Land | Transport | Climate

Smart Growth For a Post-Pandemic World

@MikeLydon | @StreetPlans

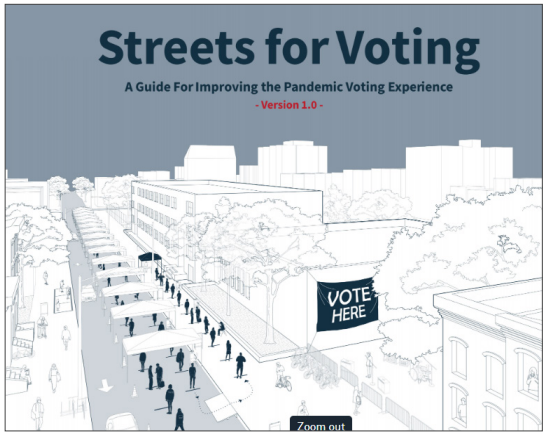
Power of Place Summit | GrowSmartRI | June 21, 2022

STREETPLANS

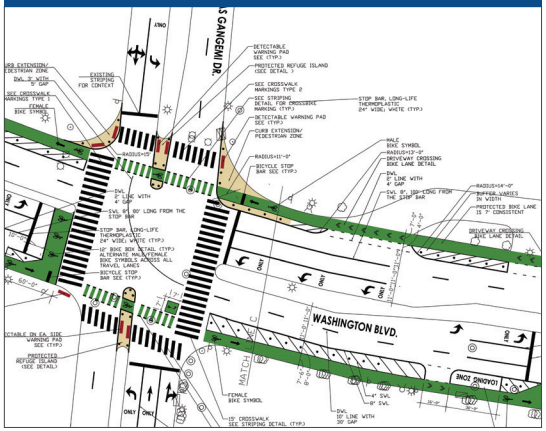
MIAMI NEW YORK

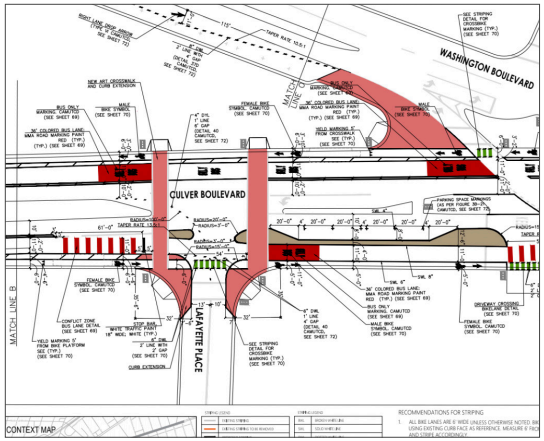
We Create Better Streets, Better Places

Planning

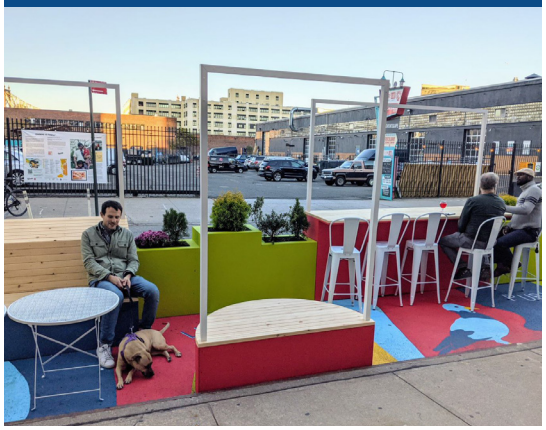


Design





Implementation



01. Land
02. Transport
03. Climate
04. Response

01. Land

National Housing Crisis

npr WNYC SIGN IN NPR SHOP DONATE

NEWS CULTURE MUSIC PODCASTS & SHOWS SEARCH

ECONOMY

There's never been such a severe shortage of homes in the U.S. Here's why

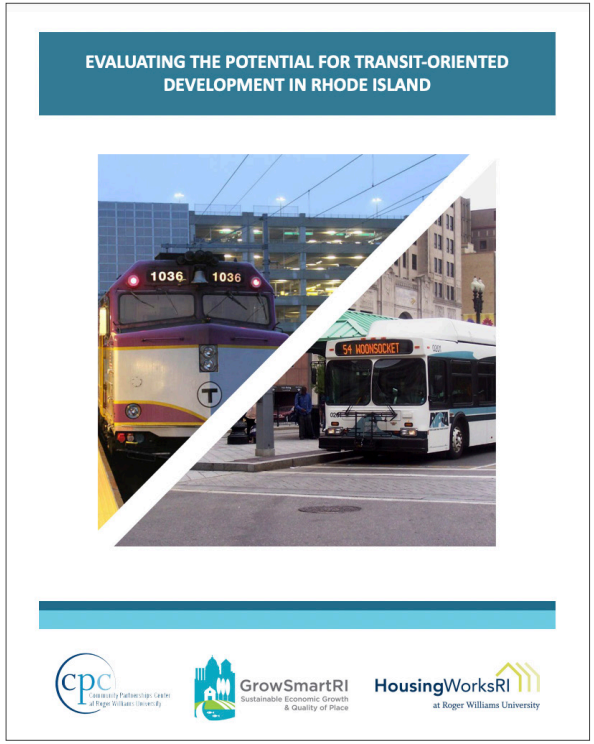
March 29, 2022 · 7:00 AM ET

CHRIS ARNOLD

3-Minute Listen + PLAYLIST

- Decades of low-production and population growth has led to shortage of 5+ million units
- Pandemic induced materials and labor shortages
- Smaller households, pandemic re-formation
- airbnb / short-term rentals
- Core problem: Zoning codes and politics limit housing

Housing RI



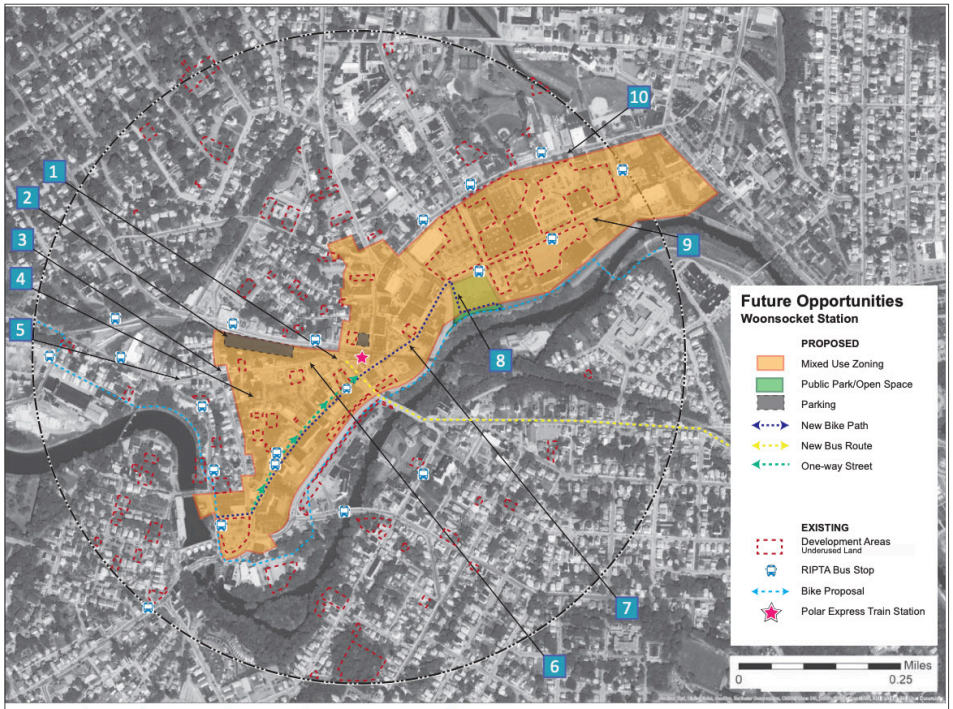


Figure: Map of proposed opportunities for TOD in study area. Source: Report authors.

- **2016 HousingWorksRI Study: 40,000 units of housing needed by 2025**
- **~ 750 units built per year across the state, or ~ 25% of needed supply**
- **Exacerbated by COVID / Work from home**
- **Burden falls disproportionately on low-income and minority people/ households**

Perception: New Housing

Reality: New Housing

Cottages on Greene, Union Studio

60 King, Gretchen Ertl

Let's Fill In The Missing Middle!

- Transportation costs decrease
- Transit use increases
- Social connection increases
- Neighborhood retail/services becomes more viable
- Traffic safety improves
- **At scale, housing becomes more affordable**

Main Streets: An Economic Powerhouse


Newport
BRICK ALLEY


Westerly
Pawcatuck River
Duck Race


Wakefield


East Greenwich
TOSCANA
139


Woonsocket
STADIUM THEATRE
STADIUM STADIUM

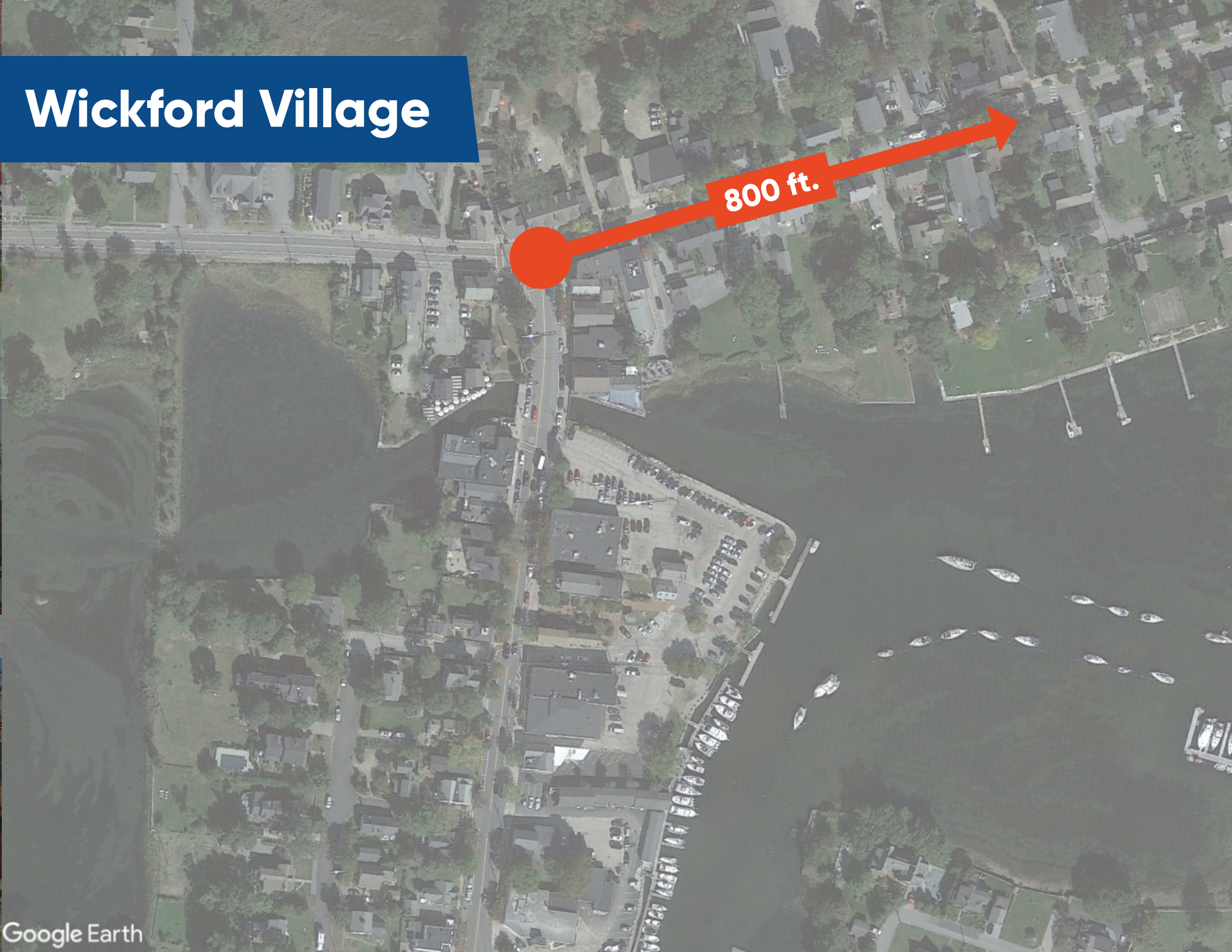

Pawtucket
MAIN ST
ROOSEVELT


Warren
coffee · pastry · bread
bywater

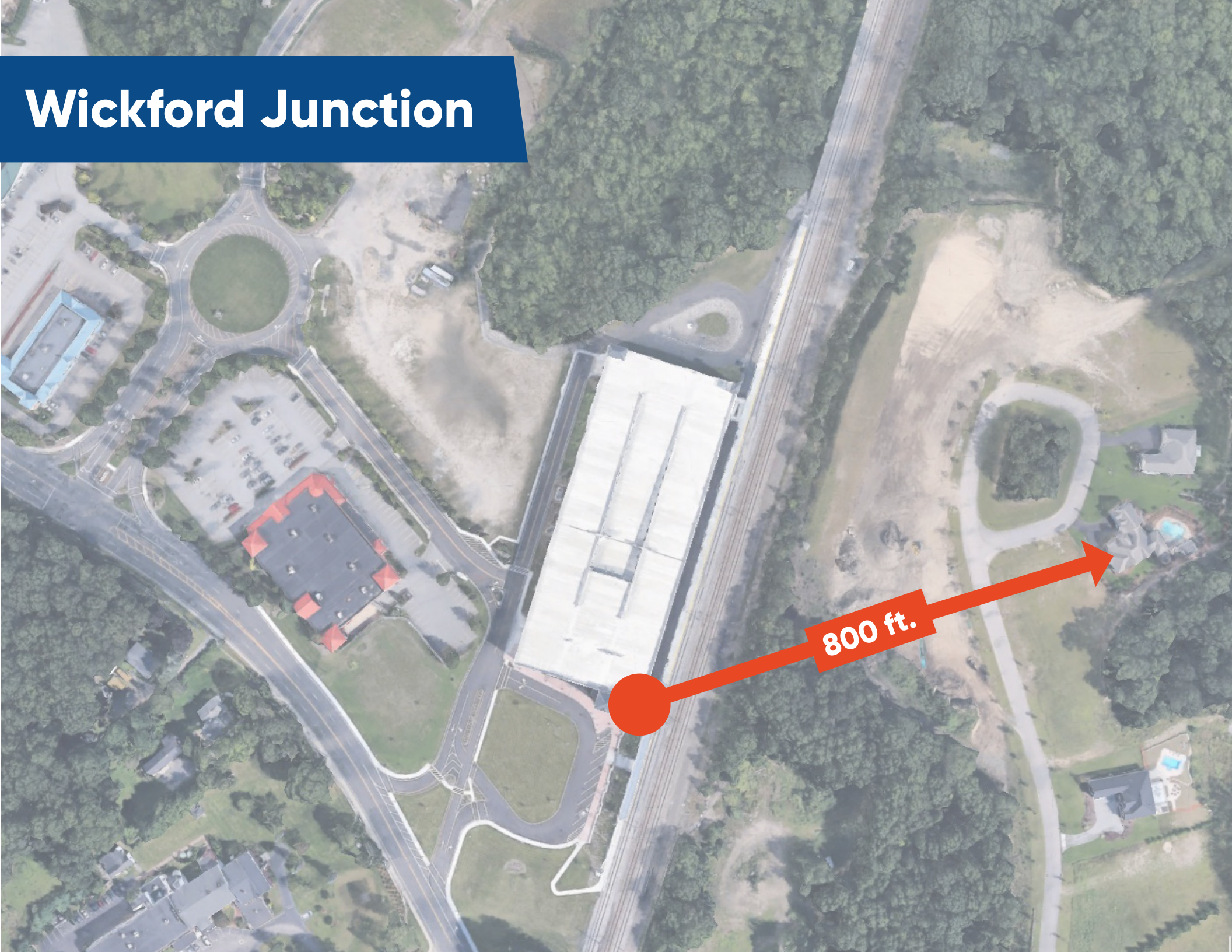

Bristol
wink
TAVERN
OPEN


Wickford

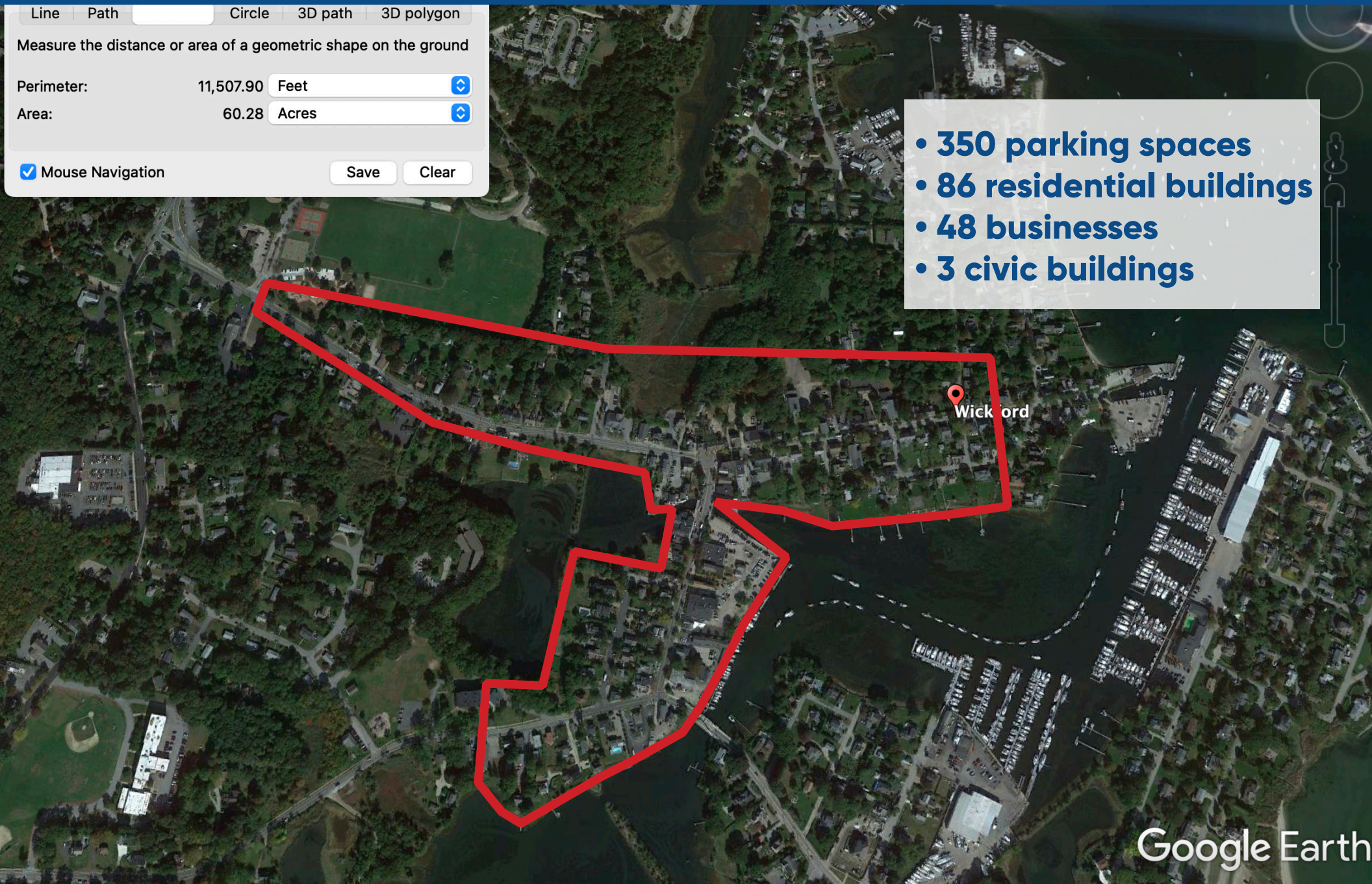
Wickford Village



Wickford Junction



What do 60 acres do all day? Wickford Village



- 350 parking spaces
- 86 residential buildings
- 48 businesses
- 3 civic buildings

What do 60 acres do all day? Wickford Junction

- 1,930 parking spaces
- 13 businesses
- 1 train station
- 0 Residential buildings

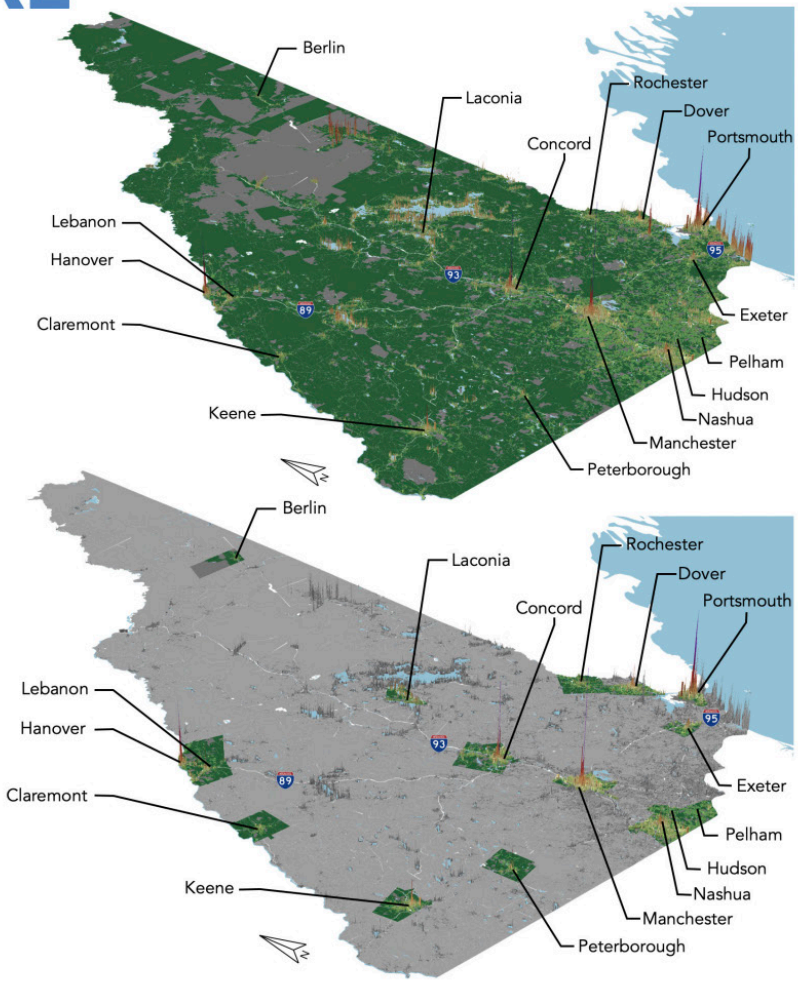

sland
Budget

Why? Consider Value Per Acre

NEW HAMPSHIRE

STATE-WIDE ANALYSIS

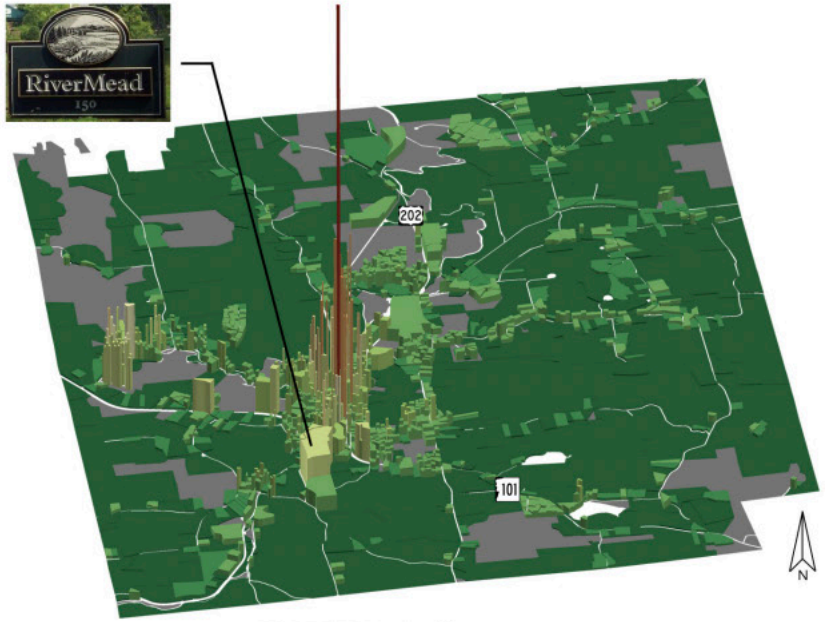
In 3D the differences in productivity among the selected communities becomes more apparent. Portsmouth has the highest peak VPA and a very productive downtown. Communities that follow I-93 north like Nashua, Manchester, and Concord also have strong downtowns. Other cities and towns that are more isolated, like Keene, have a visibly productive downtown, but lack the magnitude of their more developed counterparts. Smaller towns that have potential for a stronger downtown lack spikes in the model, but have opportunities to grow. New Hampshire is a fairly rural state with lots of land reserved in national forests and state parks. Existing urban development must serve as the foundation for intensifying land use and increasing revenue.



"Buy land, they aren't making any more of it."

– Mark Twain

Peterborough, NH



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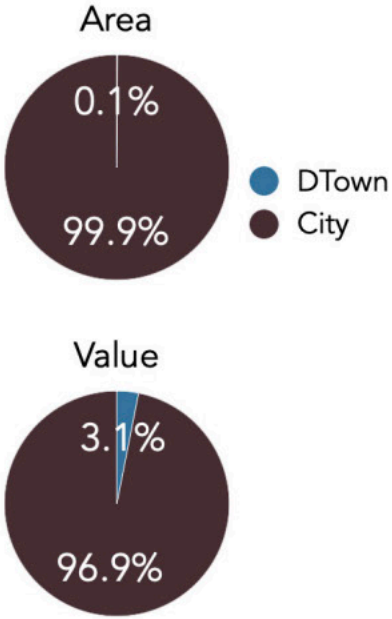
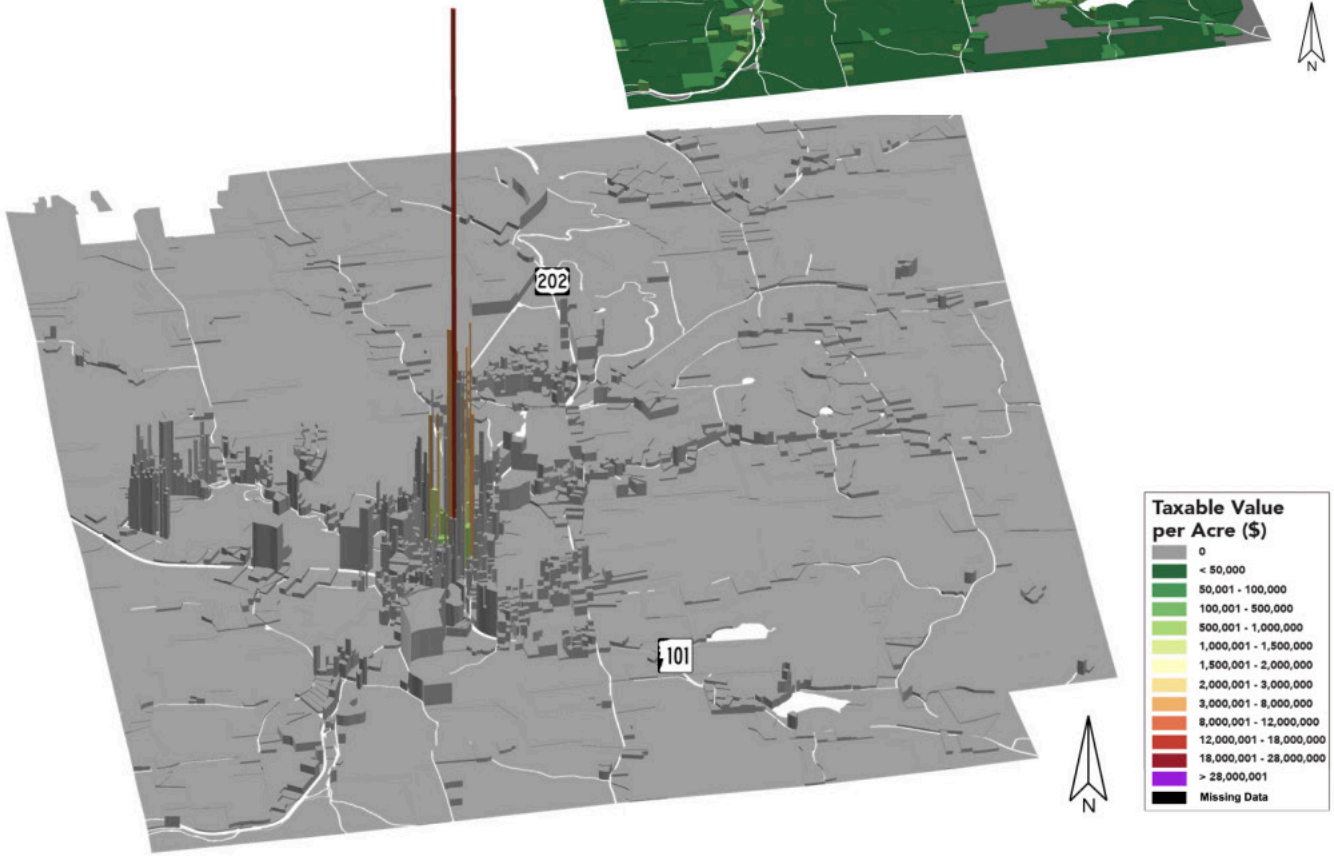
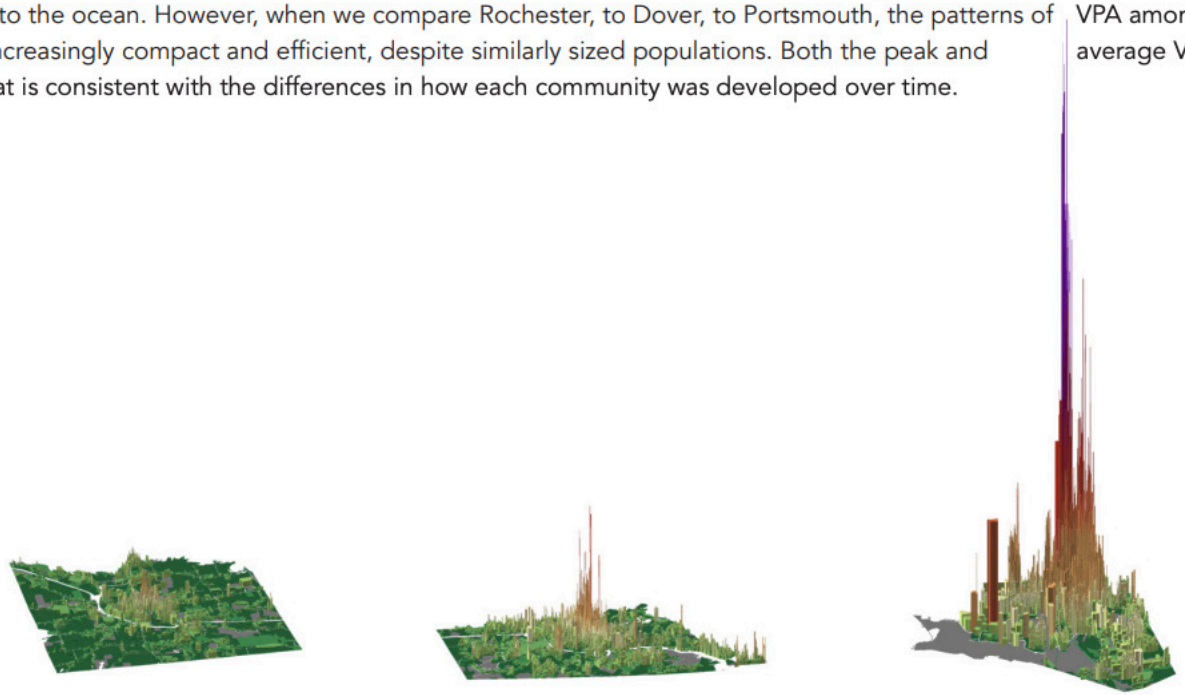




Three Development Types

SEACOAST

The Seacoast group presents an impressive comparison of three unique urban forms present in one region. Portsmouth values are influenced by proximity to the ocean. However, when we compare Rochester, to Dover, to Portsmouth, the patterns of VPA amongst different land uses are increasingly compact and efficient, despite similarly sized populations. Both the peak and average VPAs progress in a manner that is consistent with the differences in how each community was developed over time.



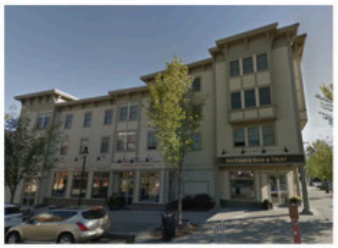
	Rochester	Dover	Portsmouth
Population	31,366	32,191	21,896
Avg. VPA	$88,371	$242,796	$557,719
Peak VPA	$5,203,925	$15,316,240	$51,157,466

Economic Superstars

Keene
Peak VPA
VPA: $14 M

Lebanon
Mixed-use
VPA: $6.2 M

Laconia
Mixed-use
VPA: $3.7 M



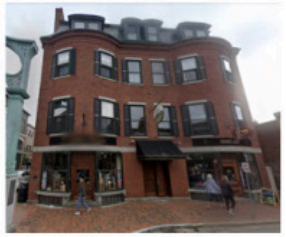
Hanover
Mixed-use
VPA: $12 M

Concord
Mixed-use
VPA: $7.6 M

Claremont
Multi-family VPA
VPA: $0.6 M

Pelham
Multi-family
Avg. VPA: $0.45 M

Hudson
Multi-family
Avg. VPA: $1.8 M

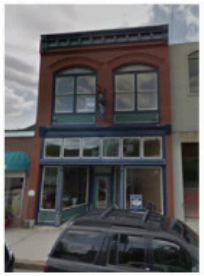


Portsmouth
Mixed-use
VPA: $29.3 M

Nashua
Mixed-use
VPA: $10 M

Exeter
Peak VPA
VPA: $13.5 M

Dover
Mixed-use
VPA: $9.6 M



Berlin
Peak VPA
VPA: $2.5 M

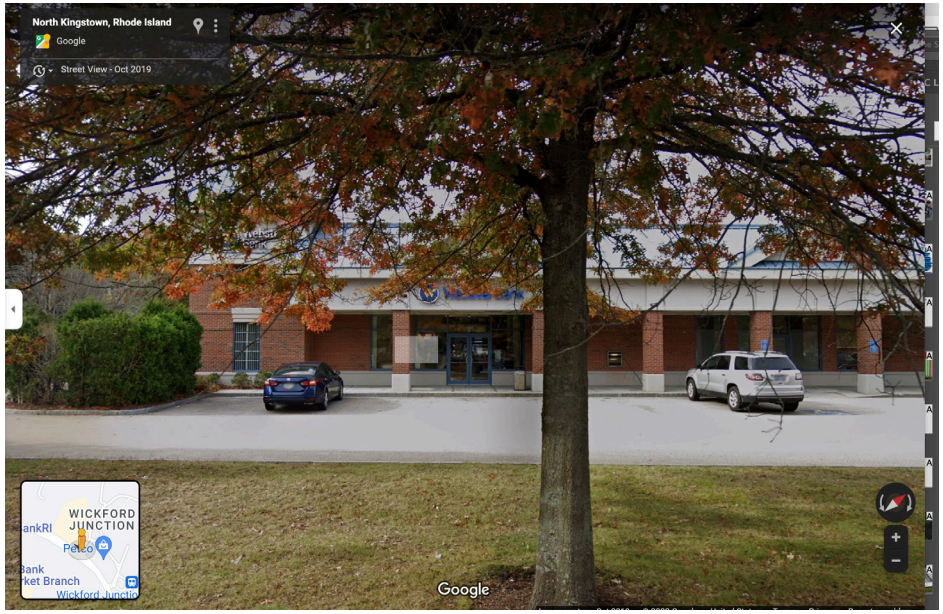
Peterborough
Peak VPA
VPA: $12.2 M

Rochester
Mixed-use
VPA: $3.9 M

How does this apply to Rhode Island?

1007 Ten Rod Road (1999)
Land Use: Retail
Lot Size: 2.3 acres
Assessed Value: $4,079,800
Value Per Acre: $1,773,826
Tax Value: $31,041/acre

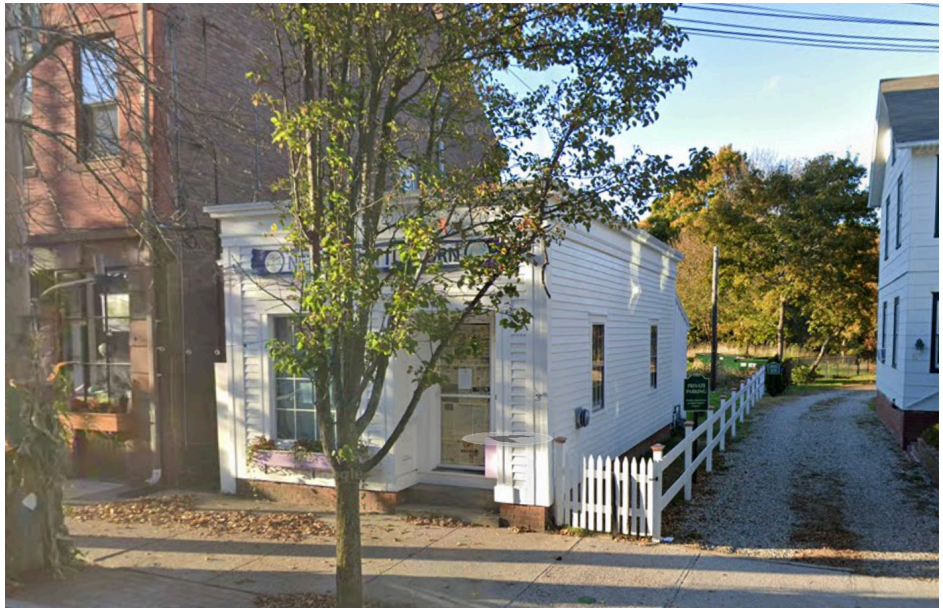
7 Main Street (1850)
Land Use: Mixed-Use
Lot Size: .51 acres
Assessed Value: $1,039,600
Value Per Acre: $2,00,949 (+12%)
Tax Value: $36,386/acre (+17%)



1041 Ten Rod Road (2006)
Land Use: Retail / Office
Lot Size: 1 acre
Assessed Value: $1,721,500
Value Per Acre: $1,721,500
Tax Value: $30,126/acre

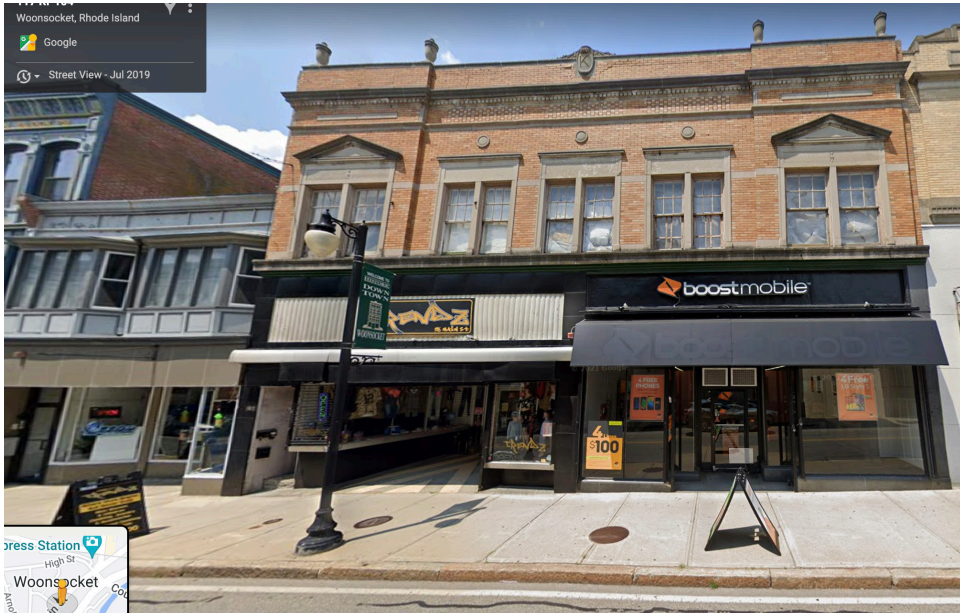
27 Brown Street (1850)
Land Use: Mixed-Use
Lot Size: .28 acres
Assessed Value: $793,500
Value Per Acre: $2,933,928 (+70%)
Tax Value: $49,592/acre (+65%)

1031 Ten Rod Road (2003)
Land Use: Retail
Lot Size: 12 acres
Assessed Value: $16,759,000
Value Per Acre: $1,396,583
Tax Value: $24,440/acre



2 Main Street (1899)
Land Use: Retail
Lot Size: .04 acres
Assessed Value: $275,800
Value Per Acre: $6,895,000 (+394)
Tax Value: $120,650/acre (+394%)

What About Woonsocket?



1500 Diamond Hill Road (1992)
Land Use: Retail
Lot Size: .66 acres
Assessed Value: $700,700
Value Per Acre: 938,938
Tax Value: $32,628/acre

116 Main Street (1900)
Land Use: Mixed-Use
Lot Size: .15 acre
Assessed Value: $270,000
Value Per Acre: $1,800,000 (+92%)
Tax Value: $62,550/acre (+92%)

876 Diamond Hill Road (2003)
Land Use: Retail
Lot Size: 1.07 acres
Assessed Value: $483,400
Value Per Acre: $449,562
Tax Value: $15,622/acre

8 Main Street (1880)
Land Use: Mixed-Use
Lot Size: .04 acres
Assessed Value: $141,000
Value Per Acre: $3,525,000 (+629%)
Tax Value: $122,493/acre (+684%)

Code Reform

PUBLIC SQUARE
A CNU Journal


Keene, New Hampshire. Wikimedia Commons.

CODES

CNU takes code reform to New Hampshire

ROBERT STEUTEVILLE AUG. 19, 2020

- CNU + New Hampshire Housing Finance Authority; Preceded by a similar Vermont code reform effort focused on incremental and long-term change.

- Massachusetts Chapter 40R + 40S incentivize compact, transit-oriented development with affordable housing

- Connecticut HB 6107 advanced several zoning reforms including the legalization of accessory dwelling units and capping parking requirements for new units of housing

02. Transport

A Long Battle: Mobility vs. Place

"When we build our landscape around places to go, we lose places to be."

– Rick Cole Congress for the New Urbanism

Roads vs. Streets

- High speed
- Low accessibility
- Low connectivity
- Low value per acre

- Low speed
- High accessibility
- High connectivity
- High value per acre

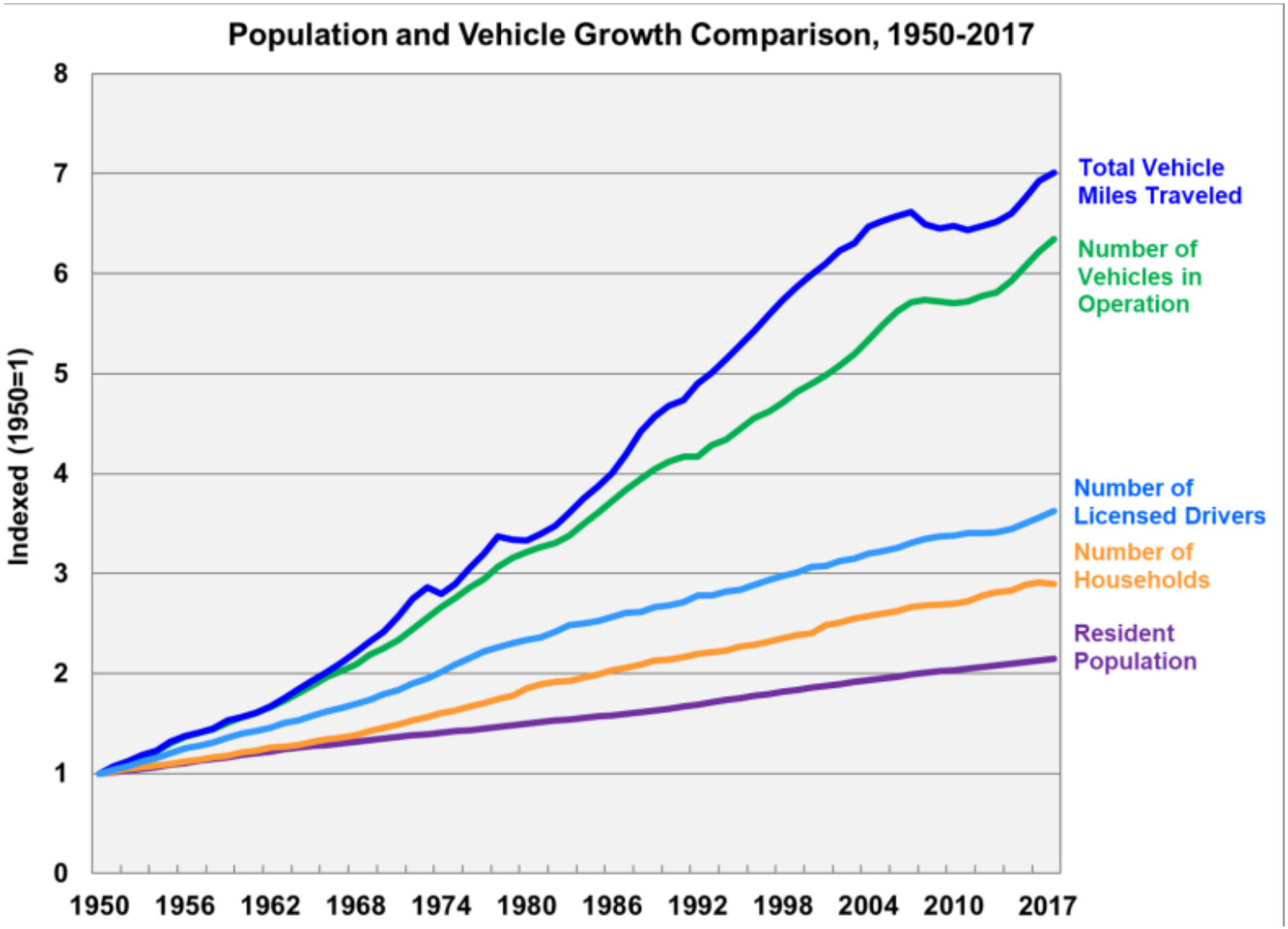
The "Stroad"

Road + Street = Stroad, the futon of transportation options.

– Charles Marohn, P.E., Strong Towns

- Moderate speed
- Low accessibility
- Moderate to low connectivity
- Moderate to low value per acre

Since 1950: 2x Population, 7X VMT

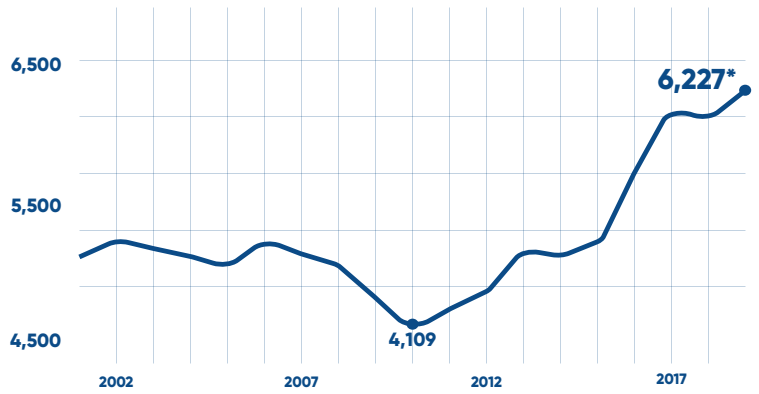


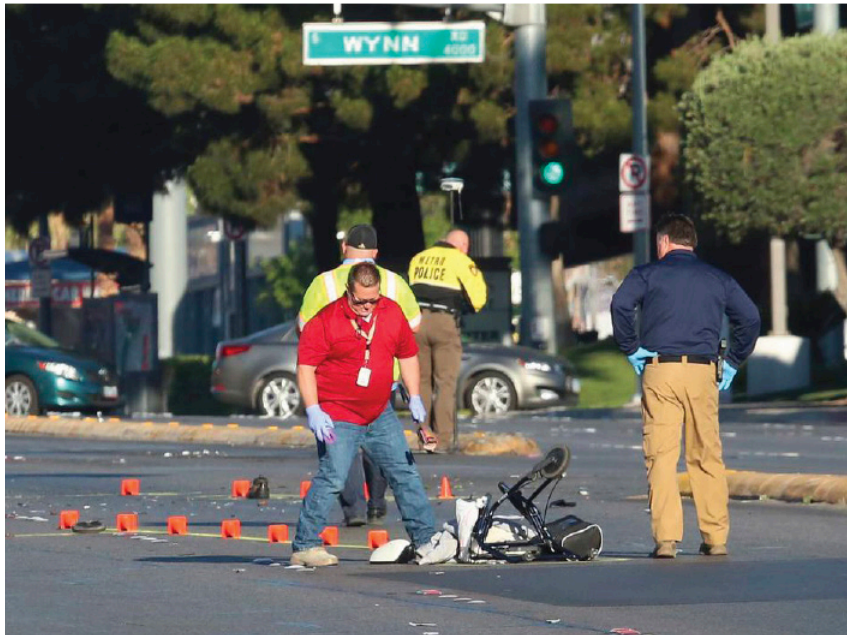
Source: Oak Ridge National Laboratory, Transportation Energy Data Book: Edition 36, December 2017.

Traffic Fatalities

U.S. Pedestrian Fatalities

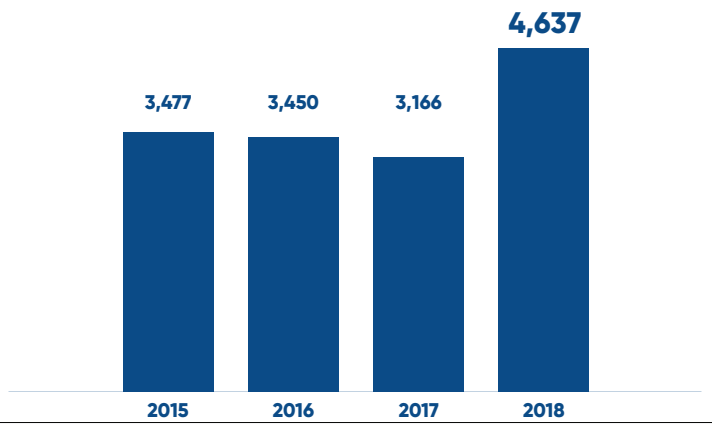
Source: The Zebra 2019





Distracted Driving Deaths

Source: The Zebra 2019



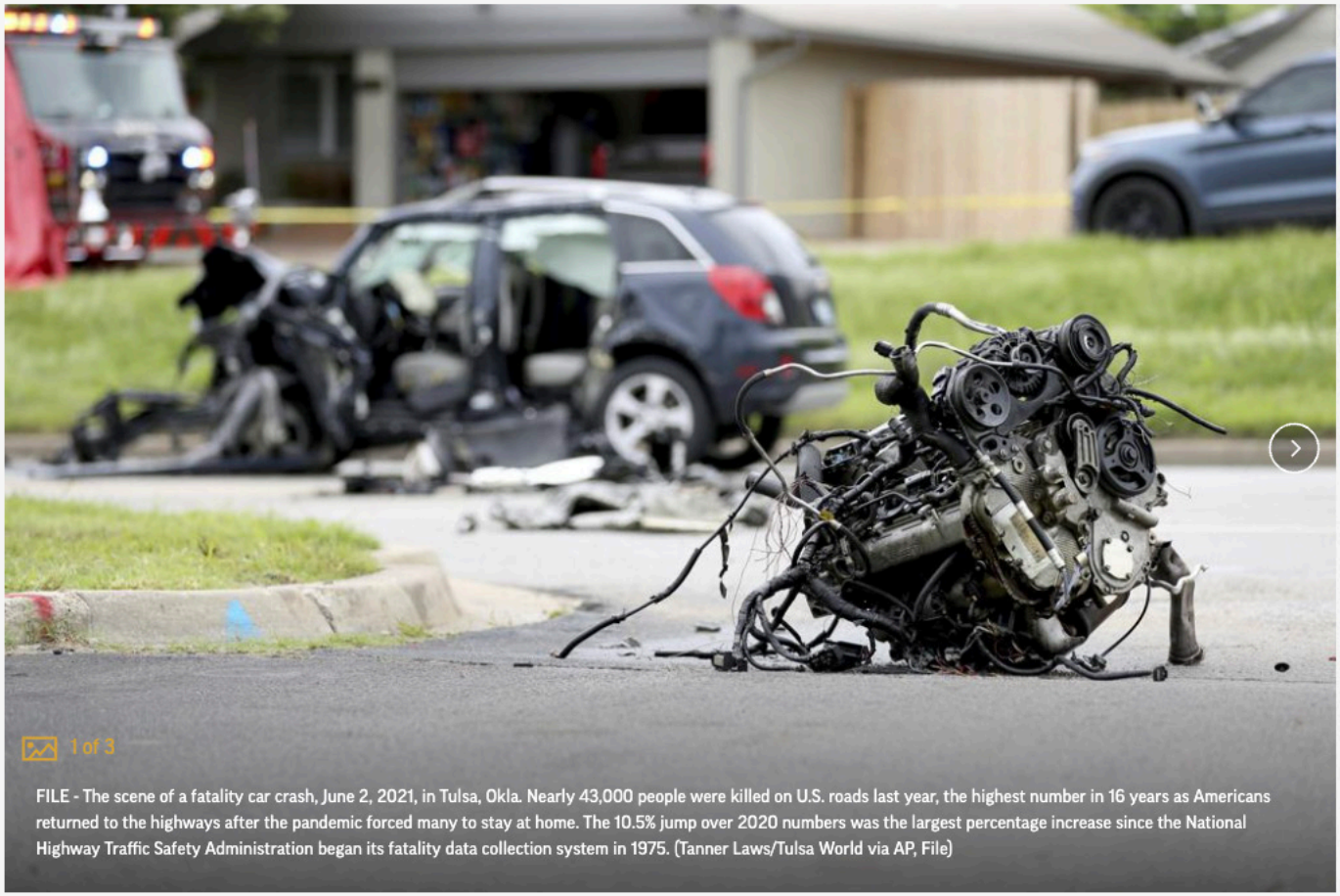
10.5% Fatal Crash Increase Since 2020

AP

U.S. News World News Politics Sports Entertainment Business Technology Health Science Oddities Lifestyl

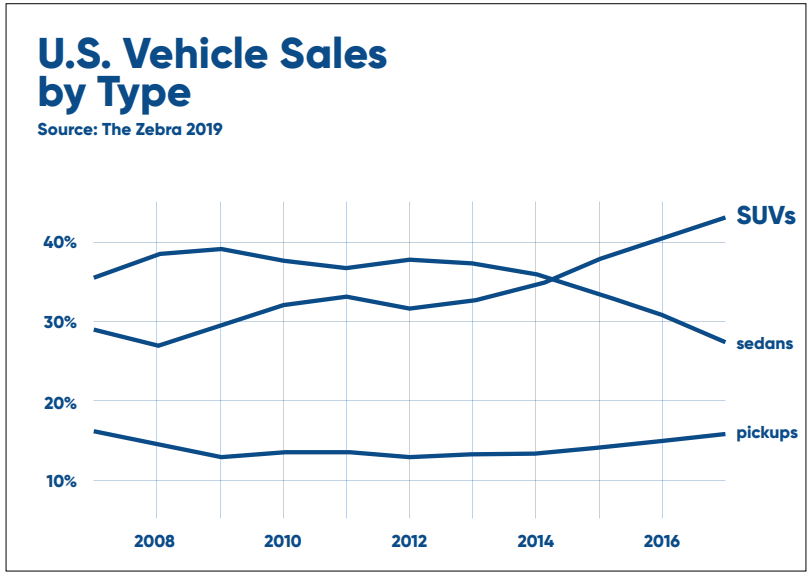
Nearly 43,000 people died on US roads last year, agency says

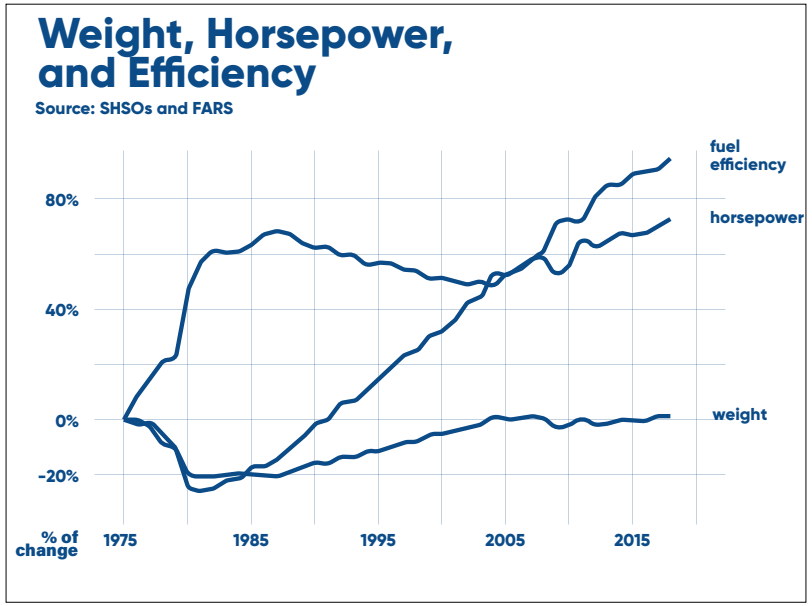
By TOM KRISHER and HOPE YEN yesterday



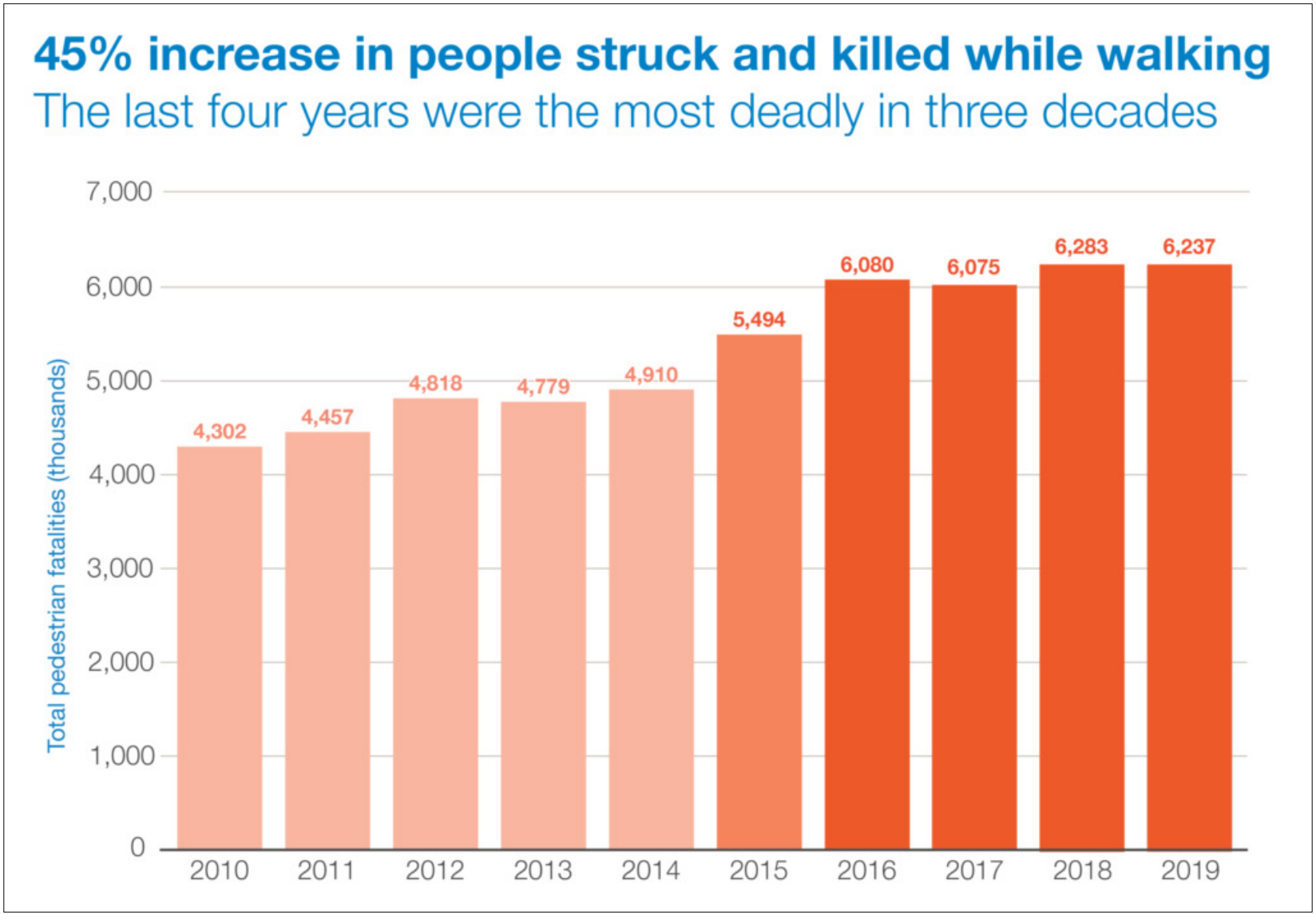
FILE - The scene of a fatality car crash, June 2, 2021, in Tulsa, Okla. Nearly 43,000 people were killed on U.S. roads last year, the highest number in 16 years as Americans returned to the highways after the pandemic forced many to stay at home. The 10.5% jump over 2020 numbers was the largest percentage increase since the National Highway Traffic Safety Administration began its fatality data collection system in 1975. (Tanner Laws/Tulsa World via AP, File)

Myriad Contributing Factors



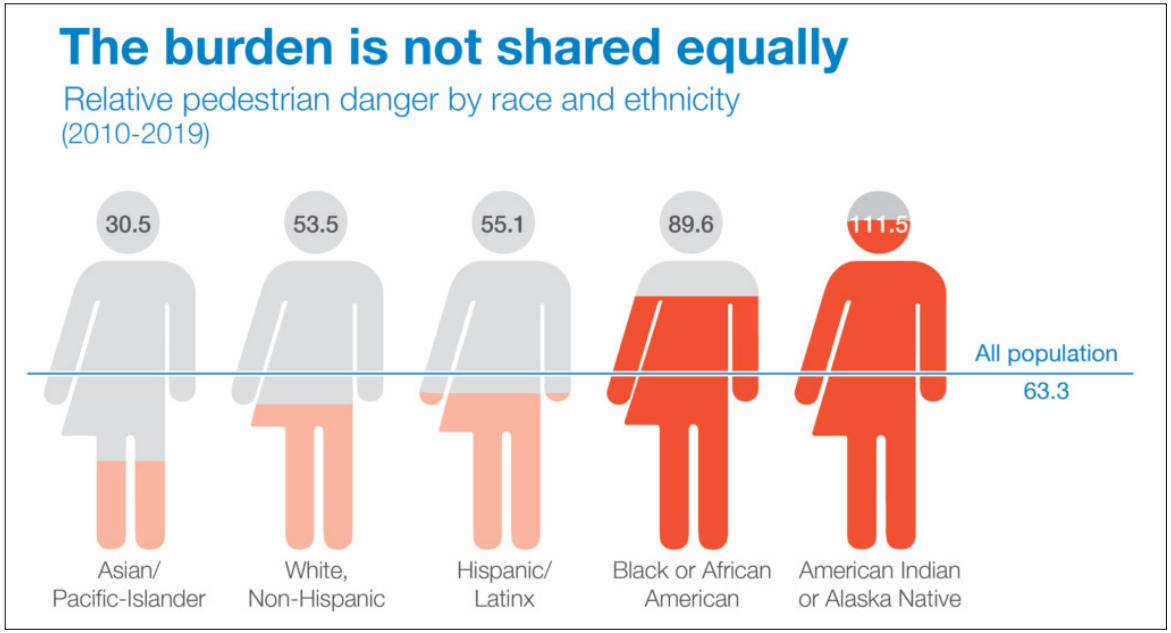


Crashes/Fatalities Not Felt Equally



National Complete Streets Coalition

Equity: Race | Income | Age



Economic Policy

The hidden inequality of who dies in car crashes

By Emily Badger and Christopher Ingraham

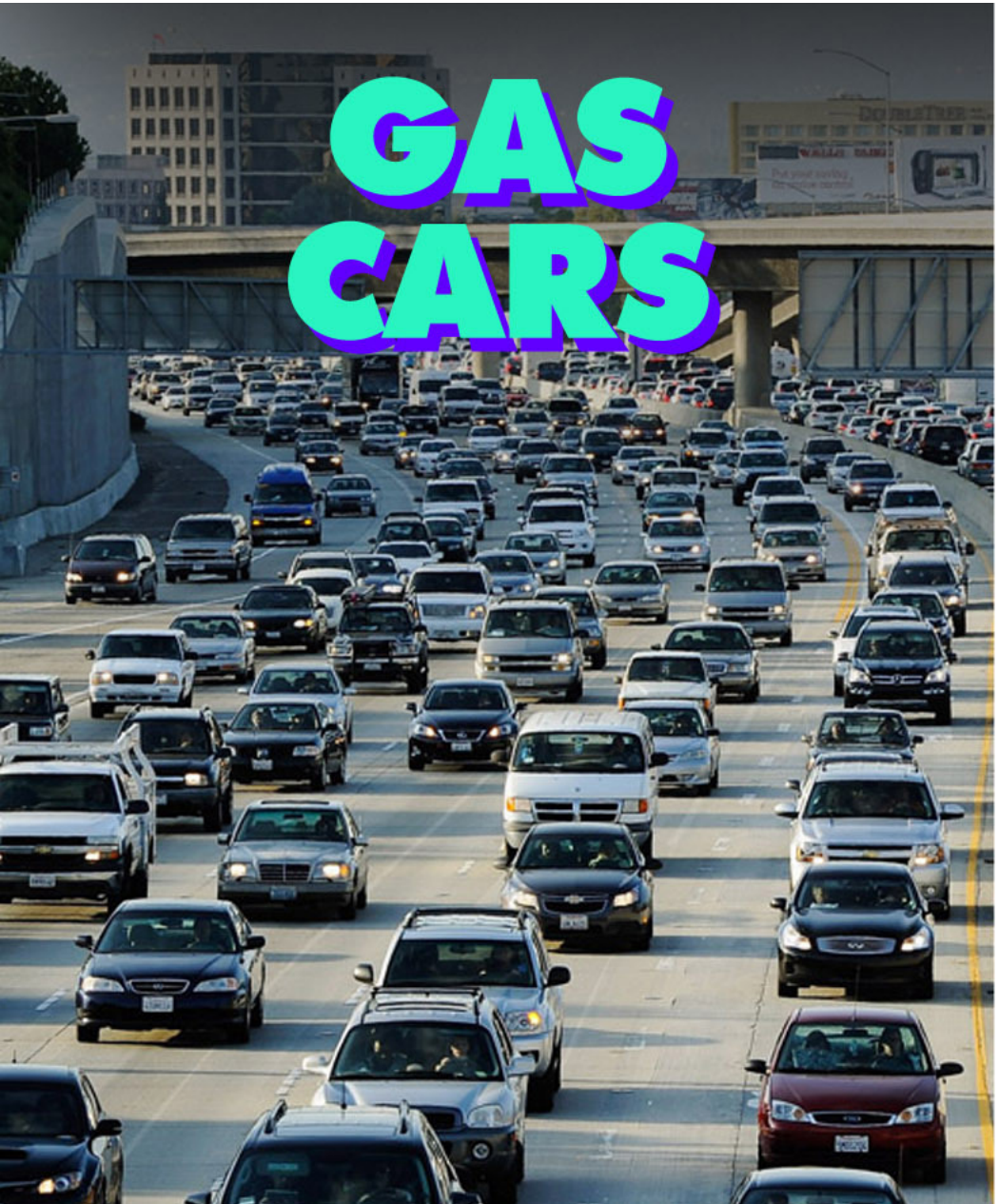
October 1, 2015

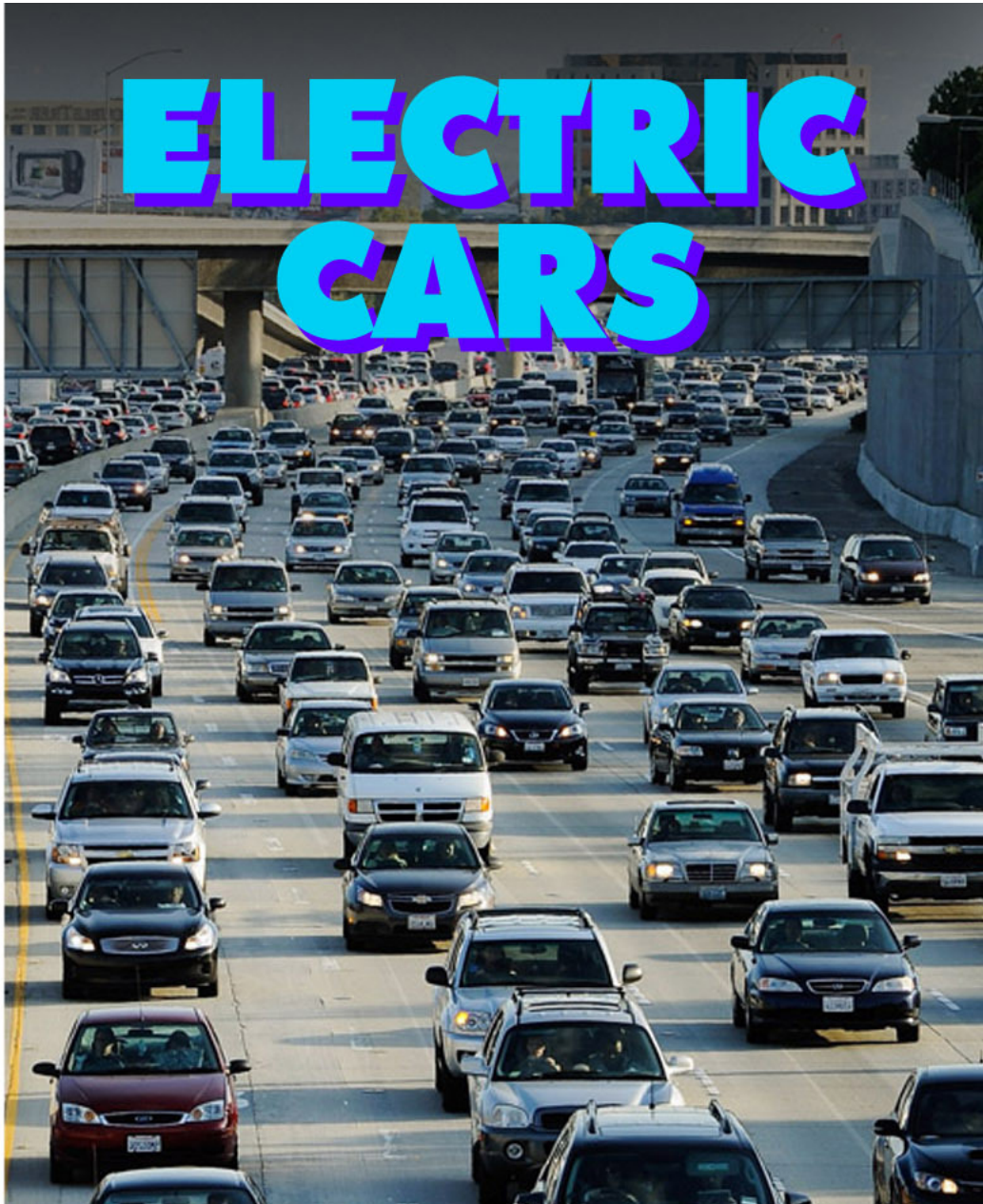
(Courtesy of Flickr user Miika Niemelä , under a Creative Commons license.)

National Complete Streets Coalition

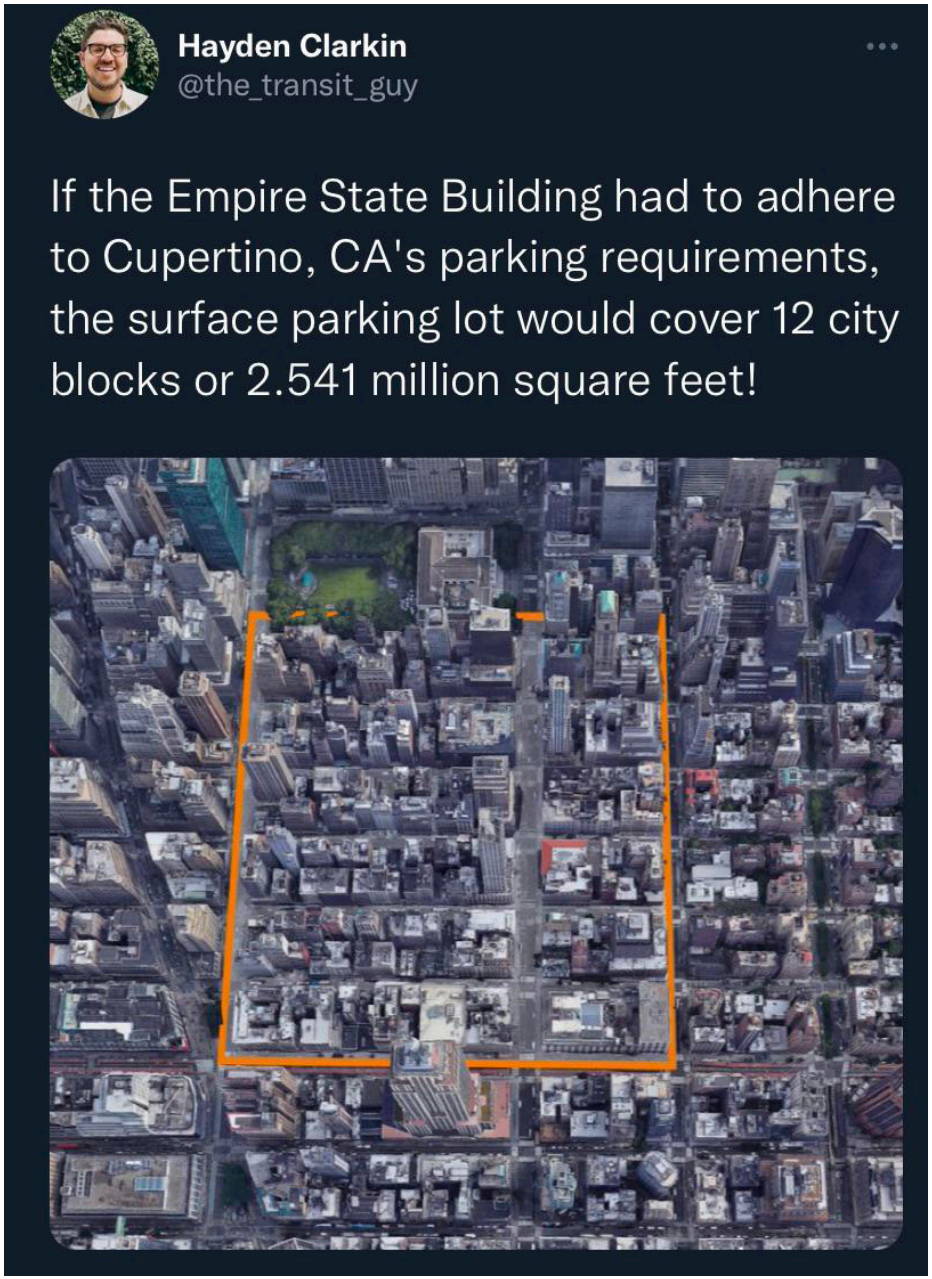
We Can't Keep Doing This.

Electric Cars Will Not Save Us!





Why? Geometry.



The High Cost of Free Parking

GOVERNING
THE FUTURE OF STATES AND LOCALITIES

THE FUTURE OF COMMUNITY DESIGN

Less Parking Could Mean More Housing

Curtailing parking minimums represents a sweeping shift in American attitudes, swapping a glorified car culture for climate-friendly and affordable housing options.

June 12, 2022 • Erika Bolstad, Stateline

Shutterstock

"It's very hard to implement other known strategies for housing affordability or for climate action or for reducing traffic if you're mismanaging your parking, or if you're requiring too much of it."

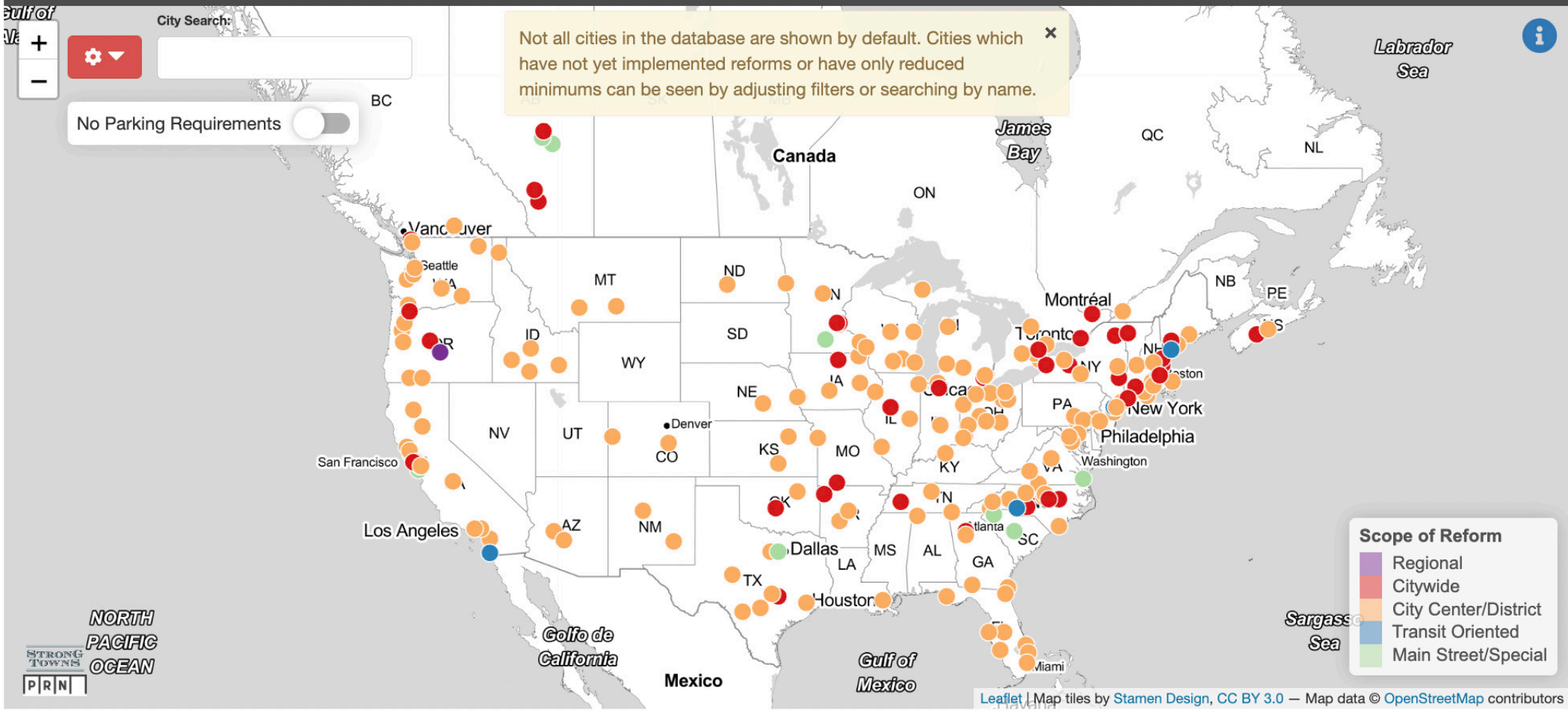

BILTMORE

Parking Reform Network

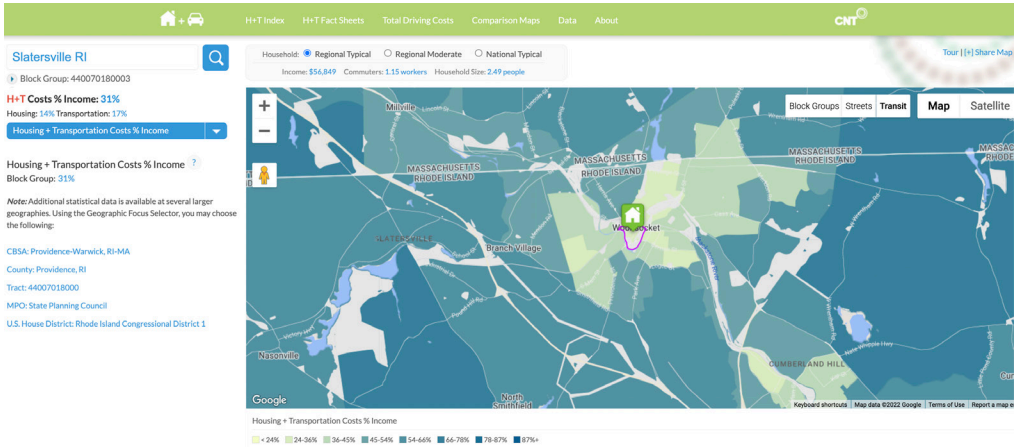
About | Resources | Blog | Mandates Map | Get Involved

Explore the reforms of over 200 cities on the map below. Click the info icon in the upper right corner, or **scroll down on this page**, for definitions and insights. You can submit an update or new report here and send feedback to map@parkingreform.org

Progress on Parking Mandates

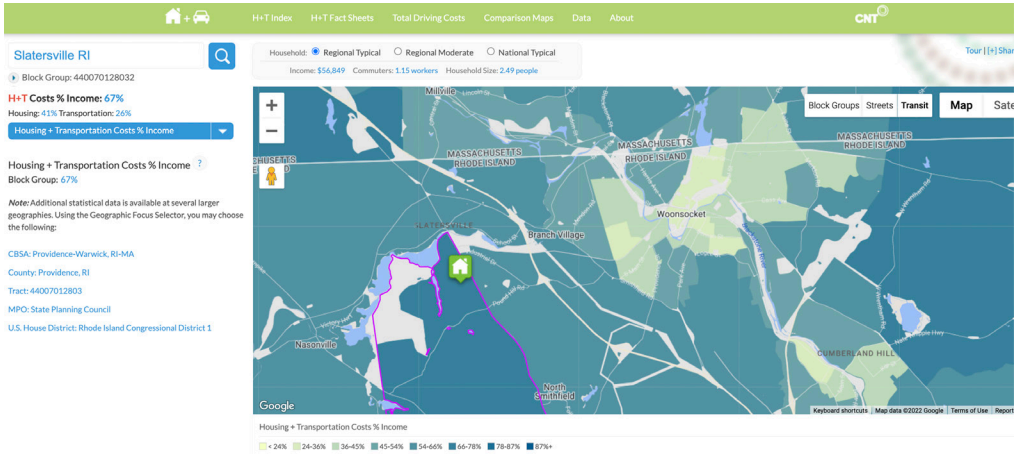


H+T = Total Affordability



Downtown Woonsocket

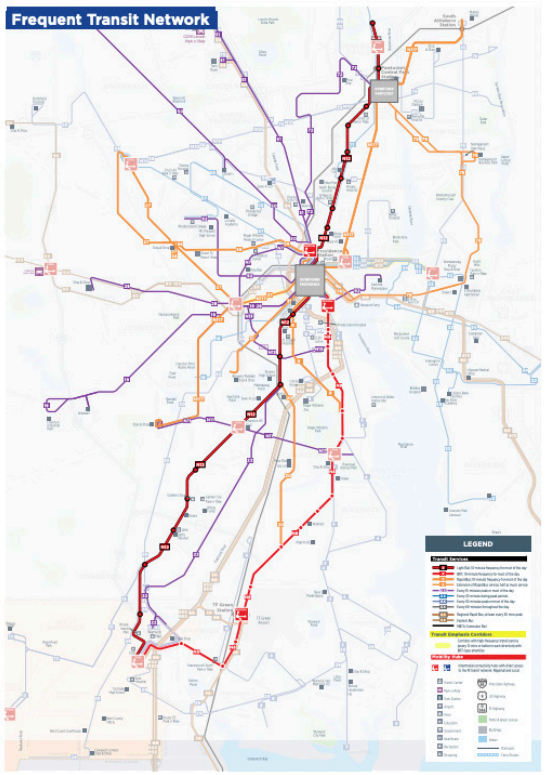
- **Regional Income**: $56,849
- **Housing:** 14%
- **Transportation:** 17%
- **Combined:** 31%

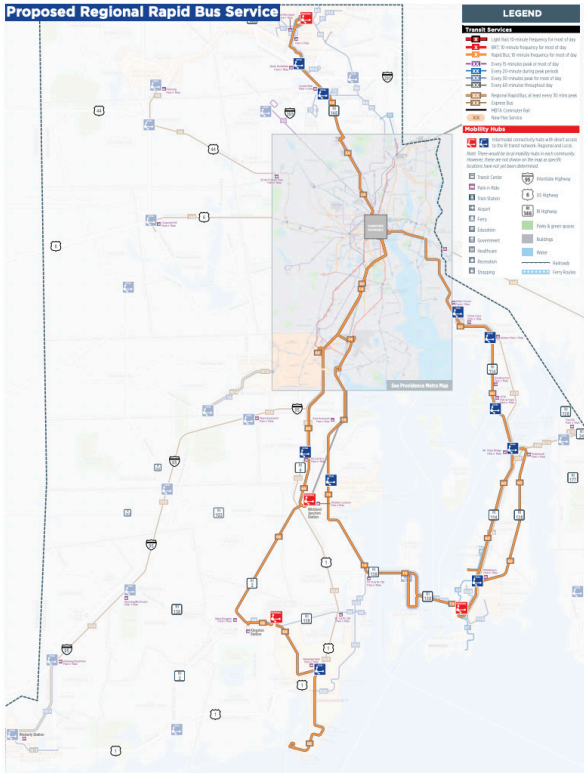


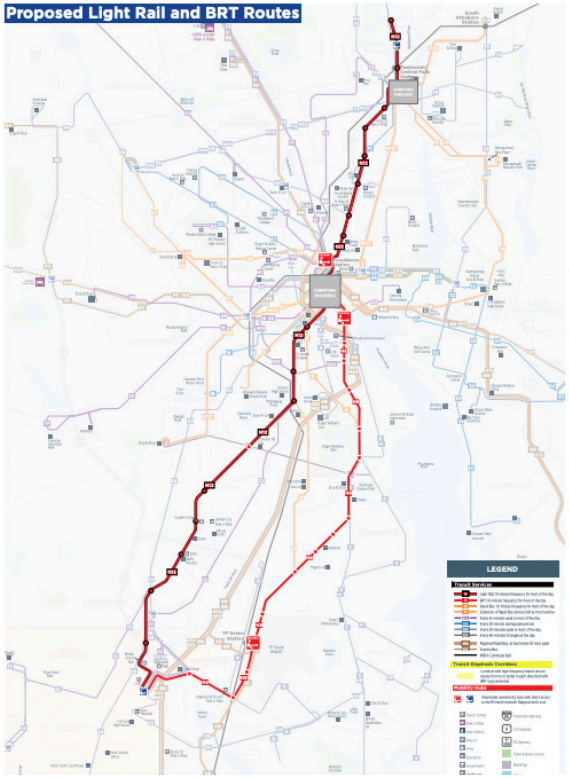
Slatersville

- **Regional Income**: $56,849
- **Housing:** 41%
- **Transportation:** 26%
- **Combined:** 67%

Build RI's Housing + Transit Future



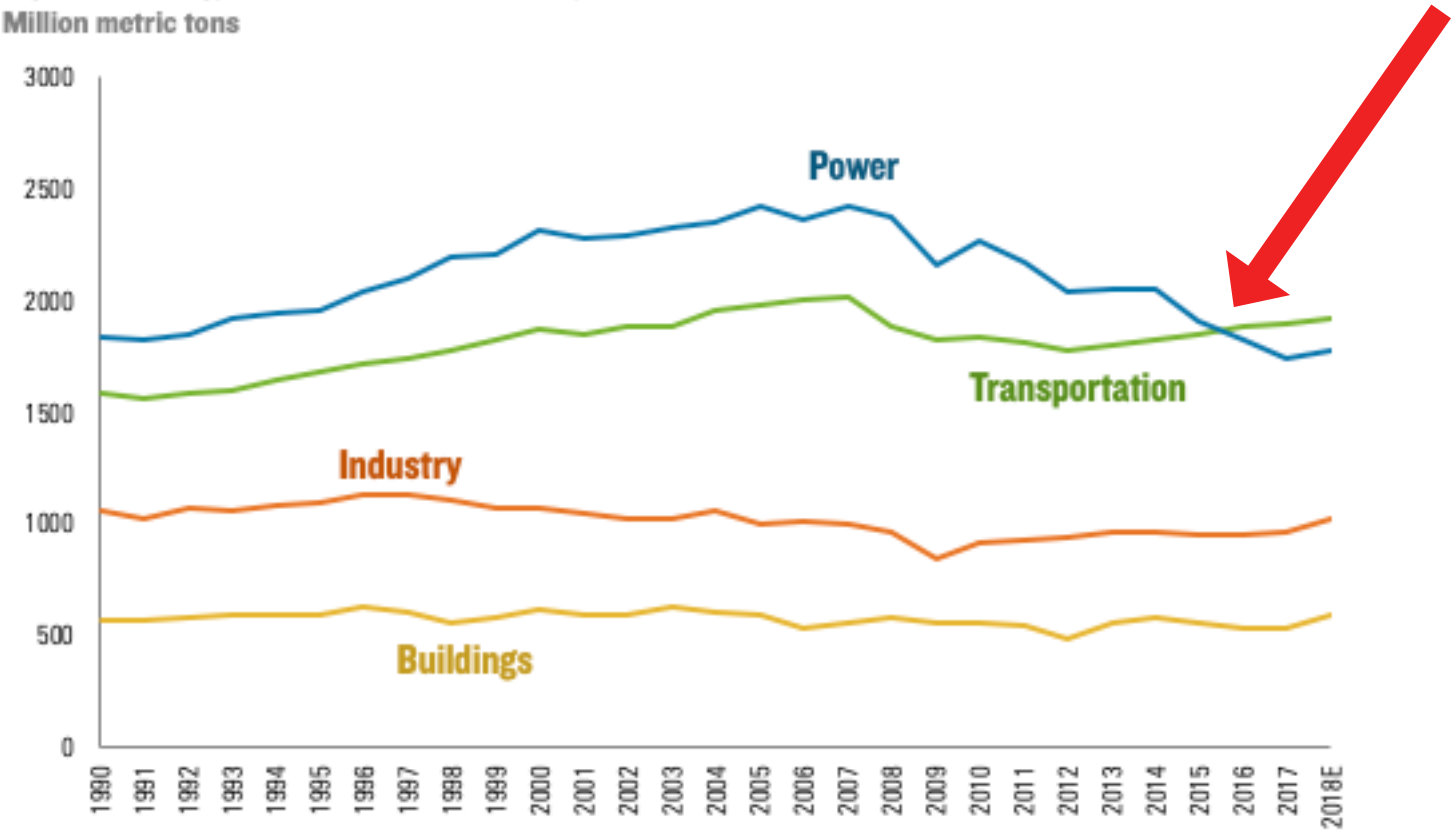




CO2 Emission: Transport is #1 Offender

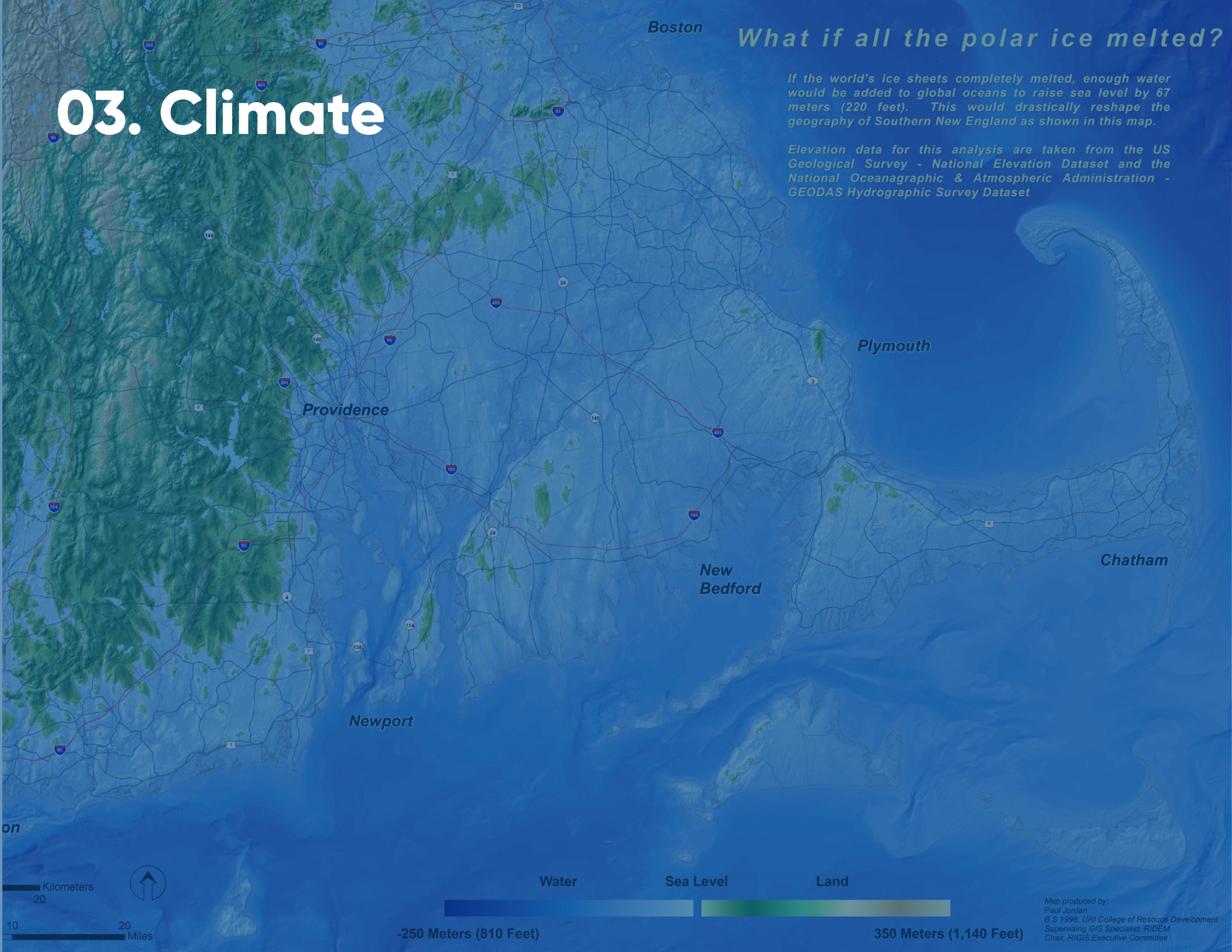
Figure 4: Energy-related CO_2 emissions by sector

Million metric tons

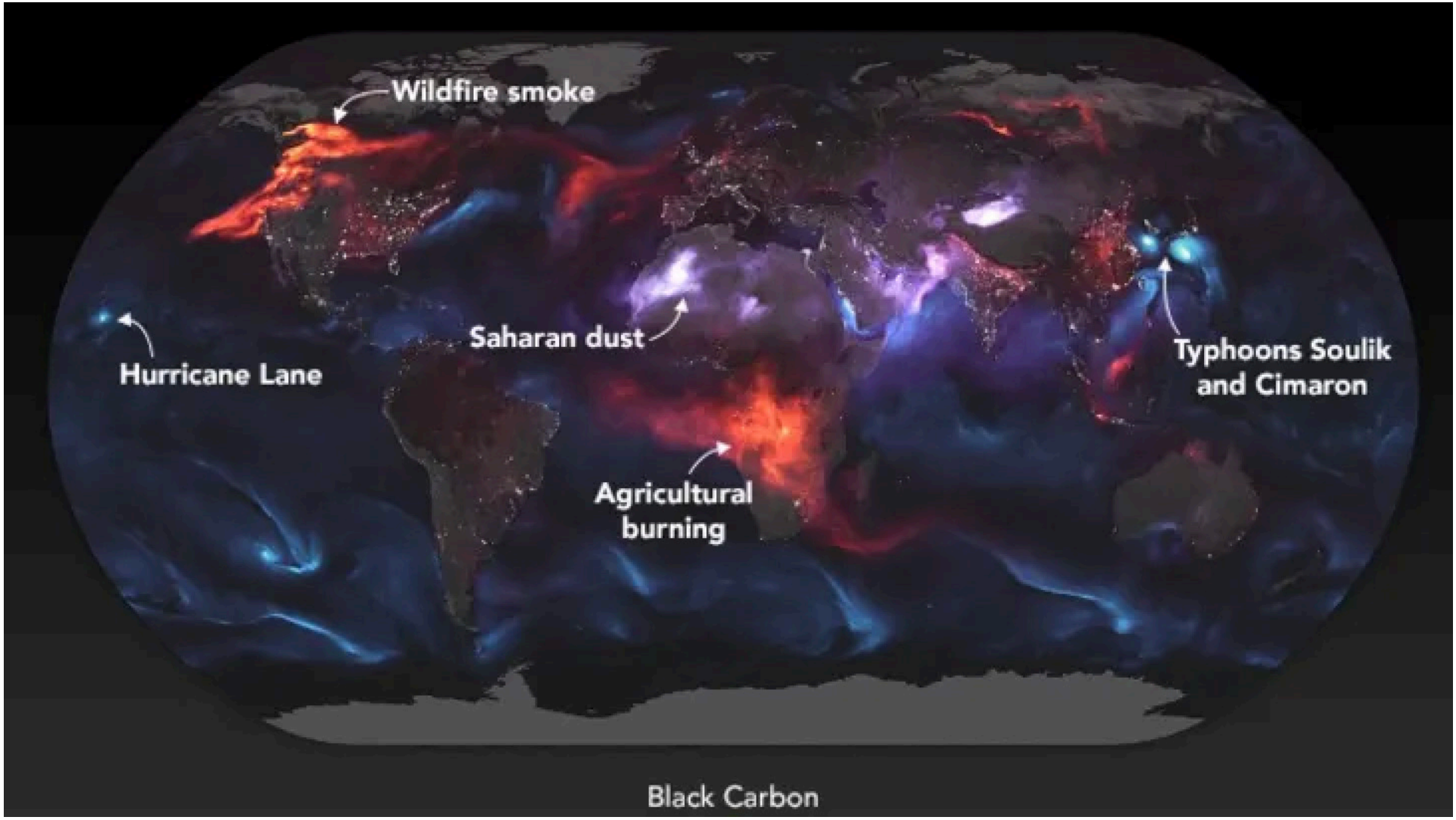


Source: Rhodium US Climate Service

03. Climate


What if all the polar ice melted?
If the world's ice sheets completely melted, enough water would be added to global oceans to raise sea level by 67 meters (220 feet). This would drastically reshape the geography of Southern New England as shown in this map.
Elevation data for this analysis are taken from the US Geological Survey - National Elevation Dataset and the National Oceanagraphic & Atmospheric Administration - GEODAS Hydrographic Survey Dataset
Boston
Plymouth
Providence
New Bedford
Chatham
Newport
Kilometers
20
10
20
Miles
Water
Sea Level
Land
-250 Meters (810 Feet)
350 Meters (1,140 Feet)
Map produced by:
Paul Jordan
B.S 1998, URI College of Resouce Development
Supervising GIS Specialist, RIDEM
Chair, RIGIS Executive Committee

Local Actions With Global Outcomes



Source: NASA

A Convergence of Crises

KHN

DONATE

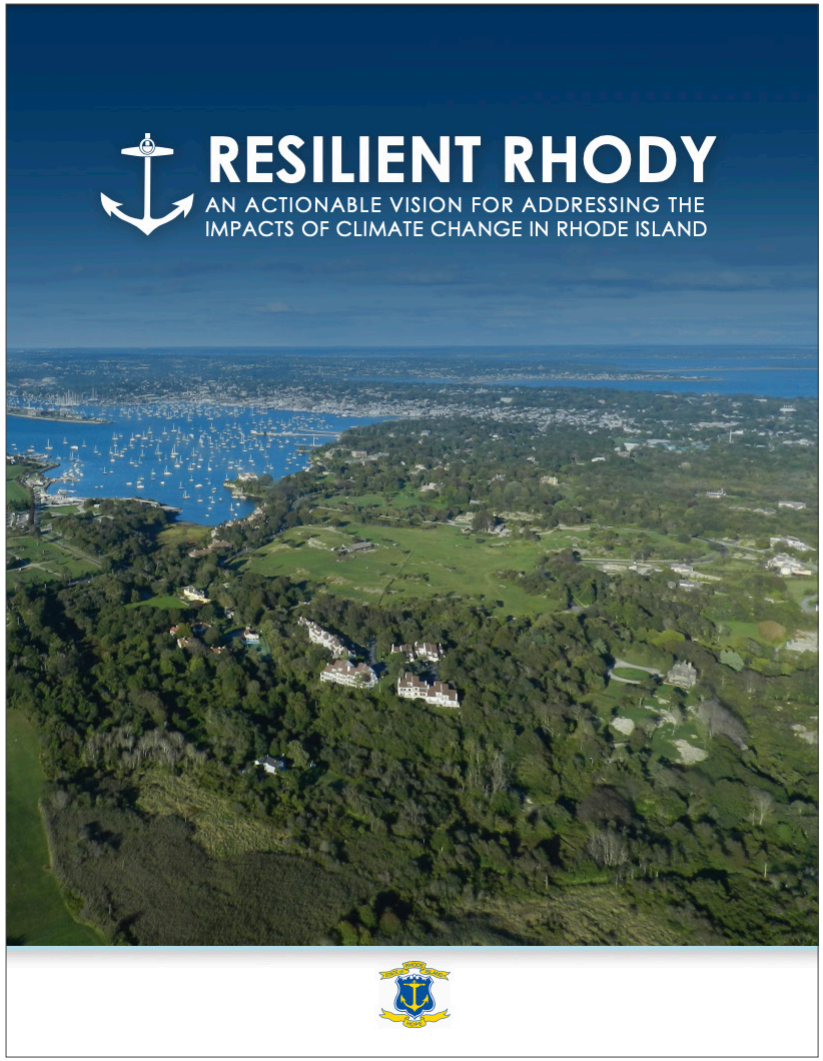
Wildfire Smoke Drives People in Low-Vaccinated Areas Indoors, Raising Outbreak Fears

By Aaron Bolton
JULY 22, 2021

REPUBLISH THIS STORY

Smoke from wildfires burning through bone dry forests and grasslands in the West covered the city of Helena, Montana on Sunday. (MATT VOLZ / KHN)

Climate Change



- Precipitation rates are climbing an inch almost every 10 years.

- The 2010s the hottest decade on record – Narragansett Bay has increased 2.5–2.9°F (from 1960–2010). (Wintertime water temperatures are warming the most rapidly.)

- Sea levels have risen > 10 inches in RI since 1930; accelerating in Rhode Island and globally.

Projected Impacts: Hotter + Wetter

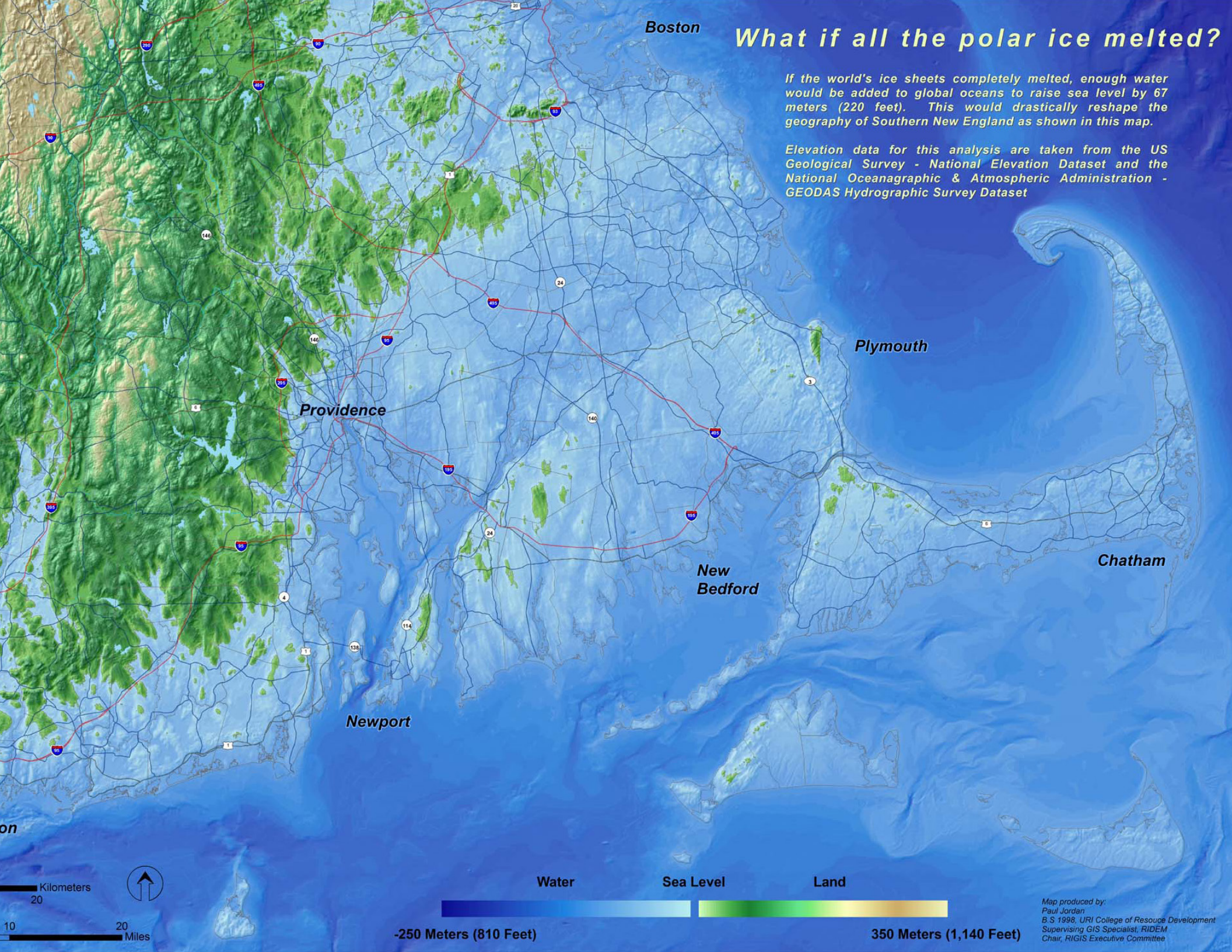
- Historically unprecedented warming is projected by the end of the 21st century.

- Increased intensity of heat waves

- Continued increases in frequency and intensity of extreme precipitation

- Sea level rises at least 9′ by 2100

https://www.weather.gov/nerfc/crar1_flood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04. Response

Decarbonize + Humanize Our Communities

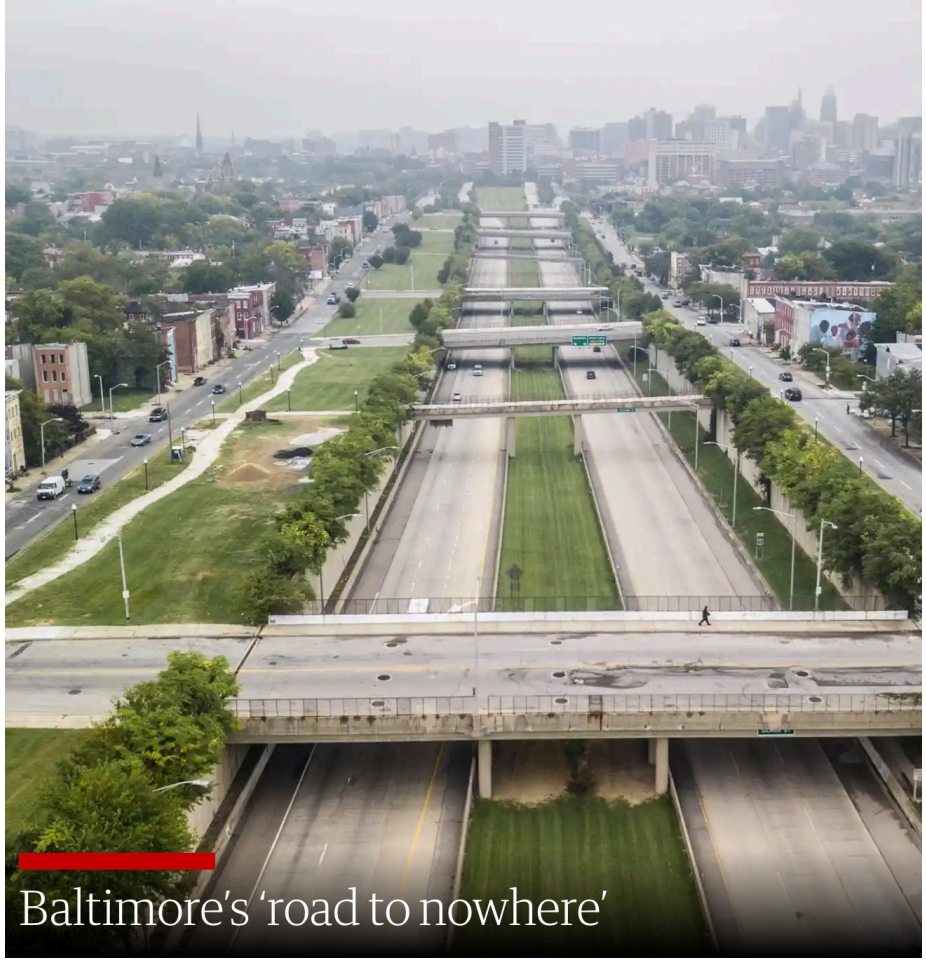

SOHO
TRUCK
Prince St

The Vocal Response

Conventional Project Delivery

1. Overly focused on large-scale, inflexible, and expensive projects with extended timelines.

2. Projects too often build on a history of racist policy; and a flawed process that lacks transparency, favors those with time/money, and ultimately breeds public mistrust.

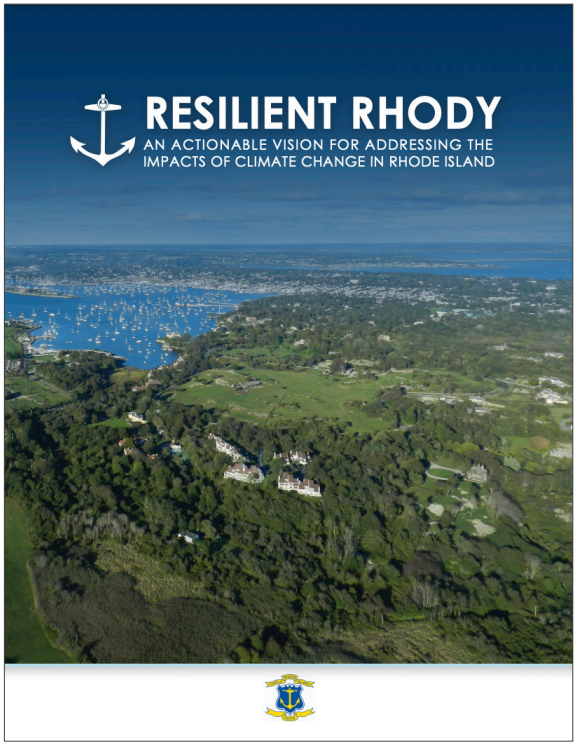


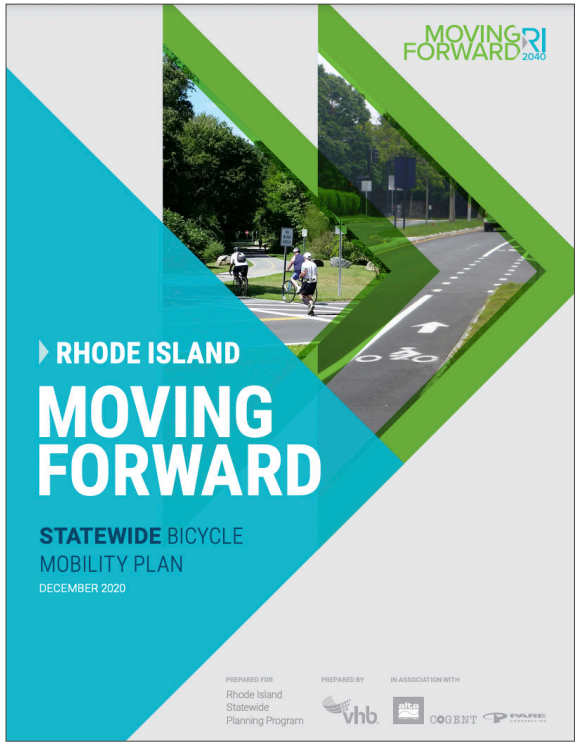
The Guardian

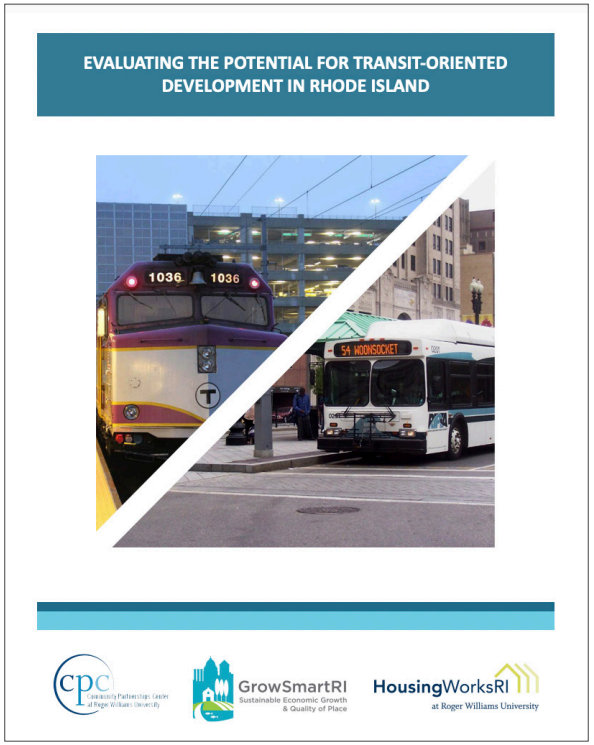
An Overcorrection? Now What?

"Liberal governance has developed a puzzling preference for legitimating government action through process rather than outcomes."

– Nicholas Bagley







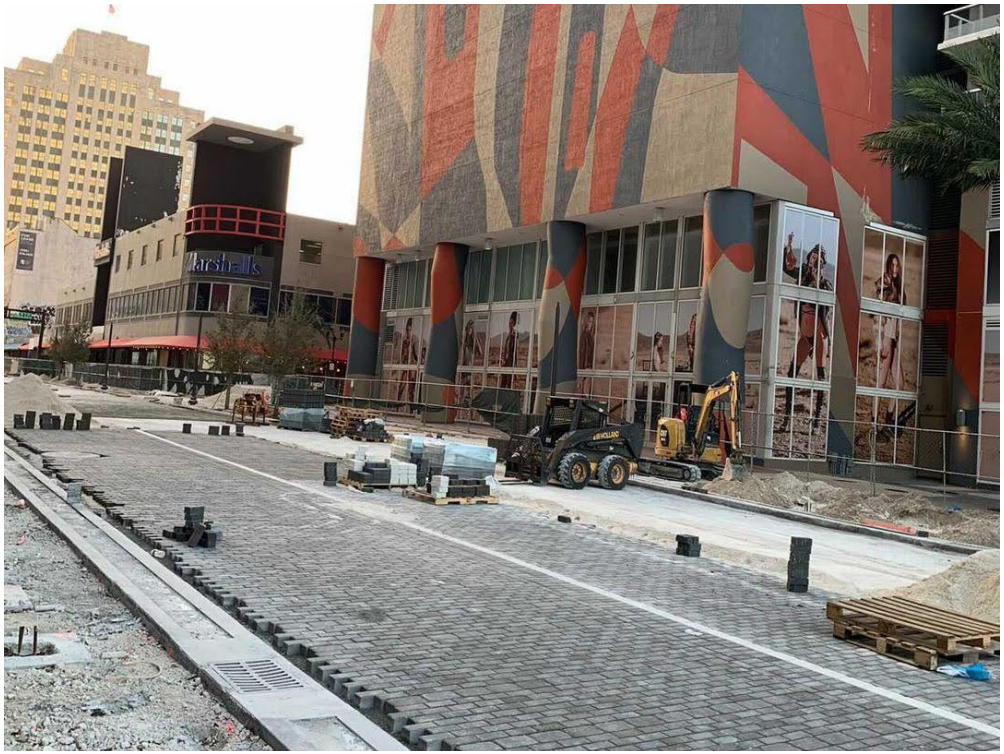
"To Innovate is to start."

– Jaime Lerner

Create (Politically) Positive, Short-Term, Low-Risk Outcomes!

Short-term Action | Long-Term Change

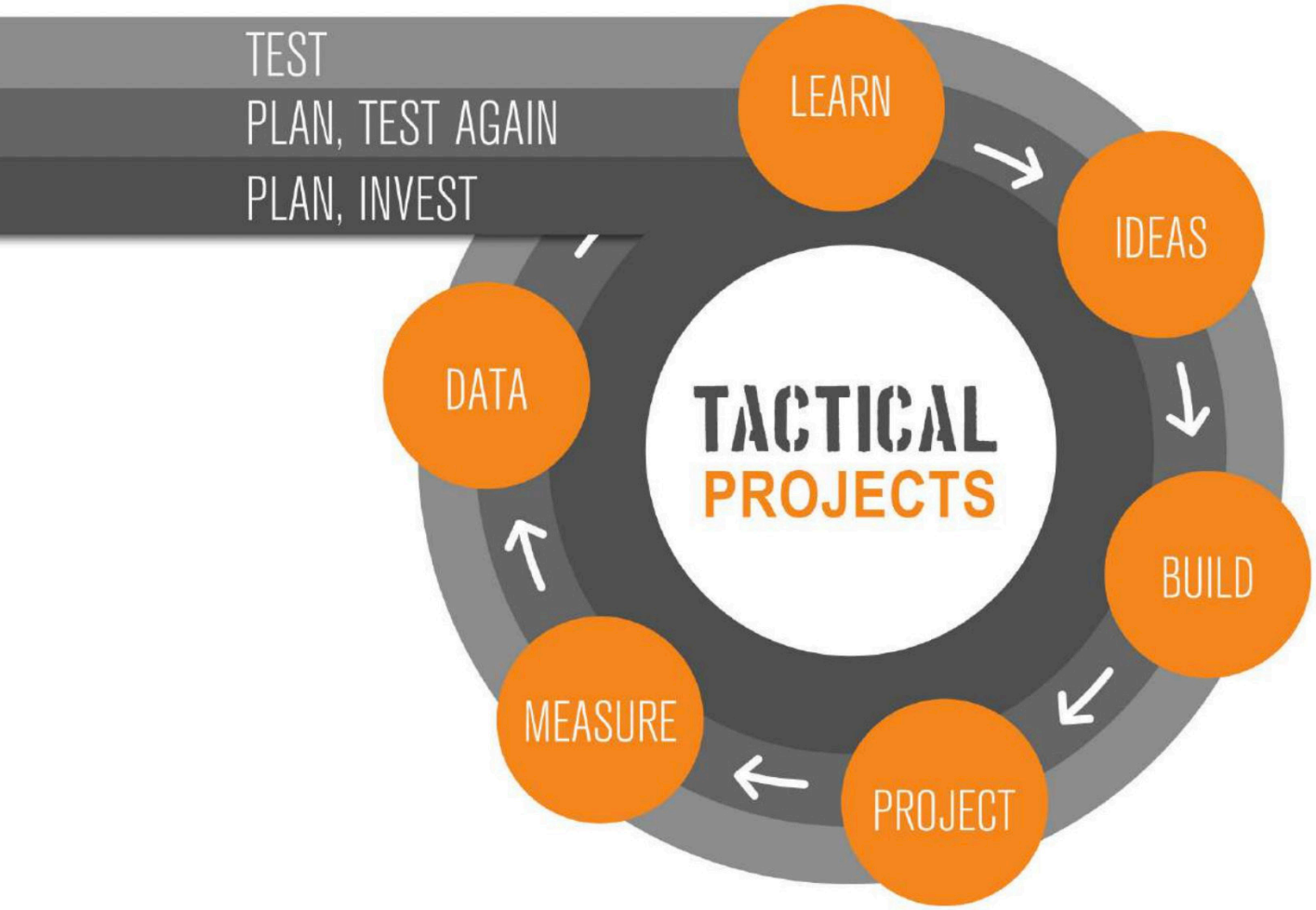
TheNextMiami.com



Tactical Urbanism

An approach to community-building using short-term, low-cost, and scalable projects **intended** to catalyze long-term change.

Methodology



LONG-TERM/CAPITAL
(20 years - 50+ years · $$$$)

Federal, state, local government, local / regional /state organizational support

High-cost, permanent materials that cannot be adjusted easily; maintenance needs vary tremendously

Required before implementation, recommended during implementation and initial evaluation period, optional thereafter

Low: project is considered a permanent capital upgrade that is unlikely to be adjusted significantly once installed

Qualitative: optional
Quantitative: recommended

Rethinking Project Delivery

Tactical Urbanism

Project Type (time interval · relative cost)	**DEMONSTRATION** (1 day - 1 month · $)	**PILOT** (1 month- 1+ year · $$)	**INTERIM DESIGN** (1 year - 5+ years · $$$)	**LONG-TERM/CAPITAL** (20 years - 50+ years · $$$$)
Project Leaders	Anyone (government, non-profit organizations, business groups, students etc.)	Local / regional government, local organizational support	Local / tegional government, local / regional organizational support	Federal, state, local government, local / regional /state organizational support
Materials + Maintenance	Very low-cost, typically low-durability. May be borrowed, easily made, or purchased; no maintenance required	Relatively low-cost, but semi-durable materials to maximize design flexibility while minimizing maintenance needs	Low and moderate cost materials, designed to balance design flexibility, performance outcomes, and maintenance	High-cost, permanent materials that cannot be adjusted easily; maintenance needs vary tremendously
Public Involvement	Optional before project implementation, Recommended during brief project lifespan	Required, frequent before implementation and frequent during evaluation period	Recommended, frequent before implementation, required during initial evaluation period, optional thereafter	Required before implementation, recommended during implementation and initial evaluation period, optional thereafter
Design Flexibility	High: organizers expect project to be adjusted and removed within a short timeline, typically one week or weekend	High: proponents expect project to be adjusted; it may be removed if it does not meet goals upon initial evaluation	Moderate: organizers expect project to be adjusted, but it is intended to remain in place until capital upgrades are possible	Low: project is considered a permanent capital upgrade that is unlikely to be adjusted significantly once installed
Data Collection + Evaluation	Qualitative: optional Quantitative: optional	Qualitative: required Quantitative: required	Qualitative: recommended Quantitative: required	Qualitative: optional Quantitative: recommended

Benefits

1. People work together in new ways - experiential engagement!

2. The data-driven methodology uncovers what works, and more importantly, **what doesn't!**

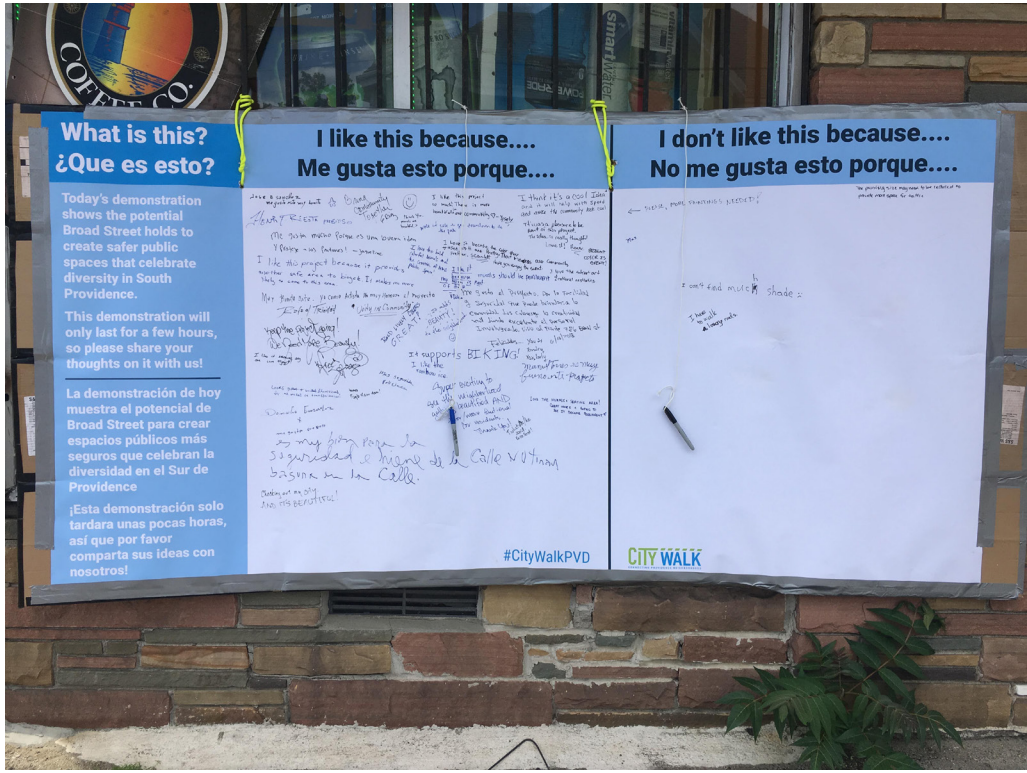
3. Builds political will and delivers public benefits faster!

Penrith Council

Engagment During a Planning Process

Providence, RI


CHILDREN
Elmwood
DABOLL ST
DO NOT
ENTER

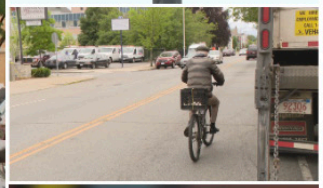

What is this?
¿Que es esto?
Today's demonstration shows the potential Broad Street holds to create safer public spaces that celebrate diversity in South Providence.
This demonstration will only last for a few hours, so please share your thoughts on it with us!
La demonstración de hoy muestra el potencial de Broad Street para crear espacios públicos más seguros que celebran la diversidad en el Sur de Providence
¡Esta demonstración solo tardara unas pocas horas, así que por favor comparta sus ideas con nosotros!
I like this because....
Me gusta esto porque....
I don't like this because....
No me gusta esto porque....
#CityWalkPVD
CITY WALK

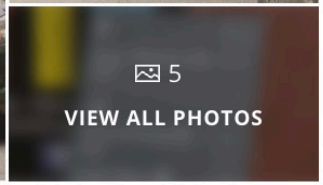

THE BEST SANDWICHES IN TOWN

Short-Term Action | Long-term Change

Safety, accessibility changes coming to Providence's Broad Street

by GABRIELLE CARACCIOLO, NBC 10 NEWS | Wednesday, June 1st 2022





Traffic on Broad Street in Providence, Wednesday, June 1, 2022. (WJAR)

PROVIDENCE, R.I. (WJAR) — Changes are coming to Broad Street in Providence as part of the city's Great Streets Initiative, which aims to make roads safer and more accessible to both bikers and pedestrians.

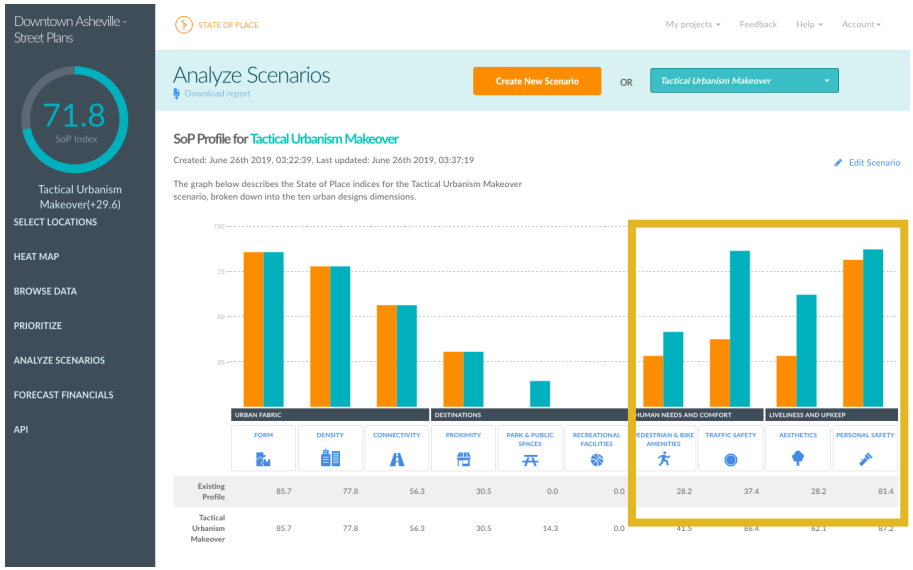
"Every street in Providence should be safe," Mayor Jorge Elorza said. "It's supporting the people that already use it, but there's also a really strong 'build it and they will come' aspect to it."

Pilot Test to Inform a Capital Project

Asheville, NC

- Average speed reduced by 28%
- Incidents of speeding reduced from 66% to 21%
- Highest speed before: 89mph
- Highest speed after: 41mph
- Vehicular counts: No change

State of Place: Value Capture



1 State of Place Index Score **42.3 to 71.8**

2 Primary Benefits: Human Needs and Comfort + Liveliness and Upkeep

3 Value Capture Forecast:

- **Econonic Benefit:** $3,510,323.52
- **ROI:** $23.40 per dollar spent

Next Steps

Coxe Avenue and South Lexington Avenue Design and Engineering Project, Asheville NC

Buncombe County

Owner Reference: 298-RFLOI-Coxe-Lexington

Bid Date: 03/31/2020

In accordance with North Carolina General Statute Chapter 143 Article 3D, the City of Asheville, North Carolina, cordially invites you to submit Letters of Interest (Statements of Qualifications) for professional design and engineering for the Coxe Avenue and South Lexington Avenue Complete Streets Projects. This project encouraged MBE/WBE participation.

City of Asheville
Dustin Clemens
(828) 575-4385
Login or create an account To view email

Published 02/06/2020 on Construction Bid Source

Interim Design
Culver City, CA

Overview

- Scale: Three corridor, multi-year interim design initiative

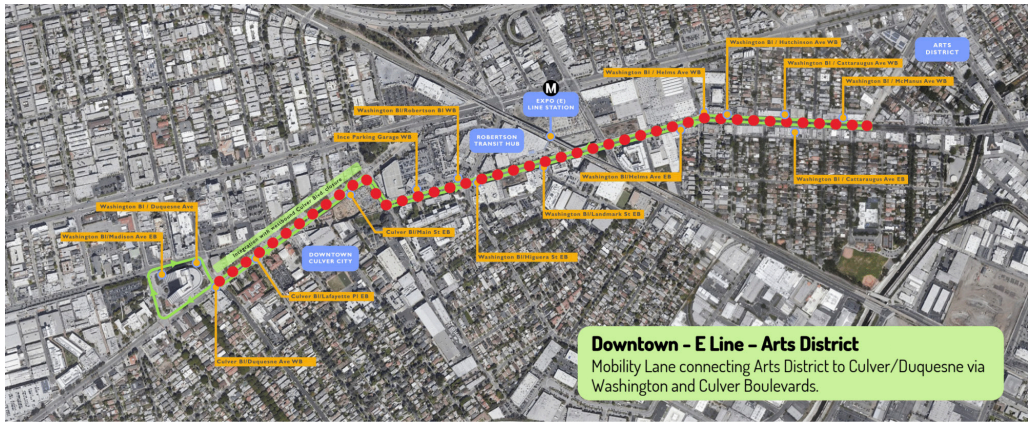
- Phase 1: Nov. 2020 - Nov. 2021

- Length: 1.3 mile segment of Washington Boulevard / Culver Boulevard

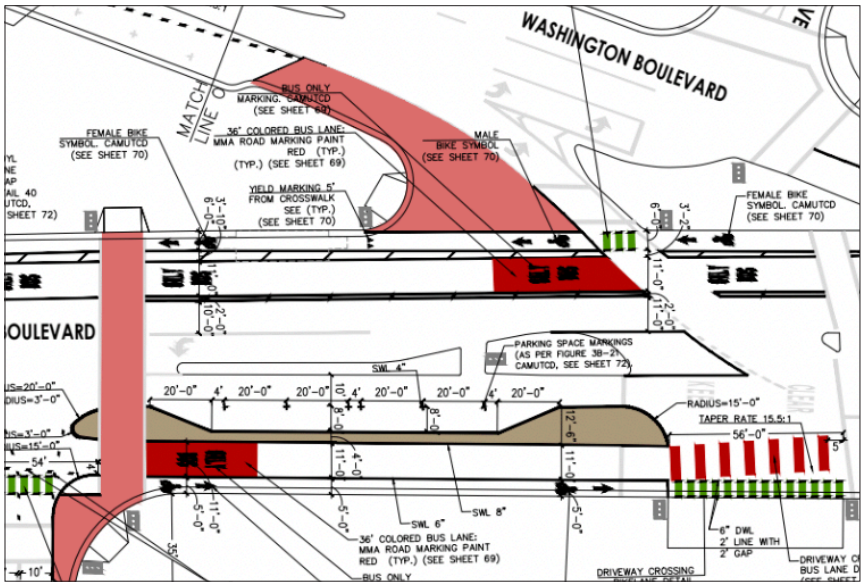
- 32 curb extensions filled with the world's largest application of asphalt art (we think).

- Purpose: Implement Transit-Oriented Development Visioning Plan and the Bicycle and Pedestrian Action Plan

MOVE Culver CITY

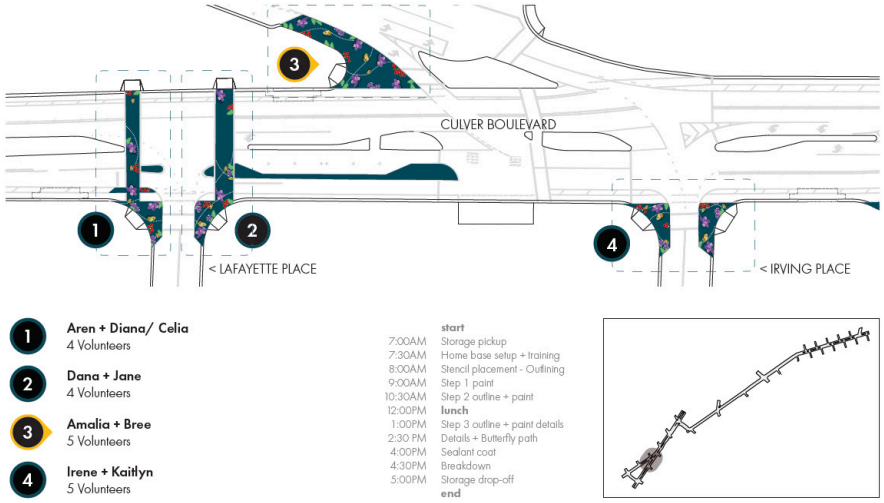


Design Approach



MOVE CULVER CITY

ASPHALT ART IMPLEMENTATION PLAN



Project Elements

Bus Lanes

Pedestrian Safety

Micromobility

Placemaking

Before

After

Culver Boulevard (Before)

Curb-to-Curb width: 78′

Sustainable Mobility Allocation: 0% of Street Space

Culver Boulevard (After)

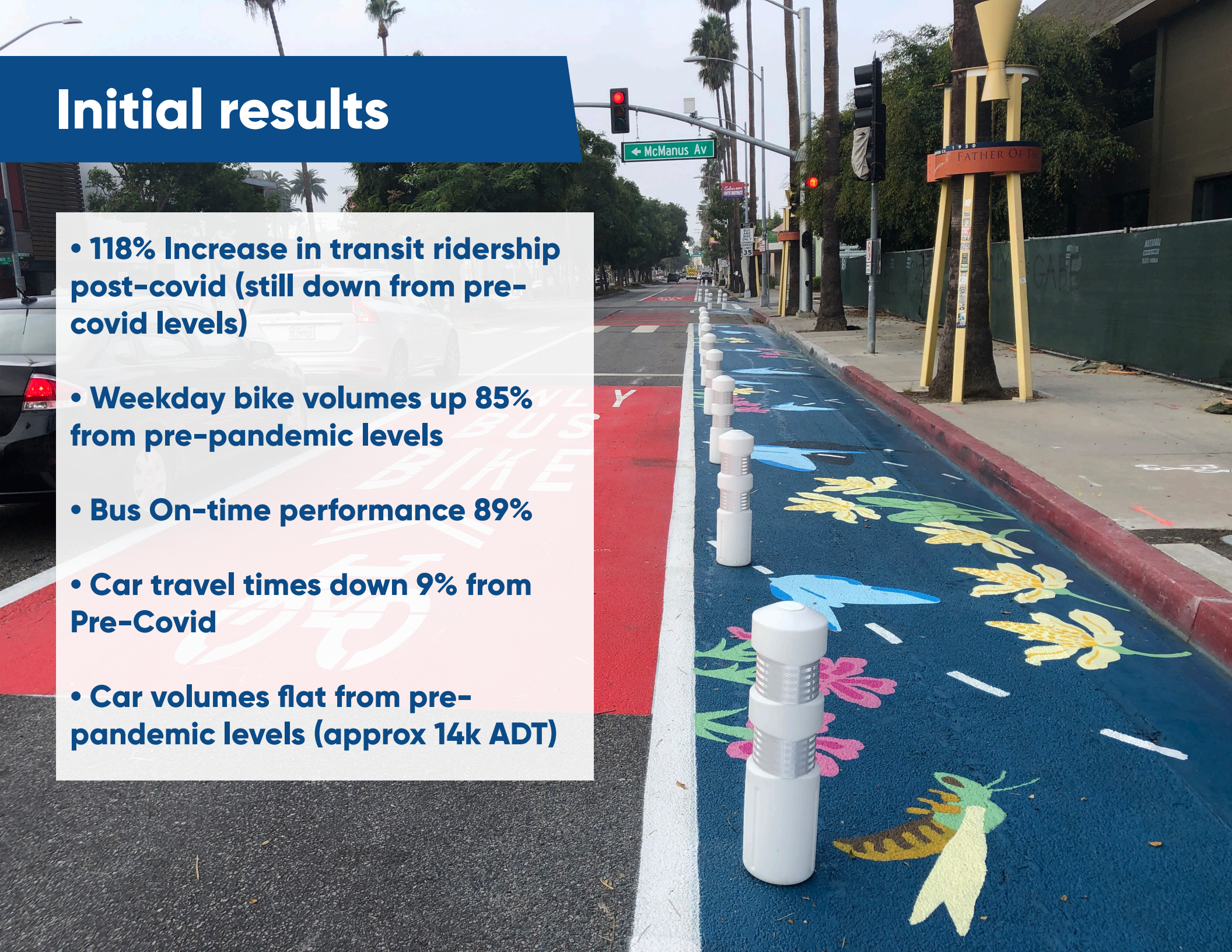
Curb-to-Curb width: 78′

Sustainable Mobility Allocation: 63% of Street Space

Community Participation

Initial results

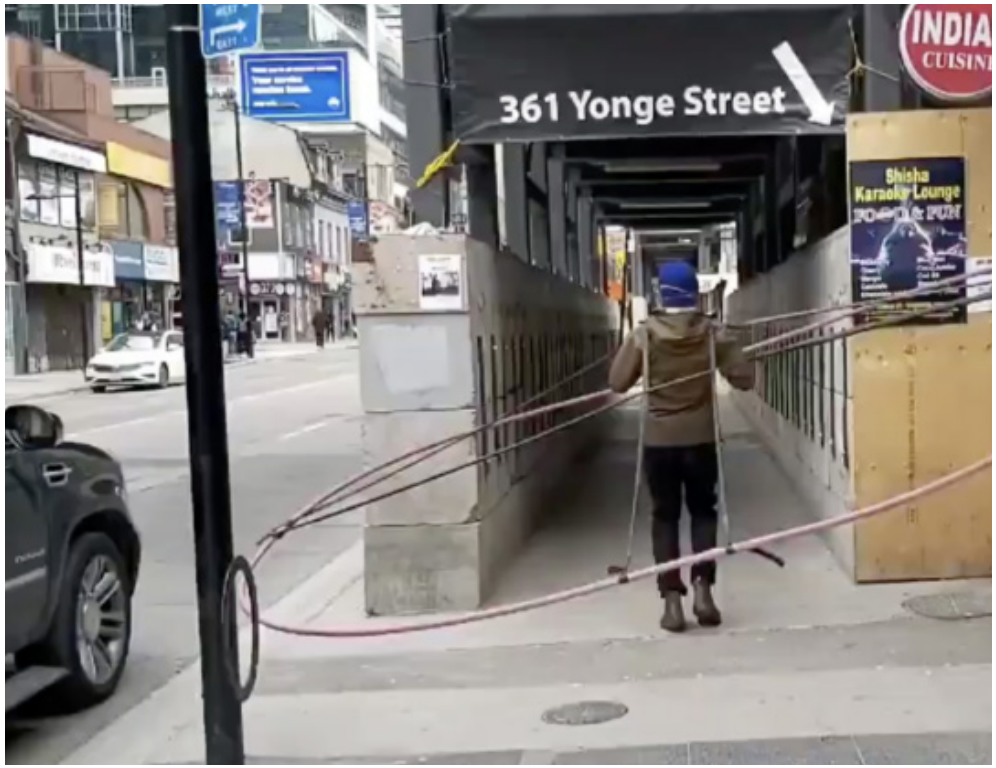
- 118% Increase in transit ridership post-covid (still down from pre-covid levels)
- Weekday bike volumes up 85% from pre-pandemic levels
- Bus On-time performance 89%
- Car travel times down 9% from Pre-Covid
- Car volumes flat from pre-pandemic levels (approx 14k ADT)



March 2020

Designing for a 6′ Radius
Cities Everywhere

Paul Shoul



Daniel Rotsztain

OPINION

New York City is dead forever

By James Altucher

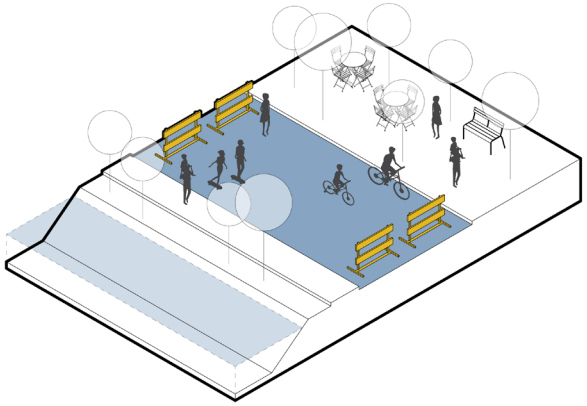
August 17, 2020 | 4:16pm | Updated

MORE ON:
CORONAVIRUS IN NY

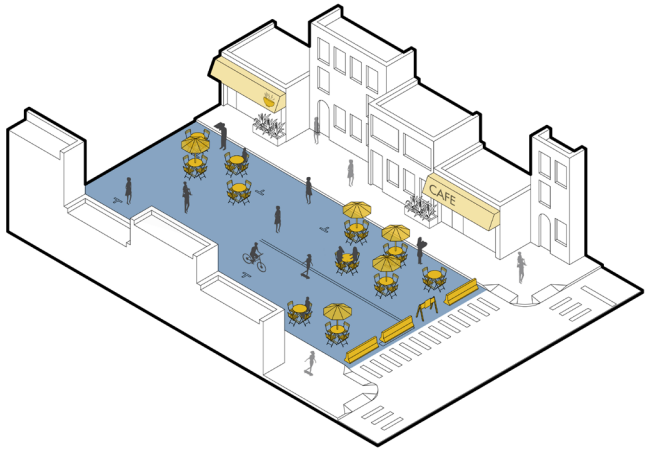
NYC readies vax hubs to give COVID shots to tots

Author, comedy club owner and former hedge-fund manager James Altucher self-published this essay on Thursday, Aug. 13, under the title, "NYC is dead forever. Here's why." He granted the New York Post permission to reprint his piece in full below.

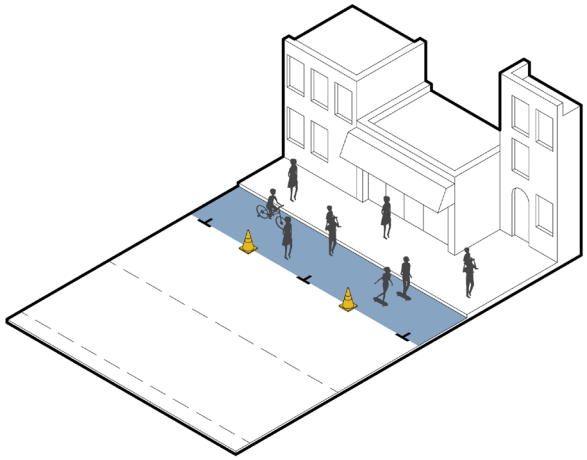
Covid Response Typology



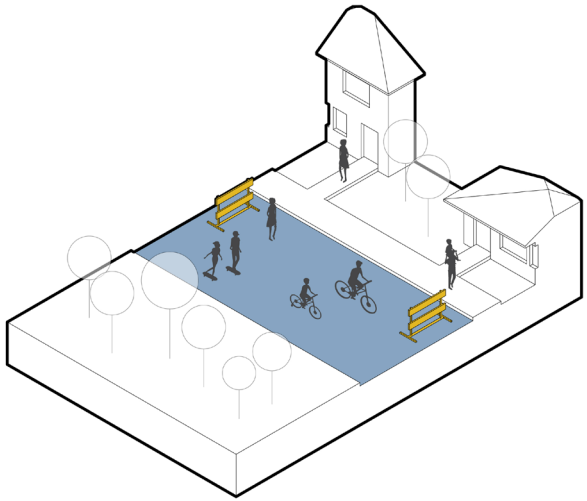
Open Streets



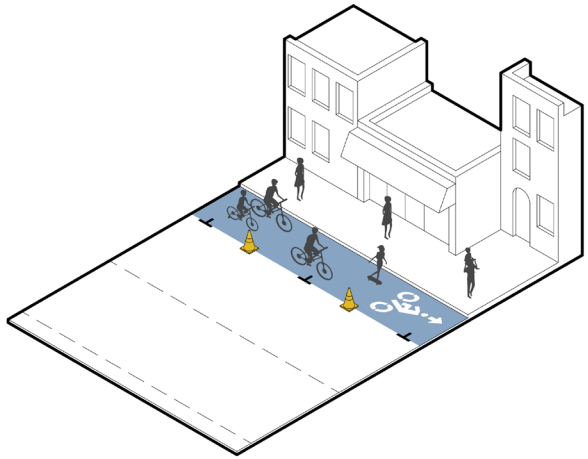
"Streateries"



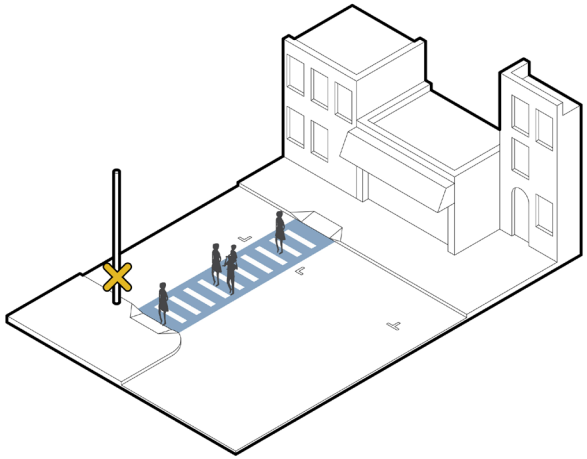
Open Curbs



Slow /Shared Streets

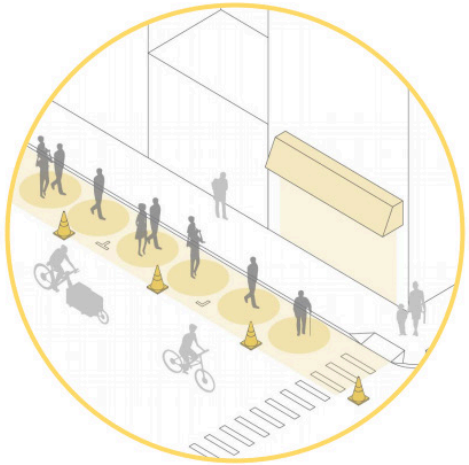


Temporary Bike Lane



Pedestrian Signal Recall

Emerging Practice: Tactical Resilience

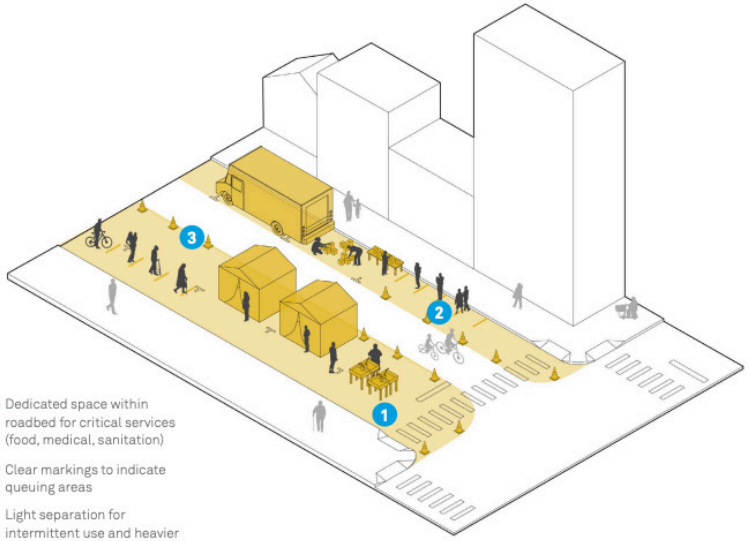


Streets for Pandemic Response & Recovery

NACTO

Global Designing Cities Initiative

CRITICAL SERVICES



1. Dedicated space within roadbed for critical services (food, medical, sanitation)
2. Clear markings to indicate queuing areas
3. Light separation for intermittent use and heavier separation for continuous use

Provide space for critical/temporary food, sanitation, health, medical, or social services distribution centers.

CONTEXT

- Near key essential destinations such as markets, clinics, community centers, and transit stops.
- Adjacent to hospitals or medical centers that require additional capacity.

KEY STEPS

- Identify and prioritize relevant locations based on city demographic/health data and medical center locations.
- Work with local medical centers to forecast where expanded capacity might be needed.
- Fully or partially close streets to erect tents, distributions centers, or mobile stations.

TIMELINE: Days to weeks.

DURATION: Hours, days, weeks, or months.

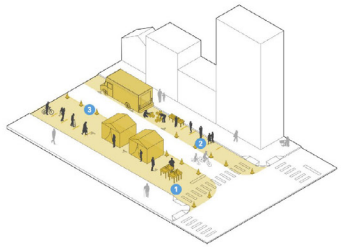
Credit: Justin Sullivan/Getty Images

San Francisco, CA, USA

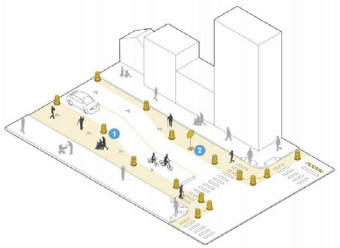
A sanctioned tent encampment for people experiencing homelessness in San Francisco provides physical distance markers for tents and amenities.

Streets for Pandemic Response & Recovery

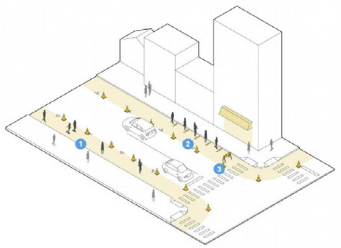
Critical Services



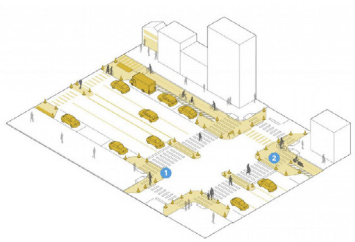
Managing Speeds



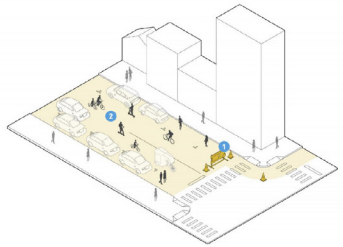
Sidewalk Extensions



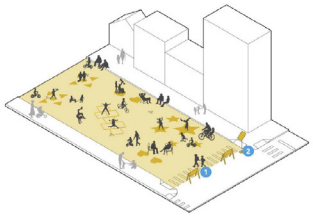
Safe Crossings



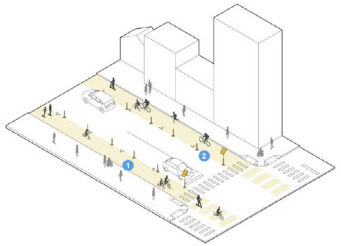
Slow Streets



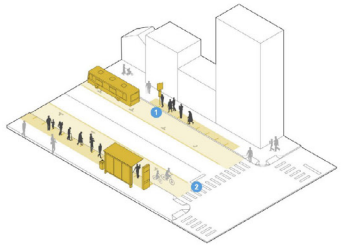
Open/Play Streets



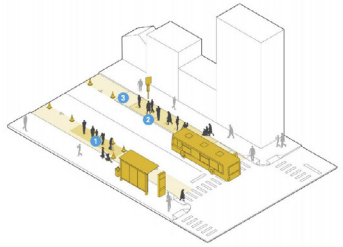
Bike & Roll Lanes



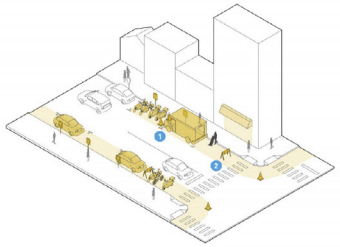
Transit Lanes



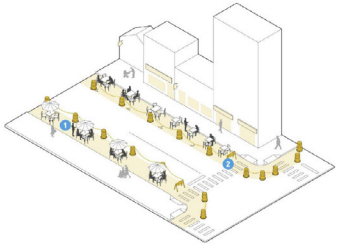
Transit Stops & Access



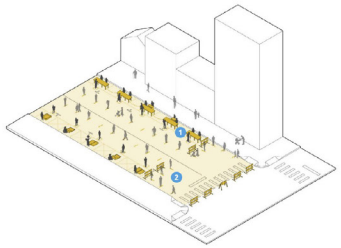
Pick-up & Delivery



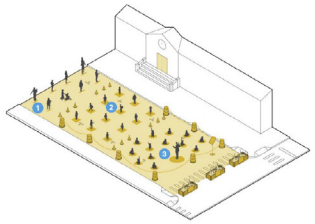
Outdoor Dining



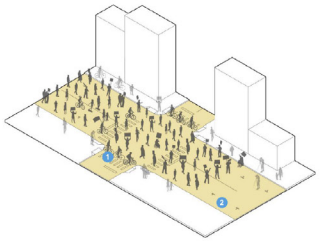
Markets



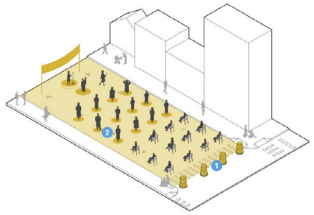
School Streets



Streets for Protest



Gatherings & Events



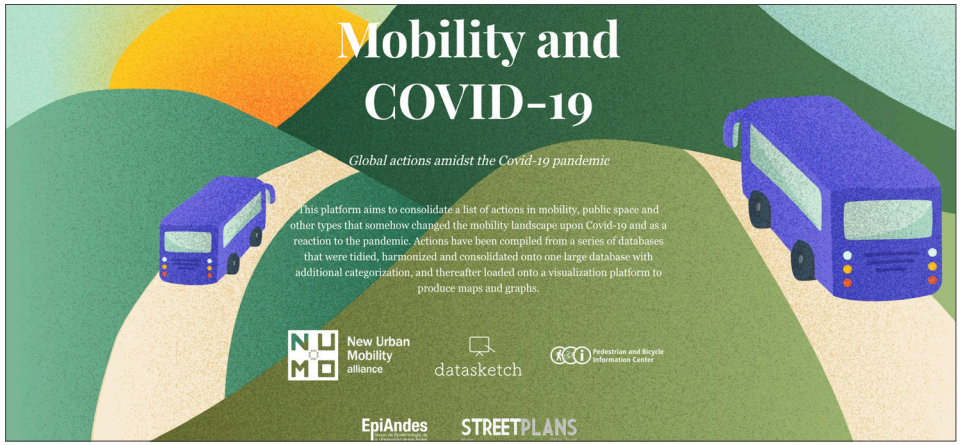
Summary Data

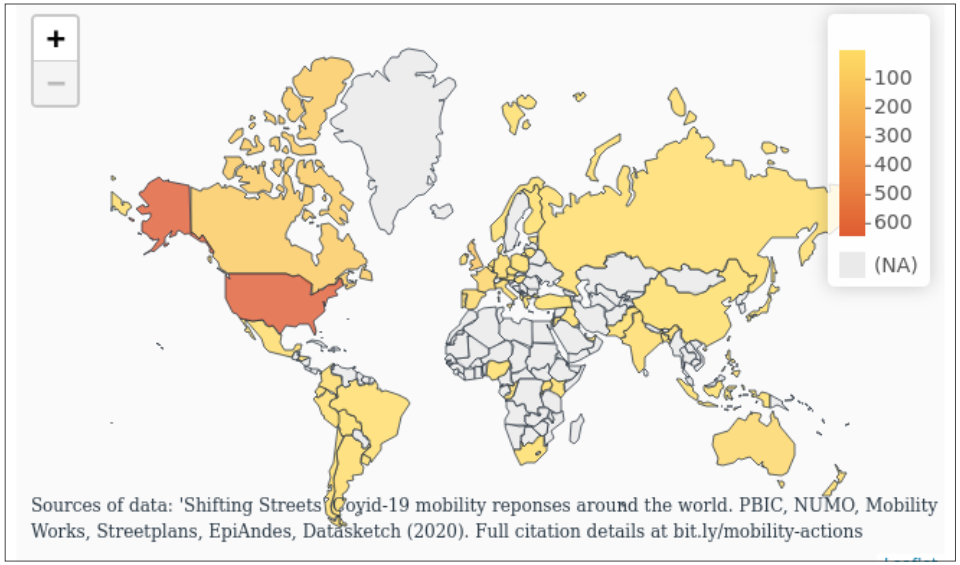
400+
Cities

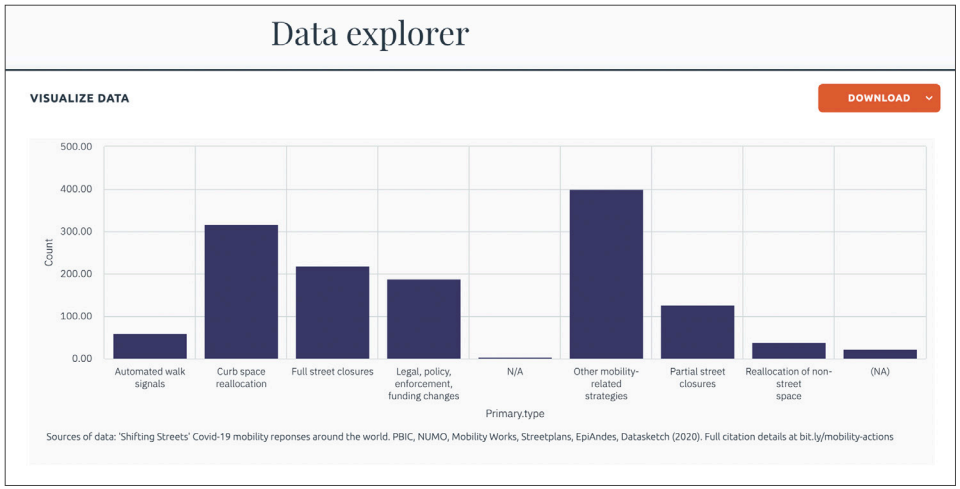
45+
Countries

6
Core Tactics

1375+
Applications







3 Lessons for Pandemic Recovery

1. Manage Streets Flexibly

2. Social Context > Physical Context

3. Streets Produce Tremendous Value: Share It

NYC's Unintentional Parking Reform Program

The New York Times

Outdoor Dining in N.Y.C. Will Become Permanent, Even in Winter

The program has become a vital lifeline and allowed more than 10,000 restaurants and bars to take over sidewalks, streets and other public spaces.

Give this article

"Open Restaurants was a big, bold experiment in supporting a vital industry and reimagining our public space — and it worked...It's time for a new tradition."

– Mayor de Blasio

+ 100,000+ jobs saved

+ 488% government revenue increase from parking as usual*

*~$6,800/yr @ 100% parking occupancy vs. ~$40,000/yr @ 5 servings per table, per day, at citywide average meal cost.

LA JOLLA LIGHT

Like dining on the street? San Diego decides to make pandemic experiment permanent for restaurants

Pannikin coffee shop on Girard Avenue in La Jolla expanded its outdoor seating options during the COVID-19 pandemic. (Elisabeth Frausto)

As the city prepares to implement new regulations that will go into effect in July, fire and code enforcement officials are still cracking down on restaurants that built outdoor structures in violation of

"...there are reduced fees for restaurants in lower-income areas as prescribed under the city's Climate Equity Index. Restaurant owners in very-low to low access opportunity areas will pay the city $10 per square foot of the structure per year, or approximately $2,000. Restaurants in very high opportunity areas can expect to pay about $6,000 per year."

– Voice of San Diego

The City Eternal

We Learn By Doing. We Need to Plan the Future That Way, Too.

> "The brain tends to remember 10% of what it reads, 20% of what it hears, **but 90% of what it does or simulates.**"
>
> – Edgar Dale

Thanks!

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