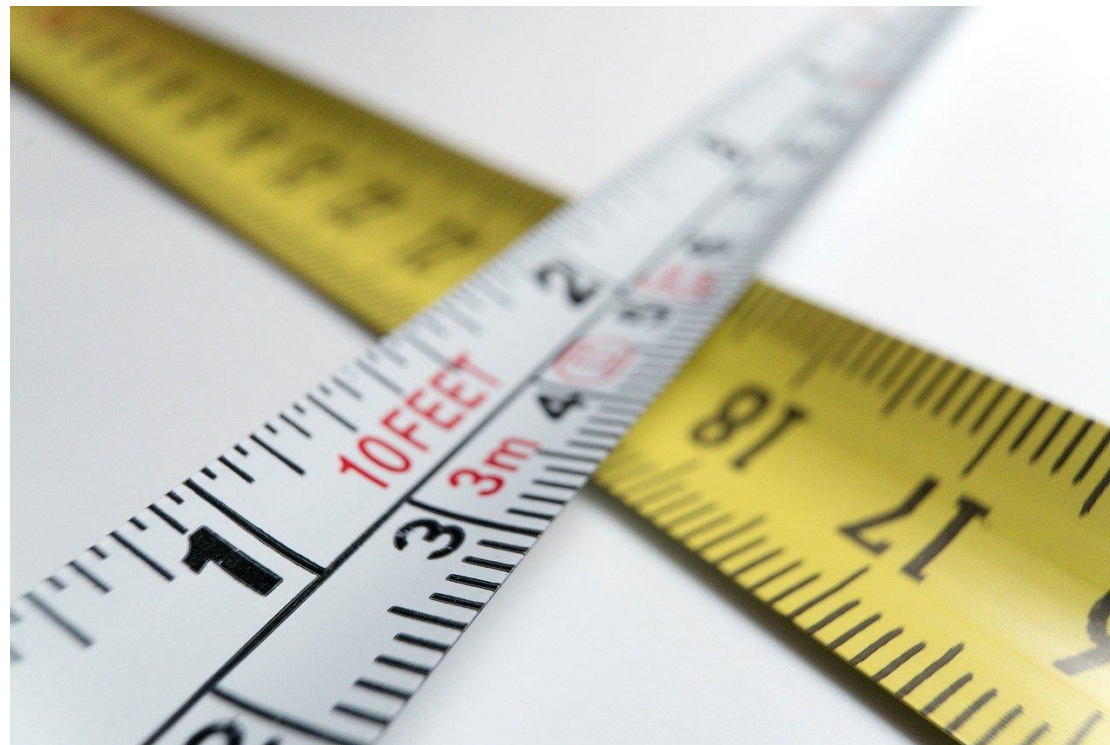
Community

How many?



Density

How close?



Proximity

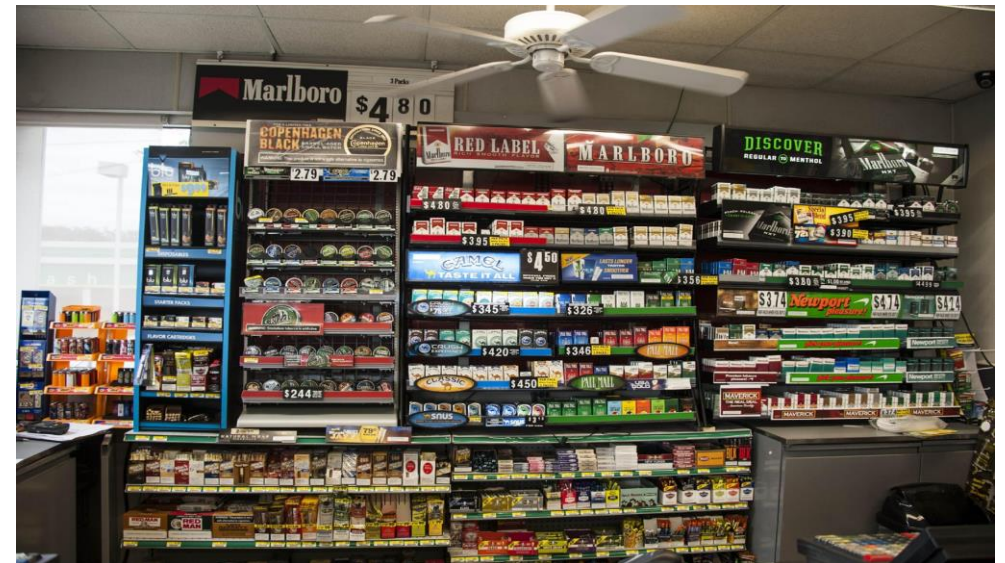
Study characteristics (n=35)

- Published between **Jan 1990 – Oct 2019**
- Majority conducted in **USA, UK, Canada** in **urban areas**
- **Retail environments:** Home, school, community
- **Exposure:** how many (density) and how close (proximity)
- **Youth smoking behaviors:** smoking susceptibility, smoking initiation, smoking frequency, smoking intensity, readiness to quit



Retail environment for tobacco & youth smoking

- Most consistent evidence for association between tobacco retail outlet **density**, particularly near the **home**, and youth smoking
- Higher **density** of retailers may =
 - More opportunities to purchase tobacco products
 - Normalization of smoking
 - Increased visual cues



Policy Strategies to Reduce Tobacco Retailer Availability: Focusing on Equity



How to reduce tobacco retailer density and why

These policy solutions can be implemented in most communities through local regulation, such as tobacco retailer licensing or changes to zoning restrictions.

Local Tobacco Retailers



Cap the number of retailers in a geographic area

Example: There can be no more than 15 stores* per district.



Cap the number of retailers relative to population size

Example: There can be no more than 1 store* per 1,000 residents.



Require a minimum distance between retailers

Example: Stores cannot locate within 1,000 ft of an existing store.



Prohibit retailers from locating near schools and other youth-sensitive areas

Example: Stores cannot locate within 1,000 ft of a school or playground.



Prohibit sales of tobacco products at pharmacies or other types of retailers

Example: Pharmacies cannot be licensed to sell tobacco products.



HEALTH: When more tobacco retailers are located in a given area, residents' health suffers. Youth are more likely to start smoking. People who smoke consume more cigarettes per day and have a harder time quitting.



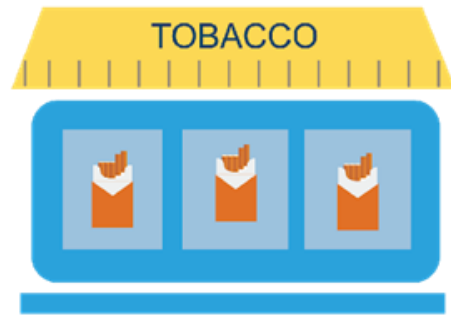
EQUITY: Tobacco retailers cluster in neighborhoods with a high percentage of low-income residents or residents of color. These communities are targeted by tobacco companies, and they disproportionately suffer the health harms caused by tobacco use.

* Numbers will vary by community.

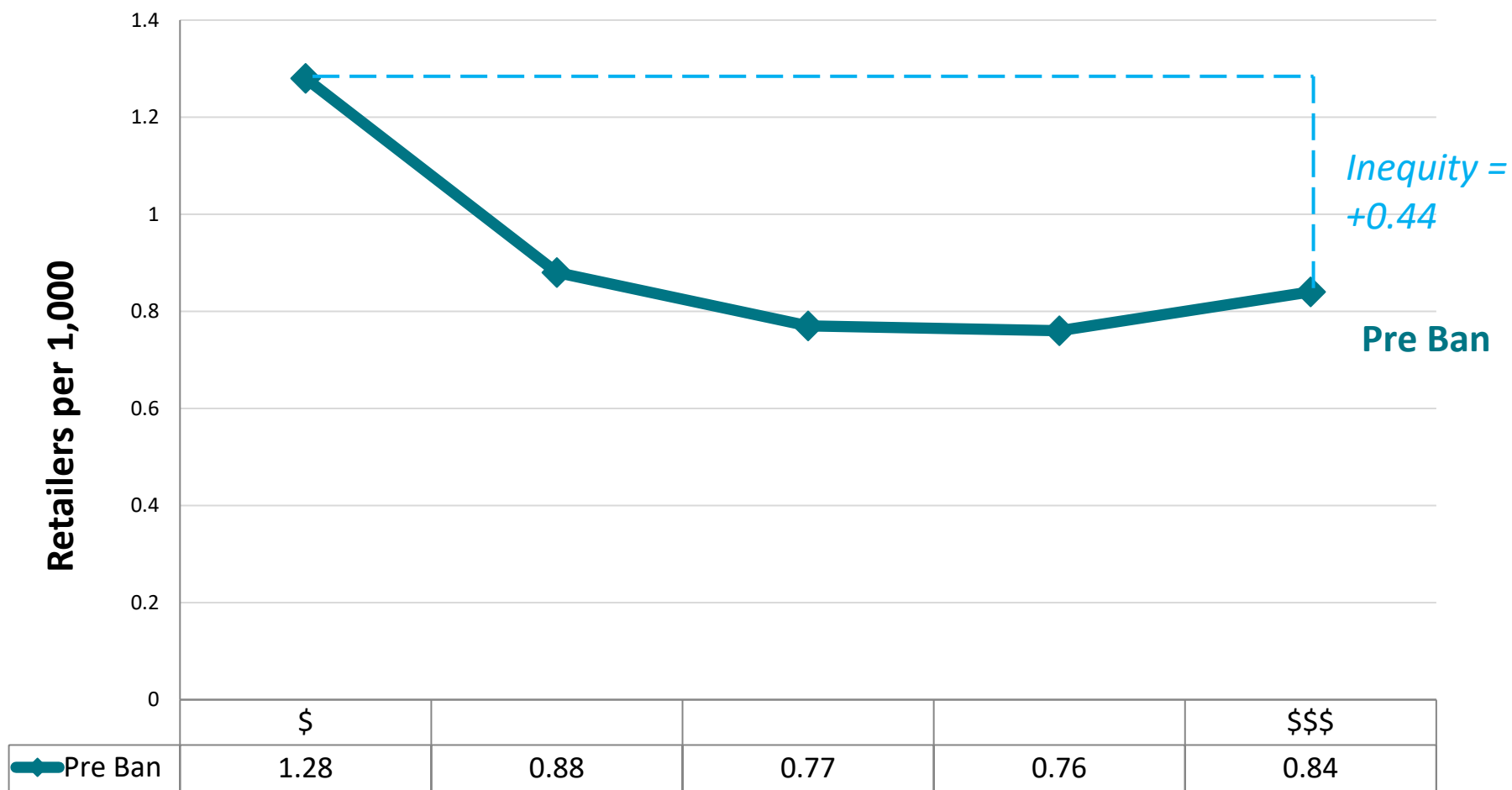
Pro-Equity Considerations of Policy Strategies

Some strategies may promote equity better than others

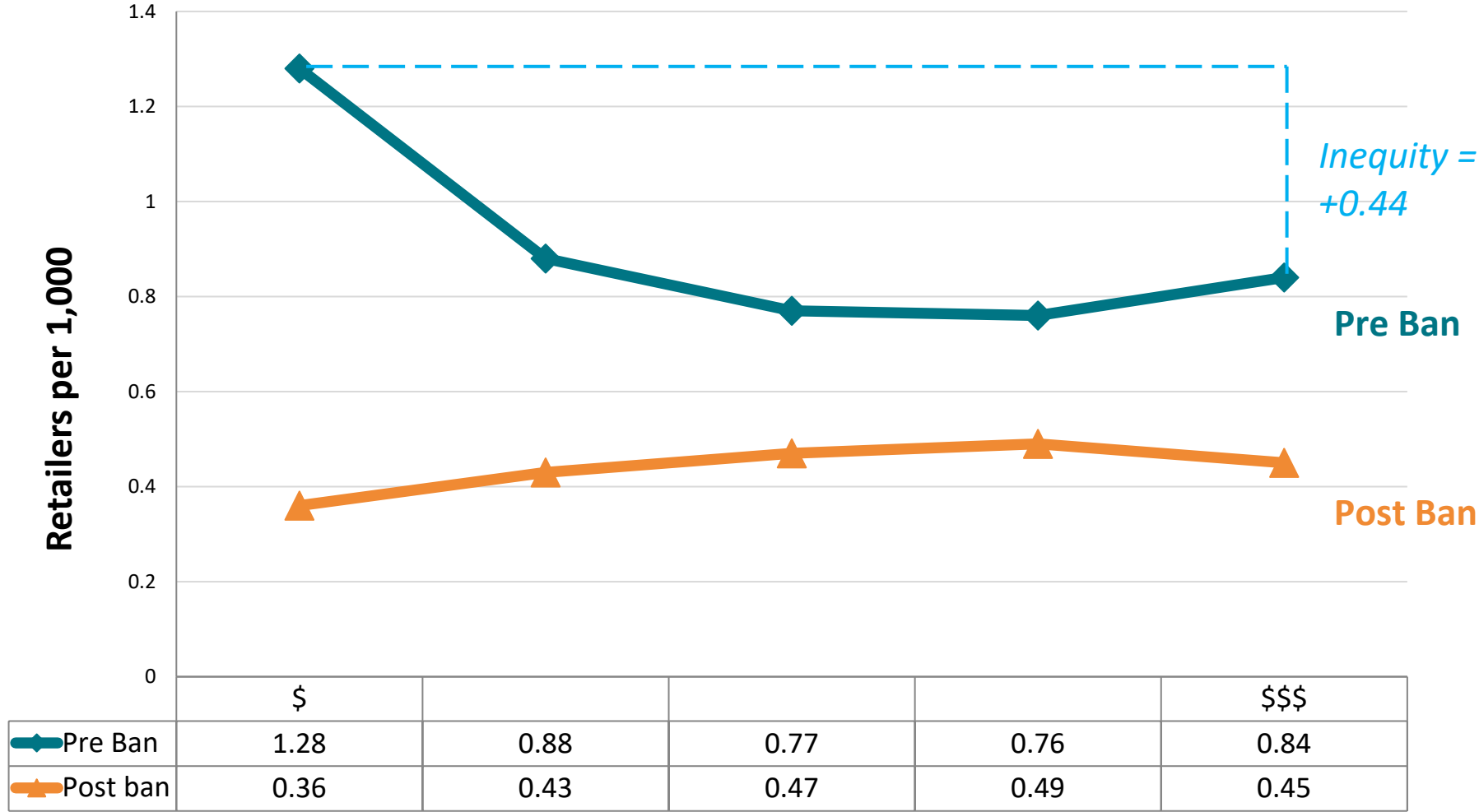
1,000 ft. buffer around school property



Projected impact on inequities: Median household income



Projected impact on inequities: Median household income

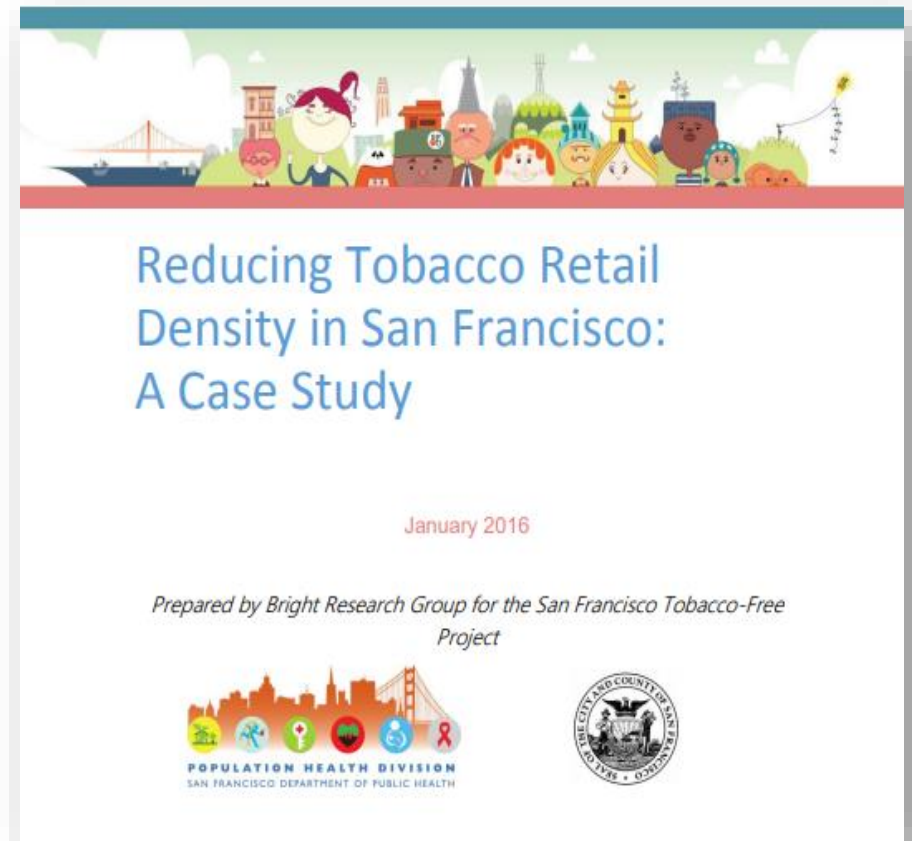


Pro-Equity Considerations of Policy Strategies

Some strategies may promote equity better than others

Local assessments;
combination of strategies

San Francisco, Philadelphia,
New York City



<https://sanfranciscotobaccofreeproject.org/wp-content/uploads/Retail-Density-Case-Study-1.27.16-FINAL-to-TFP.pdf>

TOBACCO RETAILER LICENSING STRATEGIES

Ten strategies for creating and implementing effective tobacco retailer licensing (TRL) policies in your community



Summary & Discussion

Key Takeaways

1. Protect public health: **fewer retailers and farther away**



Key Takeaways

1. Protect public health: **fewer retailers and farther away**
2. Variety of **policy strategies** to reduce retailer density/proximity: consideration of **equity impacts** is critical



Key Takeaways

1. Protect public health: **fewer retailers and farther away**
2. Variety of **policy strategies** to reduce retailer density/proximity: consideration of **equity impacts** is critical
3. Strong tobacco **retailer licensing** is essential

Thank you! Questions?

Amanda Kong, PhD, MPH
akong2@live.unc.edu
Twitter: @AmandaYKong

Ilana Raskind, PhD
iraskind@stanford.edu

