Thought Leaders Webinar

Toward a healthier, more equitable, and cleaner transport future in New Jersey

December 13, 2021 1:00 pm (EDT)



Calvin Gladney, LEED AP President and CEO, Smart Growth America



Curtis Ostrodka, AICP, LEED AP Director of Community Planning, VHB



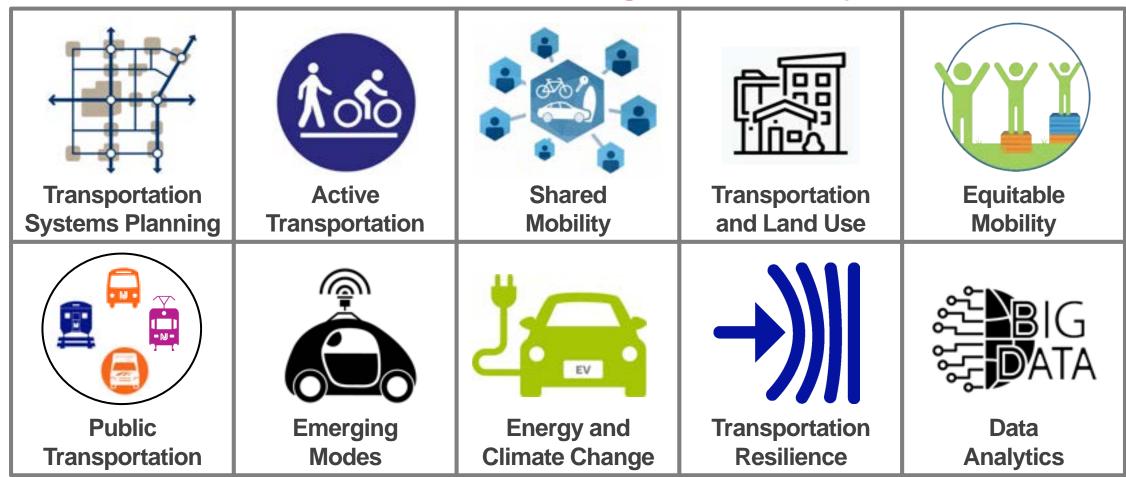
Regan F. Patterson, PH.D Transportation Equity Research Fellow, Congressional Black Caucus Foundation, Inc. (CBCF)



Brianne Eby Senior Policy Analyst, Eno Center for Transportation



Research, Planning, and Policy





Planning for Healthy, Just, Resilient, and CO2-Neutral Mobility in New Jersey

Thought Leaders Webinar December 13, 2021



Acknowledgements



NJ Climate Change Resource Center





New Jersey Climate Change Alliance

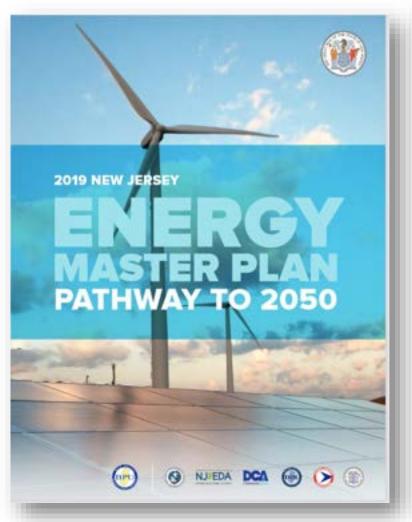
Existing Work Groups

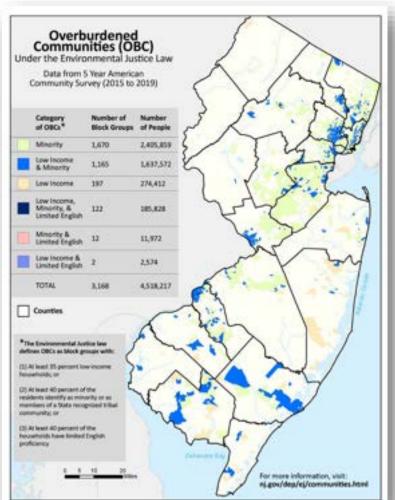
- Long-term Statewide Planning for Climate Change Workgroup
- Natural and Working Lands Workgroup
- Offshore Wind Ecological Monitoring Workgroup
- Public Health Workgroup
- Sustainable Organic Materials
 Management Workgroup

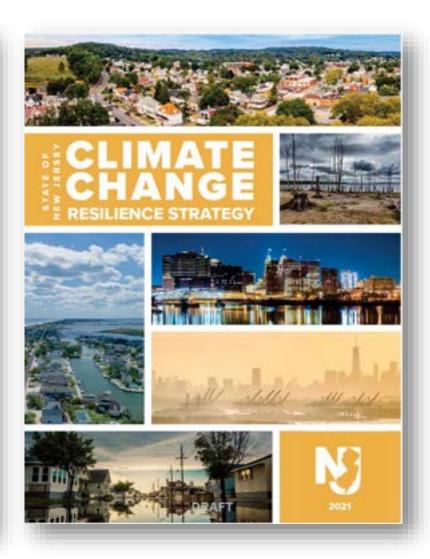
Transportation Work Group



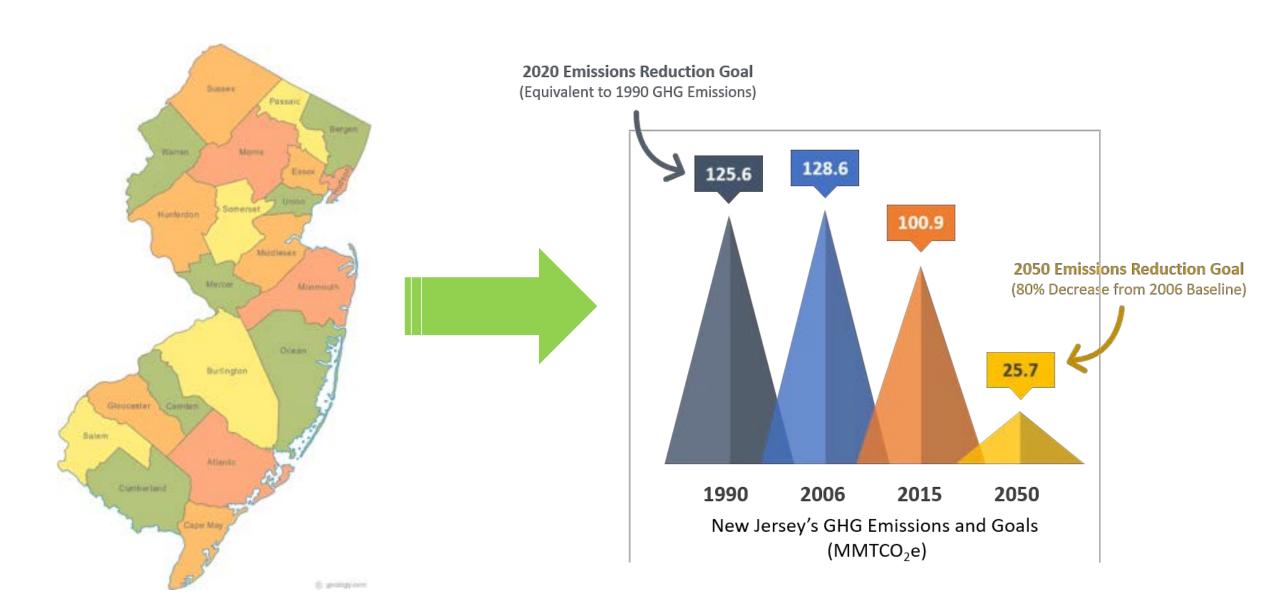
Changing policy dynamics at the State and national levels





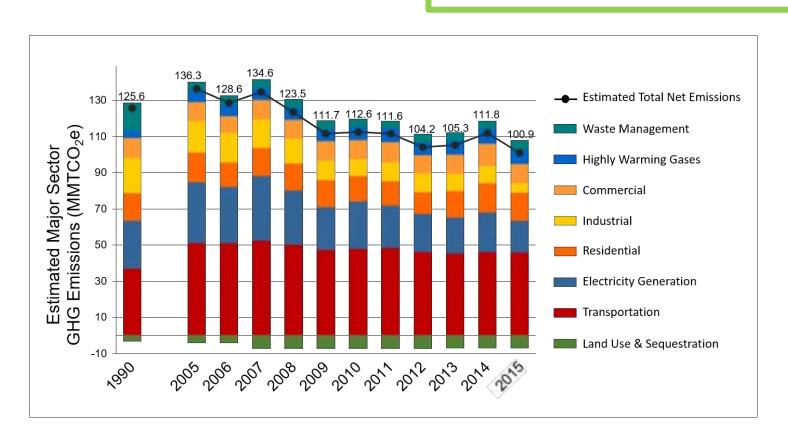


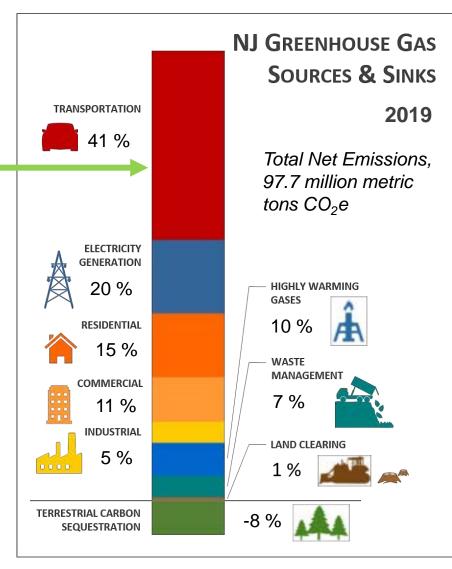
New Jersey Emissions Targets



GHG Emissions in New Jersey

Reductions in the transportation sector will be critical to achieving NJ's emissions target

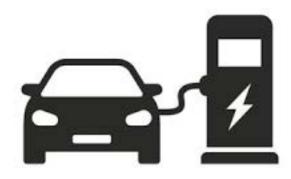


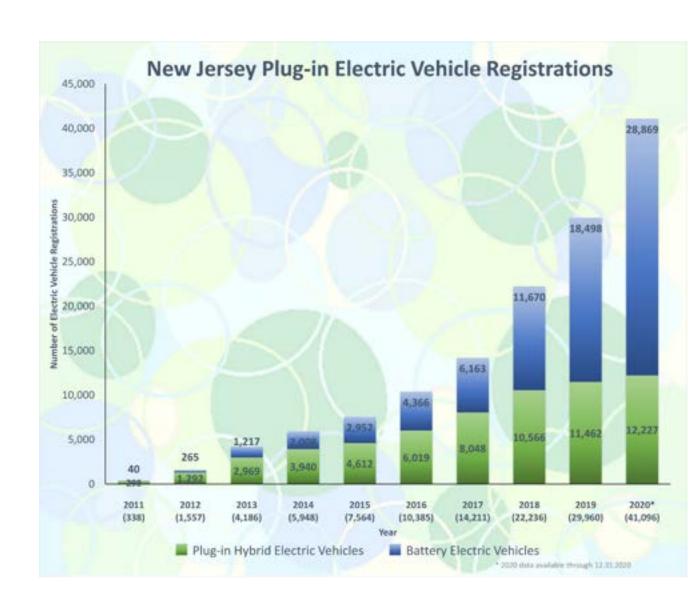


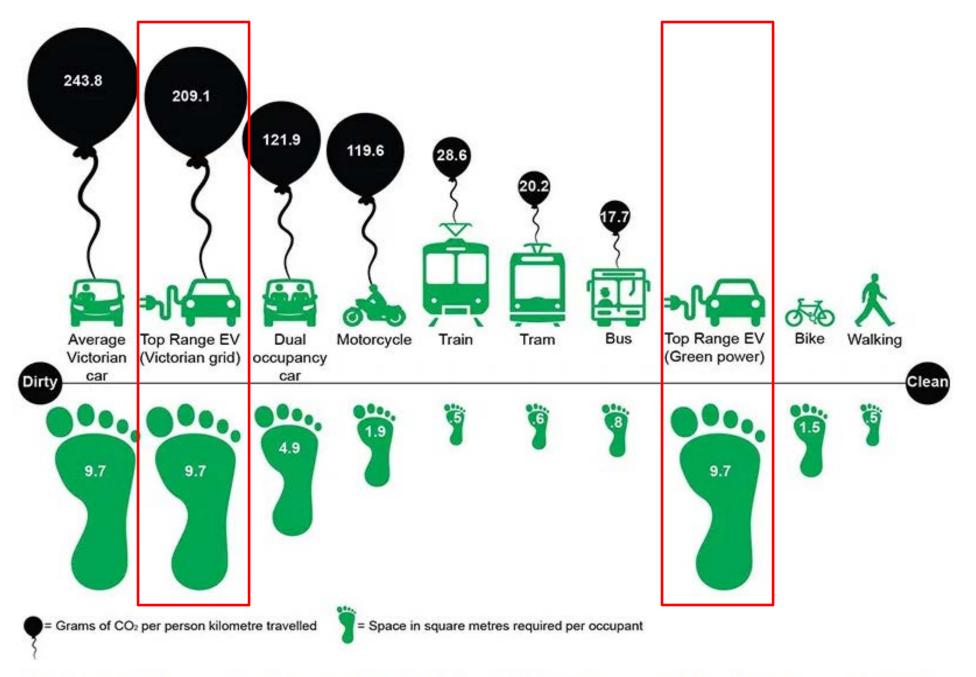
Source: NJDEP

Significant attention being paid to vehicle electrification

- Charging infrastructure investments
- Rebates and tax credits to encourage EV purchases
- EVs can use HOV lanes







This infographic compares emissions and space consumption for different transport modes. Source: Institute for Sensible Transport





Healthy. Improve health outcomes for people and communities by improving air quality and making it easier and safer to walk and bike.



Just. Promote **equity** by making travel by transit more reliable and convenient and by enhancing access to opportunity for marginalized groups.



Efficient. Increase transportation system efficiency and effectiveness by integrating advanced and emerging transportation technologies and modes.



Resilient. Adapt infrastructure to climate hazards and ensure services are flexible and responsive to change and well coordinated.



Carbon Neutral. Reduce energy use and emissions of all kinds by facilitating a transition to CO2-neutral transportation.

Guiding concepts

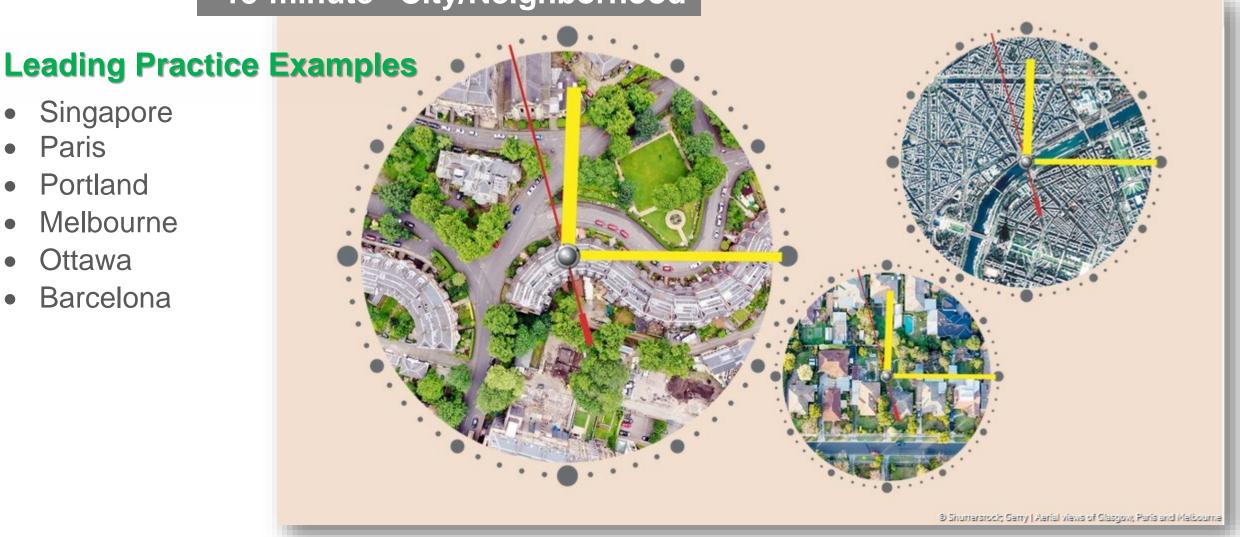
- Decarbonize the transportation sector
- Empower people to drive less
- Create a network of diverse and inclusive neighborhoods that are well connected to each other
- Think of mobility as a service and reimagine public transportation
- Embrace new technologies but ensure they are affordable and accessible to all
- Make social justice a key indicator of transportation performance

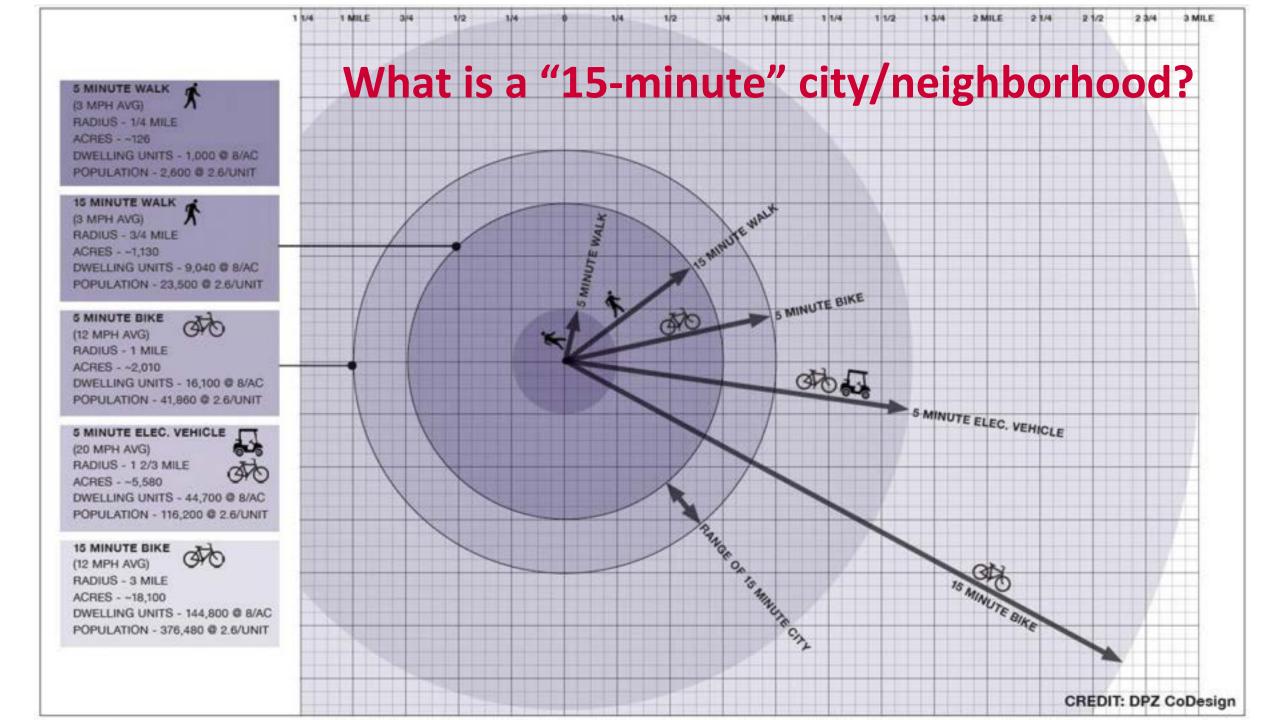
Potential Organizing Framework

"15-minute" City/Neighborhood

Singapore

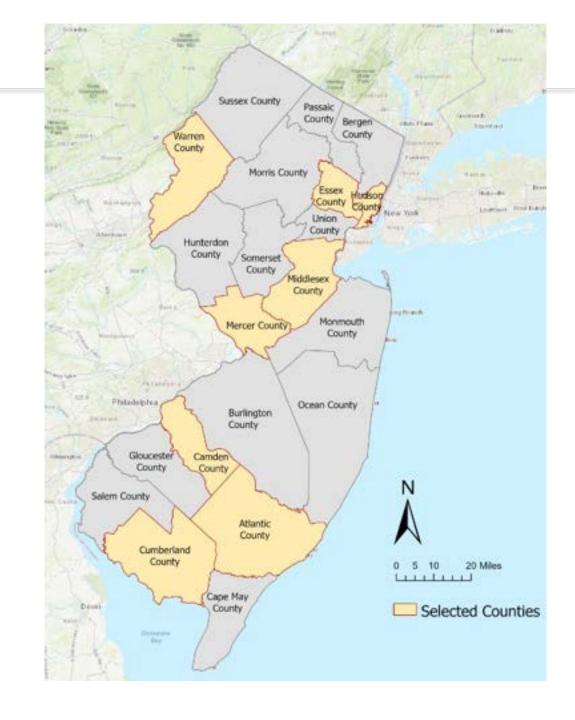
- Paris
- Portland
- Melbourne
- Ottawa
- Barcelona





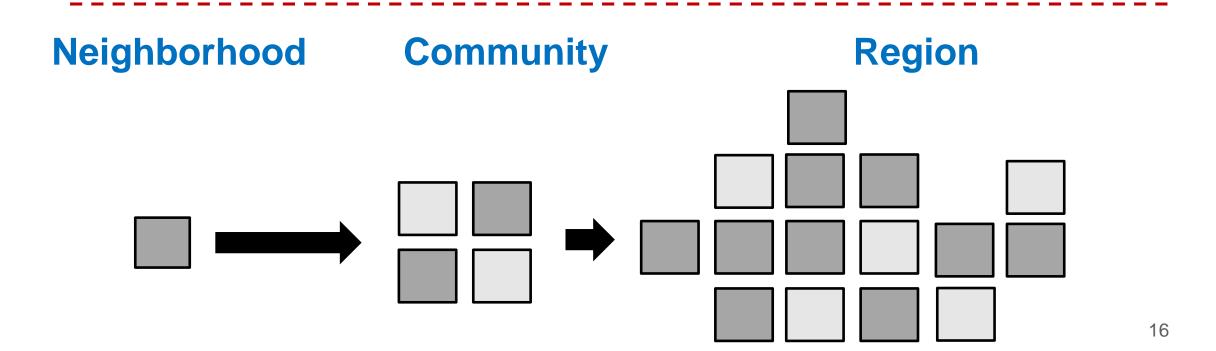
Phase 1 Case Study Locations

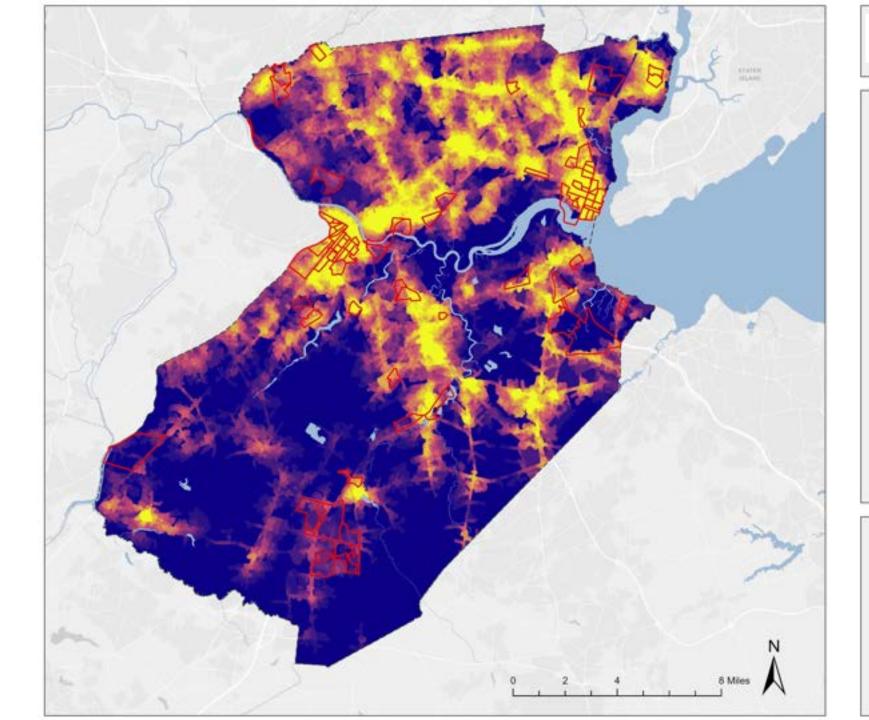
- 1. Atlantic
- 2. Camden
- 3. Cumberland
- 4. Essex
- 5. Hudson
- 6. Mercer
- 7. Middlesex
- 8. Warren



Key relationships







"15-min." Accessibility

Accessibility

Best access

Moderate access

Limited access

Low income block group

Data Source: NJGIN, ESRI base map, ESRI Business Analyst, NJ Transit GTFS data

Planning for Healthy, Just, Resilient, and CO2-Neutral Mobility in New Jersey

Prepared: June 10, 2021 by Alan M. Voorhees Transportation Center



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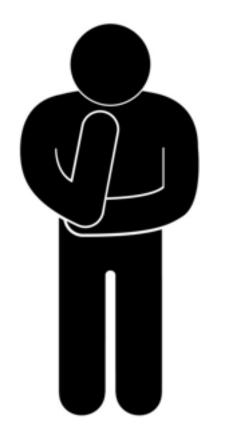
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Brianne Eby Senior Policy Analyst, Eno Center for Transportation



Thoughts? Questions? Discussion?

Phase 2 – Jan-Sep 2022

- Convene county-specific and youth (14-18 year-olds)
 visioning workshops
 - Identify needs and desired long-term outcomes
- Conduct neighborhood-scale analysis in 3-4 locations
 - Field visits and interview
 - Community engagement
 - Prepare concept plans
 - Identify infrastructure needs
- Develop planning and policy recommendations
- Prepare comprehensive final report
- Convene "Thought Leaders" Forum #2 How do we get there?







Healthy Mobility New Jersey Climate Change Alliance

December 13, 2021



What factors determine our health?





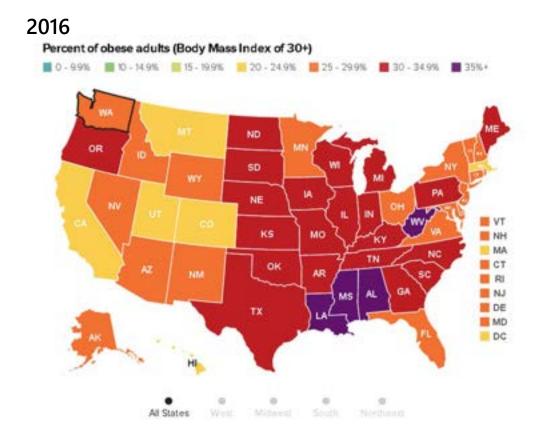






Consequences Adult Obesity

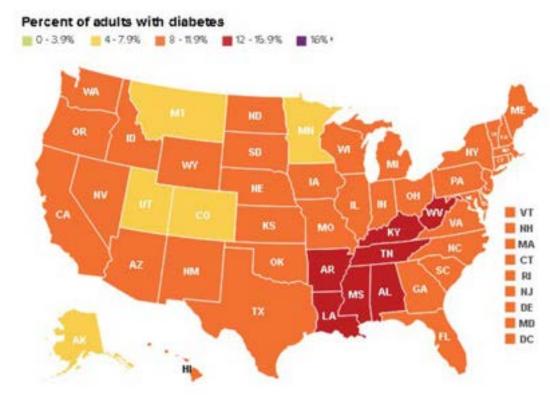




Consequences Adults with Diabetes







The Growing Cost of Healthcare is at Epidemic Proportions

- Centers for Medicare & Medicaid Services reports that in 2018 the United States spent \$3.6 trillion on Healthcare—\$11,172 per person
- Nearly 40% of adults and over 18% of children in the U.S. are obese
- We could save ~\$5.5 billion in health care costs related to obesity if one in 10 adults started a walking program
- Physical inactivity and unhealthy diets are second only to tobacco use as the main cause of premature death in the U.S.
- How we design communities reinforces the epidemic of obesity, diabetes, high blood pressure, heart disease, asthma, orthopedic, and psychological disorders

Bringing Health into Planning Decision Making

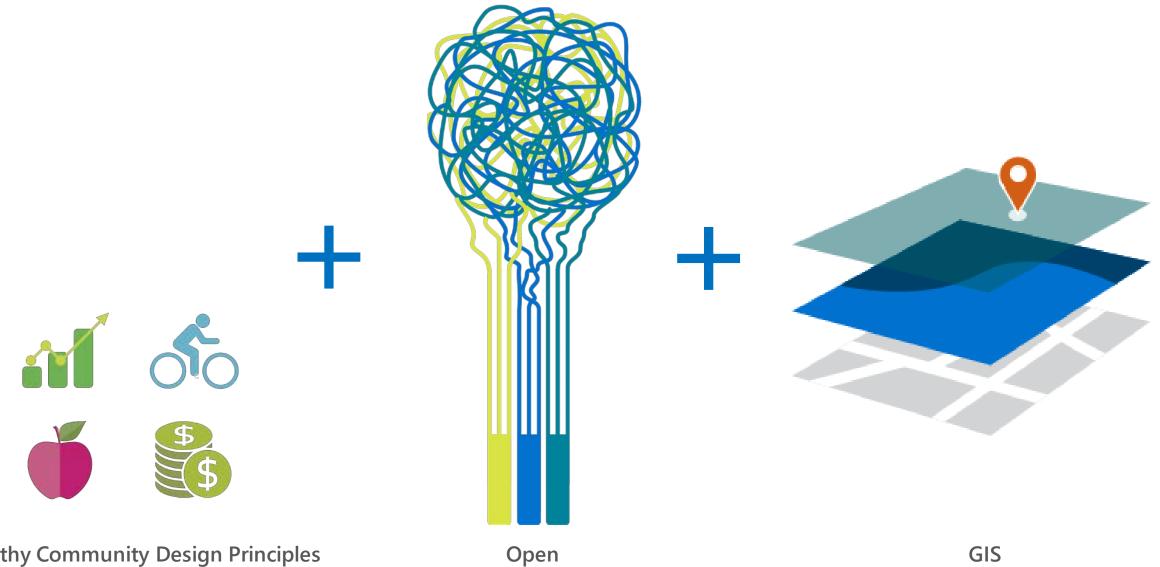
Leveraging data to plan and design communities in a way that confers health benefits and makes it easier for people to live healthy lives







Can we build a tool that would help?



Data

Healthy Mobility Model Goals



To analyze land use, urban design, and mobility factors that affect community health



To establish baseline health assessment and trends for a community



To forecast likely community health outcomes or conditions



To identify physical and prioritize improvements that can contribute to better community health

Healthy Mobility Model Inputs

Tier 1

US Census Data

- Demographics
- Education
- Commuting
- Labor Participation
- Housing Affordability

500 Cities Data (CDC)

- High Blood Pressure
- Asthma
- Heart Disease
- Diabetes
- High Cholesterol
- Obesity





Tier One Risk Assessment



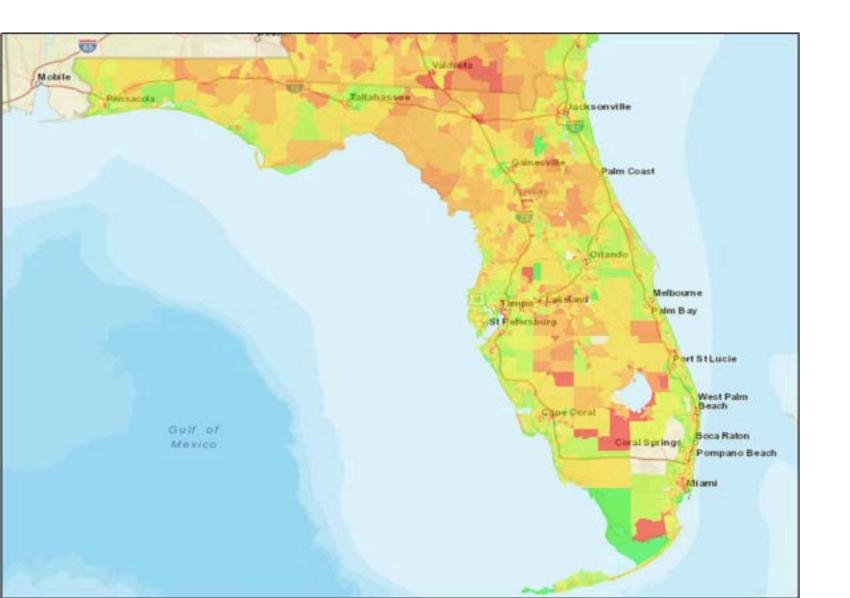
First, we used 500 Cities data.

Starting point for the analysis with known health outcomes for these tracks across major cities.

Then, statistical testing was performed on the health data with Census demographic data, open data and socio-economic data.

This identified relationships that could be used to complete the gaps in health data availability.

Tier One Risk Assessment



The statistical testing allowed for the entire state of Florida to be analyzed.

Healthy Mobility Model estimates the percent of population affected by each of the 6 health criteria and established an output Health Risk Score.



Read Disclaimer

New Jersey ~

Selected Census Tract: 005200

Select A Year: 2018

III LEGEND

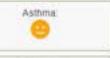
VHB Healthy Mobility Tool Risk Assessment Score

Higher Risk (2)

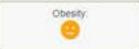
Disease Risk



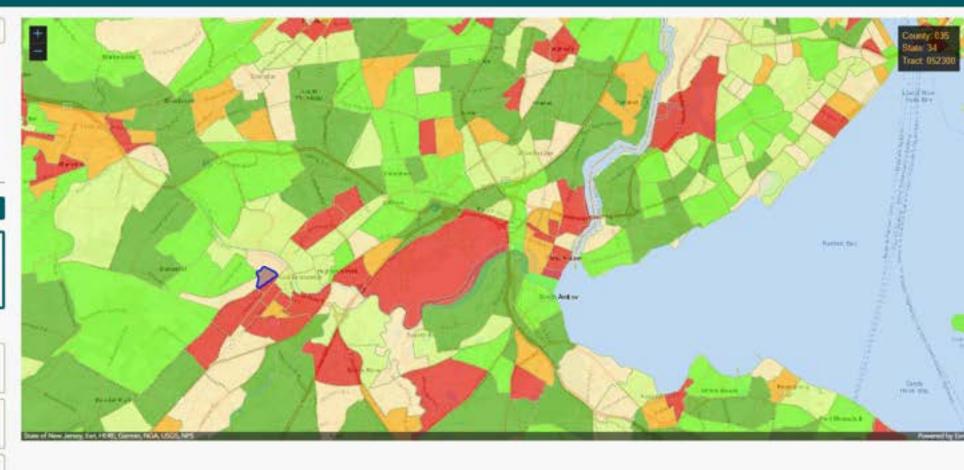












Tier Two: Recommend Strategies

Social Determinants

Income, employment, race and ethnicity, discrimination, social vulnerability, rent burden, public expenditures, school quality, educational attainment, age, food security, civic participation, language and literacy

Transportation Infrastructure

Sidewalk miles, highway miles, bike lanes, parking, transit, block length, commute mode, walkability, vehicle miles traveled, street width, safety

Institutions and Destinations

Parks and playgrounds, healthcare, schools, community gardens, cultural institutions, banking, libraries, business districts and jobs

Land Use

Density, housing mix and stability, polluting industries, brownfields, zoning, food retail options, housing age and quality, vacancy

Others

Tree cover, internet access, noise, air quality, impermeable surface, water quality, universal accessibility

St. Petersburg



Six of 10 areas have high incidence of obesity, diabetes, asthma, and COPD



Areas with parking behind buildings have lower incidence of chronic diseases



Areas within ½ mile from grocery stores and health care providers have lower incidence of chronic diseases

Health & Environment

Metroplan Orlando 2045 MTP Update



How can the HM Model be used?

- Establish a baseline health profile in conjunction with existing conditions work
- Neighborhood Studies assess built environment and social factors most connected with health to target solutions.
- Interventions/Alternatives Assessment determine which built environment changes would be most positively associated with better health outcomes.

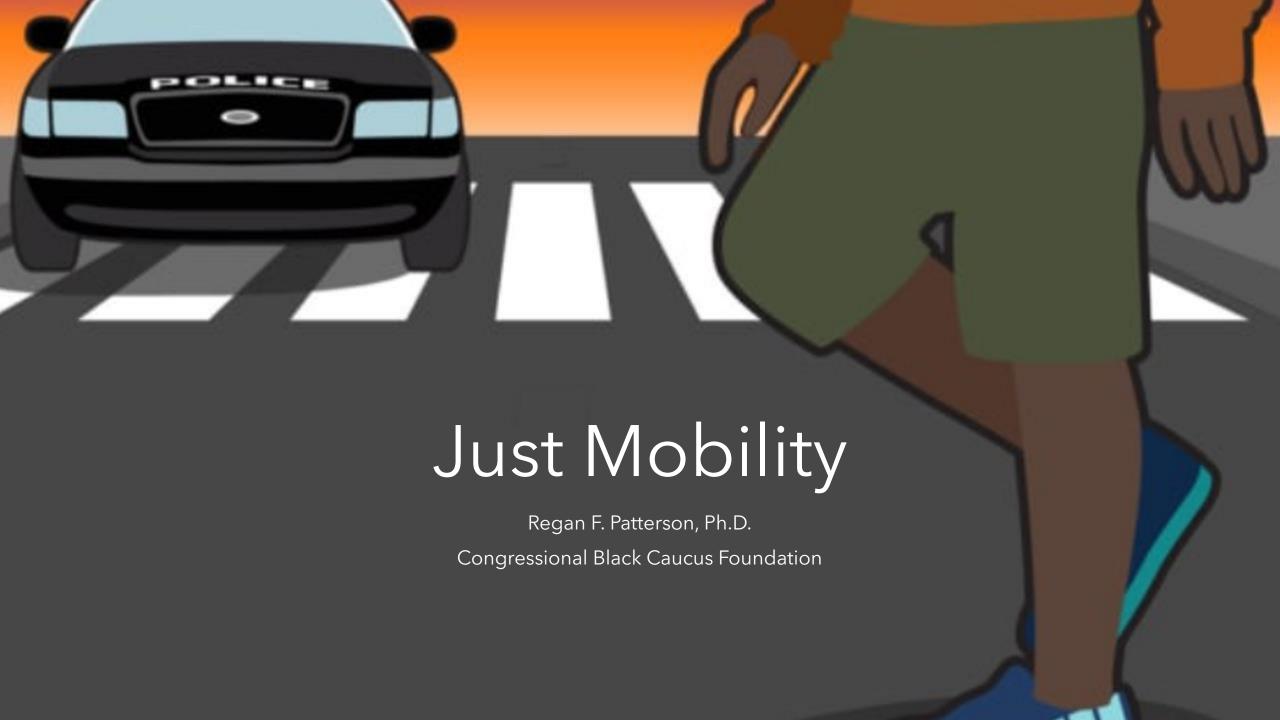
 Alternatives can be compared to one another
- Transportation Studies look specifically at transportation access factors and indicators like walkability, micro-mobility, traffic, air quality and more
- Prioritization factor community health considerations into decision making on budgeting and prioritization

Learn More:

https://www.vhb.com/technology-solutions/healthy-mobility-model/

costrodka@vhb.com





Just Mobility

Mobility Equity

"A transportation system that increases access to high quality mobility options, reduces air pollution, and enhances economic opportunity in low-income communities of color."

- The Greenlining Institute

"Mobility justice is less about mode choice, although that's important, and more about **freedom of movement**, freedom to navigate space and place, in the absence of racism."

- Dr. Destiny Thomas

Automobile-Centric Planning

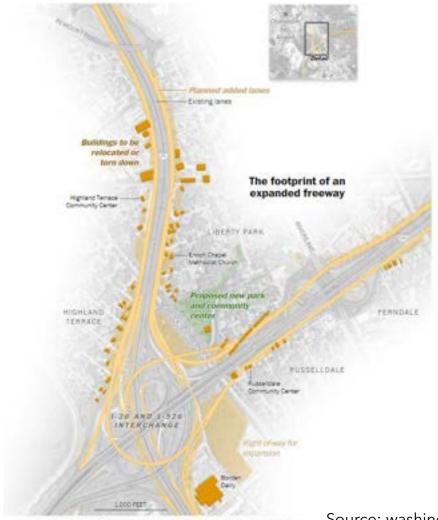


Hastings Street, a main street running through Paradise Valley and Black Bottom, predominantly Black neighborhoods in Detroit, MI

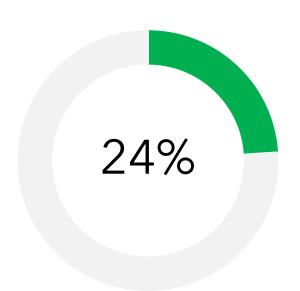


Chrysler Freeway, as viewed from the same location

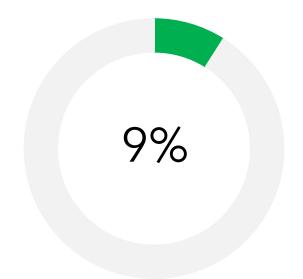
Highways



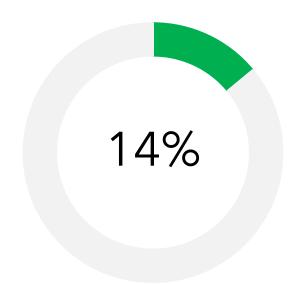
Air Pollution



Percent of African-Americans living near highly trafficked roads

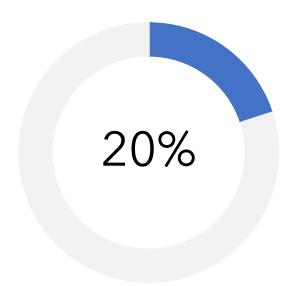


Percent Black adults with asthma

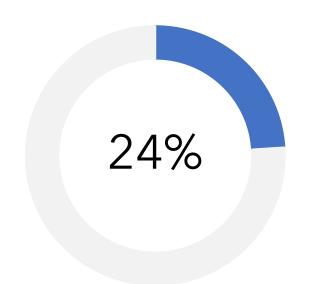


Percent Black children with asthma

Access

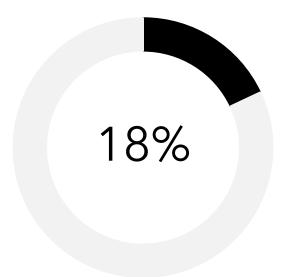


Percent Black households that do not have access to an automobile



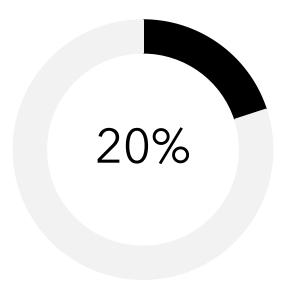
Percent public transit riders that are African-American

Safety



Percent of traffic-related pedestrian deaths that are African-American

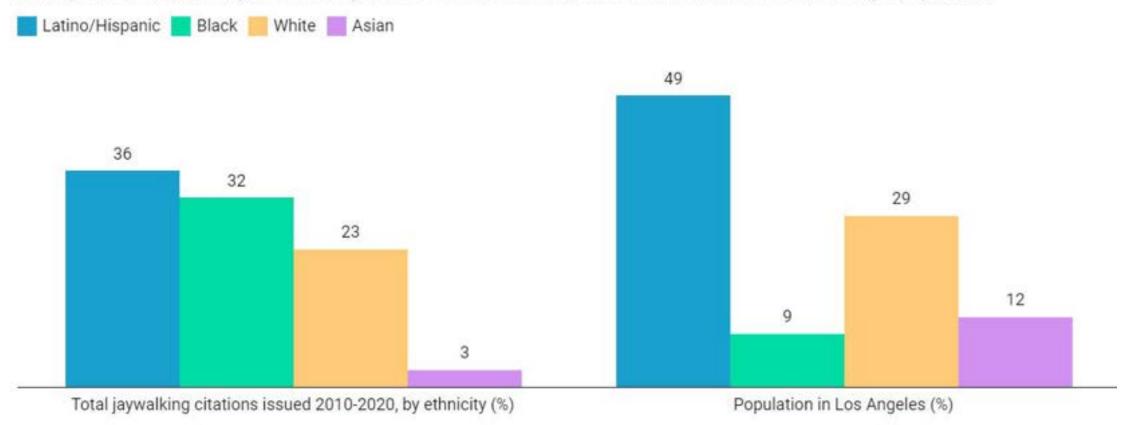
Police Violence



Average percent that Black drivers are more likely to be stopped by police than white drivers

Active Transportation

Between 2010 and 2020, Los Angeles police wrote 31,712 jaywalking citations. Those tickets were issued disproportionately to Black pedestrians, who represent nearly a third of total citations, but account for about 9% of the city's population.



Percentages rounded to nearest whole number; Ethnicity information presented as reported by LAPD; Pedestrians who identified as Indigenous, Native Hawaiian, Native Alaskan or Pacific Islander represented 0.07% of citations

Chart: Ryan Fonseca / LAist · Source: Citation data from city of Los Angeles; population data from U.S. Census estimates · Get the data · Created with Datawrapper Source: laist.com





CARS

ELECTRIC CARS





AUTONOMOUS CARS

UBER/LYFT CARS

Access



Percent of hybrid vehicle buyers in CA who are African-American Percent of plug-in electric vehicle buyers in CA who are African-American



A rendering of the proposed plan for I-375 in Detroit. Michigan. *Michigan Department of Transportation*

Free, accessible, reliable, safe public transportation



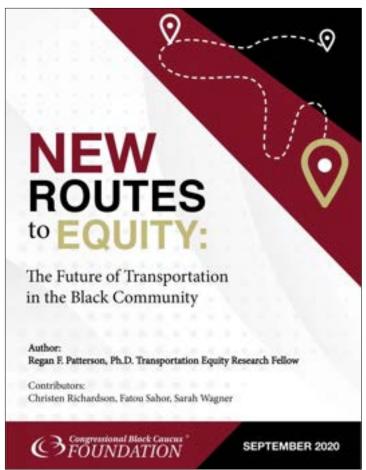
Source: thedreamcorps.org

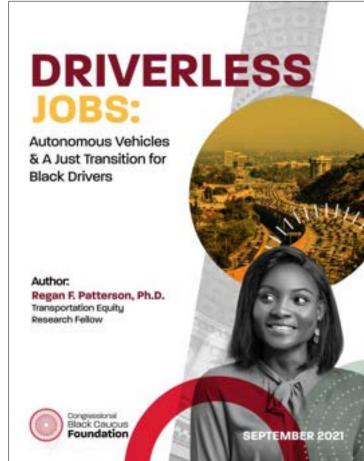
Thank You!

Regan F. Patterson, Ph.D. rpatterson@cbcfinc.org

@Regan_Felice

cbcfinc.org/publications









Brianne Eby Senior Policy Analyst

Eno Center for Transportation



@ Enotrans
@ brianne_eby



beby@enotrans.org

Vision Forum: Healthy, Just, Resilient and CO2-neutral Mobility for All



The NJCCA & the NJCCRC in association with the AMVTC @ Rutgers

Presentation by Calvin Gladney, @SmartGrowthCEO

















One organization, many programs, achieving our mission through:

Land use and development

Economic development

Transportation and Infrastructure

Vision Forum: Healthy, Just, Resilient and CO2-neutral Mobility for All



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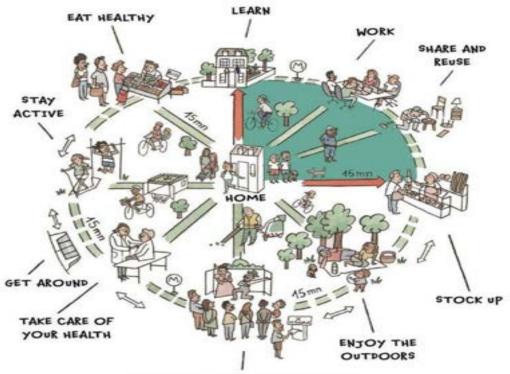
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THE 15-MINUTE PARIS



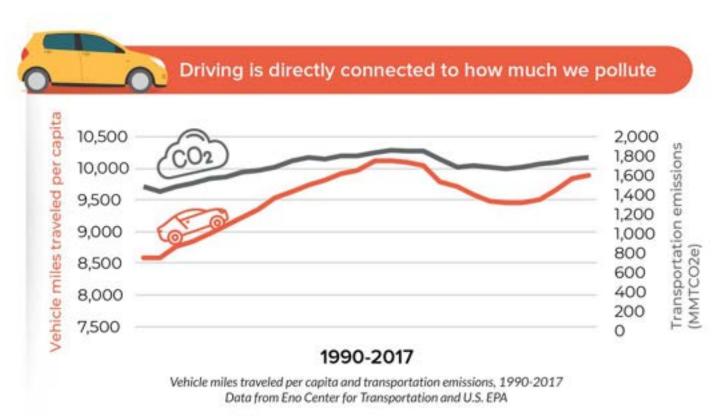


BE ENGAGED IN YOUR COMMUNITY





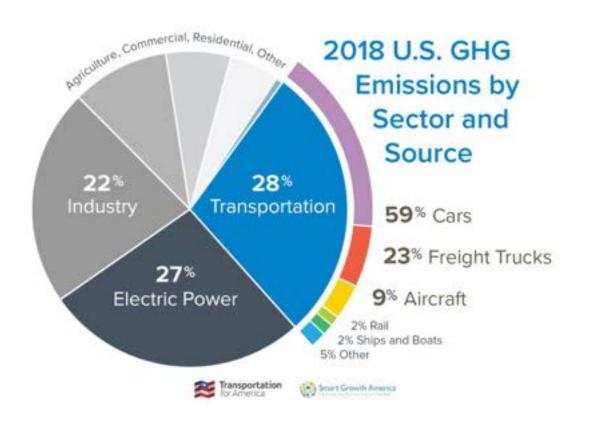
Emitting more because we're driving more

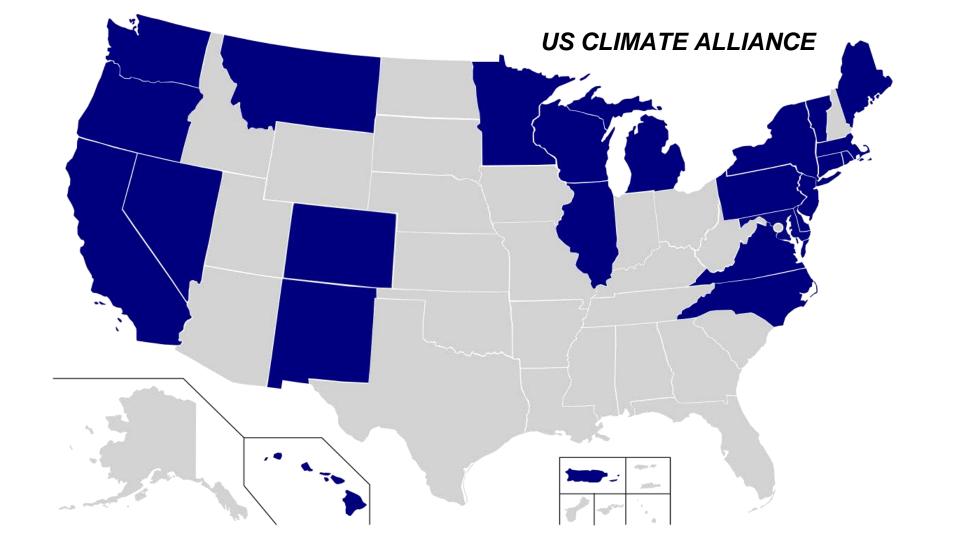




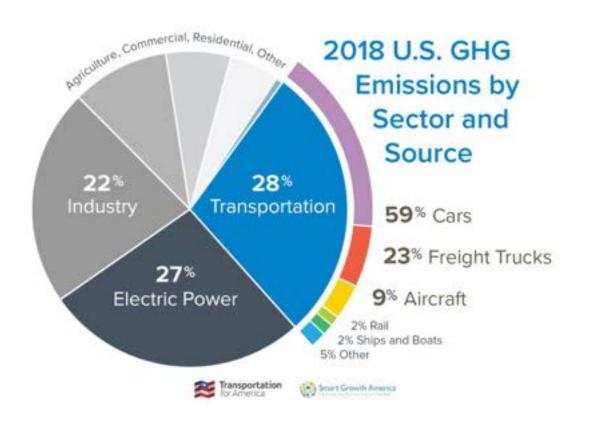


Sources of emissions





Sources of emissions



Sprawl Costs More and Makes Less



Two areas within Savannah, GA seen at the exact same scale. Sprawl requires greater spending on infrastructure, public service delivery, and transportation.

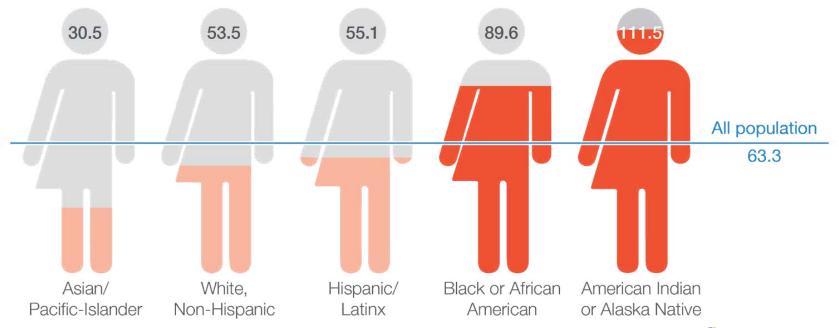
Dangerous by Design 2021



Report: Available now <u>smartgrowthamerica.org/dangerous-by-design</u>

People of color are disproportionately represented

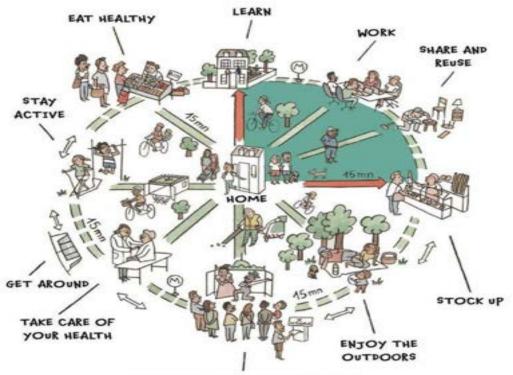
Relative pedestrian danger by race and ethnicity (2010-2019)





THE 15-MINUTE PARIS





BE ENGAGED IN YOUR COMMUNITY

Equity is not the default option.



Race & Zoning, St. Louis Zoning Code This editorial cartoon endorsed the increased use of zoning to stop "the blight bug" and protect residential communities. The zoning was misused to bar non-white residents from moving into most neighborhoods in urban areas.

Source: St. Louis Post-Dispatch

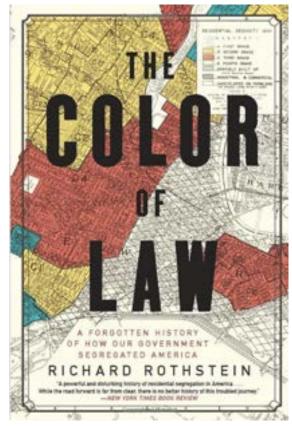


OVERTOWN NEIGHBORHOOD Miami, Florida

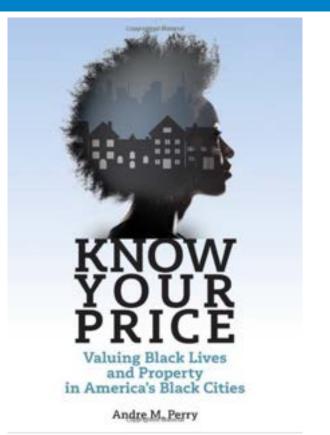


I-35 UPPER DECK CONSTRUCTION 1973 Austin, Texas

Book Recommendations



THE COLOR OF MONEY **BLACK BANKS** AND THE RACIAL **WEALTH GAP**

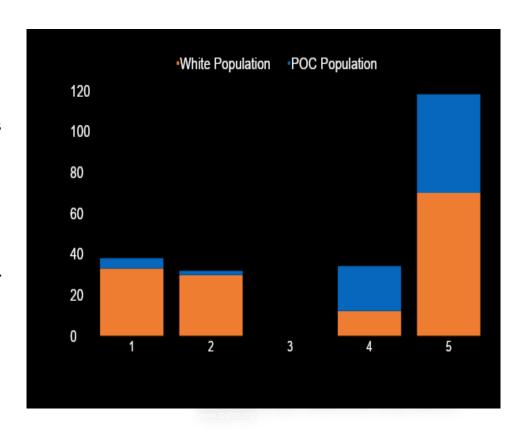




The spatial scale of segregation has gradually increased over time

These distributions are based on the contemporary metro regions that contain what were the top 50 U.S. cities by population in 1950.

Even as the population shifted from city to suburb, segregation has persisted.













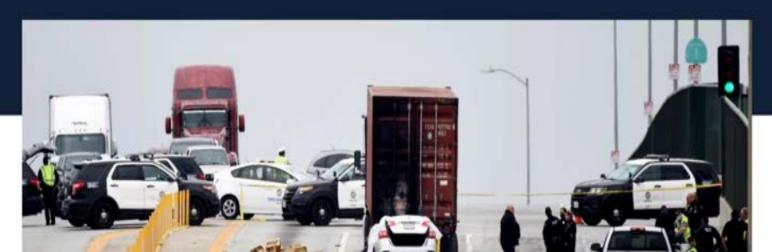


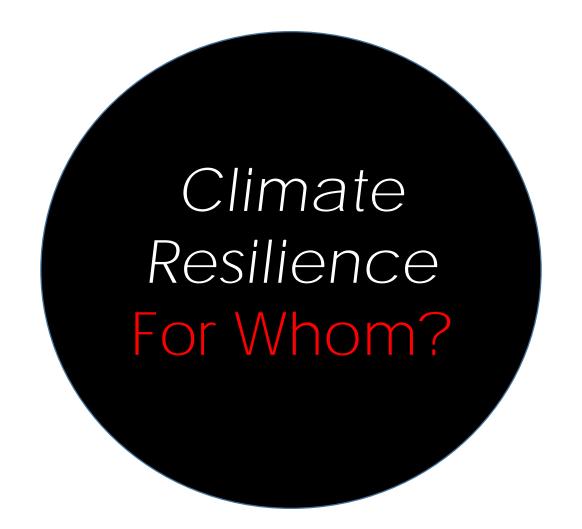


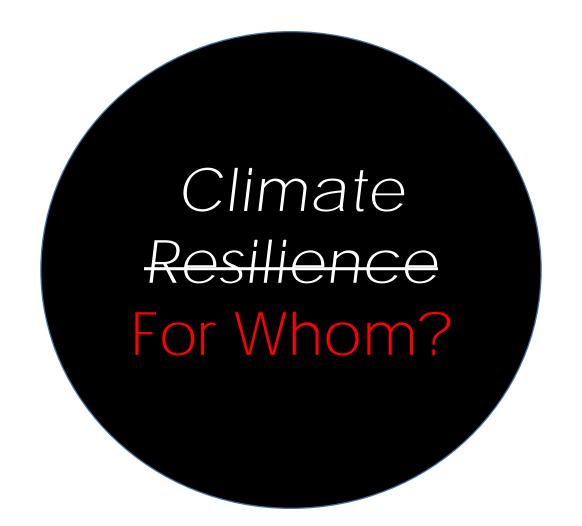
NEWS المالا

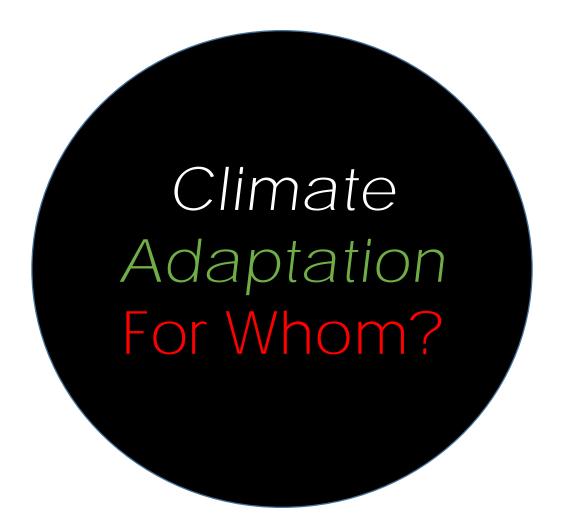
Black people are more likely to die in traffic accidents. Covid made it worse.

More Black people died in traffic deaths in 2020 than any other racial group even though Americans drove less in the pandemic. Experts say this is not new.

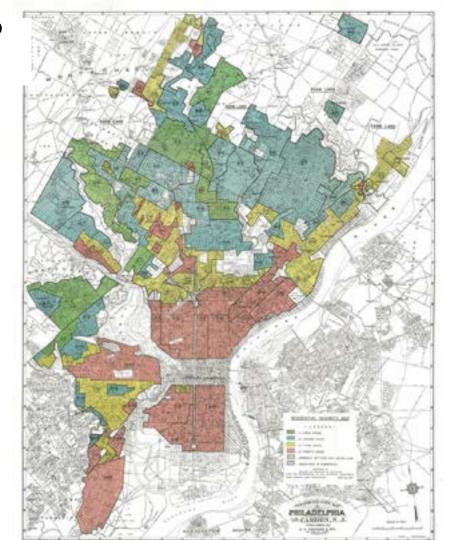




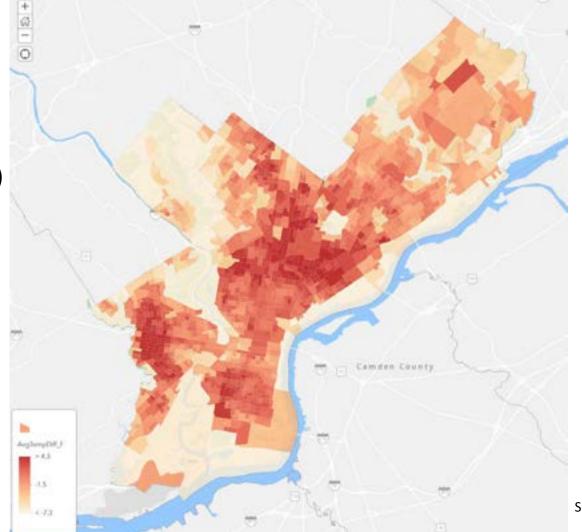




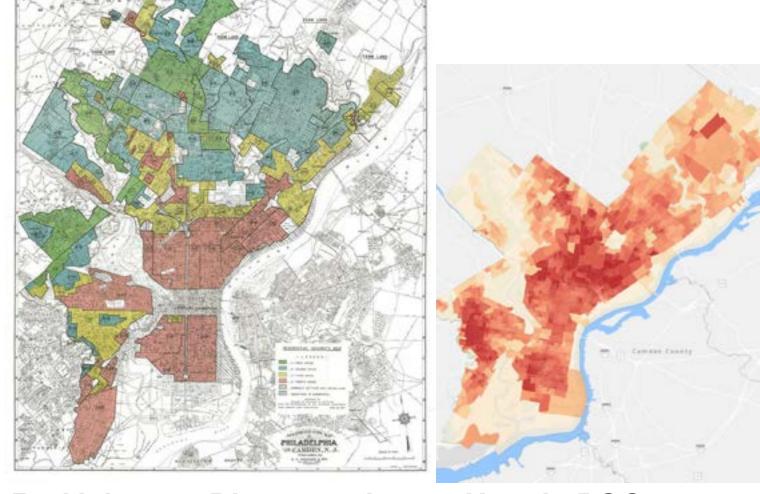
1937 REDLINING MAP (Philadelphia, PA)



(Average Temperature Difference Between Neighborhoods Philadelphia, PA)

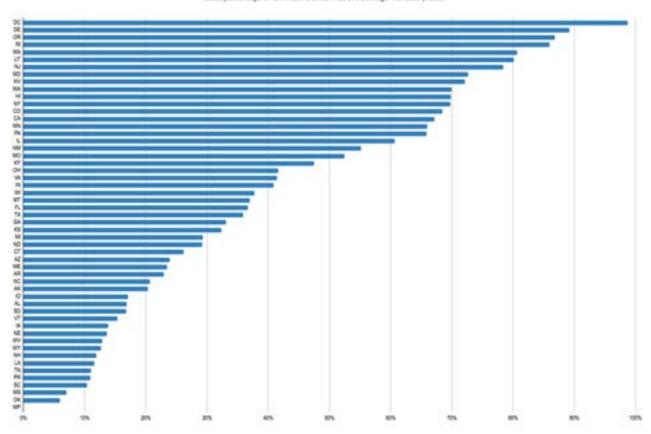


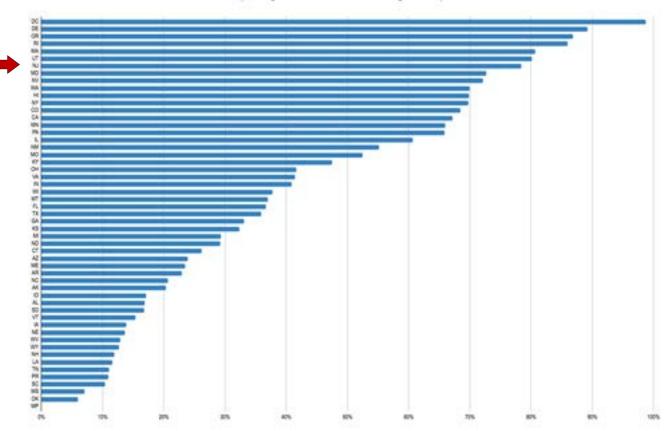
Source: City of Philadelphia



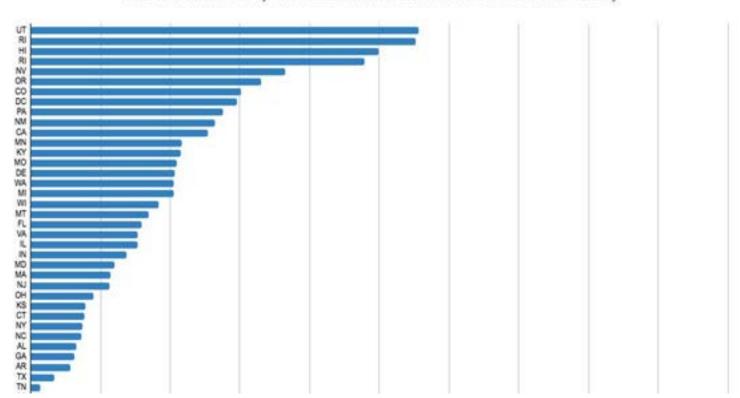
Redlining --> Disproportionate Heat in POC areas

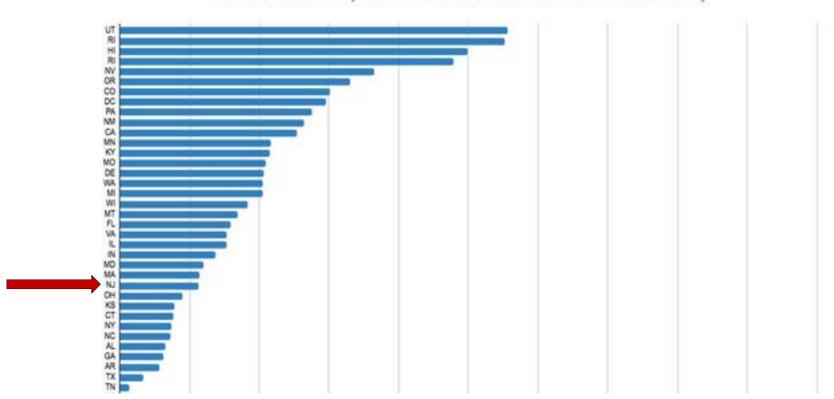






Percent low income units by state in locations with at least moderate levels of transit accessibility













15-Minute Neighborhood

Residents can fulfill their shopping, recreational and service needs within a 15-minute walk, bike or roll.

A 15-minute neighborhood has these key characteristics:



METRICS + TOOLS

15-Minute Neighborhood

Residents can fulfill their shopping, recreational and service needs within a 15-minute walk, bike or roll.

Evaluate the existence or possibility of a 15-minute neighborhood using these metric:



Smart Growth America's

Equity Summit

Register at smartgrowthamerica.org/equity-summit



January 11-13, 2022

