



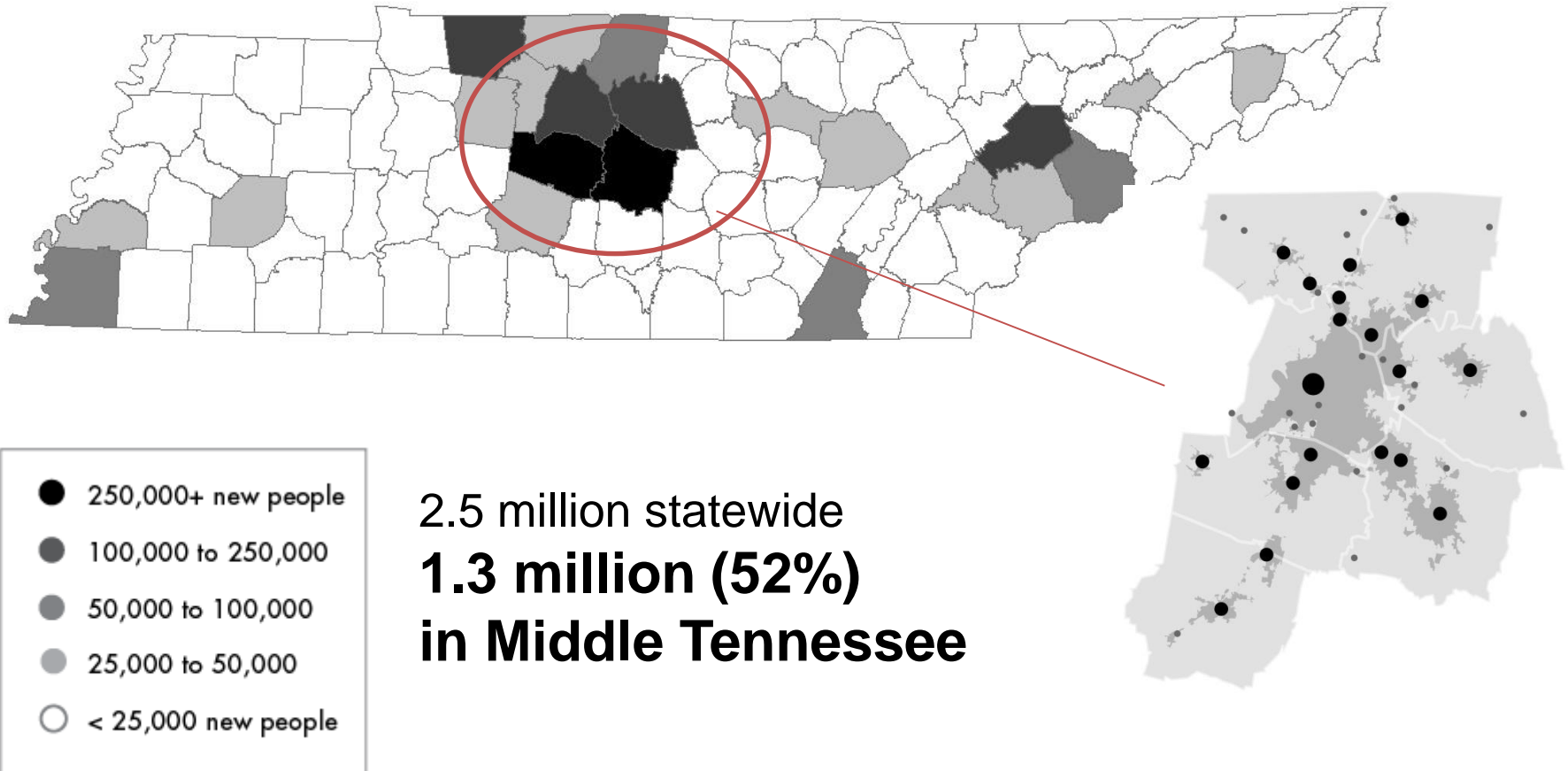
NASHVILLE AREA

**Metropolitan Planning Organization**

# Active Transportation and Health: Policy, Projects, Data Collection and Monetization

Leslie Meehan, AICP  
Planning for Healthy Communities Conference  
September 29, 2015

# Nashville Area MPO



# Policy: Public Opinion

**1st choice:** improve and expand mass transit options



**2nd choice:** make communities more walkable & bike-friendly

**3rd choice:** build new or widen existing roadways



# Policy: Public Opinion



**#1**

A Bold, New Vision  
for Mass Transit

**#2**

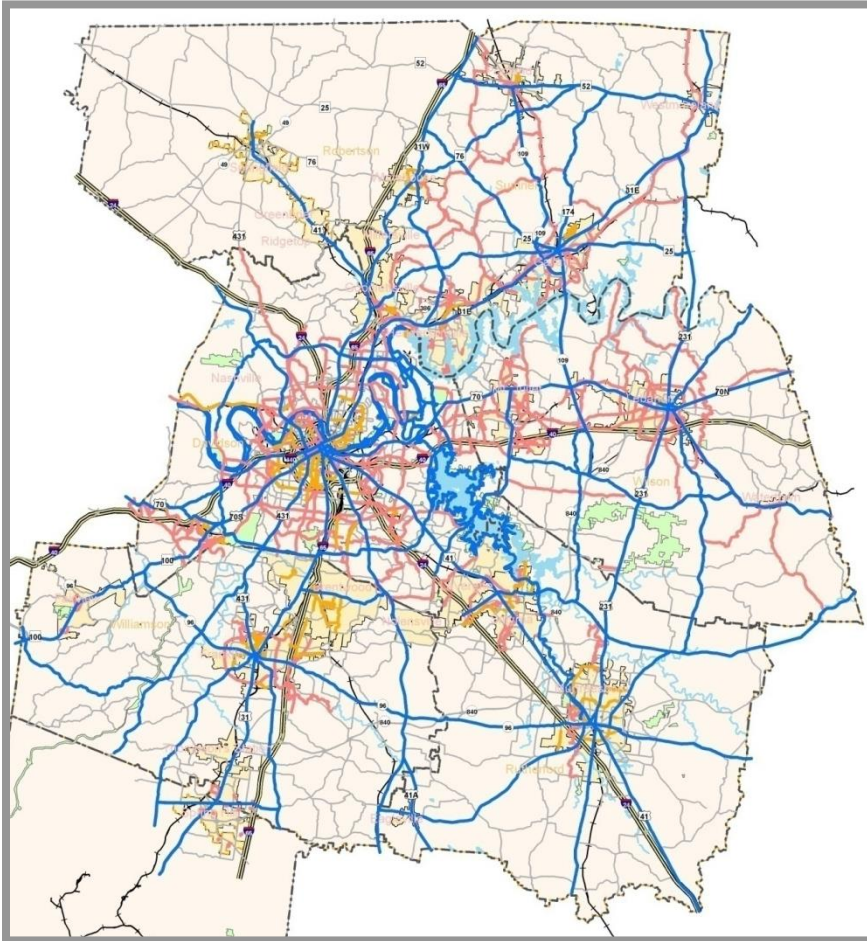
Support for  
Active Transportation  
& Walkable Communities

**#3**

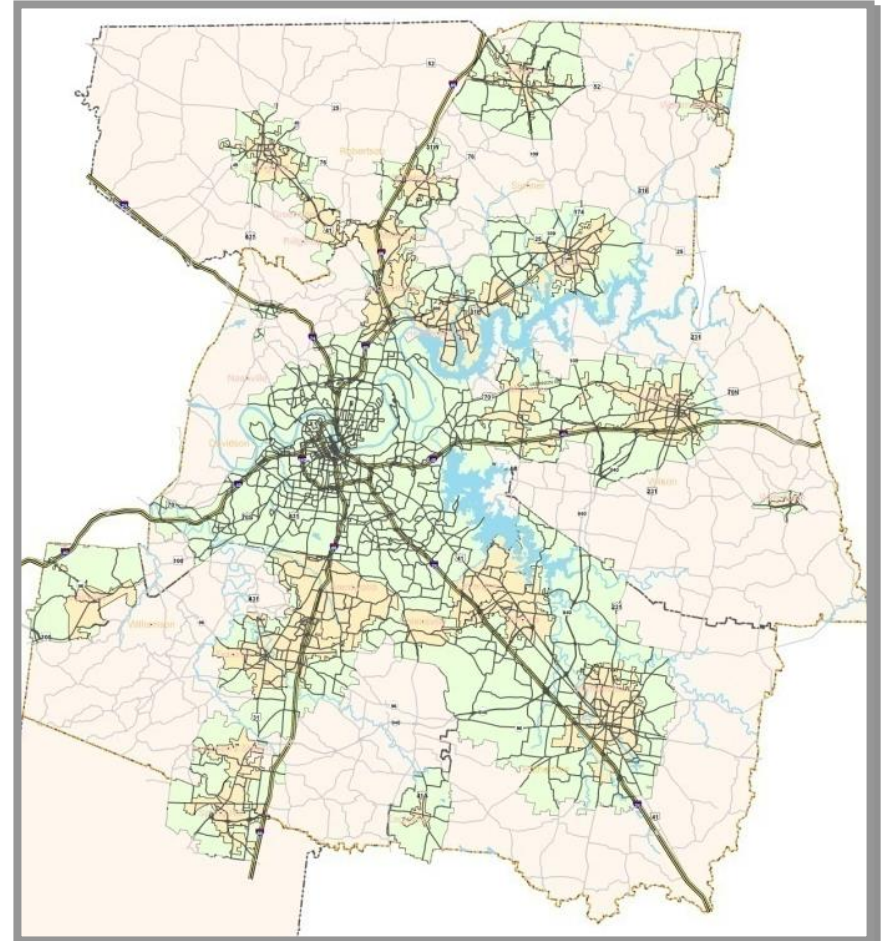
Preservation &  
Enhancement of  
Strategic Roadways

# A Regional Vision for Non-Motorized Modes

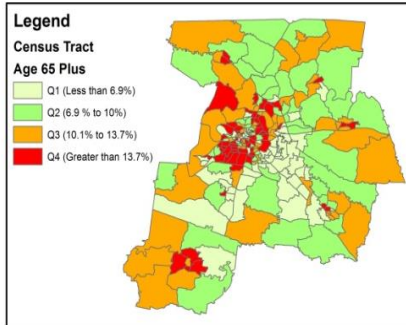
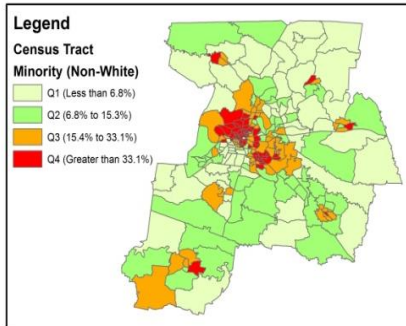
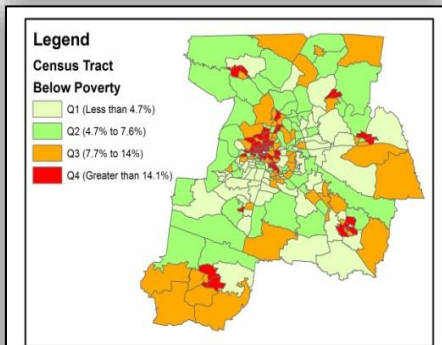
Bikeways



Sidewalks



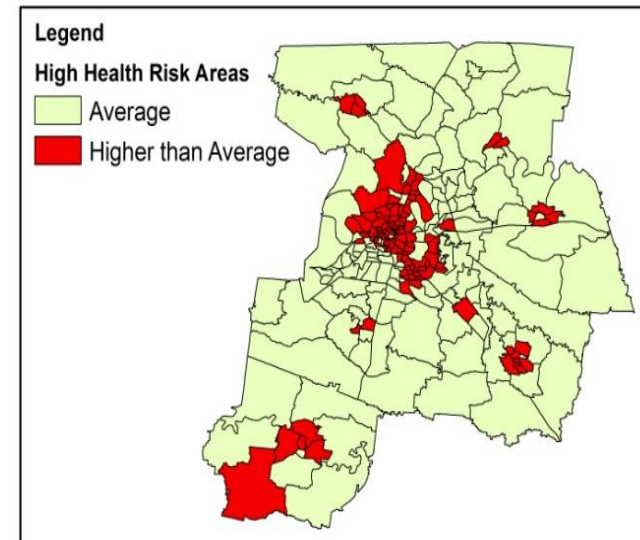
# What We Learned – Health Analysis



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 Health Investment Strategy

## Roadway Funding:

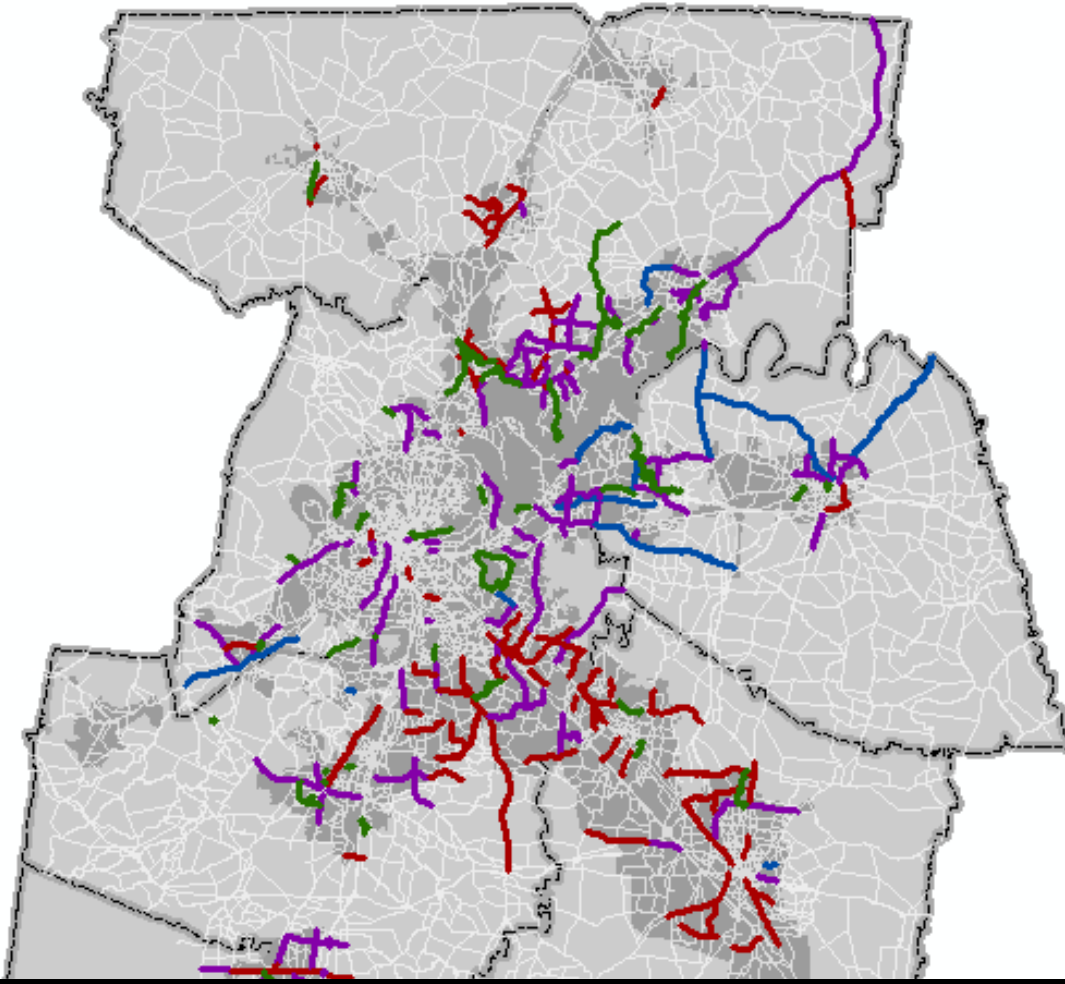
- ➔ 70% - Roadway projects that improve health
- ➔ 15% - Sidewalks, bicycle lanes, greenways, transit stops, and education
- ➔ 10% - Transit
- ➔ 5% - Intelligent Transportation Systems

# MPO's Urban STP Investment Strategy

- ➔ 2040 Plan Projects Scored on Criteria – 100 points
  - Quality Growth and Sustainable Development – 15pts
  - Multi-Modal Options – 15pts
  - Health & Environment – **15pts**
  - Safety & Security – **20pts**
  - Congestion Management – **15pts**
  - System Preservation & Enhancement – 10pts
  - State & Local Support/ Investment – 5pts
  - Freight & Goods Movement – 5pts



# Projects: Complete Streets



2035 Plan: 70% of adopted roadway projects include sidewalks, bicycle lanes, or shared-use lanes (up from 2%)

➡ 70% roadway \$ to projects that improve health

# Bikeways, Sidewalks Greenways

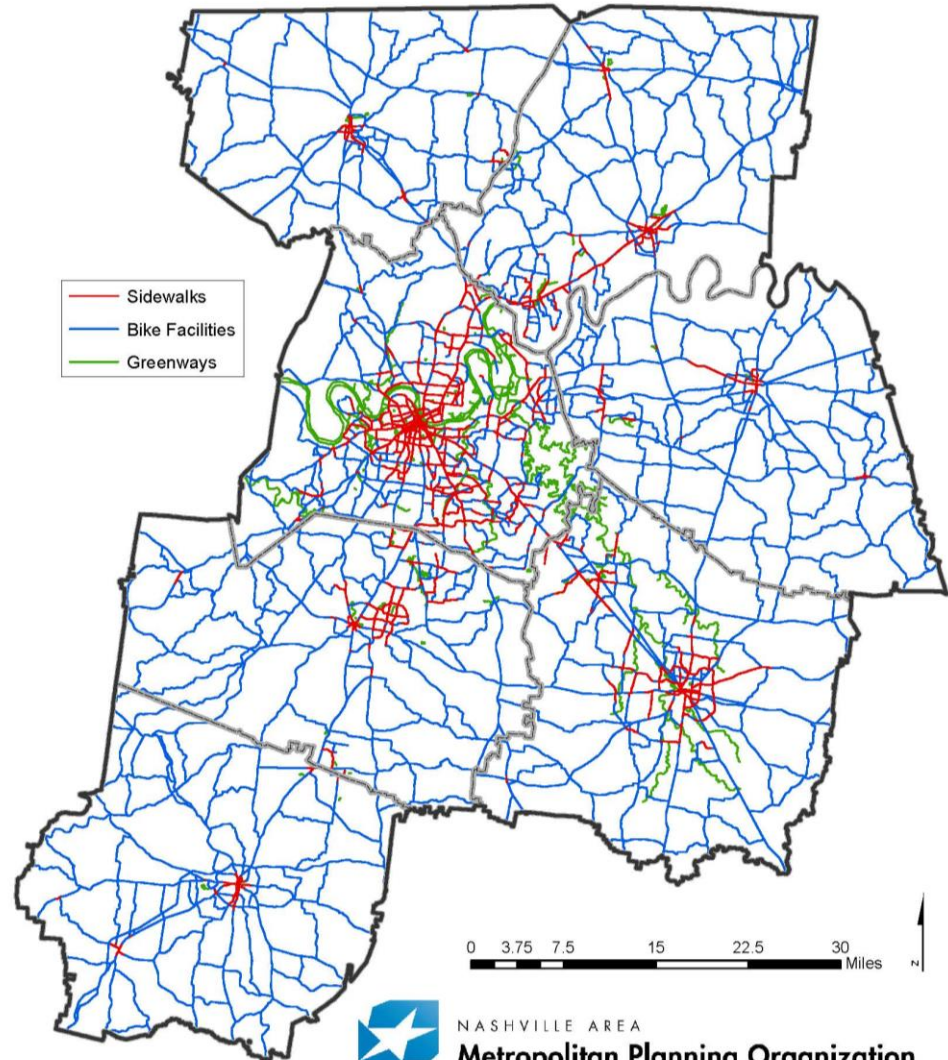
## 2009 to 2014

**Sidewalks** – 57% increase  
322 miles to 505 miles

**Bikeways** – 19% increase  
354 miles to 423 miles  
(bike lanes, buffered bike lanes, bike routes and sharrows)

**Greenways** – 36% increase  
136 miles to 185 miles  
(greenways, multi-use trails and park trails)

## Bicycle and Pedestrian Routes



# Data Collection: Middle Tennessee 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.



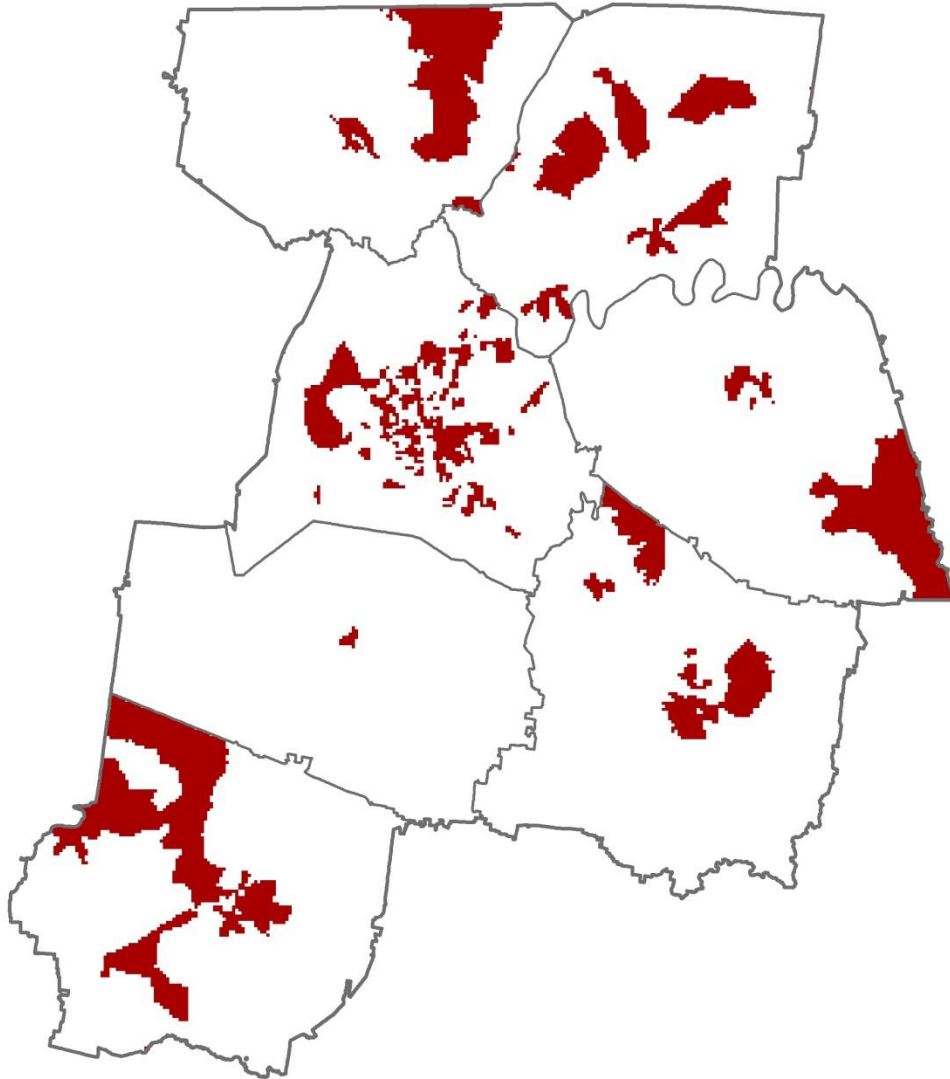
Every day, thousands of people move through the middle Tennessee region—in cars, on buses, by foot, on bikes. To plan for the projects of *tomorrow*, we need to understand how you travel *today*. Your participation in this important survey will help improve the future of transportation for all of us.



[www.middletnstudy.com](http://www.middletnstudy.com)

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

# Prioritization: Health Priority Areas

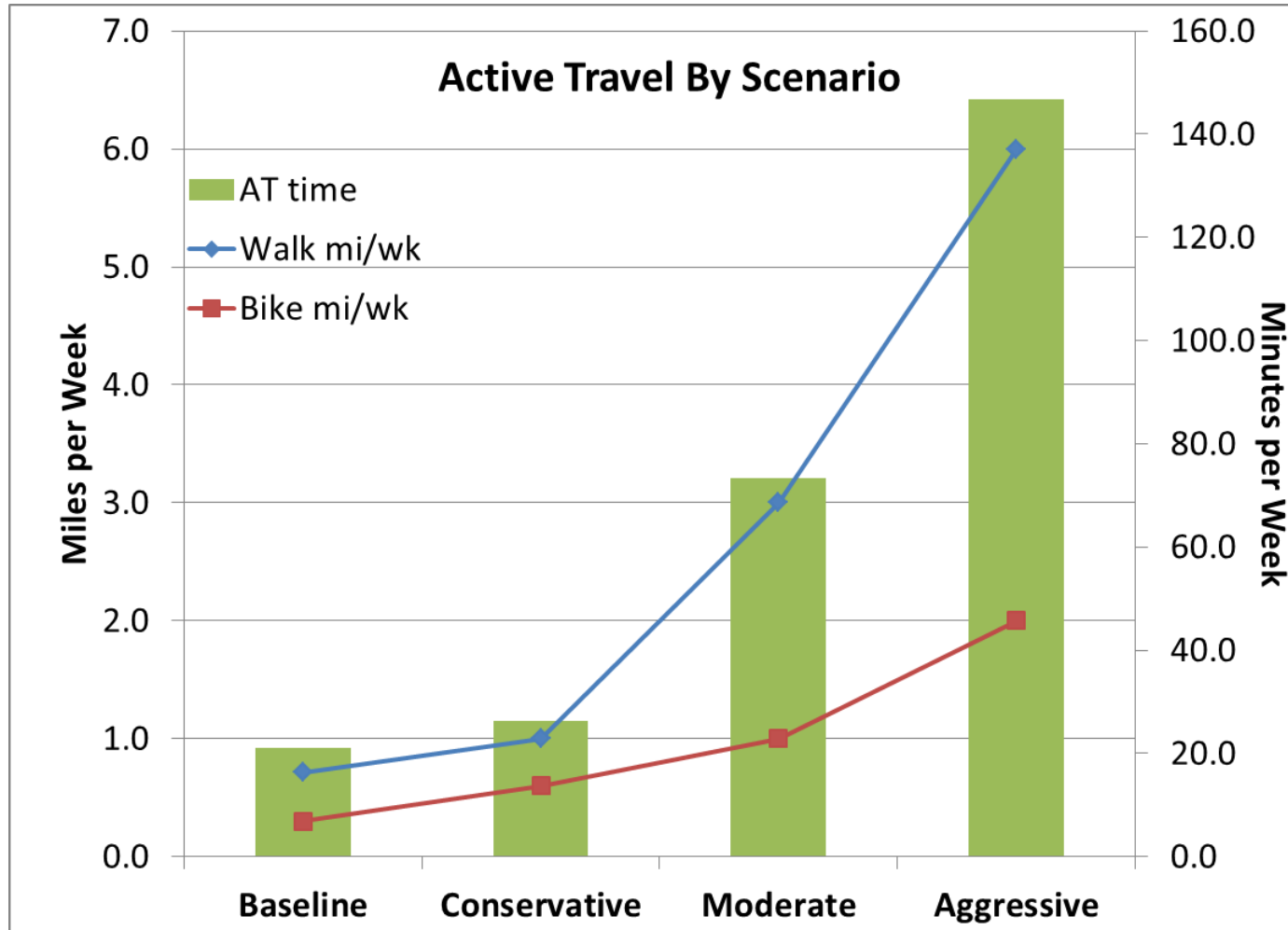


## Health Priority Areas

3 out of 4:

- Poverty
- Unemployment
- Carless Household
- Aging (over age 65)

# Happening Now: Integrated Transport and Health Impact (ITHIM)



# Diseases and Exposures

Physical Activity	Air Pollution	Collisions	
Ischemic Heart Disease	Respiratory Infections	Auto	} <b>MODE</b>
Depression	Cardiovascular Disease	Bicycle	
Dementia	Hypertensive Heart Disease	Pedestrian	
Diabetes	Inflammatory Heart Disease	Bus	
Colon Cancer	Lung Cancer	Truck	
Breast Cancer	Respiratory Disease (kids)	Highway	} <b>ROAD TYPE</b>
All-Cause Mortality	Stroke	Arterial	
		Local	
		Fatal	} <b>SEVERITY</b>
		Non-Fatal	

# Monetization: Impacts of Physical Activity via Transportation on Health

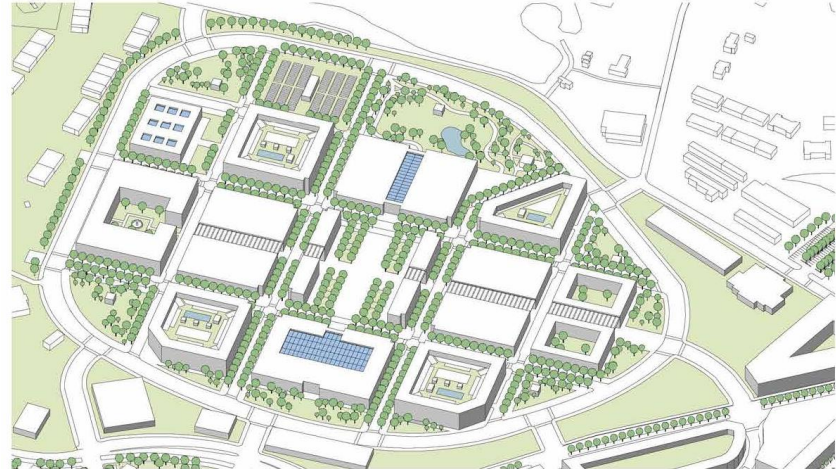
Moderate Scenario	Change in disease burden	Change in DALYs per year
Cardiovascular Diseases	10.4%	1442
Diabetes	11.2%	1252
Depression	2.7%	460
Dementia	3.9%	879
Breast cancer	2.8%	124
Colon Cancer	2.6%	94
Collisions	13.8%	1240



Savings:  
**\$200 Million**  
per year in healthcare costs

# Getting Public Health Involved in the Built Environment

- ➔ Making the Case
- ➔ Providing Data
- ➔ Involved in Policy
- ➔ Benchmarking and Performance Measures

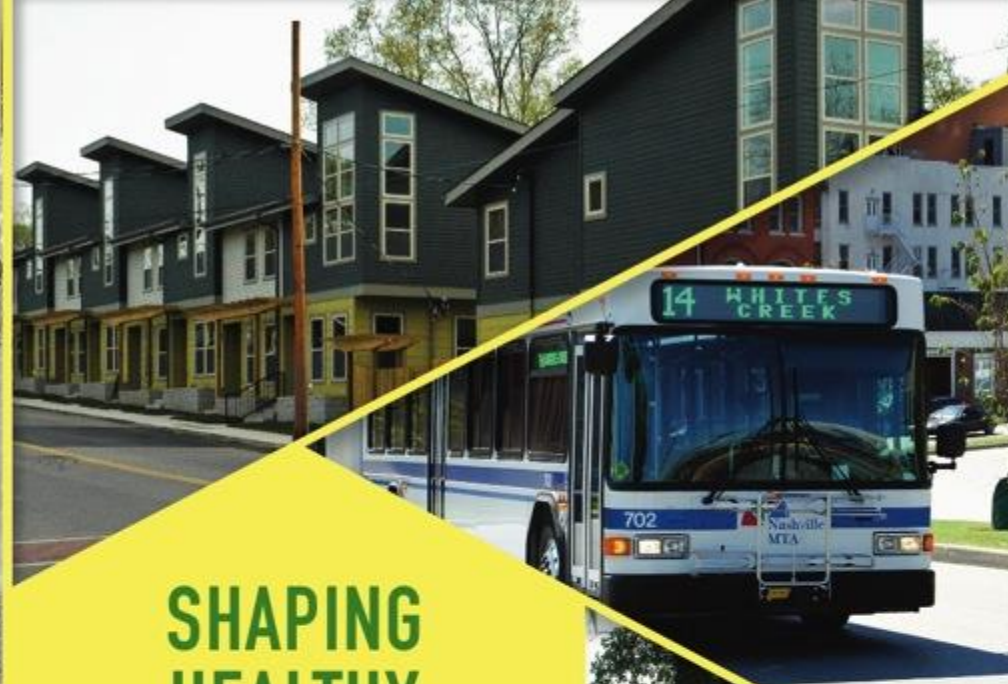


*Student Proposal for the Global Mall at the Crossings showing mixed use buildings with retail and residential dwellings (North District)*



*Hickory Hollow Mall 2013*





**SHAPING  
HEALTHY  
COMMUNITIES:  
NASHVILLE**



*Nashville Civic Design Center*



“The shape we give our city in turn shapes us.”



TM

Creating Healthy  
Built Environments

# Research: Health and the Built Environment

- Evidence shows that place determines health.
- Access to healthy options, and funding to address built environment issues, are emerging nation-wide.
- Health professionals remain on the periphery of built environment projects across the state, but there is opportunity for stronger engagement



# Costs to Tennessee

- Obesity - \$3.7 Billion per Year (2009)
- Physical Inactivity - \$3.5-3.8 Billion (2009)
- TN Department of Transportation Budget FY 2016  
- **\$1.8 Billion**



# Prevention: Physical Activity

MISSION: PROTECT, PROMOTE AND IMPROVE THE HEALTH AND PROSPERITY OF PEOPLE IN TENNESSEE



**INNOVATE TO ACCELERATE**

Accelerating Tennessee to be the Most Active State



# Physical Activity

## The **NEW** Prescription

- **Primary Prevention Initiatives**
  - Walking School Buses
- **Run Clubs**
  - Partnership with TDEC
- **Built Environment**
  - Parks
  - Greenways
  - Sidewalks
  - Bike lanes
  - Playgrounds
  - Walking Tracks

## Henry Horton State Park Healthy Park-Healthy Person

4358 Nashville Hwy Chapel Hill, TN 37034

[www.hhshealth.com](http://www.hhshealth.com)

931-364-7724



TENNESSEE  
State Parks

Patient: \_\_\_\_\_

See back side for more information  
on the healthy points program at  
Henry Horton State Park

Date: \_\_\_\_\_

### Park Rx

Check the appropriate activity, time, and frequency

- |                              |                                  |                                   |
|------------------------------|----------------------------------|-----------------------------------|
| <input type="radio"/> Walk   | <input type="radio"/> 10 Minutes | <input type="radio"/> 1 Day/Week  |
| <input type="radio"/> Hike   | <input type="radio"/> 20 Minutes | <input type="radio"/> 2 Days/Week |
| <input type="radio"/> Run    | <input type="radio"/> 30 Minutes | <input type="radio"/> 3 Days/Week |
| <input type="radio"/> Bike   | <input type="radio"/> 1 Hour     | <input type="radio"/> 5 Days/Week |
| <input type="radio"/> Paddle | <input type="radio"/> 1+ Hours   | <input type="radio"/> 6 Days/Week |
| <input type="radio"/> Other  |                                  | <input type="radio"/> 7 Days/Week |



Notes:

Unlimited Refills

Signature of Prescriber

For more information visit [www.hhshealth.com](http://www.hhshealth.com)

TN

# Happening Now - Built Environment

- **Designate Built Environment leader**
- **Initiate health in all policies task force for state-level coordination**
- **Educate locals on funding**
  - TPHA – Health by Design
  - County Directors State Meeting
- **Support local communities through technical assistance and peer learning**
  - Federal Highway Healthy/Trans. Corridor Planning Framework
  - ULI Healthy Corridors Project
- **Communicate need, successes**
  - CDC Walkability Institute
    - (State Walking Plan)
  - National Gov. Association/NAM Meeting
    - (State Physical Activity Plan)
- **Monitor and evaluate impact**

Driving in TN  
For the Public  
For Contractors and Consultants  
For Local Government

Multimodal Transportation Resources  
Bicycle and Pedestrian Program  
Bicycle Routes  
Safe Routes to School  
Divisional Staff  
Newsroom  
Sitemap  
Contact Us

Related Topics  
Bicycle Ride Across Tennessee  
TN Greenways and Trails  
TN Bicycle and Pedestrian Safety Resources



## Bicycle and Pedestrian Program - Safe Routes to School Program

**Celebrate WALK BIKE TO SCHOOL**

**With Us!** Safe Routes to School (SRTS) is a federally funded program focusing on the benefits of children walking and biking to school. Its programs aim to improve safety for children and the community and provide opportunities to increase physical activity. A model program integrates health, fitness, traffic relief, environmental awareness, and safety under one program. Bringing together a diverse group of people to identify issues and find ways to improve walking and biking conditions is the core of a successful SRTS program.

**SafeRoutes**  
Tennessee Safe Routes to School



Source: [www.safeschools.org](http://www.safeschools.org)

Congress provided SRTS funding to states through the federal surface transportation bill, the Safe, Accountable, Flexible, and Efficient Transportation Equity Act - A Legacy for Users (SAFETEA-LU). The Tennessee Department of Transportation (TDOT) received over \$21 million for the SRTS program from the Federal Highway Administration for Federal fiscal years 2005 to 2012. Projects and activities are 100% federally funded; no match is permitted. Eligible recipients include state, local, and regional agencies including non-profit organizations. A copy of the 2014 Program Guidelines and Application for Tennessee SRTS is available at [www.tn.gov/dot/bikesped/saferoutes.htm](http://www.tn.gov/dot/bikesped/saferoutes.htm).

SRTS programs have been growing in popularity all over the country in recent years due to increased obesity trends. A model program integrates health, fitness, traffic relief, environmental awareness, and safety under one program. SRTS provides an opportunity to work closely with schools, the community, and local government to create a healthy lifestyle for children and a safer, cleaner environment for everyone.

As of January 2014, TDOT received 280 applications requesting over \$50 million. The applications represented a diverse mix of educational activities including major projects such as sidewalk segments and shared-use paths and minor improvements such as sign packages, crosswalks, and pedestrian signals. To date, Tennessee's SRTS Program has awarded 98 projects totaling over \$12.3 million. View a complete listing of the [2008](#), [2009](#), [2010](#), [2012](#), [2013](#) and [2014](#) award recipients.

SRTS Workshops are held across the state to aid in understanding the program and application process. It is required that a representative of the applicant (school employee or city/county staff) attend a Workshop. View a summary of the [2014 Safe Routes to School Training Registration](#) (MS Word) form.

Applications for the final round of funding for this bill will be accepted beginning October 1, 2014 and will be due January 15, 2015. For questions, contact Diana Benedict at 615-253-2421 or [Diana.Benedict@tn.gov](mailto:Diana.Benedict@tn.gov).

Now is the time to get involved and walk/bike our children to better health - for everyone.

- [2015 Safe Routes Program Guidelines and Application](#) (MS Word)
- [2014 Safe Routes to School Workshop](#) (MS Word)

### Walk to School Day Success Stories

Trenton Elementary School students in Trenton Tennessee were excited to participate in the National Walk to School Day on Wednesday, October 8, 2014. Approximately one hundred and eighty parents and students walked from our town's City Hall to school. It was an exceptional collaboration of school staff, Coordinated School Health, city officials, police department, school board and county health department all encouraging safety, physical activity and fun. The photo is of the students who also won kick balls for participating!



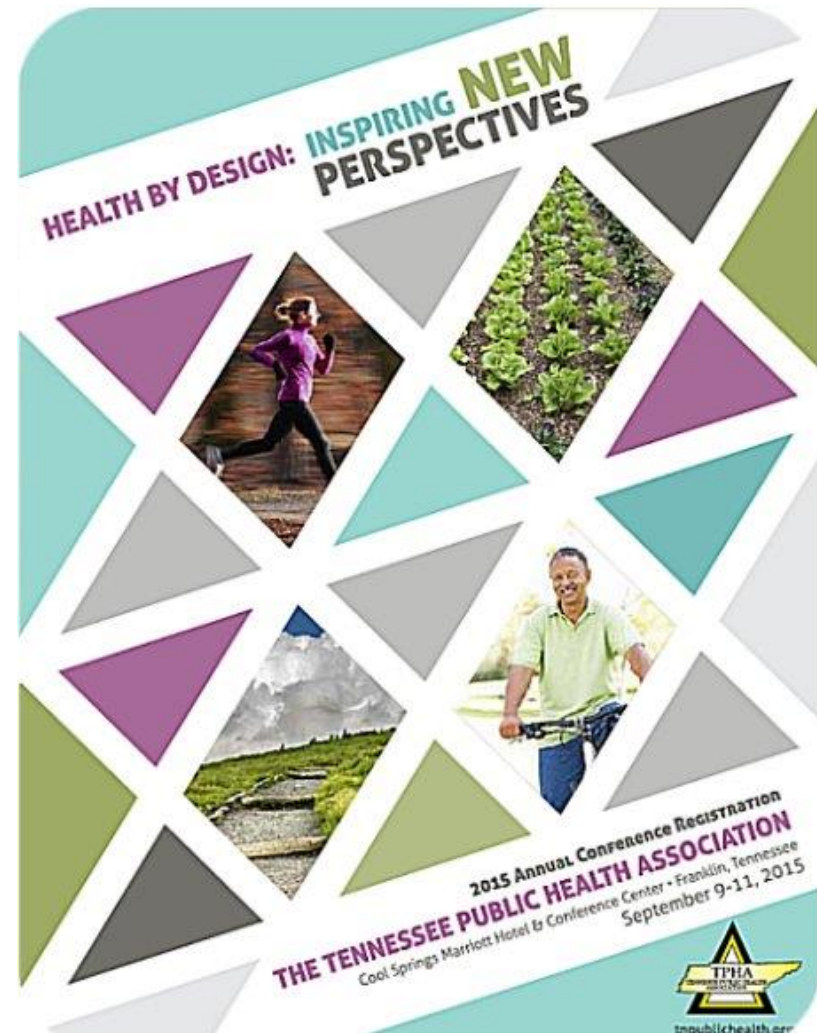
Nolensville  
[2010 Walk to School Day Photos- Nolenville](#)  
[2010 Walk to School Day Video- Nolenville](#)  
[2010 Nolenville Success Story - SRTS.pdf](#)

Lebanon  
[2010 Walk to School Day Photos- Lebanon](#)



# Support for Health and the Built Environment

- **American Planning Association**
  - Planning and Community Health Center
  - Plan4Health
- **Urban Land Institute**
  - Building Healthy Places Initiative
- **U.S. Green Building Council/RWJ**
  - Green Health Project
- **American Institute of Architects**
  - Design and Health initiatives
- **American Public Health Association**
  - Transportation and Health
- **Transportation Research Board**
  - Subcommittee on Trans. and Health
- **Centers for Disease Control**
  - Healthy Community Design Initiative
- *Institute of Transportation Engineers*







Contact: Leslie Meehan  
Office of Primary Prevention  
[leslie.meehan@tn.gov](mailto:leslie.meehan@tn.gov)