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ULI Rose Center *presents*

# Planning & Public Health

**creating healthier communities through integrative practice**



Daniel Rose Center for Public Leadership in Land Use

Alison Johnson  
Program Manager  
202-624-7015; [alison.johnson@uli.org](mailto:alison.johnson@uli.org)

- 
- **Welcome**
  - ULI Rose Center
    - Who we are/what we do
  - Webinar instructions
  - Webinar



Daniel Rose Center for Public Leadership in Land Use

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# ULI Rose Center

## Mission:

“ . . . to encourage and support excellence in land use decision making. By providing public officials with *access to information, best practices, peer networks* and other resources, the Rose Center seeks to foster creative, efficient, practical, and sustainable land use policies.”



Daniel Rose  
*Chairman, Rose Associates;  
ULI Foundation Governor*

# ULI Rose Center

## How this webinar works:

- Webinar audio information:
  - **Dial-in #: 866.404.3683**
  - **Conference code: 1496305939**
- All callers are muted during the presentation
  - To prevent any audio disruption, please mute your individual line by pressing \*6. You can un-mute your line by pressing #6.
- To ask a question-
  - During the presentation, type your question into the *Question* or *Chat* box, the moderator will review and present your questions to the panelists.
  - There will be time for questions at the end of the presentation.



Suzanne Nienaber  
Partnerships Director



CENTER  
FOR ACTIVE  
DESIGN

# Promoting Health through Design

[www.centerforactivedesign.org](http://www.centerforactivedesign.org)



# What is Active Design?

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**Active Design = Designing our communities to make the healthy choice the easy choice**



# History of health and the built environment

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**100+ years ago, urban conditions in NYC were a breeding ground for disease epidemics**



© PERENNIAL PAVED.COM  
(Reprinted with a Photograph by Anthony J.)

## **Over-crowding:**

By 1910, the average density in lower Manhattan was 114,000 people/ sq. mi; two wards reached densities > 400,000. (Today's density: 67,000/ sq. mi.)

+

**Inadequate systems** for garbage, water, and sewer, leading to pervasive filth and polluted water supplies.

## **Major epidemics:**

Air/droplet-borne diseases:

**TB**

Water-borne diseases:

**Cholera**

Vector-borne diseases:

**Yellow-fever**

# The design response

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**1842** New York's **water system** established – an aqueduct brings fresh water from Westchester.

**1857** NYC creates **Central Park**, hailed as “ventilation for the working man’s lungs”, continuing construction through the height of the Civil War

**1881** Dept. of Street-sweeping created, which eventually becomes the **Department of Sanitation**



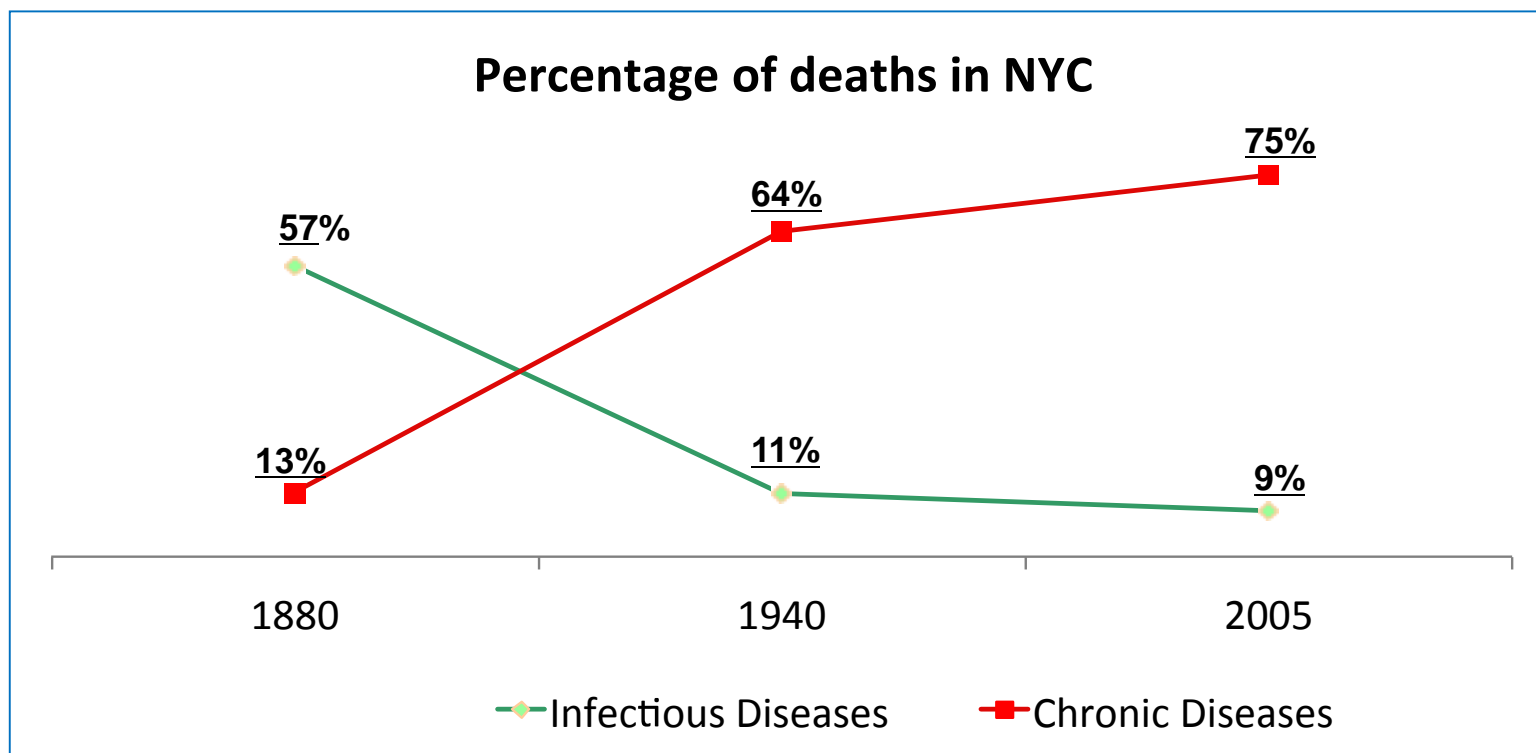
**1901** **New York State Tenement House Act** banned the construction of dark, airless tenement buildings

**1904** First section of **Subway** opens, allowing population to expand into Northern Manhattan and the Bronx

**1916** **Zoning Ordinance** requires stepped building setbacks to allow light and air into the streets



# The results: Infectious disease rates plummeted



- Today, **chronic disease** accounts for 7 out of 10 deaths across the US.
- In 2005, 133 million Americans – **almost 1 out of every 2 adults** – had at least one chronic illness.

# Can design help address today's health epidemics?

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## THE 19th CENTURY:

Infectious disease

19th Century codes, planning and infrastructure as weapons in the battle against contagious disease

These strategies were built into the city fabric, and they were effective

## THE 21st CENTURY:

Chronic Diseases, many of which are "**Diseases of Energy**"

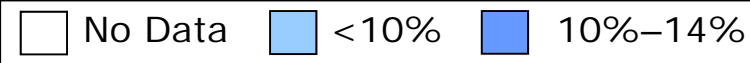
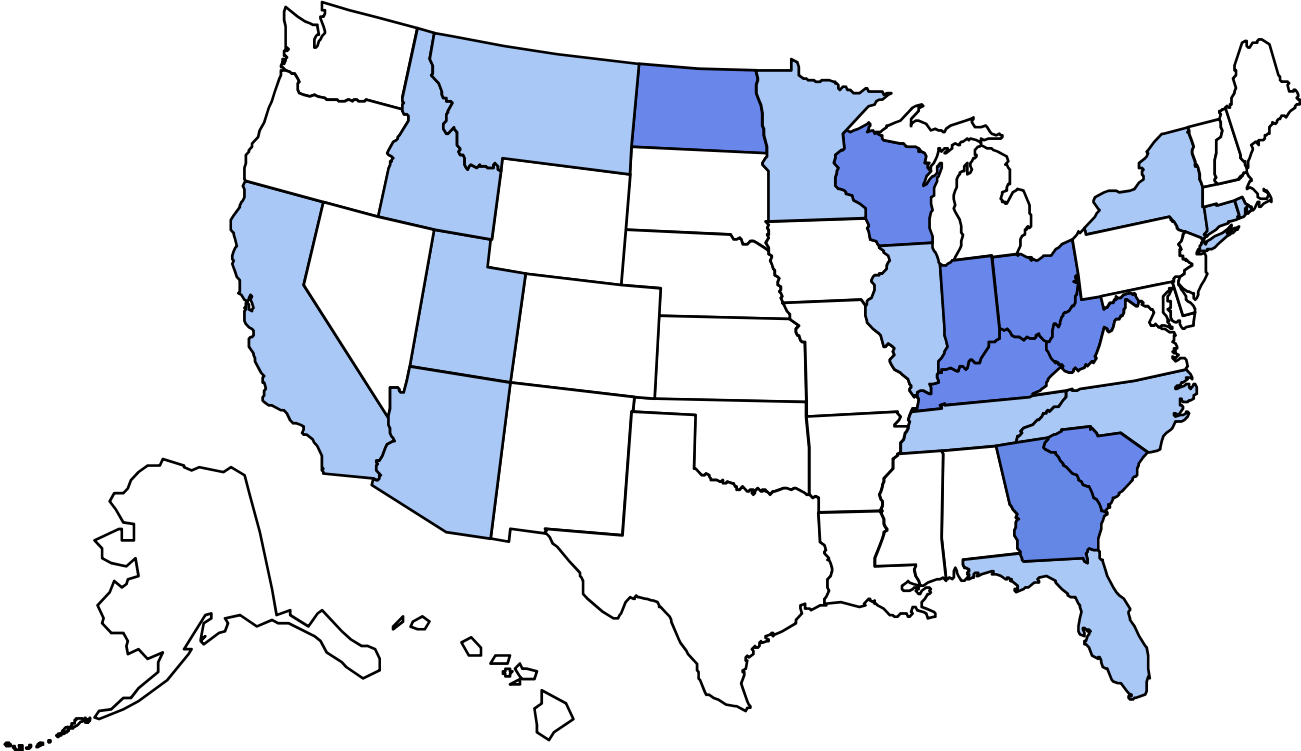
The emerging design solutions for health parallel **sustainable design** solutions

Effective designs will have to be an **invisible, pervasive, and inevitable** part of life

# Obesity Trends\* Among U.S. Adults

## BRFSS, 1985

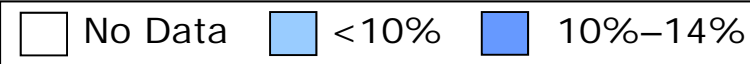
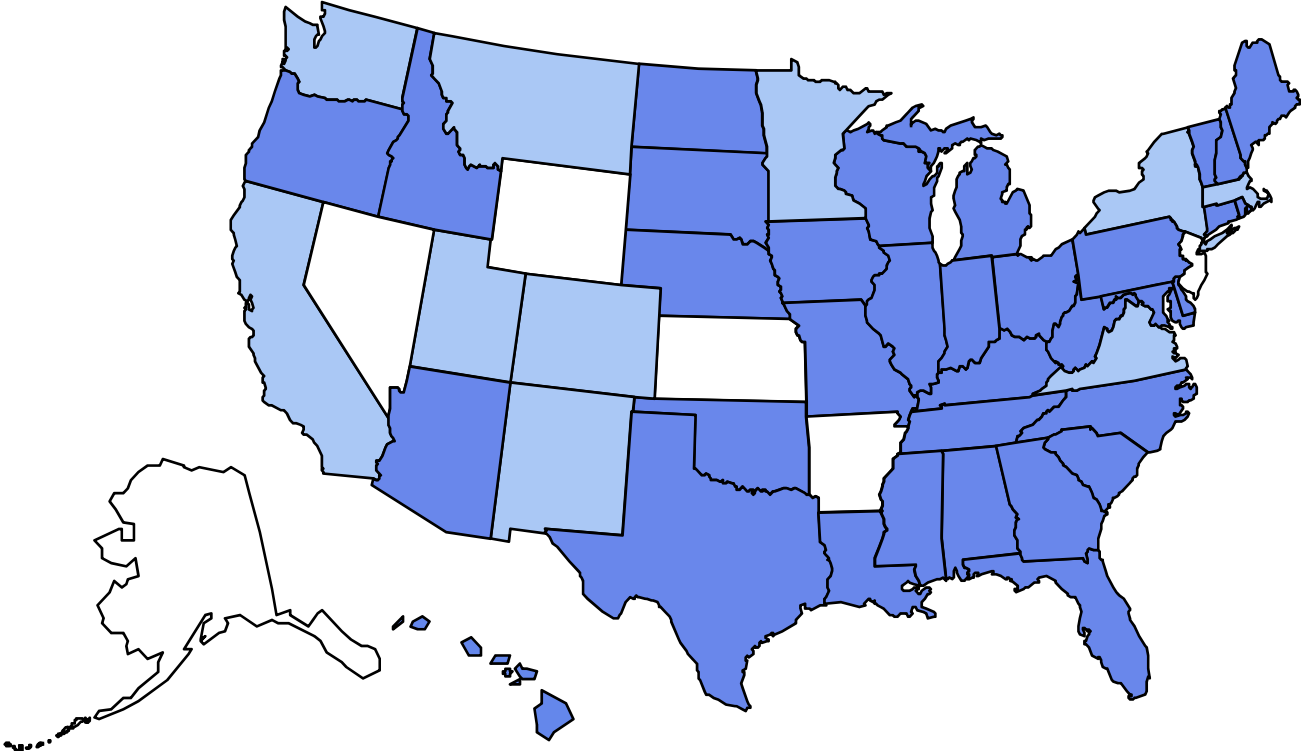
(\*BMI  $\geq 30$ , or ~ 30 lbs overweight for 5' 4" woman)



# Obesity Trends\* Among U.S. Adults

## BRFSS, 1990

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

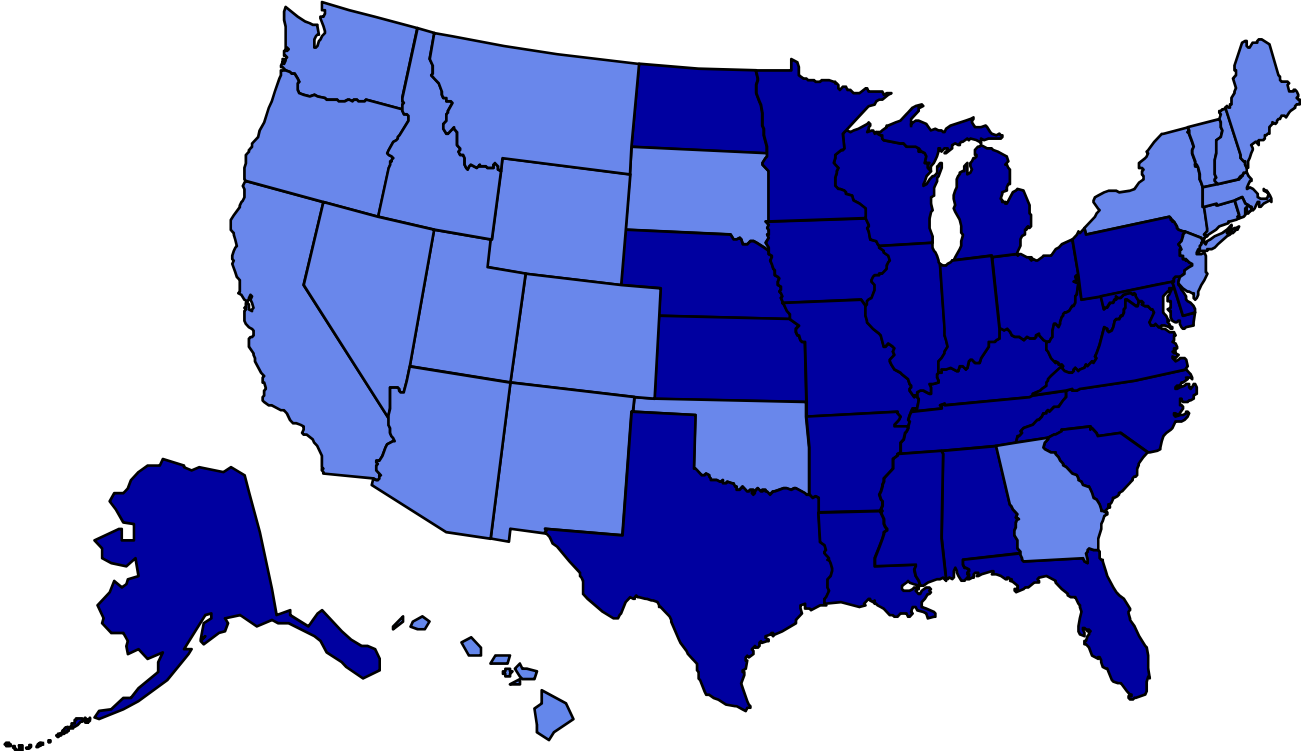




# Obesity Trends\* Among U.S. Adults

## BRFSS, 1995

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

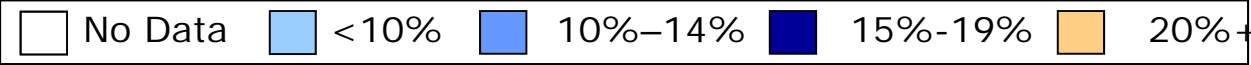
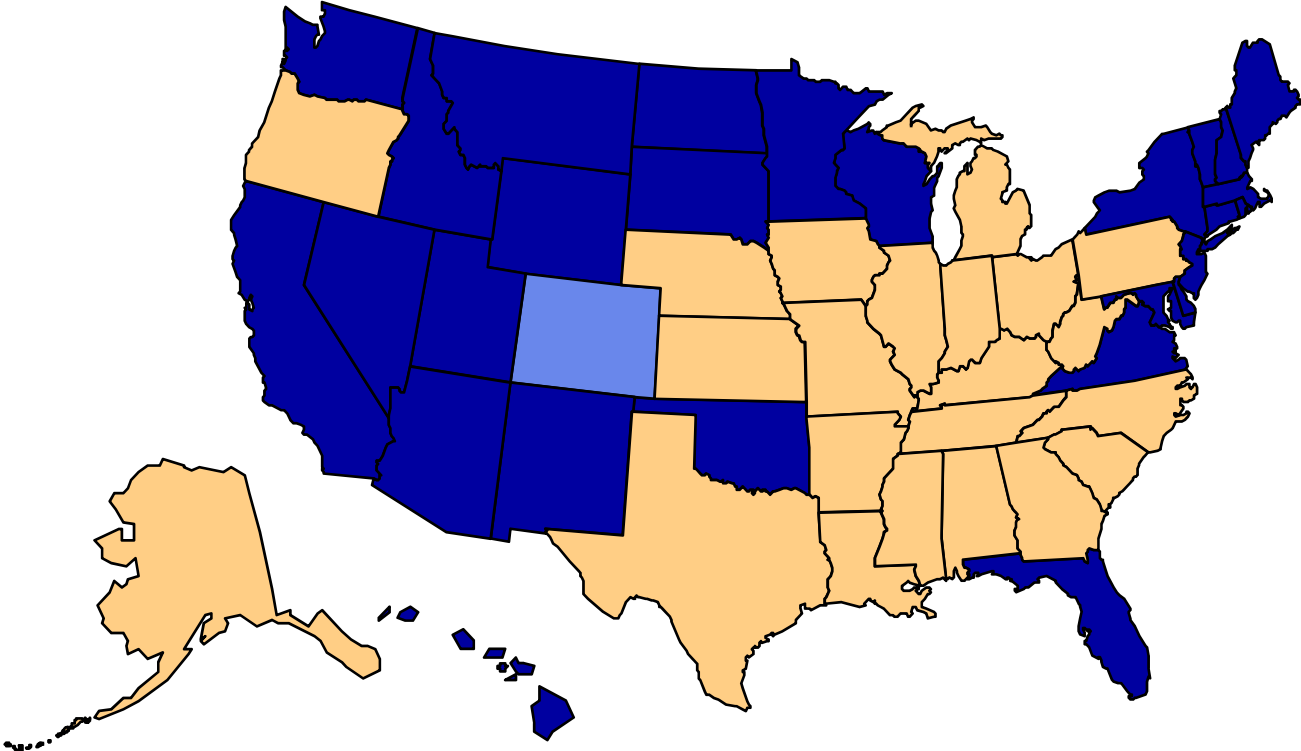


Source: U.S. Centers for Disease Control and Prevention

# Obesity Trends\* Among U.S. Adults

## BRFSS, 2000

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

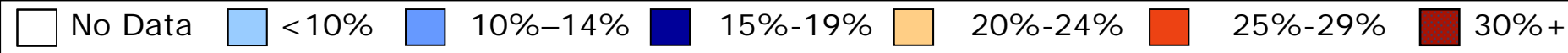
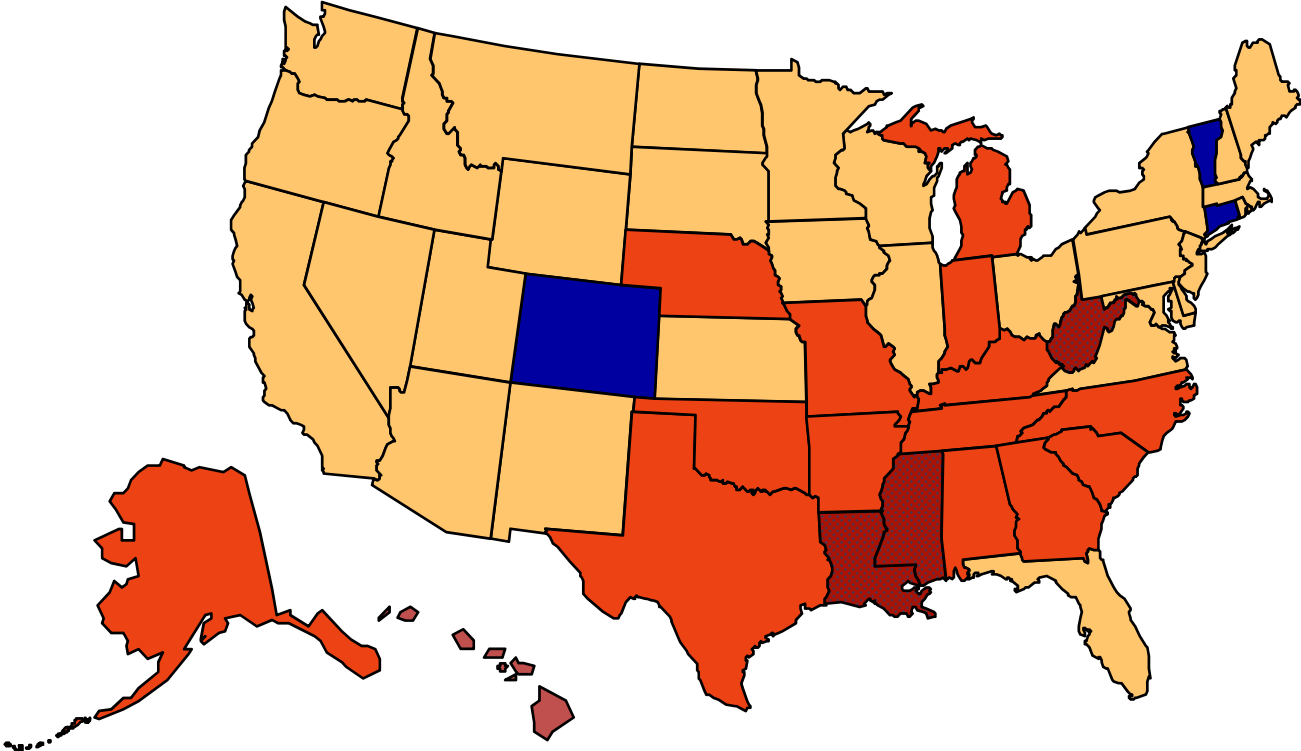


Source: U.S. Centers for Disease Control and Prevention

# Obesity Trends\* Among U.S. Adults

## BRFSS, 2005

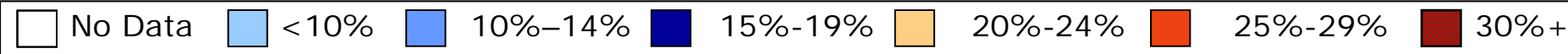
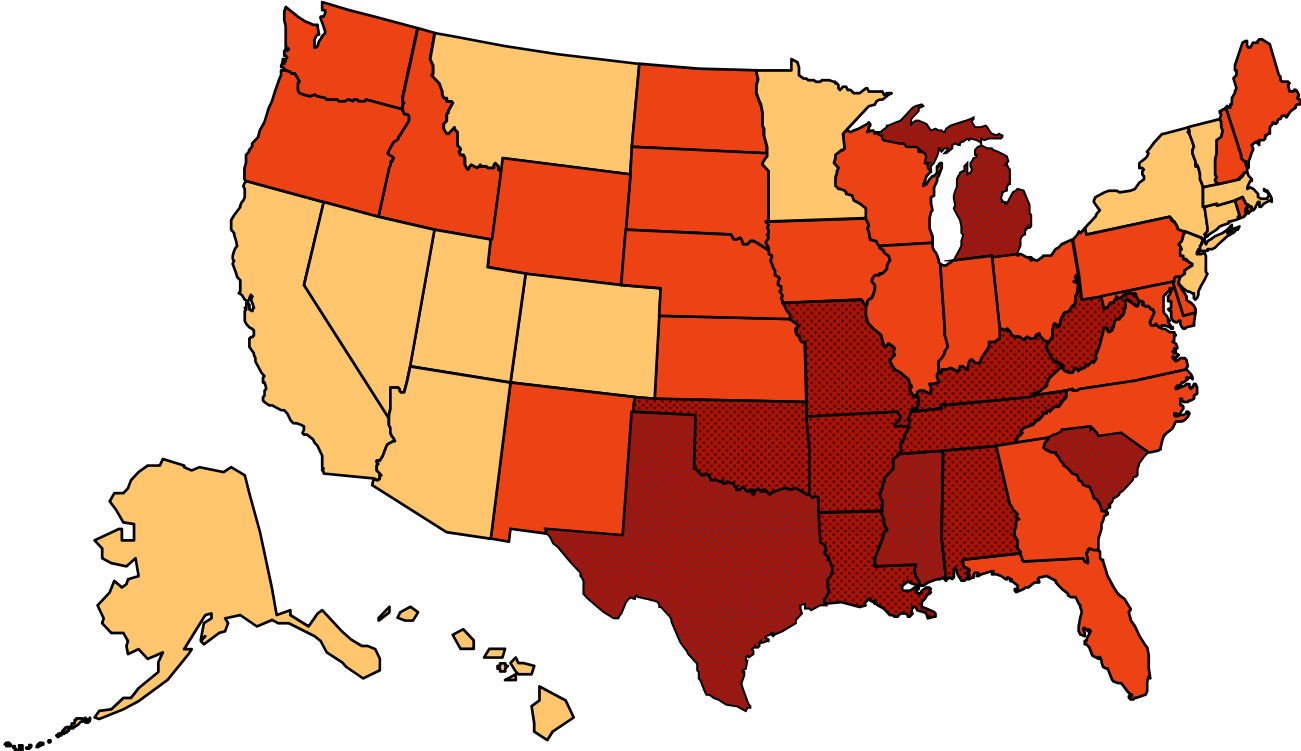
(\*BMI ≥30, or ~ 30 lbs overweight for 5' 4" woman)



# Obesity Trends\* Among U.S. Adults

## BRFSS, 2010

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



Source: U.S. Centers for Disease Control and Prevention





**People haven't changed – but our environment has**  
If you go with the flow, you can become overweight or obese



# Benefits of Physical Activity

Better Cognitive Function

Reduced Depression

Improved Self Esteem

Lowered Cardiovascular Risk Factors

Decreased Risk of Colon And Breast Cancers

Strengthened Bones

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Academic Achievement

Stress Management

Prevention of Weight Gain

Weight Loss When Combined with Diet

Lowered Risk of Type-2 Diabetes

Lowered Risk of Falls by Improved Balance



# Design and physical activity

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## 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.
- **Each hour spent in a car contributes a 6% risk in obesity** and chronic disease while each km walked contributes a 5% decrease in risk





# Design and physical activity

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- Creating or improving access to places for physical activity can result in a **25% increase in number of people who exercise at least 3 times per week**
- Creating a more enticing and walkable public realm can result in a **161% increase in physical activity** (e.g. walking and biking)





# Co-benefits: Environmental sustainability



Transportation



Play



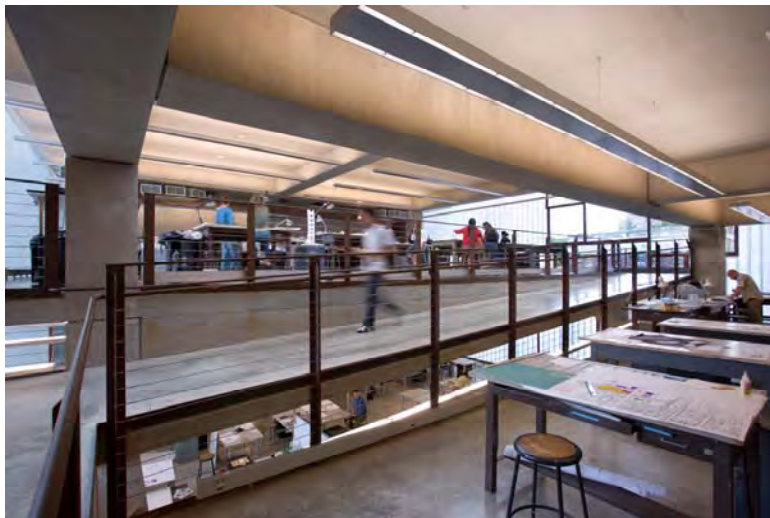
Vertical circulation



# Co-benefits: Universal accessibility

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- **Creating safer places to walk & for wheelchair travel**
- **Making elevators more available for those who need them**





# Co-benefits: Economic resiliency and social engagement

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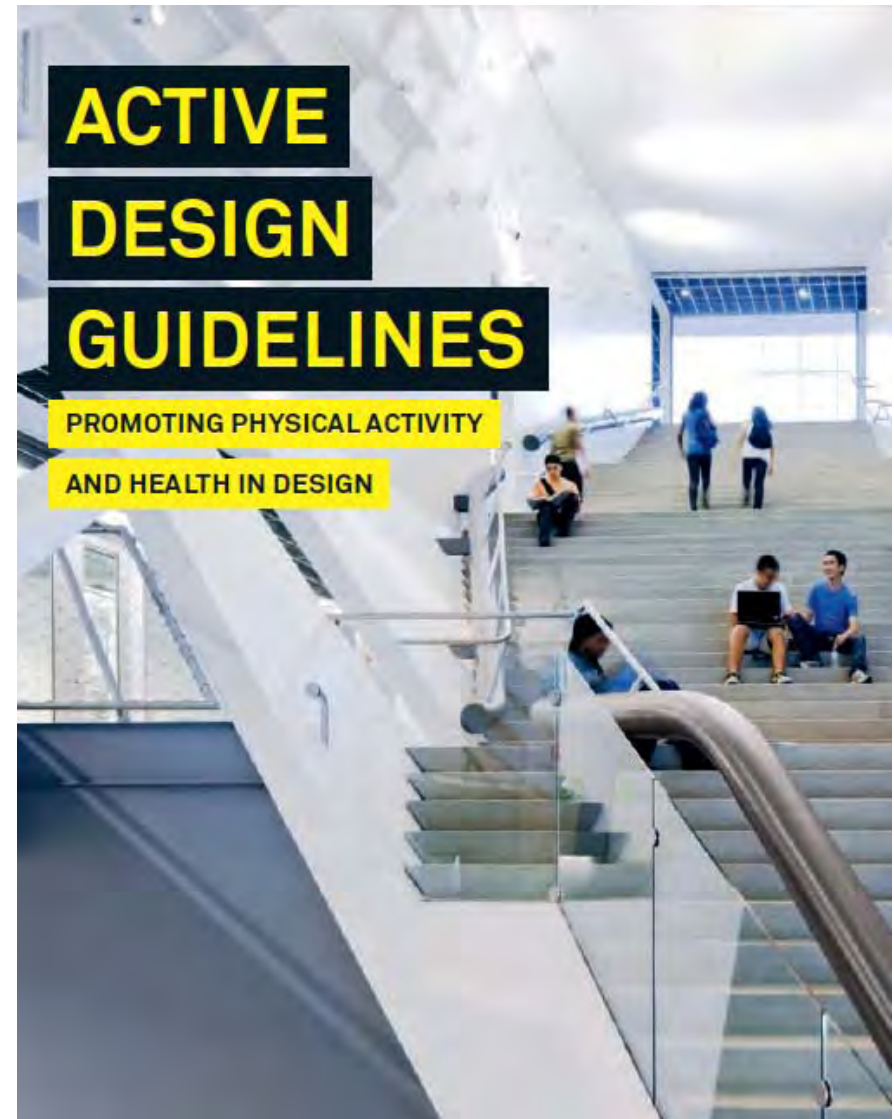
- **Creating a more vibrant public realm supports economic and social health of communities, mental health of individuals**



# The Active Design Guidelines

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- Origins at annual **Fit City** conferences
- **Collaborators** included City agencies, professional associations, private sector, academics
- The **Centers for Disease Control and Prevention** funded initial outreach efforts
- The **Center for Active Design** is now leading efforts to disseminate information about active design  
[www.centerforactivedesign.org](http://www.centerforactivedesign.org)





# Key concepts

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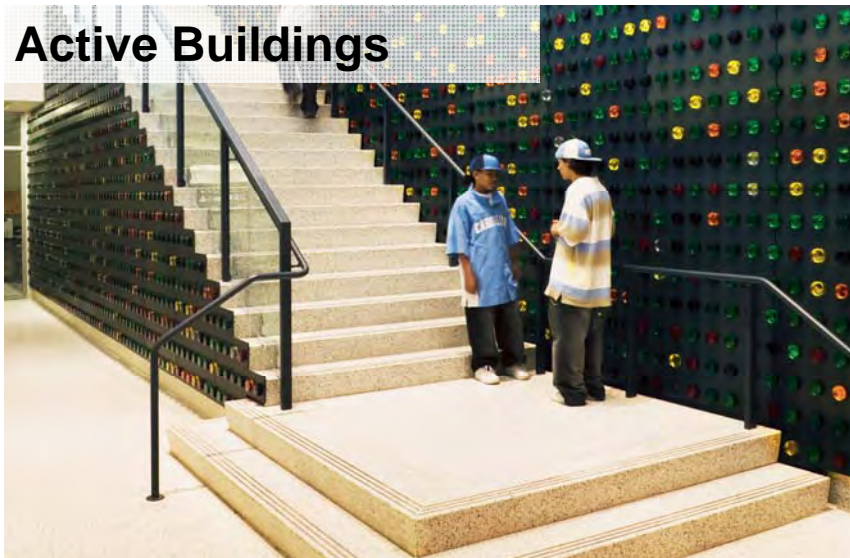
**Active Transportation**



**Active Recreation**



**Active Buildings**



**Healthy Food Access**





# Active Transportation

- Land use mix + development patterns
- Pedestrian environment
- Bicycle infrastructure
- Transit access





# Active Recreation

- Parks, playgrounds, plazas
- On-site recreation
- Street closures





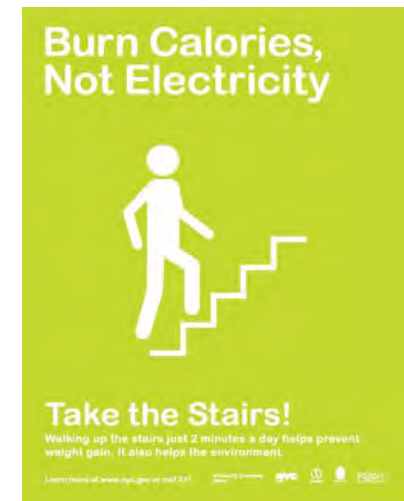
# Healthy Food Access

- Supermarkets
- Farmers markets and produce stands
- Gardening opportunities
- Tap water access



# Active Buildings

- Designed to encourage stair use
- Support the pedestrian realm
- On-site recreation and gardening





# Active Buildings

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- **Designed to encourage stair use**
- **Support the pedestrian realm**
- **On-site recreation and gardening**





# LEED Pilot Credit



New Construction | v2009

## Design for active occupants

EQpc78 | Possible 1 point

### Intent

This is a [pilot credit](#). To use any pilot credit on your LEED project, be sure to [register here](#). Documentation requirements and additional questions are listed below.

Improve the health of building users through physical activity while reducing environmental impacts.

### Requirements

**All projects: Meet the following requirement:**

Buildings must have at least one main stair that enables occupants to travel between the building entrance floor(s), occupant's own destination floor and common use floors. Access to floors may be restricted by use of security devices, such as card keys, codes or other access devices.

**AND**

Include seven or more of the following features:

For staircase(s)\*:

1. Classify all regularly occupied floors for re-entry, allowing all building users to have access to and from these floors. Service floors do not need access for all users.
2. Make accessible staircases visible from the corridor by either:

# Case Study: Arbor House



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LEED Platinum-Subject of Mt. Sinai Study about the Effects of Active Design on Obesity

# Case Study: Arbor House

- Shift in the ground floor plan to make stairs more visible





# Case Study: Arbor House

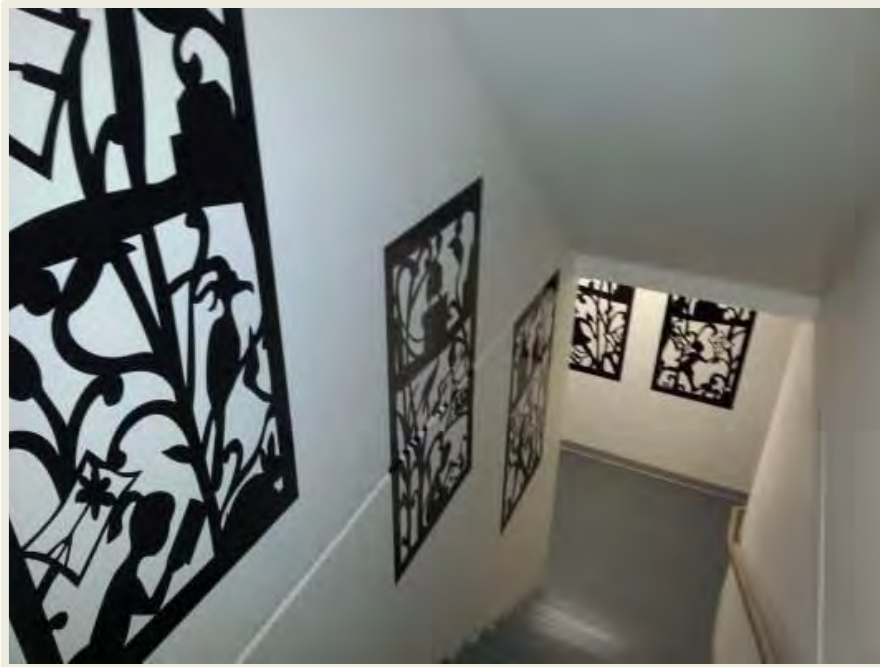
- Shift in the ground floor plan to make stairs more visible



# Case Study: Arbor House

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- Art and signage to promote stair use





# Case Study: Arbor House

- Indoor and outdoor recreation spaces



# Case Study: Arbor House

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- Rooftop hydroponic farm – community supported agriculture
- Secure indoor bicycle storage





# Thank you!

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- Visit [www.centerforactivedesign.org](http://www.centerforactivedesign.org) to download Active Design Guidelines for free, as well as other resources
- Suzanne Nienaber, Partnerships Director  
[suzanne@centerforactivedesign.org](mailto:suzanne@centerforactivedesign.org)





**Active Living**  
Hennepin County

**Karen Nikolai**  
**Manager, Healthy Community Planning**  
(612) 348-8089 office  
[karen.nikolai@co.hennepin.mn.us](mailto:karen.nikolai@co.hennepin.mn.us)

# Active Living Hennepin County



- Partnership of cities, businesses, nonprofits, parks, MnDOT, Metropolitan Council and other organizations
- Convened by Hennepin County starting in 2006
  - most recent meeting was Monday – panel on bike parking to incentivize mode shift from cars
  - Vision, mission and guiding principles adopted in October, 2007
  - Active Living policies adopted in June, 2009





# Active Living workshops

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Workshops have helped make active living tangible for our partners and communities.

- Walking Workshop in St. Louis Park, March '09
- Biking Workshop in Robbinsdale, October '09



# Active Living to Complete Streets

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Complete Streets (CS) workshop held – Dec 2008

CS Resolution of Support – Feb 2009

CS policy development – Spring 2009

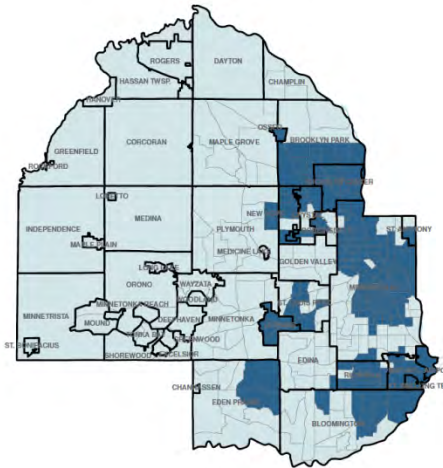
CS policy unanimously approved – July 2009

CS Task Force created – November 2010



# Pedestrian and Bicycle Planning

- Began in 2012 under CDC Community Transformation Grant
- Drafted first ever county pedestrian plan – out for comments
- Funding eight municipal bicycle and pedestrian plans
- Kicking off update of county bicycle plan this month
- New bicycle and pedestrian coordinator position





# Health Impact Assessment: Bottineau Transitway

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HIA: used to consider potential health effects that a proposed policy or project could have and how effects are distributed. We used the following methods on Bottineau:

- HIA Advisory Committee, interviews, focus groups, data, analysis from earlier Bottineau reports, literature review
- Bottineau HIA assessed six factors related to the transitway's development that research has shown to impact health:
  - Physical activity
  - Education
  - Housing+Transportation Costs
  - Traffic Safety
  - Employment
  - Access to Healthy Foods

# Key HIA Recommendations

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- Conduct analysis to identify low-income and transit-dependent populations beyond ½ mile radius that could benefit from access to the line
- Continue to engage populations living in the corridor during future phases of light rail project
- Target growth in the station areas and implement zoning, parking requirements and building codes that encourage higher density, mixed-use development
- Incorporate bike and pedestrian infrastructure improvements into station area plans
- Preserve existing affordable housing and support the development of affordable and mixed-income housing

# How HIA Findings Will Be Used

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- “Deep” community engagement with vulnerable populations (new BCBS MN funding)
- Station-area planning (11 station areas)
- Transitway Development
- Help residents understand how the transitway and land use changes could impact them
- Alignment of health benefits and FTA New Starts criteria



# A Word About Funding

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- Funding may come from many sources, depending on how you imagine your work coming together
- Our funding sources have included: BCBS MN, MN Dept of Health, CDC, NACCHO, The Pew Charitable Trusts
- We've turned funding around to others in the form of mini-grants, bike racks, and other incentives

# Final thoughts on Healthy Community Planning



- Work closely with elected officials and communities
- Write leadership into resolutions and policies
- Engage **multidisciplinary** staff and advocates
- Be creative to bring ideas and people together



# For more information

- <http://hennepin.us/activeliving>
- <http://www.hennepin.us/completestreets>
- <http://hennepin.us/pedestrianplan>
- [hennepin.us/bottineauhia](http://hennepin.us/bottineauhia)





THE HONORABLE ROGERS ANDERSON, CHAIRMAN



NASHVILLE AREA

**Metropolitan Planning Organization**

# Incorporating Health in Regional Transportation Planning

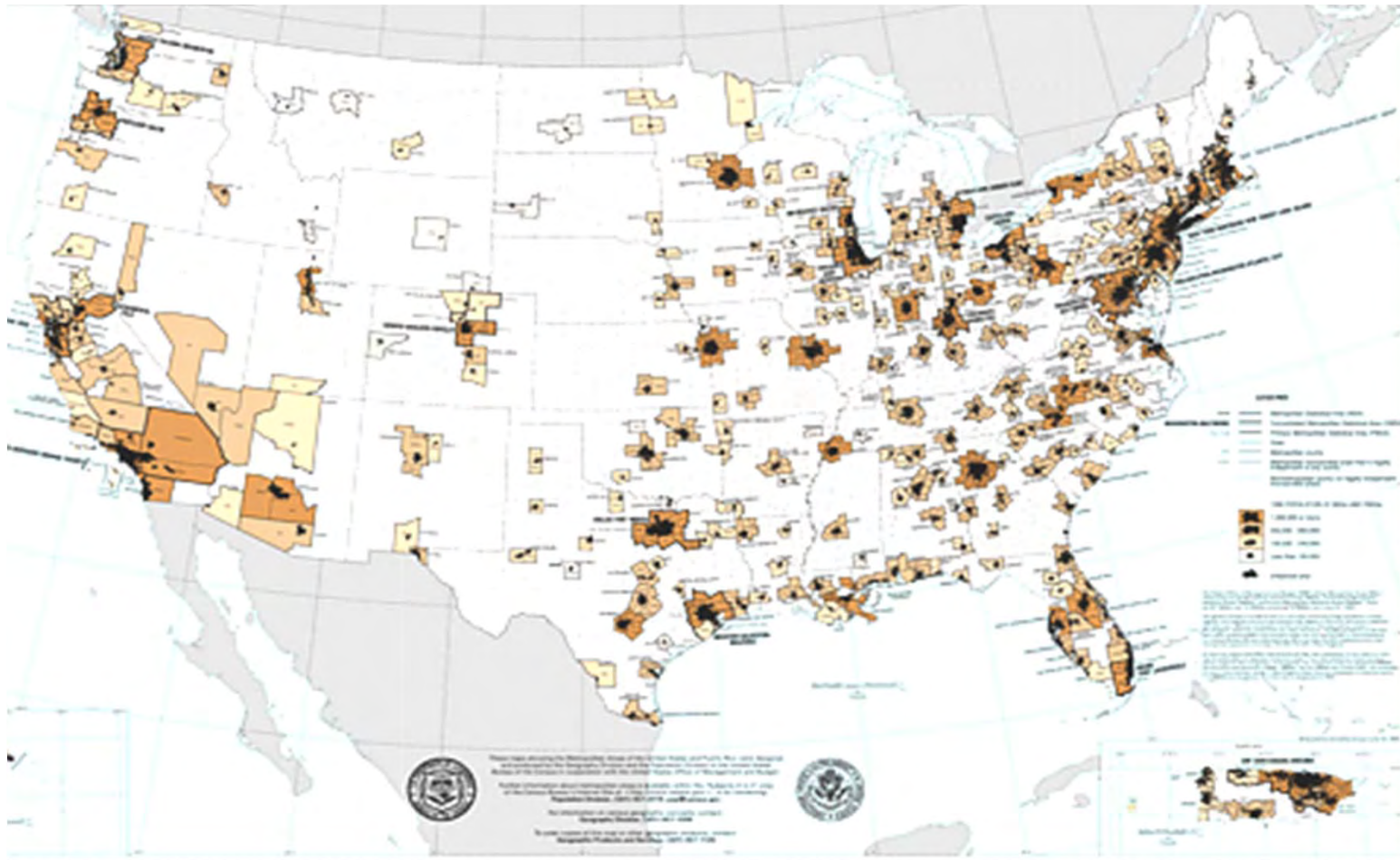
Mary Beth Ikard, APR | Communications Director

*Planning & Public Health: Creating Healthier*

*Communities through Integrative Practice*

June 20, 2013

# Metropolitan Planning Organizations



# How MPOs Work

- ➔ Conduit for Federal Transportation Dollars in Urban Areas
- ➔ Provide funding for roads, transit, greenways, bikeways and sidewalks
- ➔ Work with local governments to establish regional priorities (however, bike/pedestrian trips are local)
- ➔ Impact everyone in a region



# What We Accomplished

## ➔ Policy

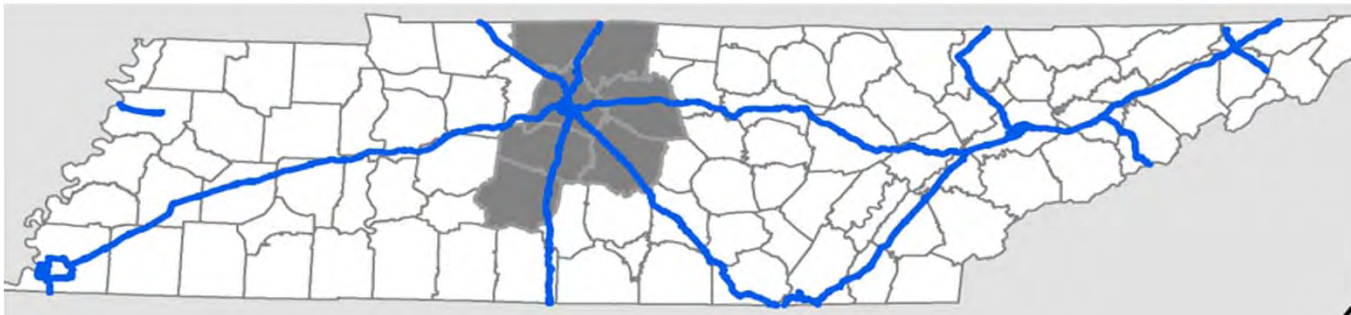
➤ Scoring Criteria for Inclusion of Health in Evaluation of Transportation Projects

## ➔ Funding

➤ Restructured Existing Funding Sources so More Money is Spent on Active Transportation

## ➔ Data

➤ Regional Data Collection Effort to Provide Baseline Evidence for Policy Benchmarking



# Growing Issues to Address

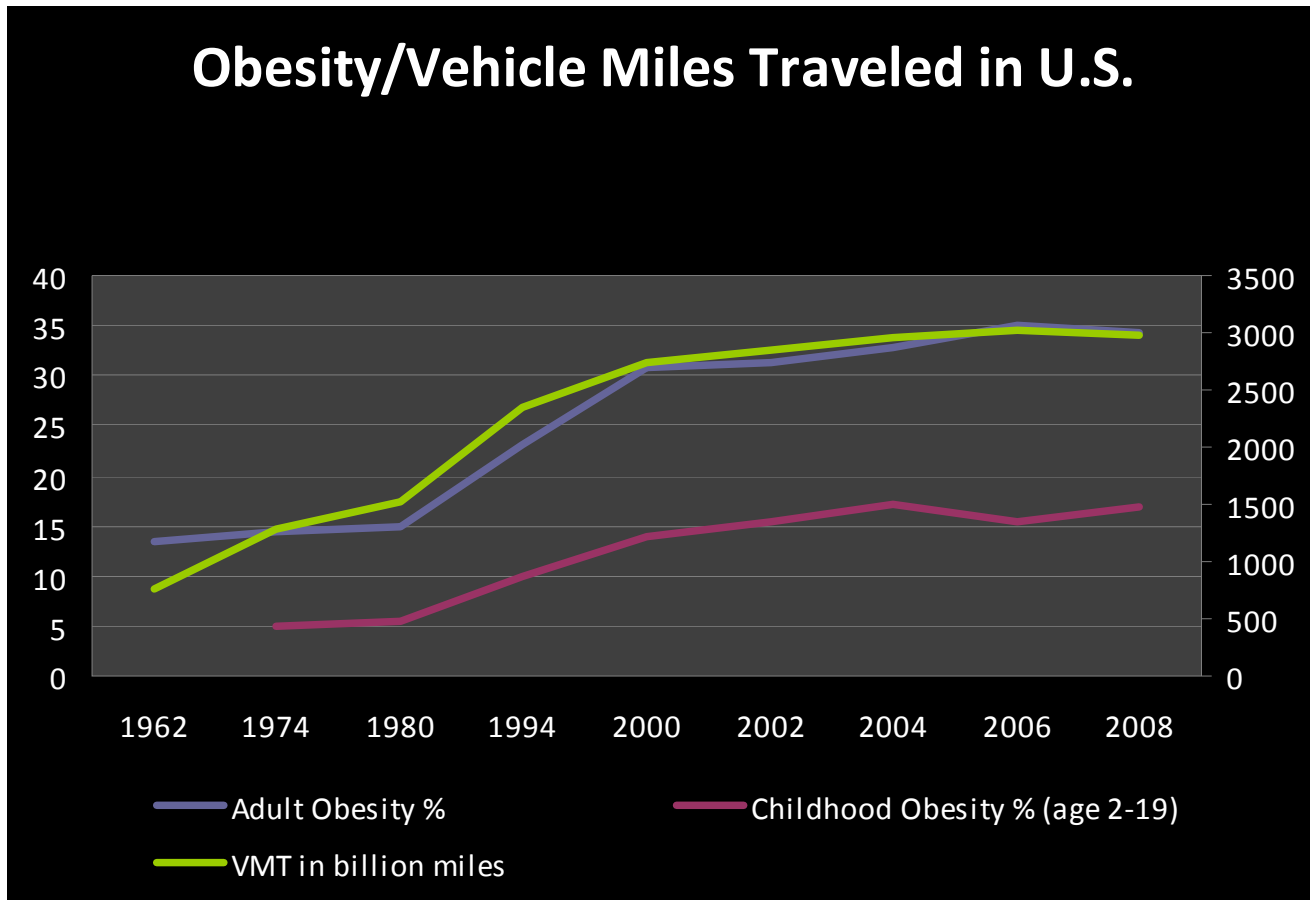
- ➔ Housing Choices
- ➔ Availability of Jobs
- ➔ Increasing Costs
- ➔ Longer Travel Times & Trip Lengths
- ➔ Quality of Life
- ➔ Worsening Personal Health / Increasing Costs
- ➔ Education
- ➔ Affordable and Healthy Foods

# Making the Case for Health

[nashvillempo.org](http://nashvillempo.org)



# Transportation and Obesity



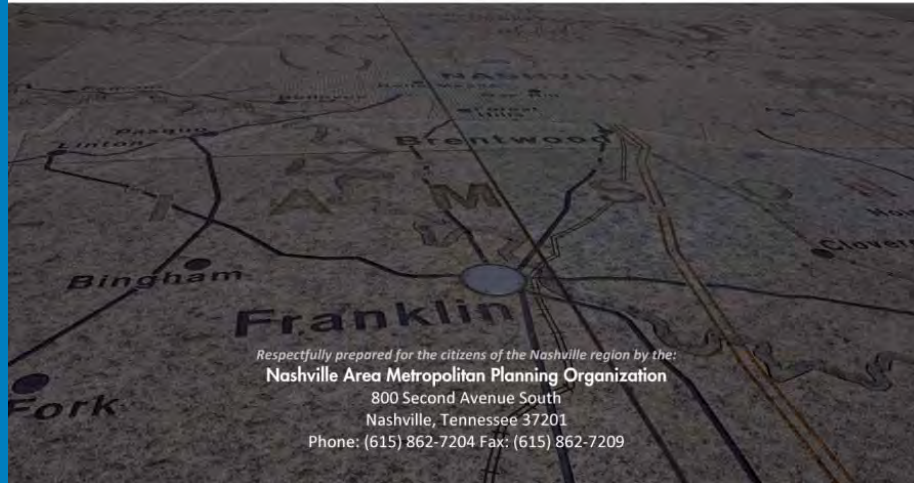
Sources: Centers for Disease Control – National Health and Nutrition Examination Survey/  
U.S. DOT – Federal Highway Administration, Annual Vehicle Distance Traveled in Miles and Related Data

# MPO's Public Opinions

- ➔ Three strategies provided for improving transportation in Middle Tennessee; respondents then asked to prioritize—
  - **1st choice:** improve and expand mass transit options
  - **2nd choice:** make communities more walkable & bike-friendly
  - **3rd choice:** build new or widen existing roadways

Nashville Area Metropolitan Planning Organization

**2035**  
NASHVILLE AREA  
**Regional Transportation Plan**



**#1**

A Bold, New Vision  
for Mass Transit

**#2**

Support for  
Active Transportation  
& Walkable Communities

**#3**

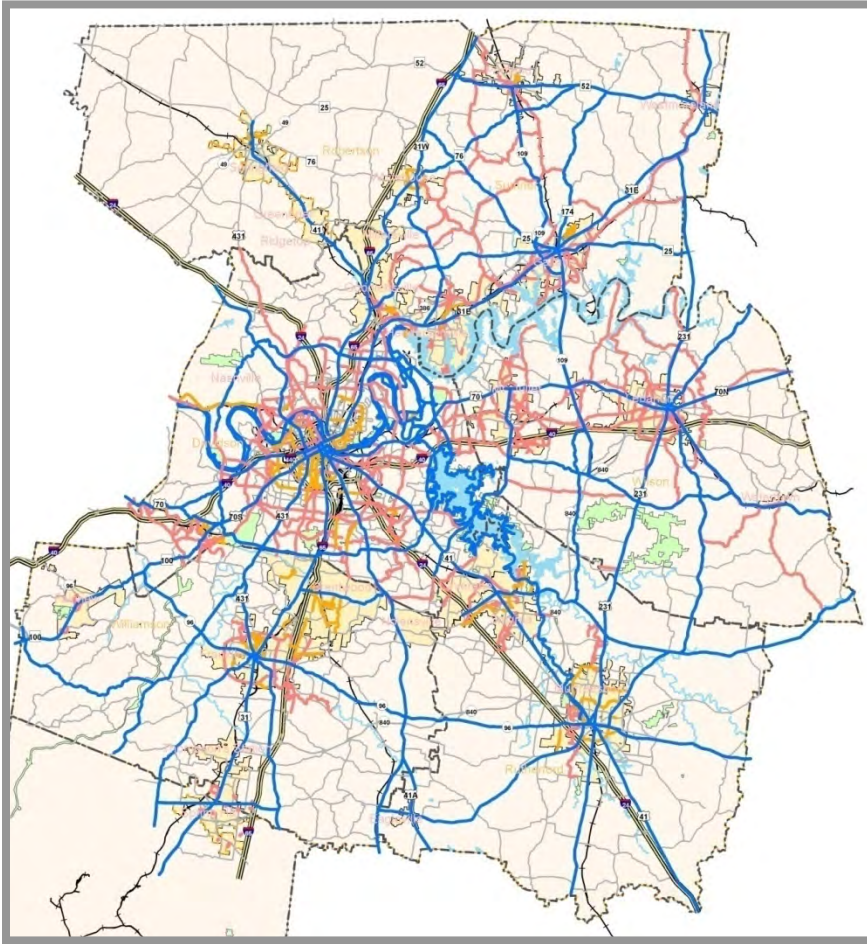
Preservation &  
Enhancement of  
Strategic Roadways

[nashvillempo.org](http://nashvillempo.org)

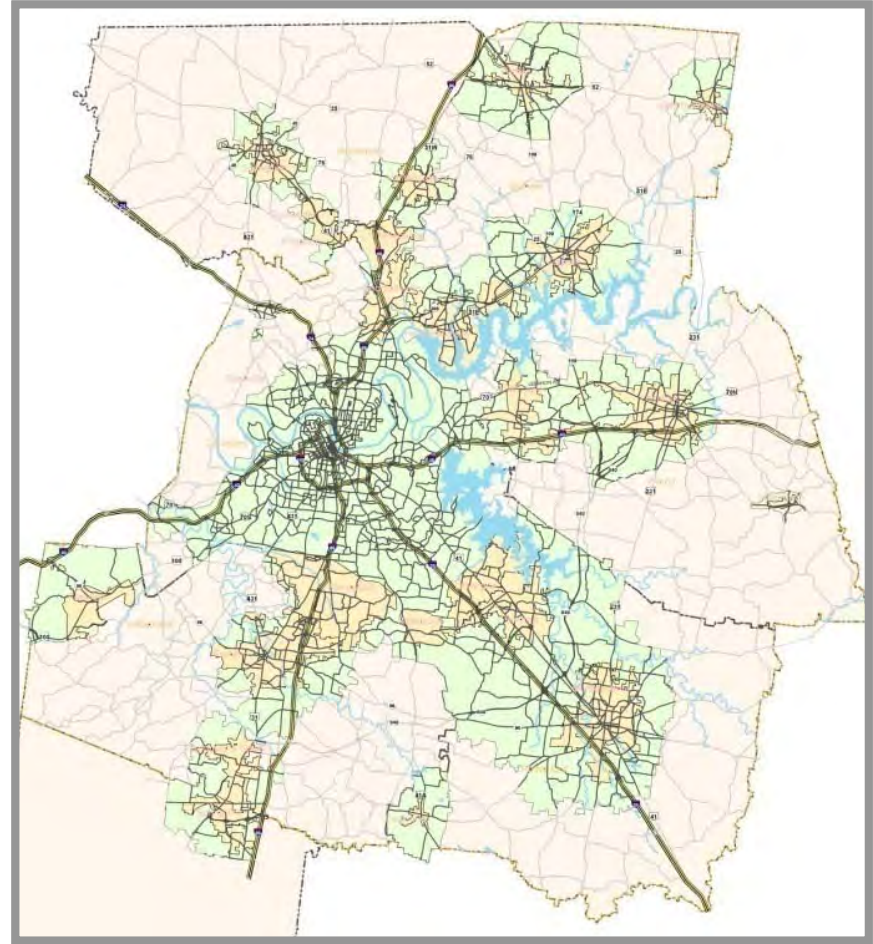


# A Vision for Future Active Transportation

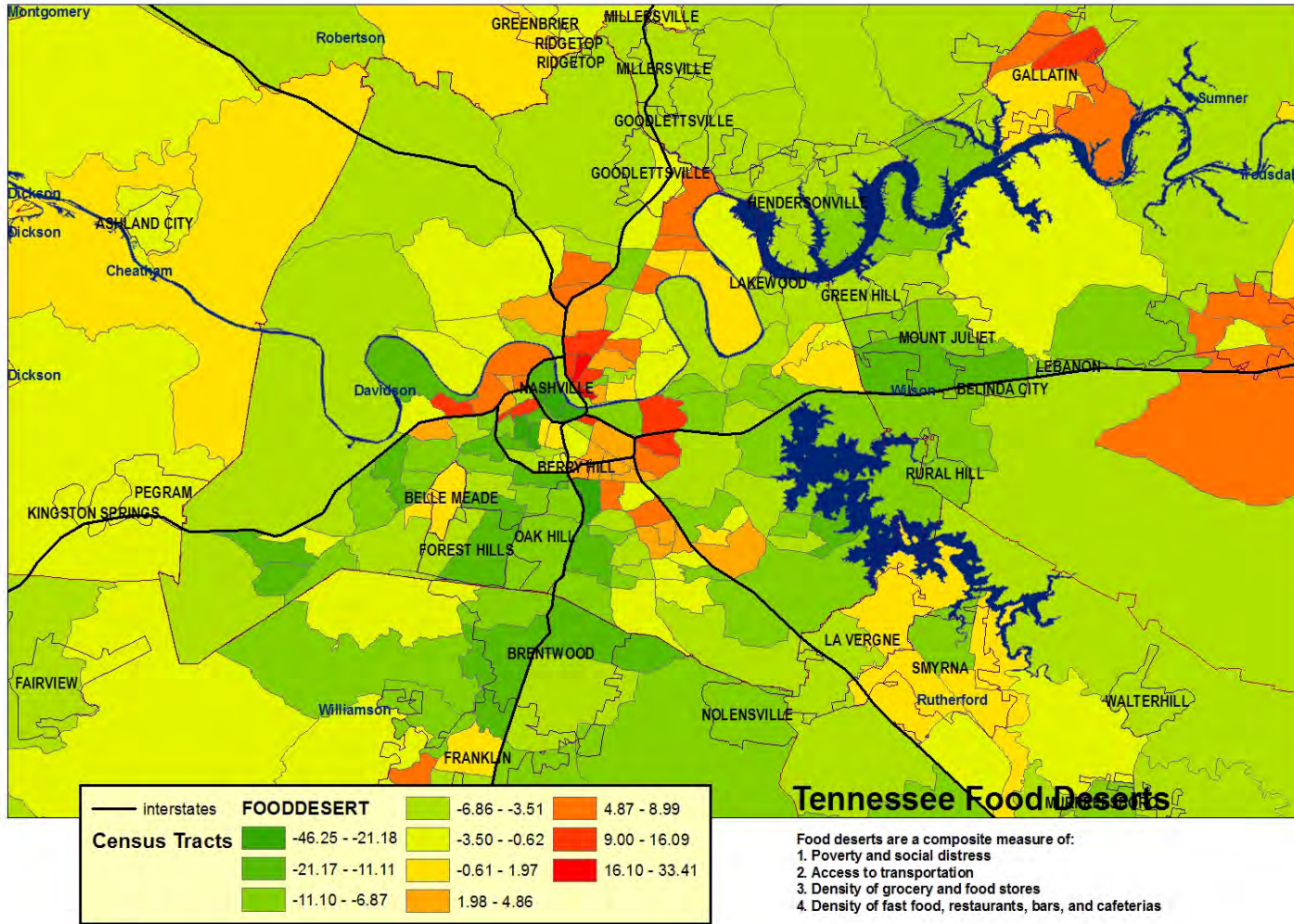
Bikeways



Sidewalks

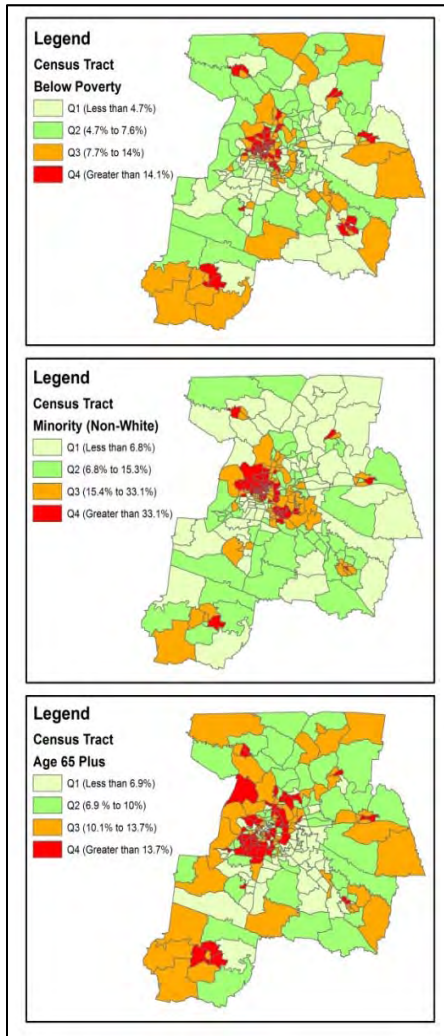


# Food Access and Transportation





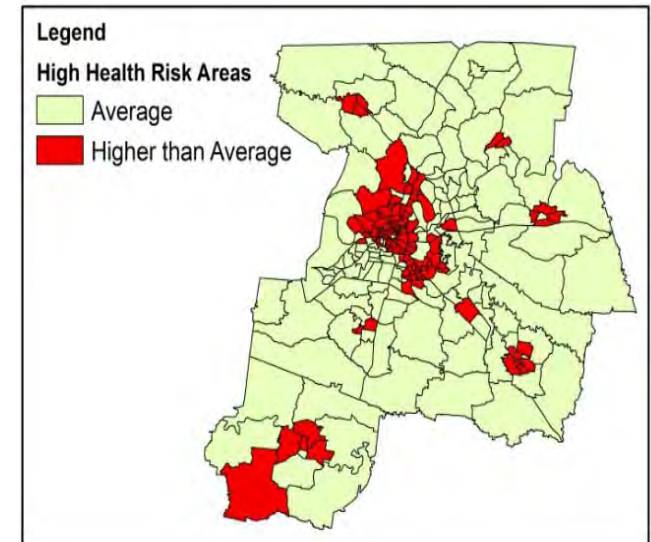
# What We Learned – Health Analysis



There is a strong link between the lack of physical activity and health (e.g. heart disease, obesity, and other chronic conditions).

Research has also shown certain population groups have a higher disparity. These groups include:

- Low Income
- Minority
- Older Adults (over 65)

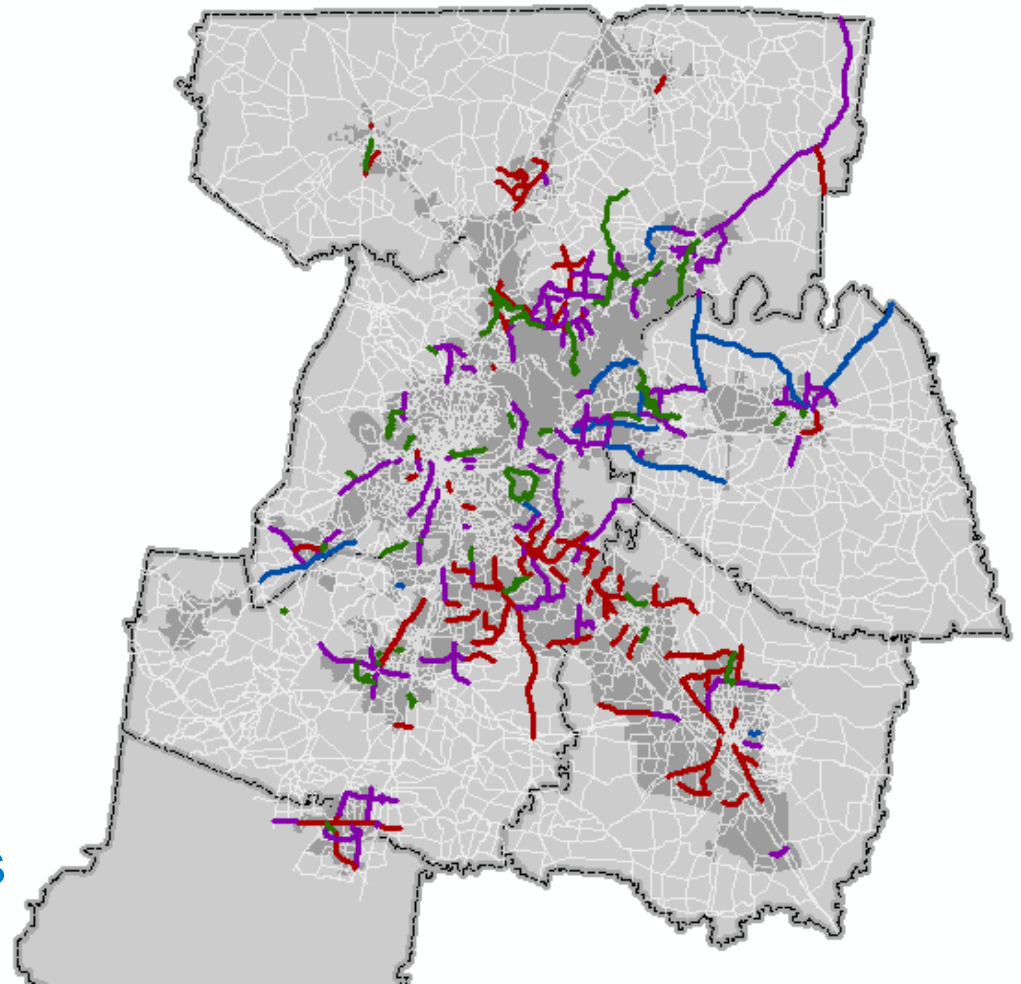
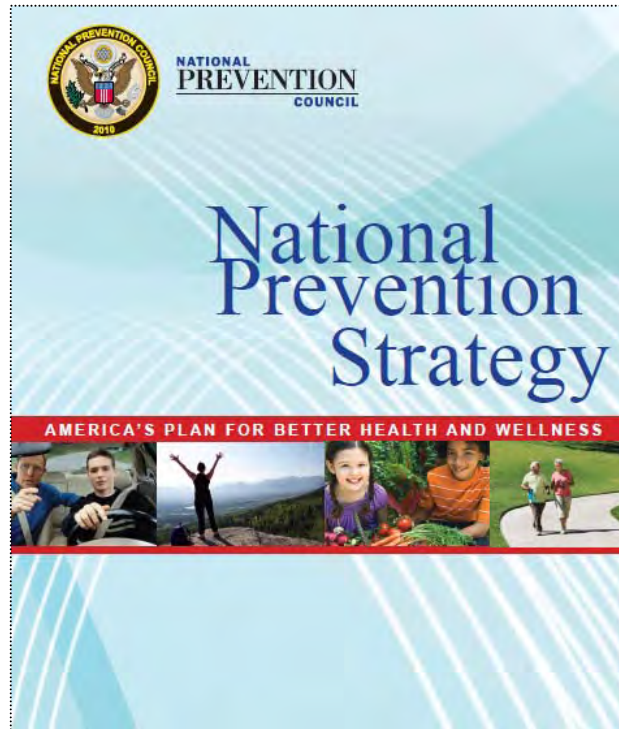


# MPO's Urban STP Investment Strategy

- ➔ 70% to Location Specific Roadway Improvements
  - **Quality Growth and Sustainable Development – 15%**
  - **Multi-Modal Options – 15%**
  - **Health & Environment – 10%**
  - **Safety & Security – 10%**
  - **Congestion Management – 10%**
  - **State & Local Support/ Investment – 15%**
  - **System Preservation & Enhancement – 15%**
  - **Freight & Goods Movement – 10%**



# More Complete Streets



70% of adopted roadway projects include sidewalks, bicycle lanes, or shared-use lanes (up from 2%)

# MPO's Urban STP Investment Strategy

➔ 15% minimum investment in Active Transportation & Walkable Communities

↳ Sidewalks, bicycle lanes, greenways, transit stops, and education

➔ 10% minimum flexed to Transit

↳ Combined with Federal Transit Administration funds to help implement regional vision for mass transit

➔ 5% Intelligent Transportation Systems

↳ Using technology to manage traffic

# Transportation and Health Study

Transportation, Physical Activity and Health Data Collection and Analysis

## Middle Tennessee Transportation and Health Study



Welcome About the Study Invited to Join? Report Travel FAQs Materials Contact Us

**Step 1**  
Invited to join? Complete a Household Questionnaire.  
[Start Here](#)

**Step 2**  
Record your travel on your assigned day using your travel log.  
[Learn More...](#)

**Step 3**  
After your travel date, please report your travel information.  
[Report Travel](#)

**Step 4**  
If selected, complete the additional Health Survey.  
[Take Health Survey](#)

**Welcome!** The Middle Tennessee Transportation and Health Study is sponsored by the **Nashville Metropolitan Planning Organization**, the **Clarksville Urbanized Area Metropolitan Planning Organization**, and the **Tennessee Department of Transportation**. If you have received a participation letter, please [Start Here](#) to begin the survey.



Every day, thousands of people move through the middle Tennessee region—in cars, on buses, by foot, on bikes. To plan for the projects of *tomorrow*, we need to understand how you travel *today*. Your participation in this important survey will help improve the future of transportation for all of us.





# Champions and Partners



Residents/Workers in Mid TN

- Elected Officials
  - Partners – Housing, Transit, Chambers of Commerce
  - Showcasing other cities
  - Public Health:
    - Centers for Disease Control
    - Tennessee Obesity Taskforce
- ([www.EatWellPlayMoreTN.org](http://www.EatWellPlayMoreTN.org))



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**facebook** .com/NashvilleMPO



Livability. Sustainability. Prosperity. Diversity.

Leslie Meehan, AICP  
Director of Healthy Communities  
meehan@nashvillempo.org

Mary Beth Ikard, APR  
Communications Director  
ikard@nashvillempo.org

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# Questions?



**Urban Land  
Institute**

Daniel Rose Center for Public Leadership in Land Use

Alison Johnson  
Program Manager  
202-624-7015; [alison.johnson@uli.org](mailto:alison.johnson@uli.org)

## Give us your Feedback!

- **Email us** – [rosecenter@uli.org](mailto:rosecenter@uli.org)
- Complete our survey via Survey Monkey:  
[https://www.surveymonkey.com/s/Planning\\_PublicHealth](https://www.surveymonkey.com/s/Planning_PublicHealth)

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- twitter  : [@ULIRoseCenter](https://twitter.com/ULIRoseCenter)
- Facebook  : [www.facebook.com/ulirosecenter](https://www.facebook.com/ulirosecenter)