Creating Healthy Communities Through Design:

Becoming a Fit City: Top Opportunities in Healthy, Active Design

Wednesday, January 25th | 2:00-3:30pm EST | 1.0 CE/CM Unit

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Reena Agarwal, NYC Departments of Design + Construction and Health & Mental Hygiene
Branden Born, PhD, University of Washington

NYC Health

AIANY

Goals for Today's Webinar

Learn about:

❑ Specific **opportunities to help increase physical activity and improve access to healthy foods and beverages** in your community, using examples from other communities

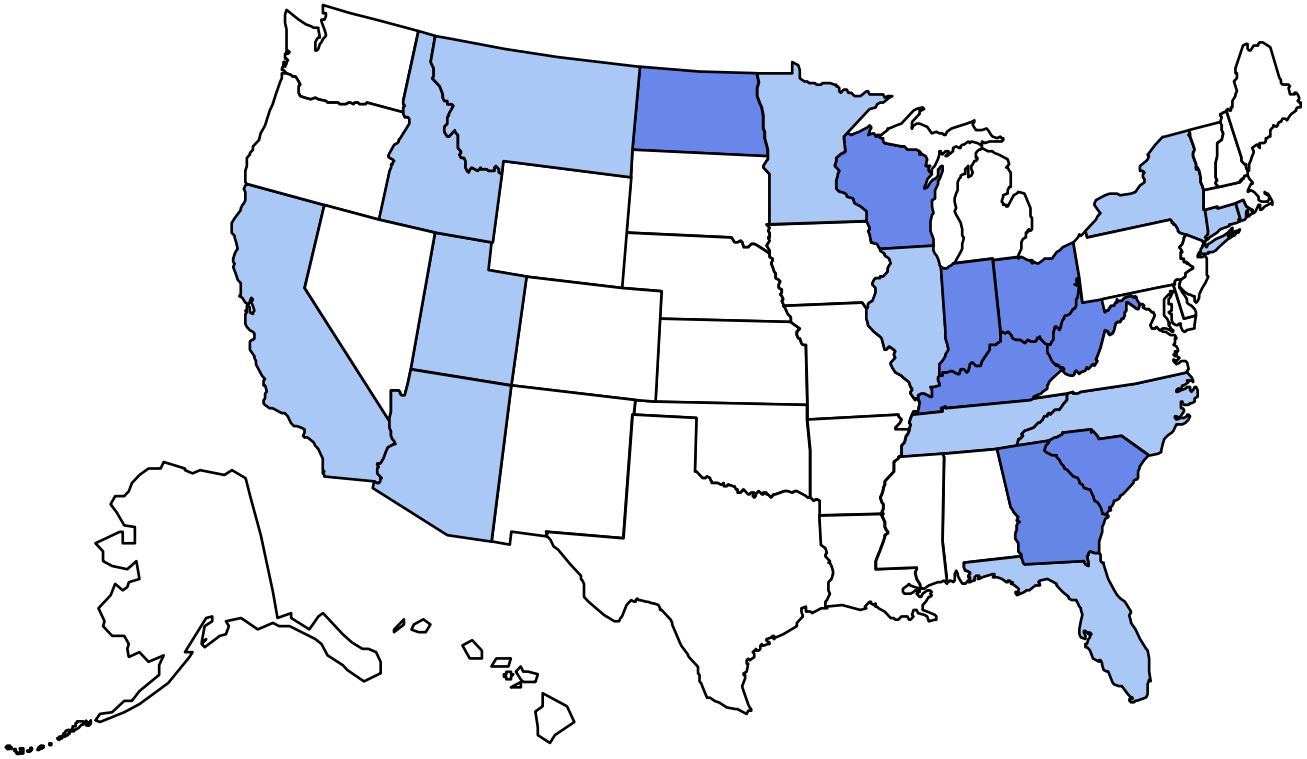
❑ **How your community's built environment policies**, such as your zoning and building codes, transportation plans, and contract processes, **can have positive health and other impacts**

❑ **How to create the partnerships and support necessary** to become a healthier, more active community

ACTIVE DESIGN

Obesity Trends* Among U.S. Adults

BRFSS, 1985



No Data | <10% | 10%–14%

(*BMI ≥30, or ~ 30 lbs overweight for 5’ 4” woman)

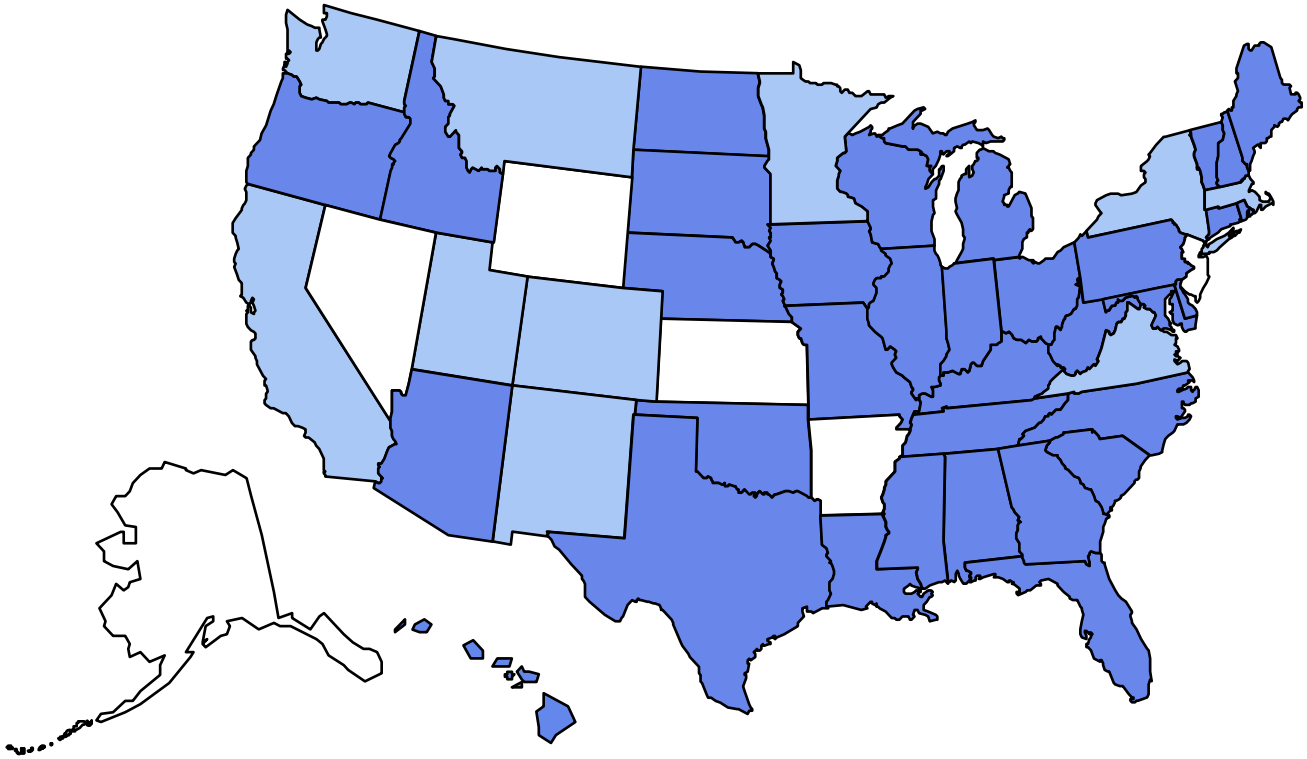
Source: U.S. Centers for Disease Control and Prevention (CDC)

ACTIVE DESIGN

Obesity Trends* Among U.S. Adults

BRFSS, 1990

(*BMI ≥30, or ~ 30 lbs overweight for 5’ 4” woman)



Source: U.S. Centers for Disease Control and Prevention (CDC)

ACTIVE DESIGN

Obesity Trends* Among U.S. Adults

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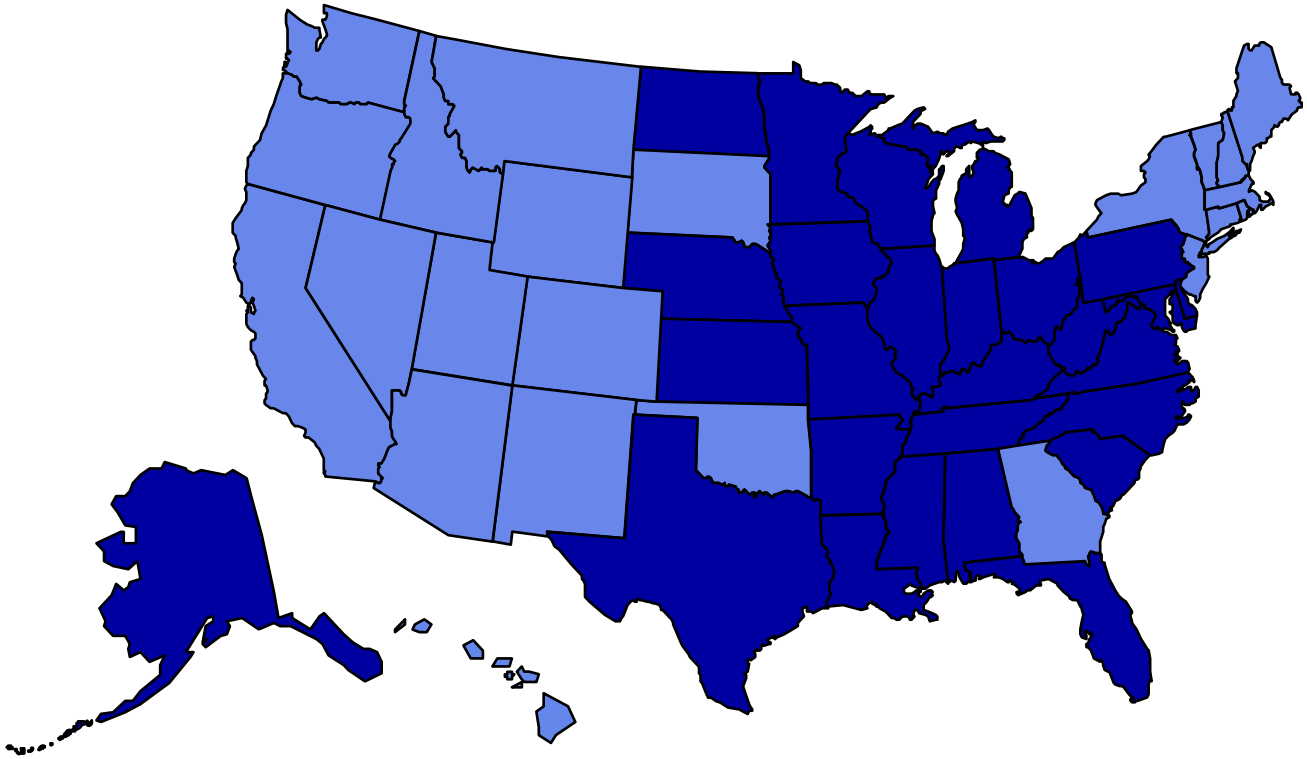

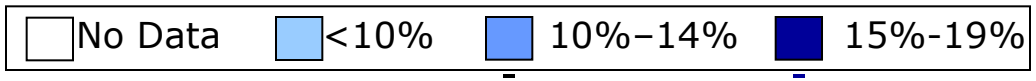

Source: U.S. Centers for Disease Control and Prevention (CDC)

ACTIVE DESIGN

Obesity Trends* Among U.S. Adults

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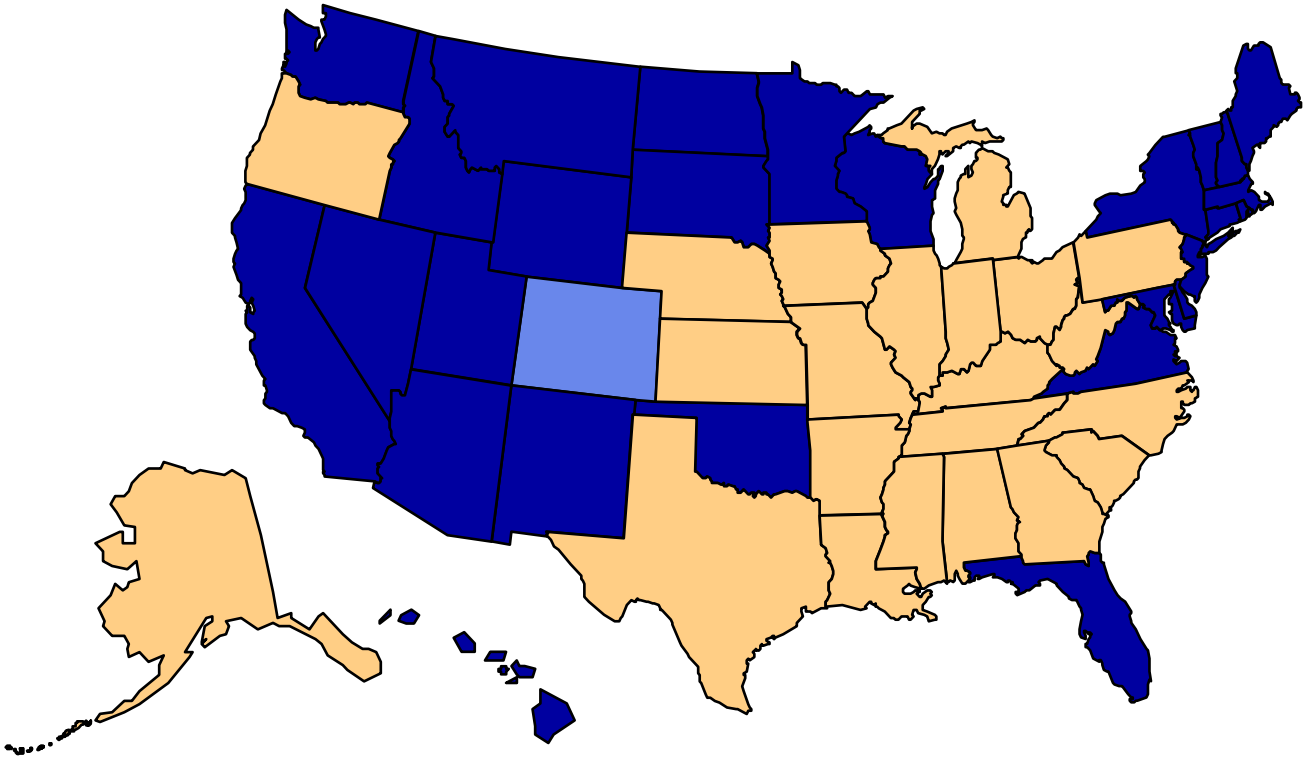
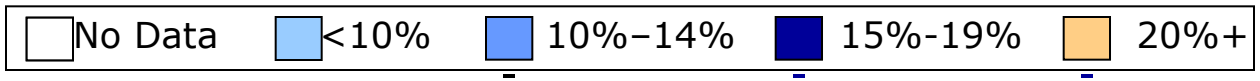




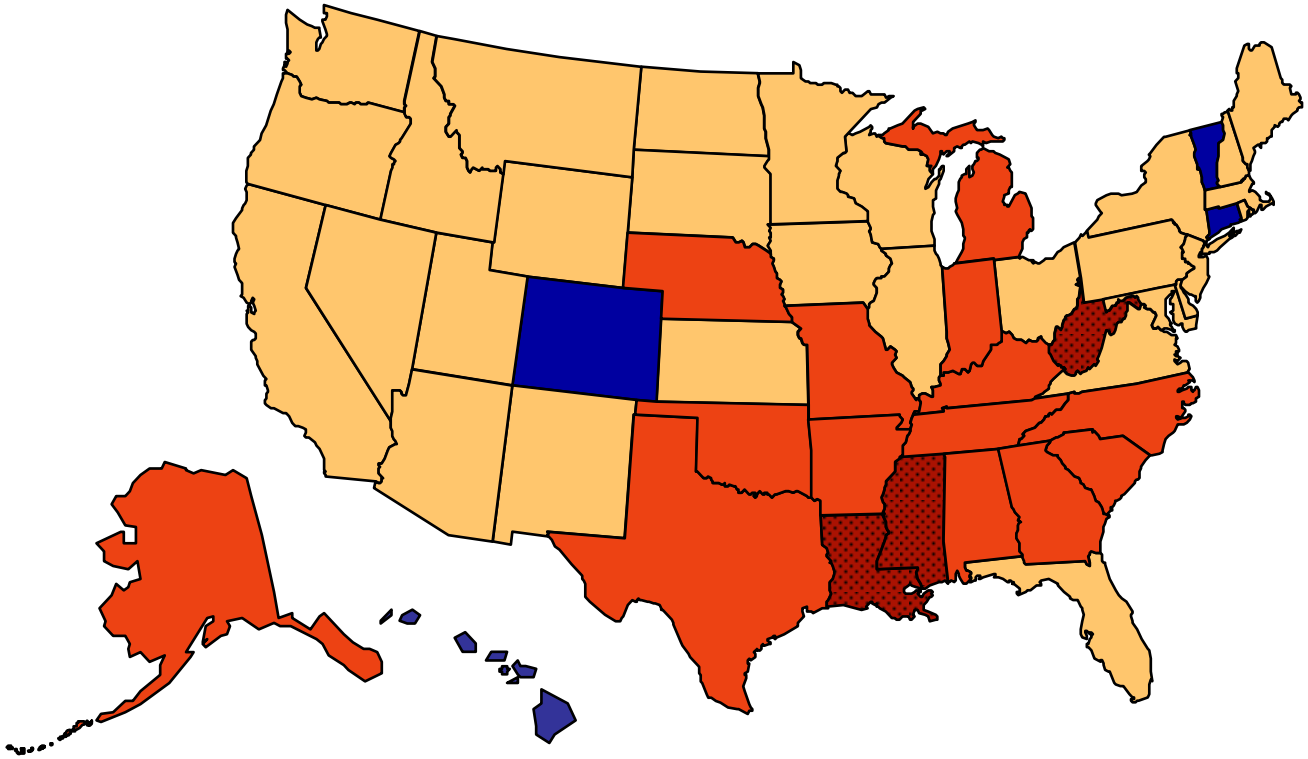
Source: U.S. Centers for Disease Control and Prevention (CDC)

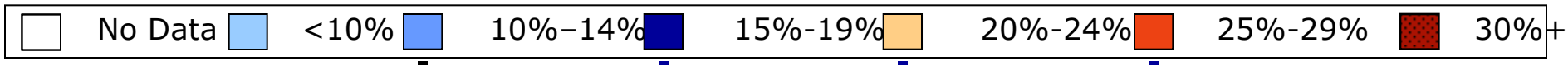
ACTIVE DESIGN

Obesity Trends* Among U.S. Adults

BRFSS, 2005

(*BMI ≥30, or ~ 30 lbs overweight for 5' 4" woman)





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ACTIVE DESIGN

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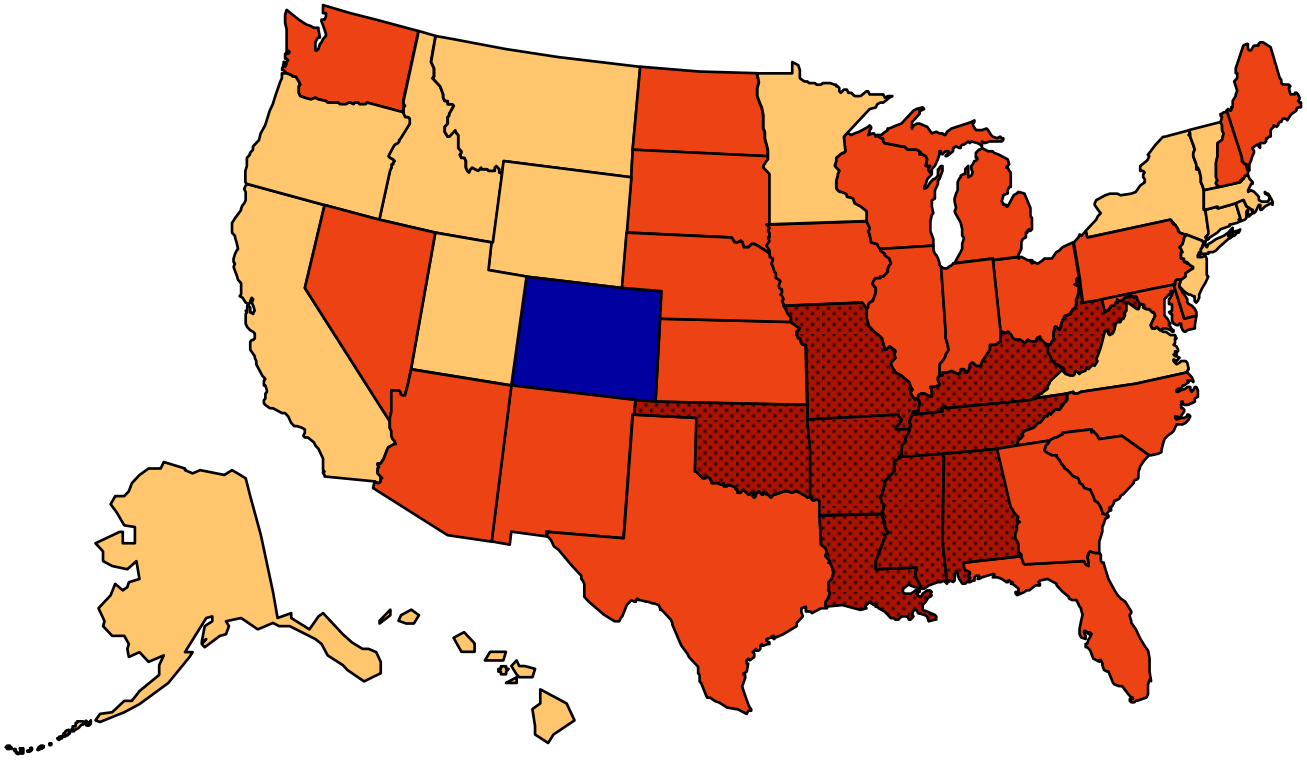

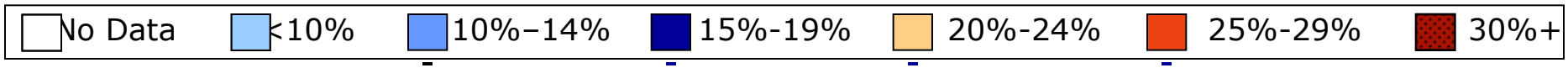

Source: U.S. Centers for Disease Control and Prevention (CDC)

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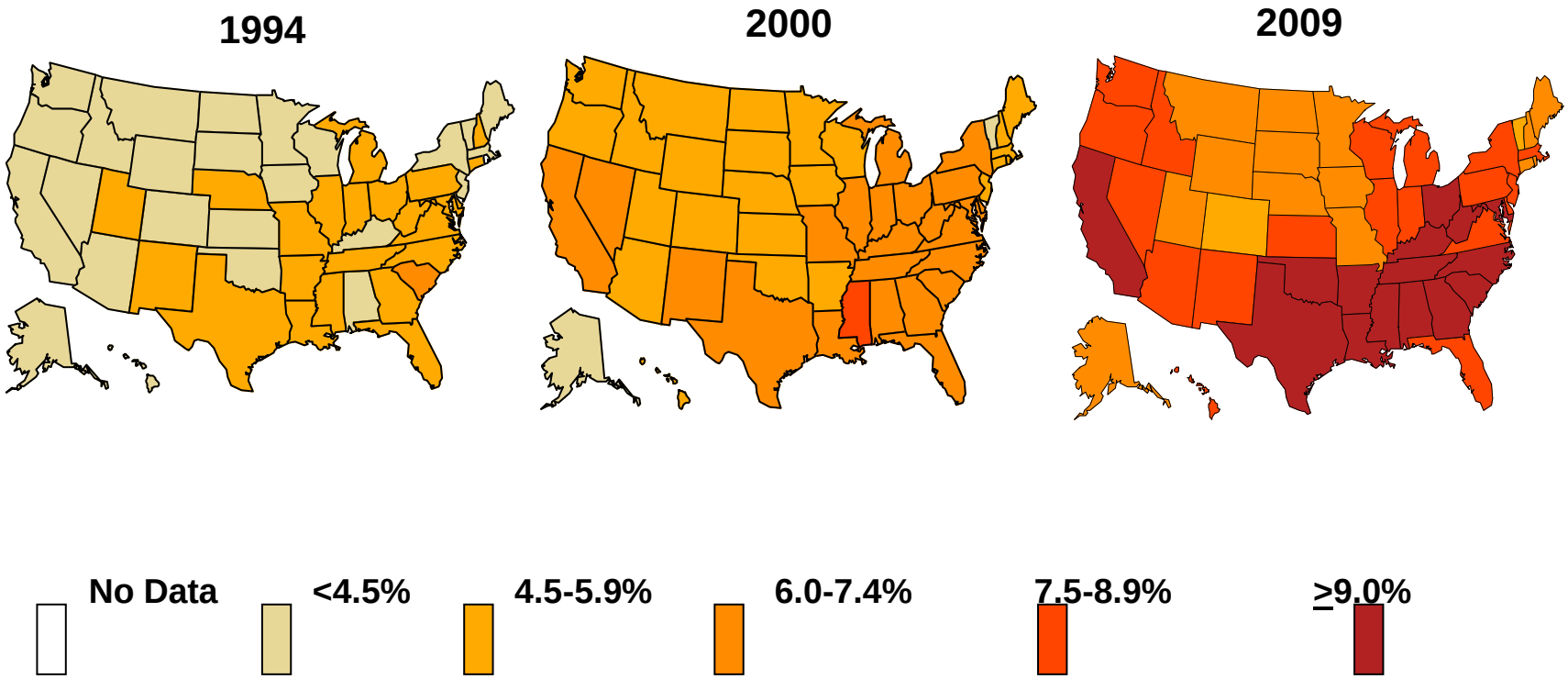
Diabetes trends among U.S. adults



Source: CDC's Division of Diabetes Translation. National Diabetes Surveillance System available at http://www.cdc.gov/diabetes/statistics

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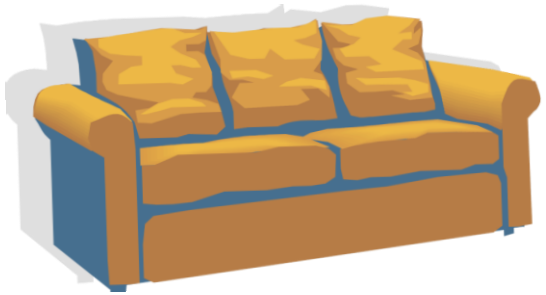
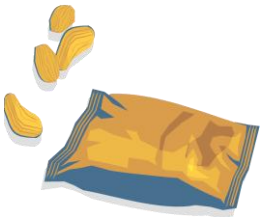
Today, top five causes of death in the U.S. are:

- Tobacco products
- **Obesity**
- High blood pressure
- High blood sugar
- **Physical inactivity**

Risk Factors

- **Poor diets (food and beverages)**
- **Physical Inactivity**
- **TV viewing / Screen time**
- **Not breastfeeding**





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The costs of obesity

- According to the CDC, the medical costs attributable to obesity in the U.S. are estimated to be **$147 billion per year.**

- **By 2030**, if obesity trends continue as shown, **86% of adults** will be overweight or obese and total attributable health-care costs will be **$860-956 billion per year.**

- City of Dallas: **medical costs of an obese city employee are up to 6 times** that of a normal weight employee.

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People have not changed – our environment has

If you go with the flow, you get overweight or obese

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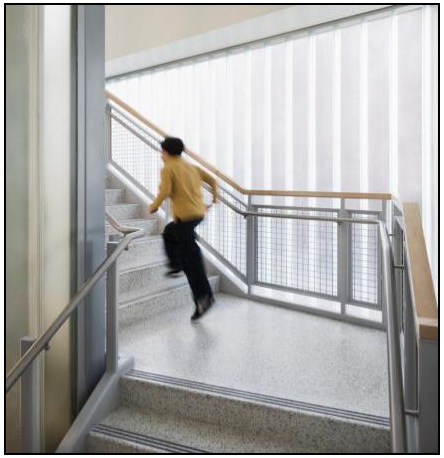
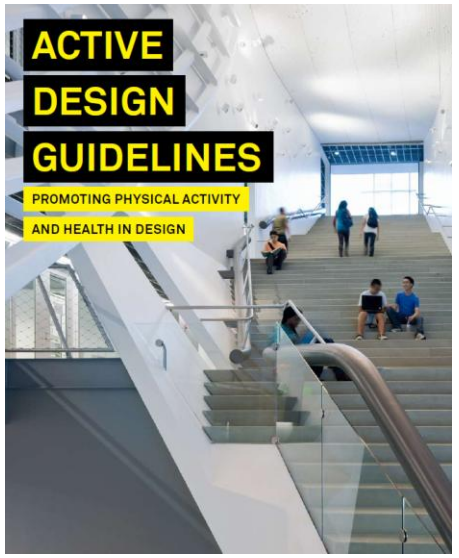
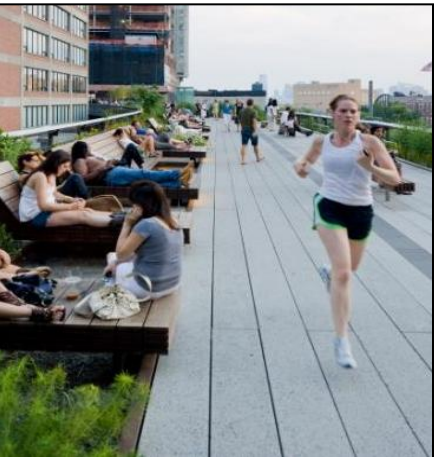
What is Active Design?

Designing our neighborhoods, streets, and buildings to encourage physical activity and improve access to healthy food and beverages

Download the Guidelines at: www.nyc.gov/adg







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Active Design: Health Benefits

Encouraging stair use & active transportation

- Just **2 minutes** (about 6 floors) of stair climbing a day burns enough calories to prevent average U.S. adult annual weight gain

- Men climbing 20-34 flights of stairs per week have a **29% lower risk of stroke.**

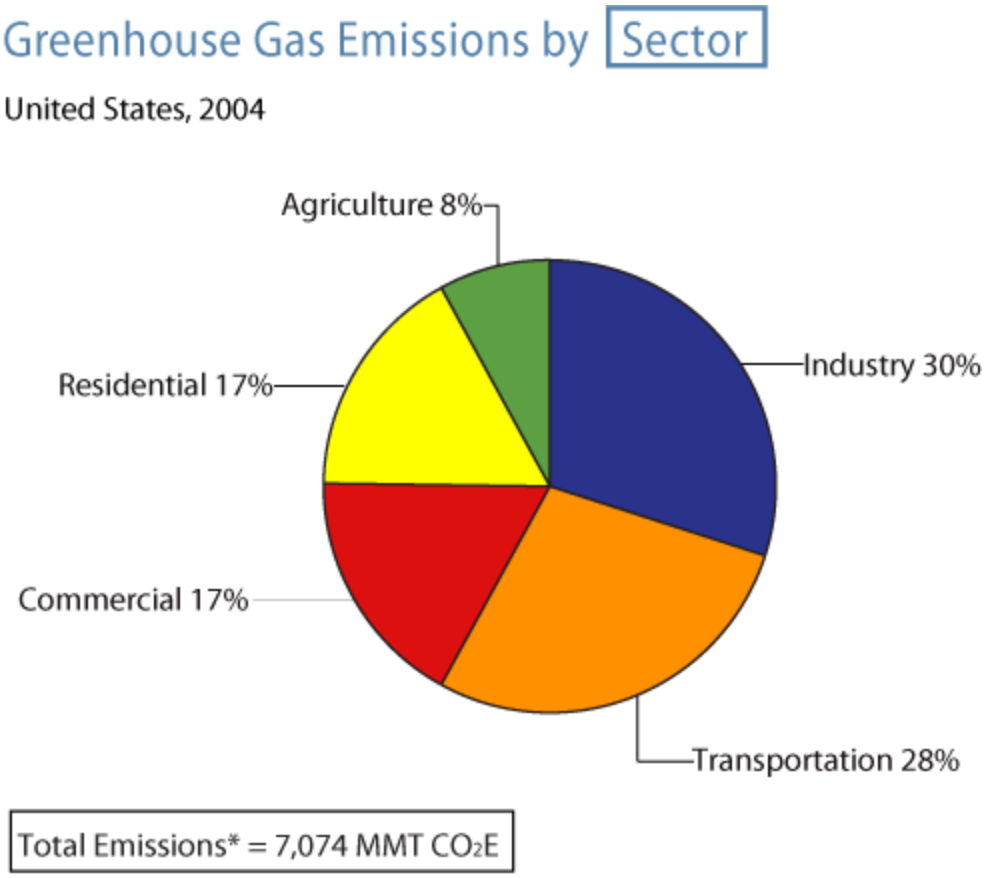
- Just **15 minutes of cycling** (2.5 miles) twice a day burns the equivalent of 10 lbs per year.

Co-benefits of Active Design : Improve the environment

- Transportation is responsible for **70% of U.S. oil consumption** and

28% of greenhouse gas emissions

- Elevators account for **3-10% of a building's energy use**
- An **escalator running 24/7 can generate approximately 4 cars worth** of CO2 yearly



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Co-benefits: Strengthen our economy

More compact, walkable development patterns save money on avoided infrastructure costs

	Water & Sewer Laterals Required	Water & Sewer Costs (billions)	Road Lane Miles Required	Road Land Miles Costs (billions)
Sprawl Growth Scenario	45,866,594	$189.8	2,044,179	$927.0
Compact Growth Scenario	41,245,294	$177.2	1,855,874	$817.3
Savings	**4,621,303**	**$12.6 (10.1%)**	**188,305**	**$109.7 (6.6%)**

Sprawl Costs: Economic Impacts of Unchecked Development, Robert W. Burchell, Anthony Downs, Barbara McCann and Sahan Mukherji, Island Press, 2005

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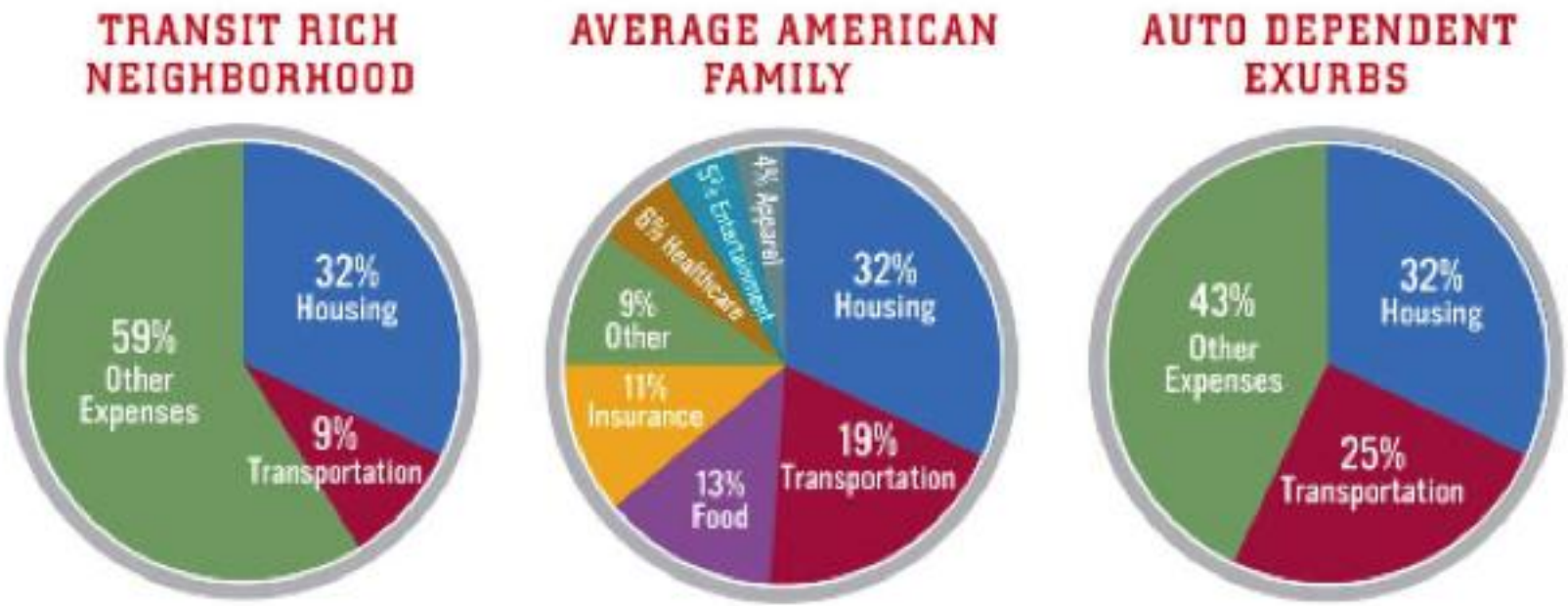
Co-benefits: Save people money



People in walkable, transit-rich neighborhoods spend only 9 percent of their monthly income on transportation costs; those in auto-dependent neighborhoods spend 25 percent.

Source: Center for Transit-Oriented Development

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Co-benefits: Create jobs

Project type	Road	Bicycle	Pedestrian	Off-street trail	Number of projects	Direct jobs per $1 million	Indirect jobs per $1 million	Induced jobs per $1 million	Total jobs per $1 million
Total, all projects					58	4.69	2.12	2.15	8.96
Bicycle infrastructure only		•			4	6.00	2.40	3.01	11.41
Off-street multi-use trails				•	9	5.09	2.21	2.27	9.57
On-street bicycle and pedestrian facilities (without road construction)		•	•		2	4.20	2.20	2.02	8.42
Pedestrian infrastructure only			•		10	5.18	2.33	2.40	9.91
Road infrastructure with bicycle and pedestrian facilities	•	•	•		13	4.32	2.21	2.00	8.53
Road infrastructure with pedestrian facilities	•		•		9	4.58	1.82	2.01	8.42
Road infrastructure only (no bike or pedestrian components)	•				11	4.06	1.86	1.83	7.75

Building bicycle and pedestrian infrastructure creates more jobs per dollar invested, compared to road infrastructure only

Source: Political Economy Research Institute: June 2011

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Co-benefits: Create desirable places to live, work & play

Sprawl Community – Preferred by 43%

There are **only single-family houses** on large lots

There are **no sidewalks**

Places such as shopping, restaurants, a library, and a school are within **a few miles** of your home and you **have to drive** most places

There is enough parking when you drive to local stores, restaurants, and other places

Public transportation, such as bus, subway, light rail, or commuter rail, is **distant or unavailable**

Smart Growth Community – Preferred by 56%

There is a **mix** of single-family detached houses, townhouses, apartments, and condominiums on various sized lots

Almost all of the streets have **sidewalks**

Places such as shopping, restaurants, a library, and a school are within **a few blocks** of your home and you can **either walk or drive**

Parking is **limited** when you decide to drive to local stores, restaurants, and other places

Public transportation, such as bus, subway, light rail, or commuter rail, is **nearby**

Source: NAR National Poll, 2011 Q: In which community would you rather live?

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Co-benefits: Create more accessible places

- Creating safer places to walk, take transit, & for wheelchair travel

- Making elevators more available for those who need them

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Laying the groundwork in your community

Solutions aren't one-size-fits-all

❑ **Create intersectoral partnerships within government**: Other Agencies, Mayor's Office, Elected officials

❑ **Create partnerships outside of government**:
Professional associations (AIA, APA, ASLA, ITE, ULI, USGBC) | Community organizations | Business alliances | etc.

❑ **Create forums for intersectoral dialogue to investigate problems & develop solutions together**

❑ **Be strategic in your communications and issue framing**

❑ **Build political and public support** for your solutions

Learn more about Active Design by watching previous webinars:

Creating Healthy Communities Through Design: Active Design 101

Karen Lee, MD, MHSc, FRCPC, | NYC Dept. of Health & Mental Hygiene

Skye Duncan | NYC Dept. of City Planning

Story K. Bellows | Mayors' Institute on City Design

The Honorable Deke Copenhaver | Mayor, City of Augusta, GA

The Benefits of Active Design for Business & Real Estate Development

Hugh Morris, AICP, LEED AP | National Association of Realtors

Kevin Green | Midtown Alliance

Lee Sobel | EPA Office of Sustainable Communities

Joanna Frank | NYC Food Retail Expansion to Support Health (FRESH) Program

Webinar Recording & Presentations available at: www.nyc.gov/adg

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