



Transportation for America

Metropolitan Planning for Healthier, Safer, More Prosperous Regions

September 22, 2016

www.T4america.org
@t4america

Ranata Reeder



Outreach Director
Transportation for America

About Us

Transportation for America is the alliance of elected, business and civic leaders from communities across the country, united to ensure that states and the federal government invest in smart, locally-driven transportation solutions — because these are the investments that hold the key to our future economic prosperity.

T4A is committed to helping your community create the transportation investments necessary for a prosperous future.

Today's Presenters

Rochelle Carpenter

Senior Policy Analyst, Nashville MPO &
Manager of Health & Transportation
Programs for Transportation for America

Ken Rose

MPA, Senior Advisor,
Physical Activity & Health Division of
Nutrition, Physical & Obesity,
National Center for Disease Control &
Prevention (CDC)

Susan L. Polan

PhD Associate Executive Director,
Public Affairs & Advocacy,
American Public Health Association

Peter Gies

AICP, Regional Transportation Planner,
Broward Metropolitan Planning Organization

Matt Carpenter

Director of Transportation Services,
Sacramento Area Council of Government

Tram Truong

GISP, Transportation Planner,
Greensboro Department of Transportation,
Greensboro Urban Area MPO

Rochelle Carpenter



Senior Policy Analyst,
Nashville MPO &
Manager of Health & Transportation Programs
Transportation for America

Current Challenges in Healthy Transportation Planning?

- 1) What challenges does your metropolitan planning organization have in funding bicycling and walking projects and/or helping your members build them?
- 2) What information would be most helpful to you in a forthcoming guidebook for MPOs on planning for, funding, and helping your members build bicycling and walking projects?

Please send answers to these questions to T4America staff using the chat box to the left of your screen.

Ken Rose



MPA, Senior Advisor

Physical Activity & Health Division of Nutrition, Physical & Obesity,
National Center for Disease Control & Prevention (CDC)

Incorporating Active Transportation into MPO Planning: CDC priorities to promote physical activity policies, systems and environments

Ken Rose, MPA

Senior Advisor, CDC Physical Activity and Health Program

Division of Nutrition, Physical Activity, and Obesity

National Center for Chronic Disease Prevention and Health Promotion

Centers for Disease Control and Prevention

Sept 2016





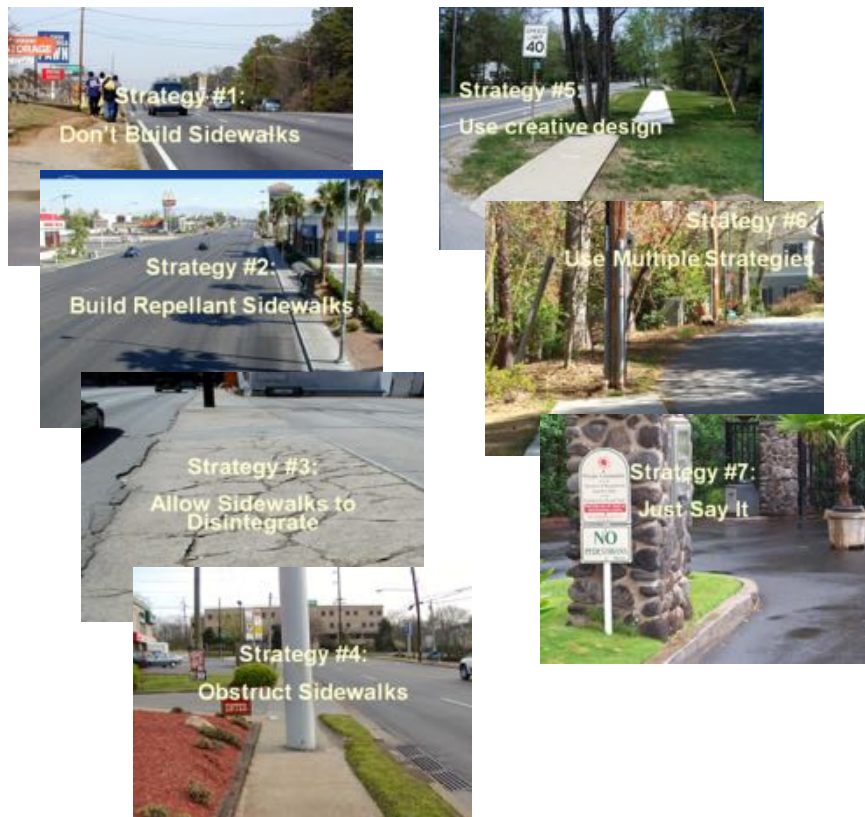
Land Use for Cars



Drive thrus for everything



“National No Walk Campaign”



Adapted from Howard Frumkin, PhD



Leading causes of death

- heart disease
- cancer
- chronic lower respiratory diseases
- stroke
- unintentional injuries (crashes)
- alzheimers disease; diabetes

Transportation Contributors

- air pollution (CVD; respiratory diseases; cancers)
- crashes (safety of active transport)
- lack of physical activity (chronic diseases)



<http://www.cdc.gov/nchs/fastats/lcod.htm>

NUTRITION
PHYSICAL ACTIVITY
OBESITY

PHYSICAL ACTIVITY BUILDS A HEALTHY AND STRONG AMERICA

THE PROBLEM

1 IN 2



About 1 in 2 adults live with a chronic disease.

About half of this group have two or more.



Only half of adults get the physical activity they need to help reduce and prevent chronic diseases.

NOT GETTING ENOUGH PHYSICAL ACTIVITY COSTS MONEY

\$117
BILLION

\$117 billion in annual health care costs are associated with inadequate physical activity.



1 IN 10 premature deaths could be prevented by getting enough physical activity.

It could also prevent:



1 IN 8

cases of breast cancer



1 IN 8

cases of colorectal cancer



1 IN 12

cases of diabetes



1 IN 15

cases of heart disease

Physical activity is the closest thing we have to a wonder drug.

Dr. Tom Frieden, CDC Director

<http://www.cdc.gov/physicalactivity/downloads/healthy-strong-america.pdf>



CDC Transportation and Health Policy Recommendations

Active Transport/Healthy Community Design

- ❑ Evaluate and promote promising practices
- ❑ Safe and convenient opportunities for physical activity
- ❑ Increased resources to non-motorized transportation
- ❑ Incentives to reduce vehicle miles traveled
- ❑ Pedestrian and bicycle master plans
- ❑ Encourage “smart growth”, “complete streets” and “safe routes to schools”
- ❑ Safe, convenient, and affordable transportation options
- ❑ Policies to protect pedestrians and bicyclists from motor vehicle crashes
- ❑ Bicycling and walking accessibility to public transit
- ❑ Increase resources for public transit



www.cdc.gov/transportation



Goal 1. Make Walking a National Priority

Encourage people to promote walking and make their communities more walkable. Create a walking movement to make walking and walkability a national priority.

Goal 2. Design Communities that Make It Safe and Easy to Walk for People of All Ages and Abilities

- Design and maintain streets and sidewalks so that walking is safe and easy.
- Design communities that support safe and easy places for people to walk.

Goal 3. Promote Programs and Policies to Support Walking Where People Live, Learn, Work, and Play

Promote programs and policies that make it easy for students to walk before, during, and after school.

Promote worksite programs and policies that support walking and walkability.

Promote community programs and policies that make it safe and easy for residents to walk.

Goal 4. Provide Information to Encourage Walking and Improve Walkability

Educate people about the benefits of safe walking and places to walk.

Develop effective and consistent messages and engage the media to promote walking and walkability.

Educate relevant professionals on how to promote walking and walkability through their profession.

Goal 5. Fill Surveillance, Research, and Evaluation Gaps Related to Walking and Walkability

Improve the quality and consistency of surveillance data collected about walking and walkability.

Address research gaps to promote walking and walkability.

Evaluate community interventions to promote walking and walkability.

T4A Beginners Guide to integrate active transportation into community planning



- ❑ **Case Studies**
- ❑ **Toolkit targeting MPOs and Public Health Departments**
- ❑ **Final Product Spring/Summer 2017**



Thank You

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention or the Agency for Toxic Substances and Disease Registry



Ken Rose, MPA (kröse@cdc.gov)



Susan L. Polan



PhD Associate Executive Director
Public Affairs & Advocacy
American Public Health Association

Why does Public Health care about Transportation policy?

Susan Polan, PhD
AED, Public Affairs and Advocacy



Background

Who is APHA?

APHA champions the health of all people and all communities. We are the only organization that influences federal policy, has a 140-plus year perspective and brings together members from all fields of public health.

Our Mission

Improve the health of the public and achieve equity in health status

Our Vision

Create the healthiest nation in one generation

How our concerns differ?

Transportation?

- Accountability: Limited budget
- Efficiency: How to plan for existing cars on the road
- Flexibility: Offering options
- Safety and security: All modes of transportation

Health?

- Obesity/Chronic disease
- Safety
- Traffic injuries and fatalities ~ \$200 billion
- Air Quality
- Access and Equity
- Exacerbating poverty and health inequities
- Communities without safe places to live, walk, play, congregate

Making the connection



Opportunity knocks

Working with community partners, planners and transportation engineers can help support development of safe, accessible, efficient and healthy communities for everyone.

We did some research to better understand the relationship between the two communities and here are the high points:

- According to transportation professionals public health advocates were unrealistic and extraneous.
- Key drivers of transportation policy: cars and money.

Digging deeper

What Impacts Transportation Planning?

- Everybody wants to keep cars moving, sometimes to the detriment of people.

What Issues Override Public Health?

- Everything. Domination by cars is entrenched in planning. It's common for planners to say they'll 'improve the roadways,' when all they're doing is widening the road, which creates more barriers to other modes of transportation, forcing more people into cars, and creates a future need to widen the road.

How is Public Health Viewed?

- As interlopers. I think that public health has a valuable message but is being pretty heavy-handed in pushing their agenda and demanding things be done their way.
- Mostly benign and somewhat naive and uneducated about the way things are...

Principle 1: Meet Them Where They Are



Principle 2:
Talk in Terms
They Understand



ROAD
WORK
AHEAD

Principle 3: Then Own Your Own Space



MPOs can say



- People love their cars but hate traffic. By offering options, we can improve the transportation experience for drivers, riders, cyclists and pedestrians.
- Cars need to keep moving, roads and sidewalks need to be in good shape, people need to get around.
- Less traffic means fewer headaches for drivers, fewer road and car repairs and, in the long term, more money for other important transportation projects. It means less day-to-day upkeep and more improvement projects.
- Automobiles are a huge driver of transportation policy – but we all know they’re a demanding and costly mode of transportation, hard on the road as well as the environment and expensive to maintain. Incorporating the needs of public transit, pedestrians and cyclists into planning eases the pressure on streets and highways.

Public Health can say

- Choices that reduce congestion and keep roads in good shape can keep people in good shape, too! Well-maintained sidewalks, biking and walking trails get more people outside and active.
- Smart transportation planning can get a big boost in public and official support by tapping into the growing call for strategies that reduce the obesity rate and increase opportunities to incorporate physical activity into our daily lives.
- More choices about getting around means better access for all, less traffic congestion, less air pollution and a healthier environment.



APHA Transportation and Health Tools

- Transportation and Health Toolkit
 - <http://www.apha.org/topics-and-issues/transportation/transportation-and-health-toolkit>
- Transportation and Health Tool
 - <https://www.transportation.gov/transportation-health-tool>
- Healthy community design initiatives
 - (ex. Plan4Health; Partner with America Walks, Safe Routes to School National Partnership, Partnership for Active Transportation Leadership Council, etc.).
 - <http://www.apha.org/topics-and-issues/environmental-health/healthy-community-design>

ABOUT APHA

The American Public Health Association champions the health of all people and all communities. We strengthen the profession of public health, promote best practices and share the latest public health research and information. We are the only organization that influences federal policy, has a 140-plus year perspective and brings together members from all fields of public health. Learn more at www.apha.org.



800 I Street, NW
Washington, DC 20001-3710
202-777-APHA *phone*
www.apha.org

Susan Polan
Susan.polan@apha.org
202-777-2510

Peter Gies



AICP, Regional Transportation Planner,
Broward Metropolitan Planning Organization



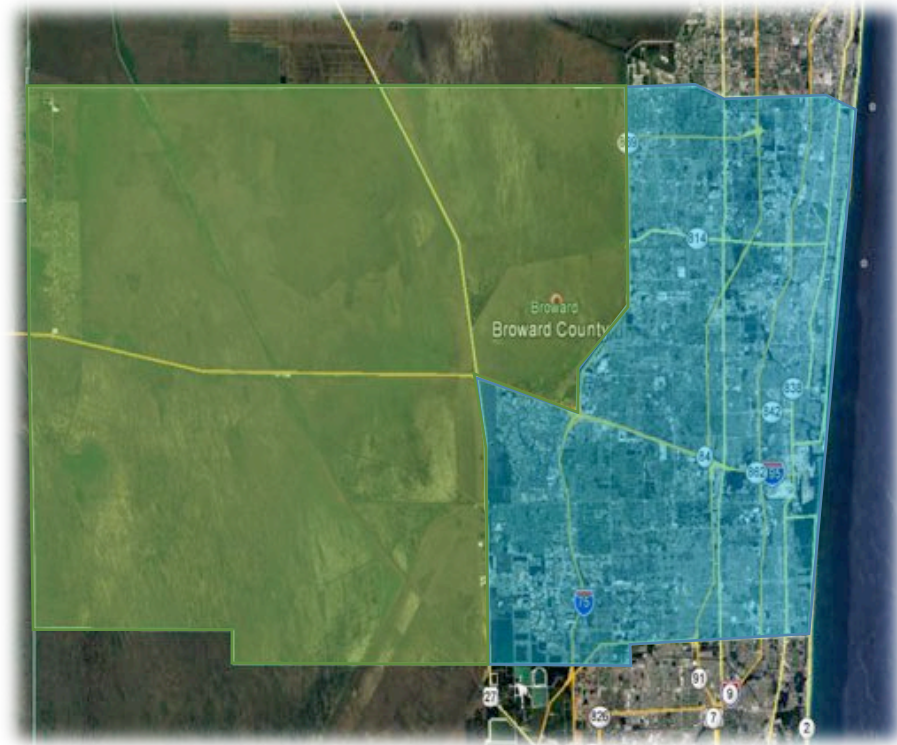
Bicycling and Walking Excellence by MPOs

Peter Gies, AICP
Broward MPO

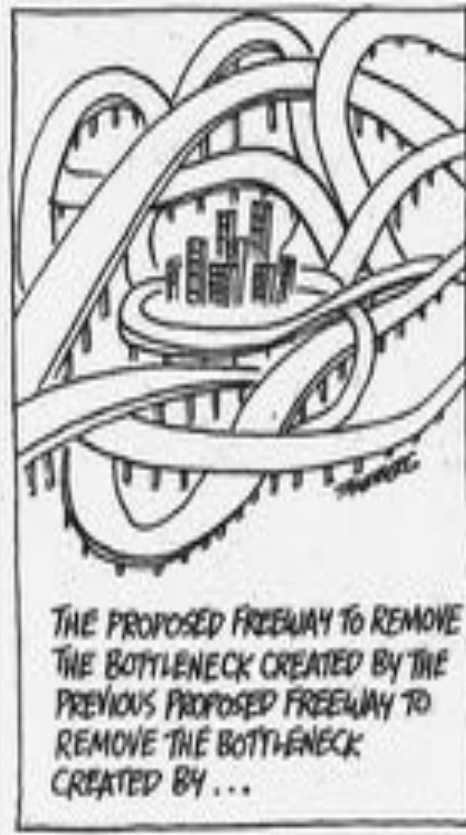


PLANNING CONTEXT

- Developable Area: 470 s/m
- Conservation Area: 853 s/m
- Population: 1.8M
 - 14,700 unincorporated
- 31 Municipalities



THE FALLACY OF RELIEVING CONGESTION...



Source:
FHWA



HISTORY – THE BEGINNING

- Adopted Transformation 2035 Long-Range Transportation Plan (Dec 2009)
- Focus on moving people, not cars
- Allocated large portion of funding to transit and bicycle/pedestrian projects (70%)
- Foundation for our Complete Streets Initiative

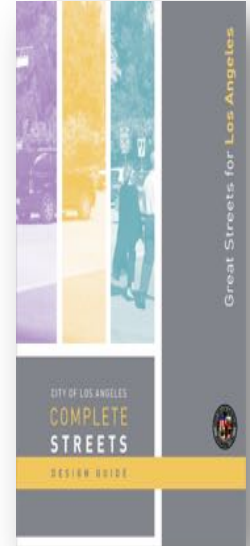


HISTORY – GAINING MOMENTUM

- Joint award with the CDC/TOUCH Initiative to incorporate health into transportation (2011)
 - Working with non-traditional partners (health community)
 - Developed the Complete Streets Guidelines
- Partners formed our Complete Streets Advisory Committee (CSAC)



Photo by Stewart Robertson, Kingman and Associates





HISTORY - PARTNERING

- Broward MPO's Technical Assistance
 - July 2012, Board Complete Streets Guidelines
 - Policy & Planning Framework Models in 2013
 - Multi-Modal Level of Service (MMLOS) tool in 2013
- To date, approximately 13 local partners have taken action to incorporate Complete Streets into their policy initiatives



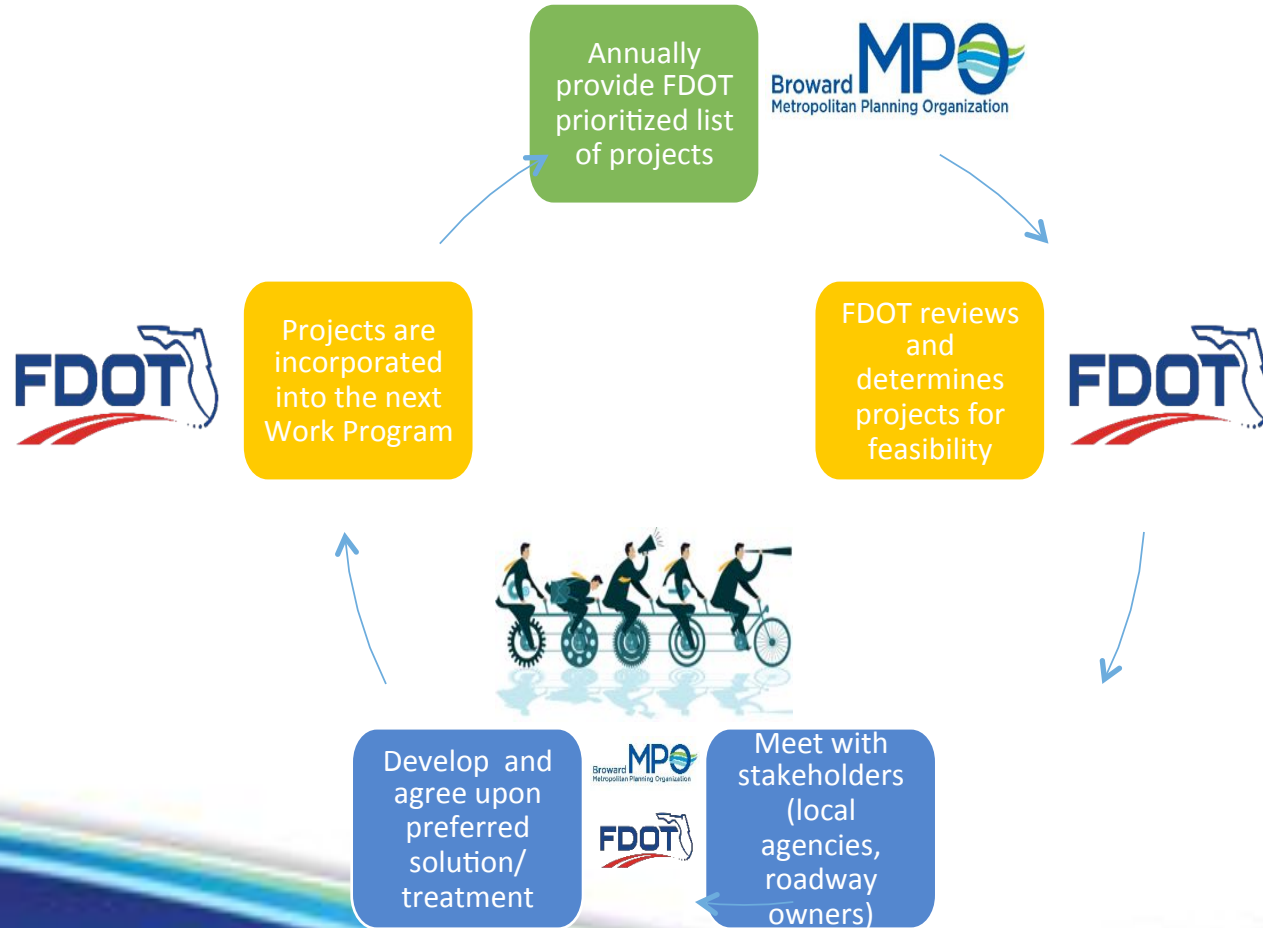
COMPLETE STREETS – NOW WHAT?

- Established necessary support for Complete Streets
- 2035 LRTP Identified list of bicycle/ pedestrian improvements, but no clear path for implementation
- Money exists



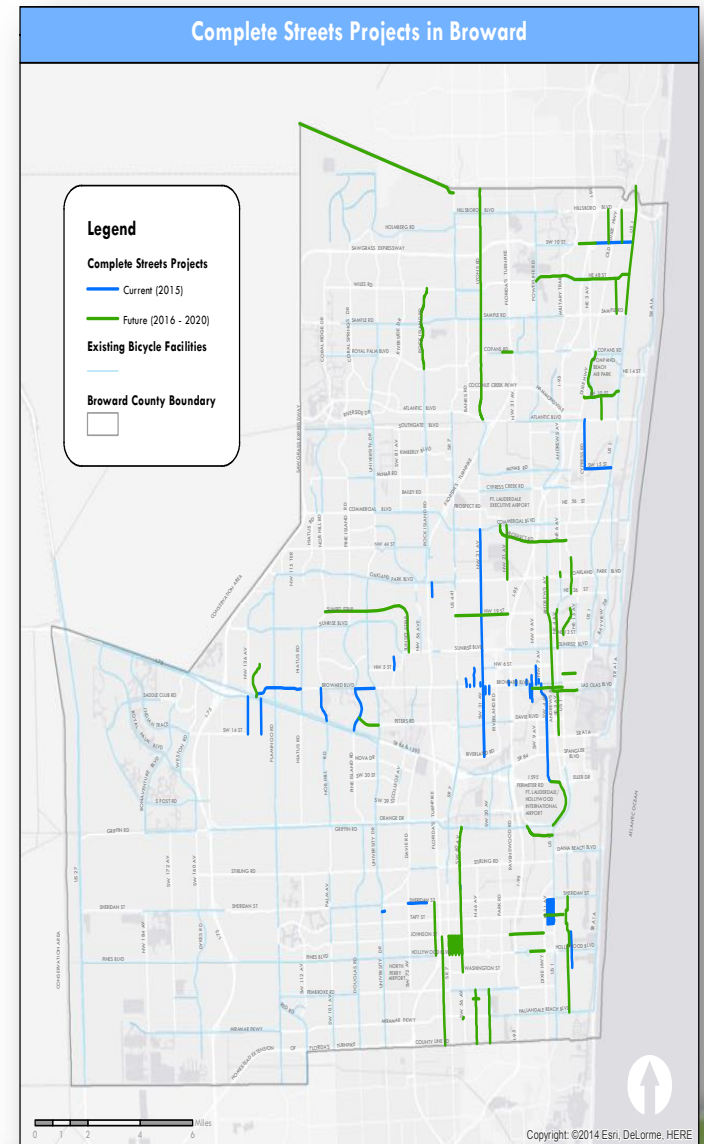
- FDOT as a partner and our construction wing
- Start with high priority projects (low-hanging fruit)
- Began programming projects in the 5-year Work Program

IMPLEMENTATION PROCESS



THE RESULT

- Broward MPO's Mobility Program
 - \$120 Million in Bicycle & Pedestrian improvements programmed for the next five years
 - 90 miles – bicycle
 - 34 miles – pedestrian
- First Phase (Construction FY 2015)
 - 48 projects
 - \$15 million



AND A TIGER TOO...2016

- *Broward Regional Complete Streets Initiative*
- In partnership with 4 cities, Broward County, and the Florida Department of Transportation (FDOT)
- Connecting 5 existing gaps in the regional bicycle/pedestrian network
- \$19.1M project, awarded \$11.4M – remaining \$7.7M in local match
- Builds upon MPO's \$120M Mobility Program investment



CHALLENGES

- Inter-agency Coordination (sometimes Intra-agency Coordination)
- Project Vetting and Public Outreach
- FDOT's Institutional Memory
- Reality of incremental planning
- You don't know what you don't know



LESSONS LEARNED

- Political support is key
- Mutating Roles – The Dawn of the Plangineer
- Predatory Planning
- Work within the existing process, but don't be afraid to forge a new path





THANK YOU & INFO:

Peter Gies, AICP

giesp@browardmpo.org

(954) 876-0048

Twitter: @PeterGies

Broward MPO:
@SpeakUpBroward/SpeakUpBroward (Twitter/Facebook)

To learn more about Broward's Complete Streets efforts:

<http://www.browardmpo.org/index.php/major-functions/complete-streets-initiative>

Matt Carpenter



Director of Transportation Services
Sacramento Area Council of Government

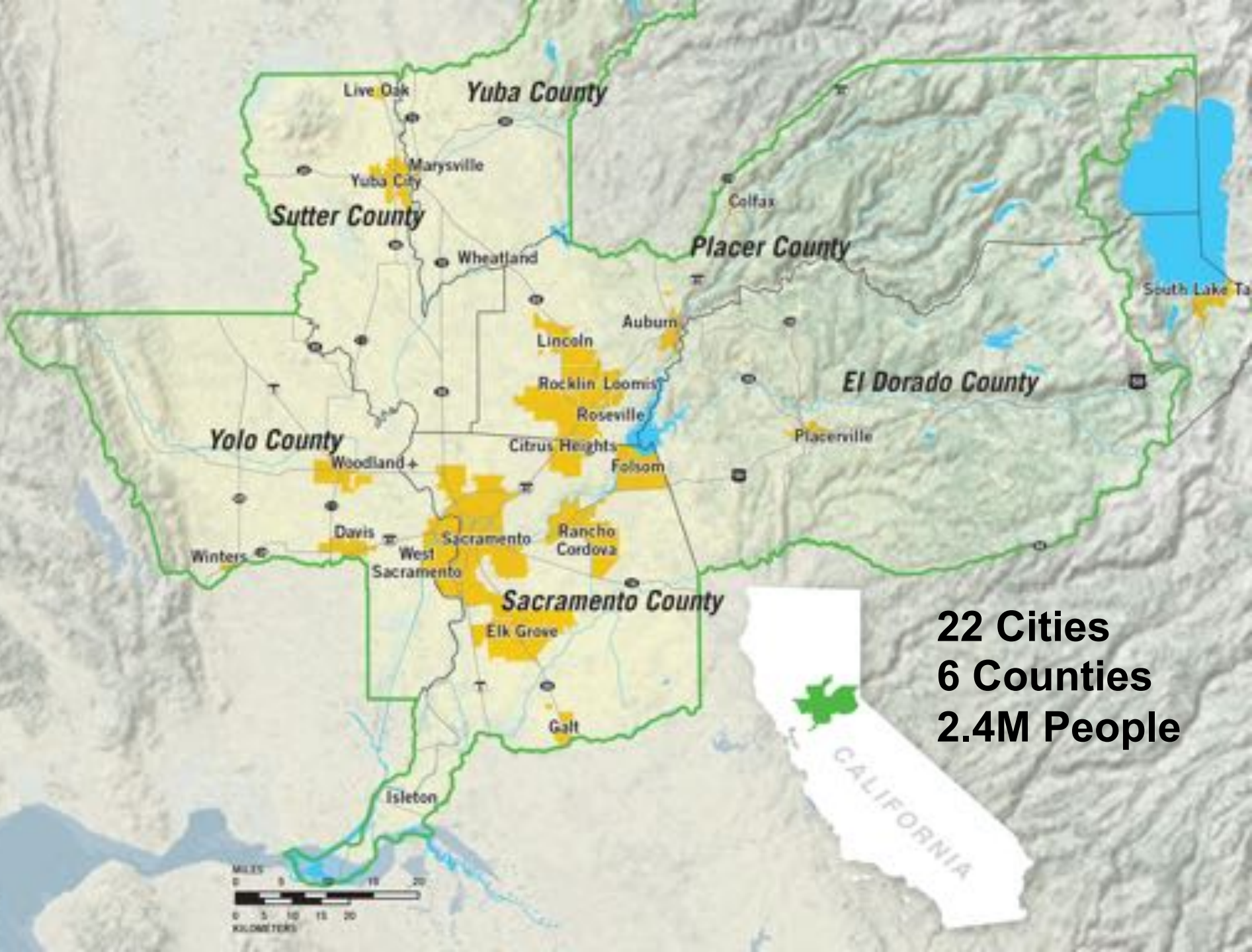
PROMOTING HEALTH AND ECONOMIC PROSPERITY THROUGH DATA-DRIVEN DECISION-MAKING



Matt Carpenter, SACOG

mcarpenter@sacog.org

September 2016



22 Cities
6 Counties
2.4M People



MTP/SCS **2035**

**METROPOLITAN TRANSPORTATION PLAN
SUSTAINABLE COMMUNITIES STRATEGY**



MTP/SCS Principles & Associated Performance Outcomes



Smart Land Use

- Better Jobs/Housing Fit
- More Compact & Mixed Use Growth in Target Areas



Economic Vitality

- Support Goods Movement
- Catalyst for Growth



Environmental Quality

- Protect Farmland
- Conserve Resource Lands



Access and Mobility

- Reduce VMT
- Increase non-auto travel
- Improve Safety



Financial Stewardship

- Increase % of Growth in Infill Areas
- Demonstrate Cost Effectiveness



Equity and Choice

- Diversity of Housing Options
- Improve Options for the Transit Dependent

MTP/SCS: Performance-based Bicycle & Pedestrian Priorities

- Timing coordination between Fix-it-First maintenance & bicycle/pedestrian improvements
- Complete Streets to expand travel choices and improve roadway utilization
- First & Last Mile connections to transit



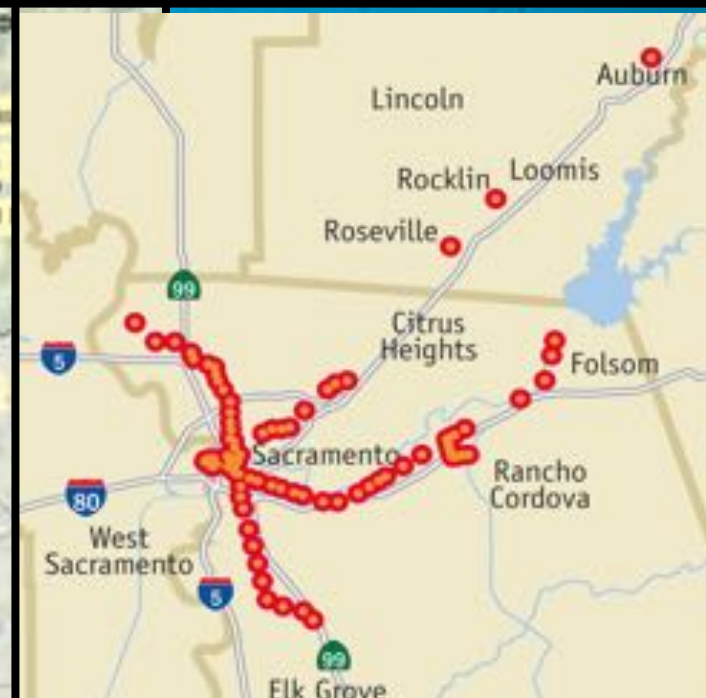
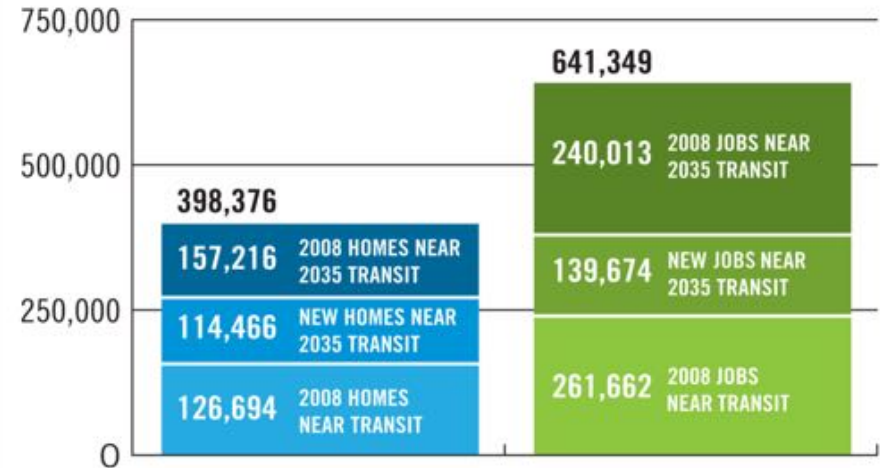
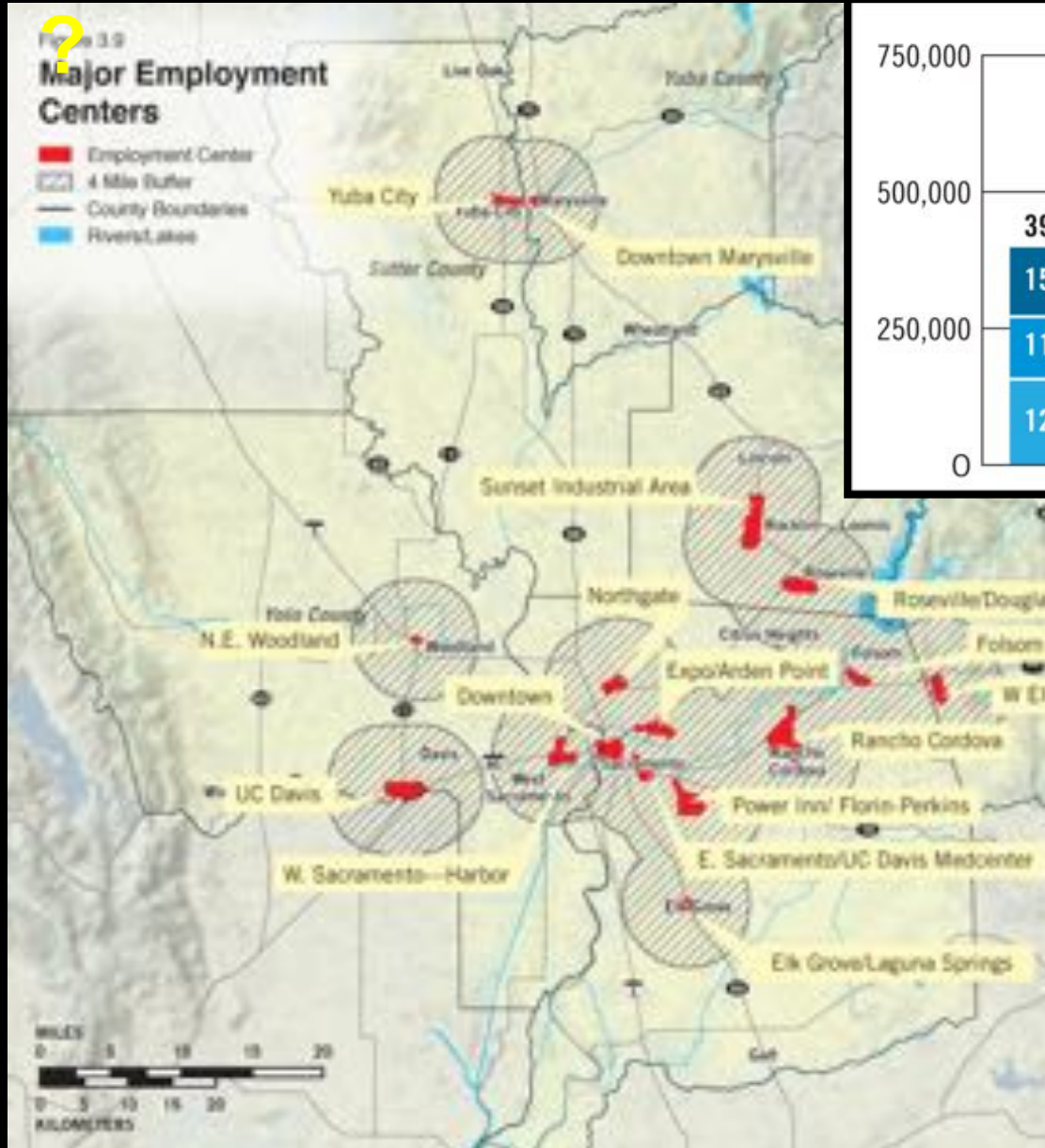
Performance Outcomes for Regional Funding

- Project supports a regional reduction in VMT per household/per capita?
- Project supports a regional reduction in congested VMT per household/per capita.
- Project supports an increase in transit and/or active transportation
- Project provides long-term economic benefit within the region, recognizing the importance of sustaining both the urban and rural economies.
- Project improves goods movement within the region, including first/last mile travel
- Project significantly improves safety and security.
- Demonstrate “state of good repair” benefits that improve the efficiency of the existing transportation system

Does the Project support an increase in transit and/or active transportation?

Fig. 3.9
Major Employment Centers

- Employment Center
- 4 Mile Buffer
- County Boundaries
- River/Lakes

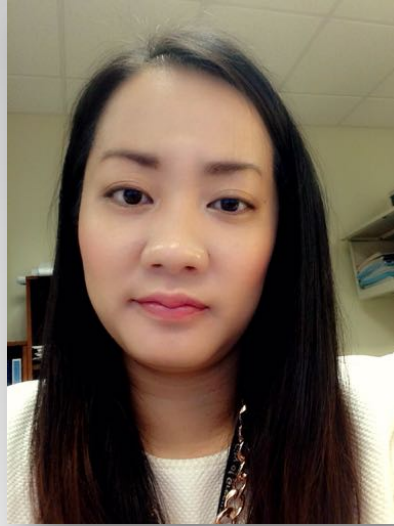


Healthy Region Lessons Learned

- **Collaborate Broadly and Communicate Often**
- **Select a Limited Number of Performance Measures**
- **Strive to Performance-Based but Acknowledge Technical Limitations**



Tram Truong

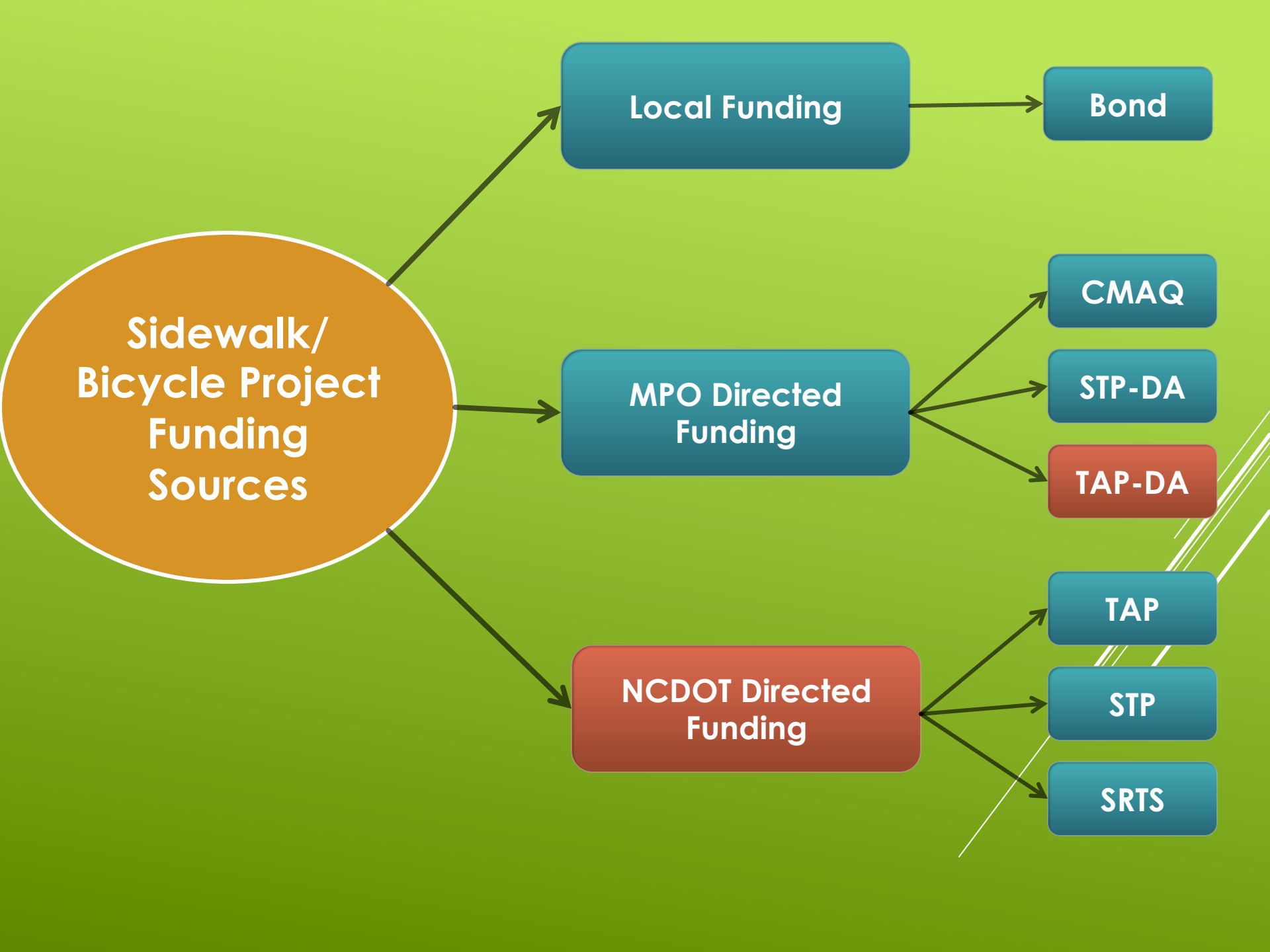


GISP, Transportation Planner
Greensboro Department of Transportation,
Greensboro Urban Area MPO

GREENSBORO CASE STUDY

Tram Truong, GISP
Transportation Planner
Greensboro Urban Area MPO





**Sidewalk/
Bicycle Project
Funding
Sources**

Local Funding

Bond

**MPO Directed
Funding**

CMAQ

STP-DA

TAP-DA

**NCDOT Directed
Funding**

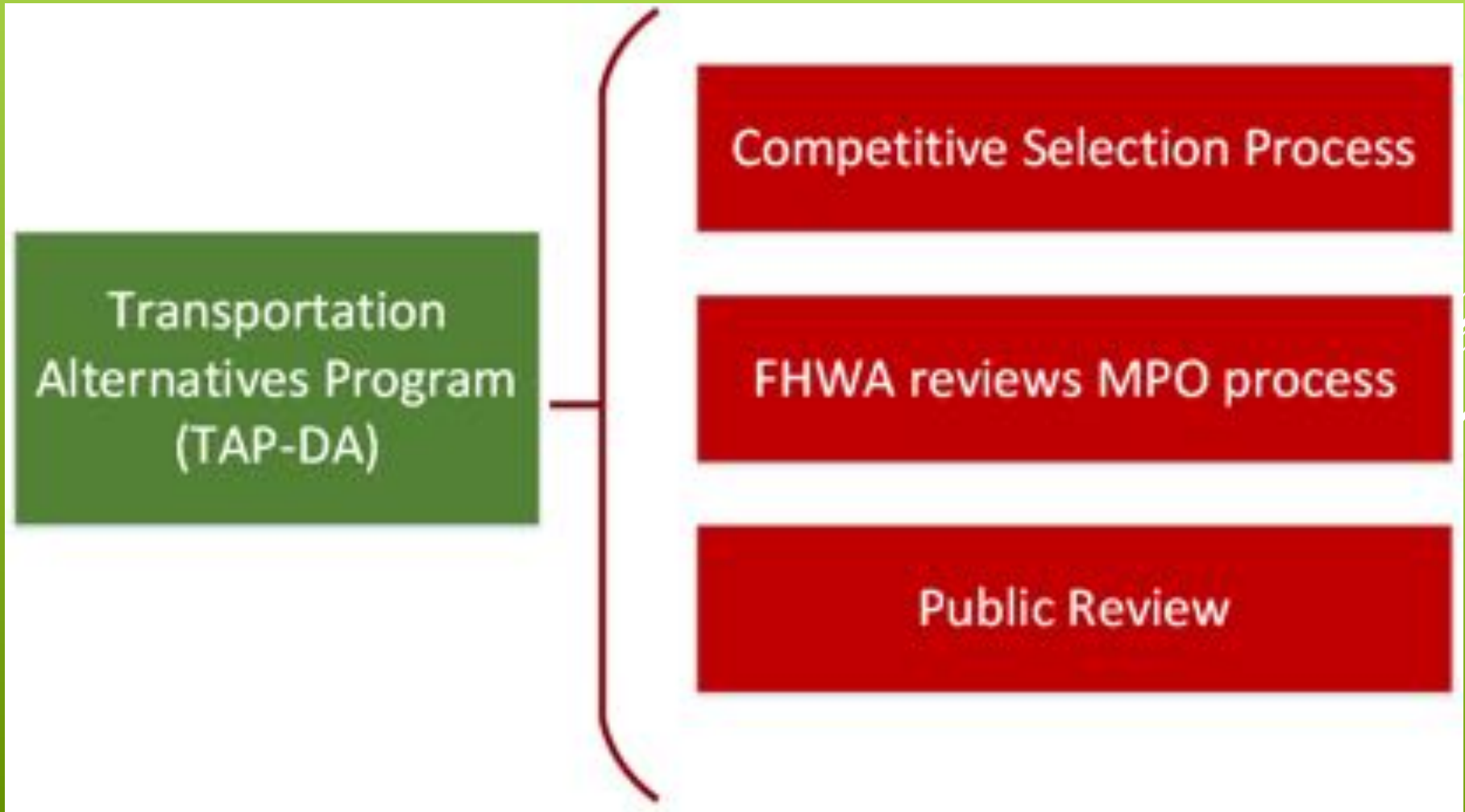
TAP

STP

SRTS

TAP OVERVIEW

SELECTION PROCESS REQUIREMENTS



TAP OVERVIEW

ELIGIBLE PROJECTS

Transportation
Alternatives Program
(TAP-DA)

Bicycle & Pedestrian Infrastructure

Recreational Trails

Safe Routes to School

(Bike & Pedestrian Safety Education Program for K-8)

Environmental Mitigation

Historic Preservation

(Related to Transportation Facility)

Archaeological Activities

(Related to Transportation Impact)

TAP SCORING METHODOLOGY

Four criteria:

1. Land Use Connectivity
2. Transportation System Connectivity
3. Safety & Mobility
4. Project Readiness & Viability



CONCEPTUAL MODEL

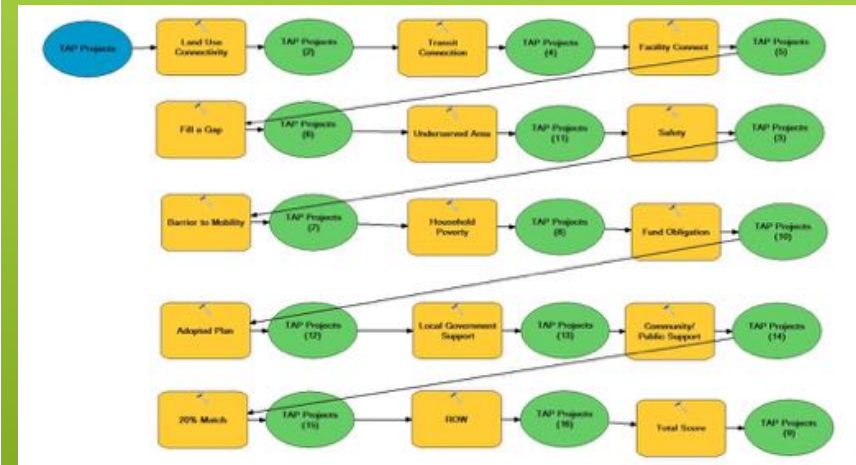
Land Use Connectivity

Transportation System Connectivity

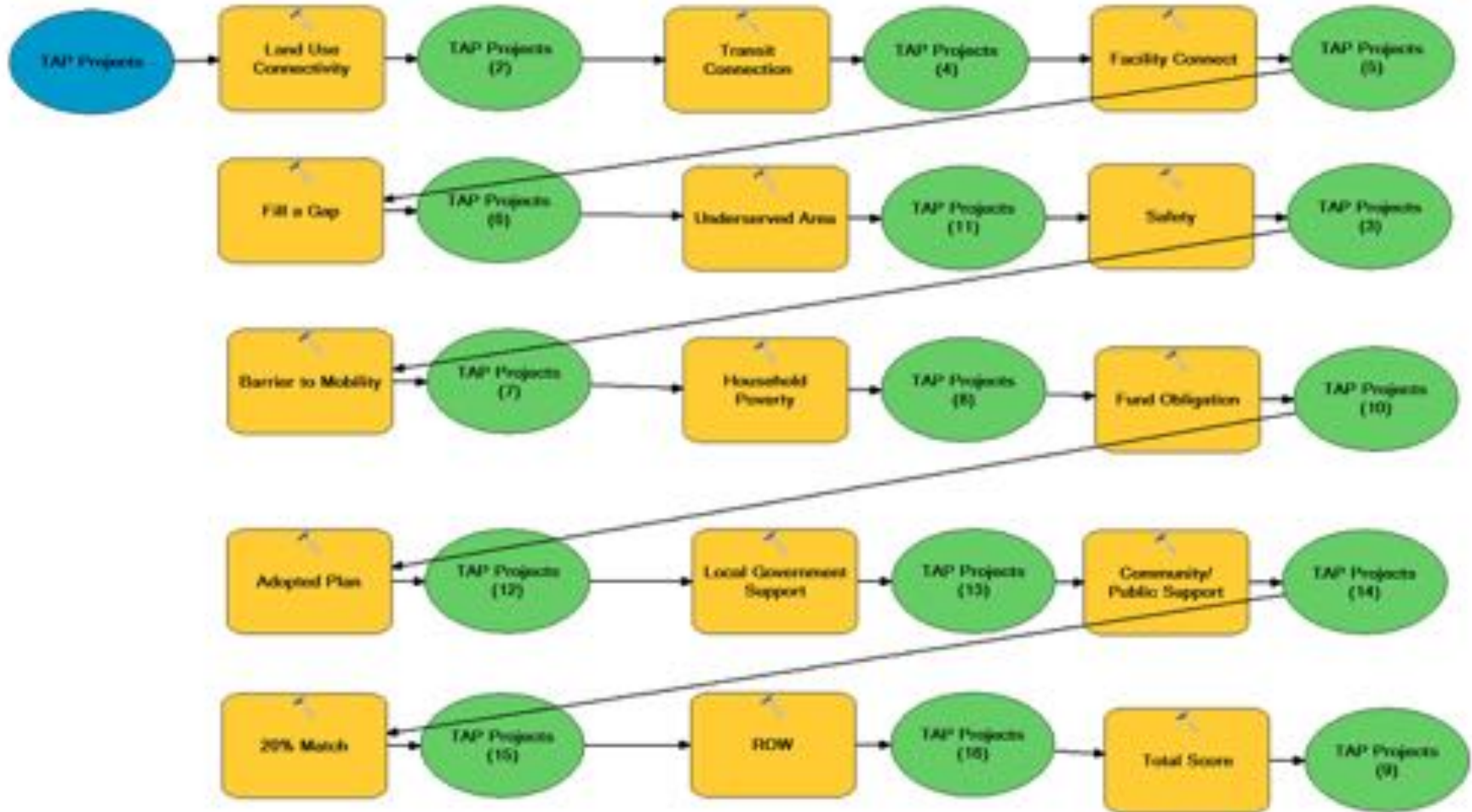
Safety & Mobility

Project Readiness & Viability

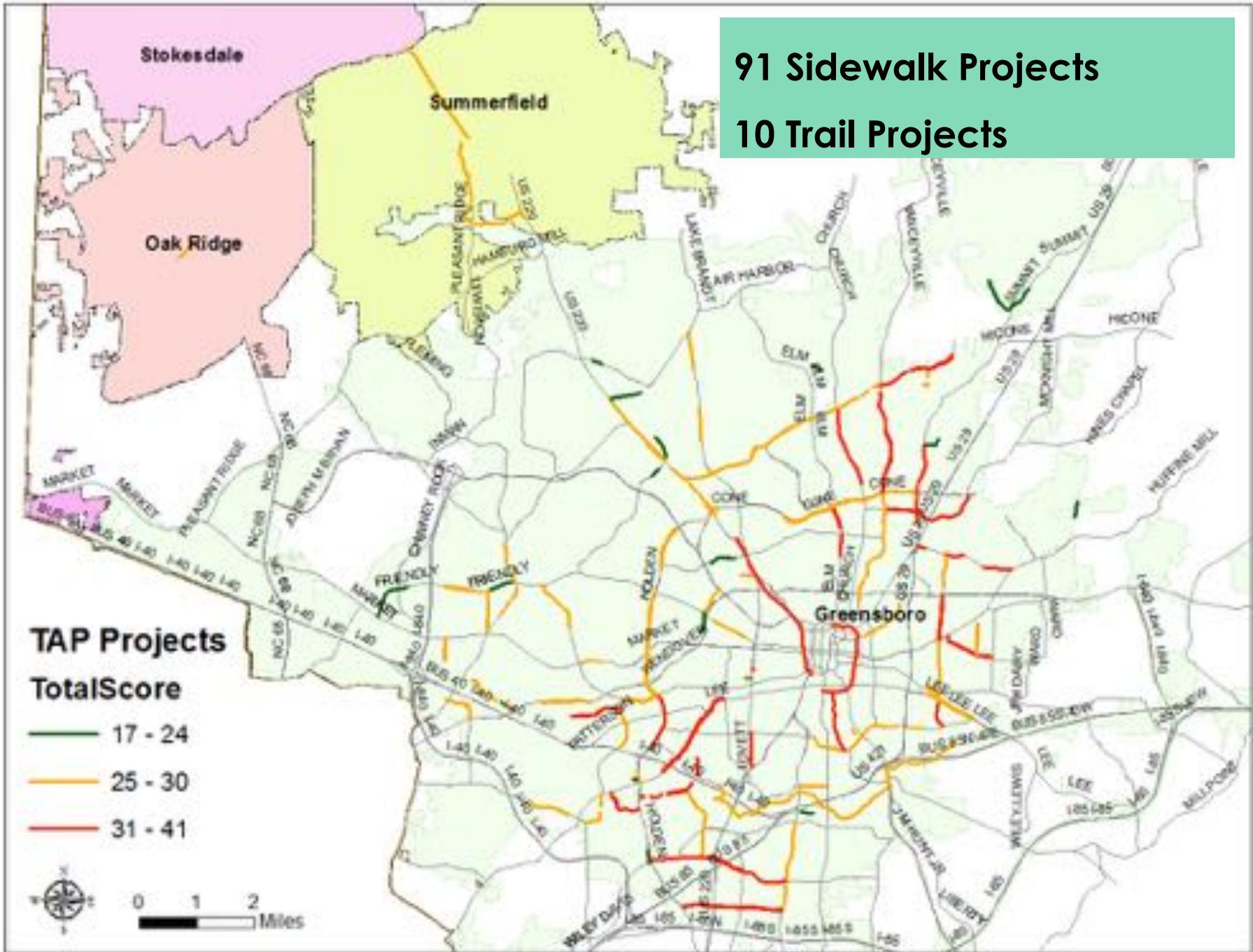
GIS MODEL



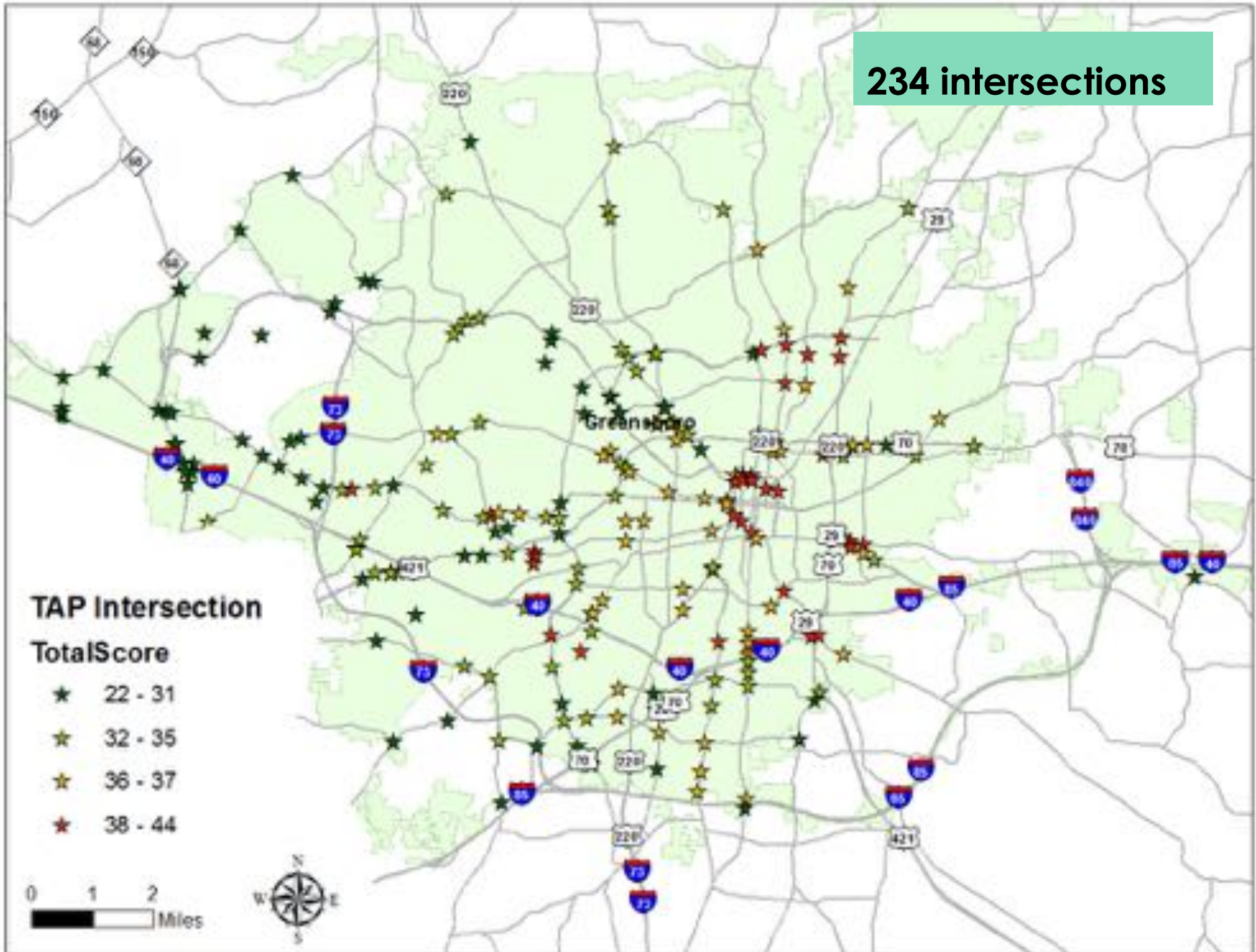
GIS MODEL



91 Sidewalk Projects
10 Trail Projects



234 intersections



RESULTS

A grid table with multiple columns and rows. The second row from the top is highlighted in yellow. The table contains various data points, likely representing project results or metrics.

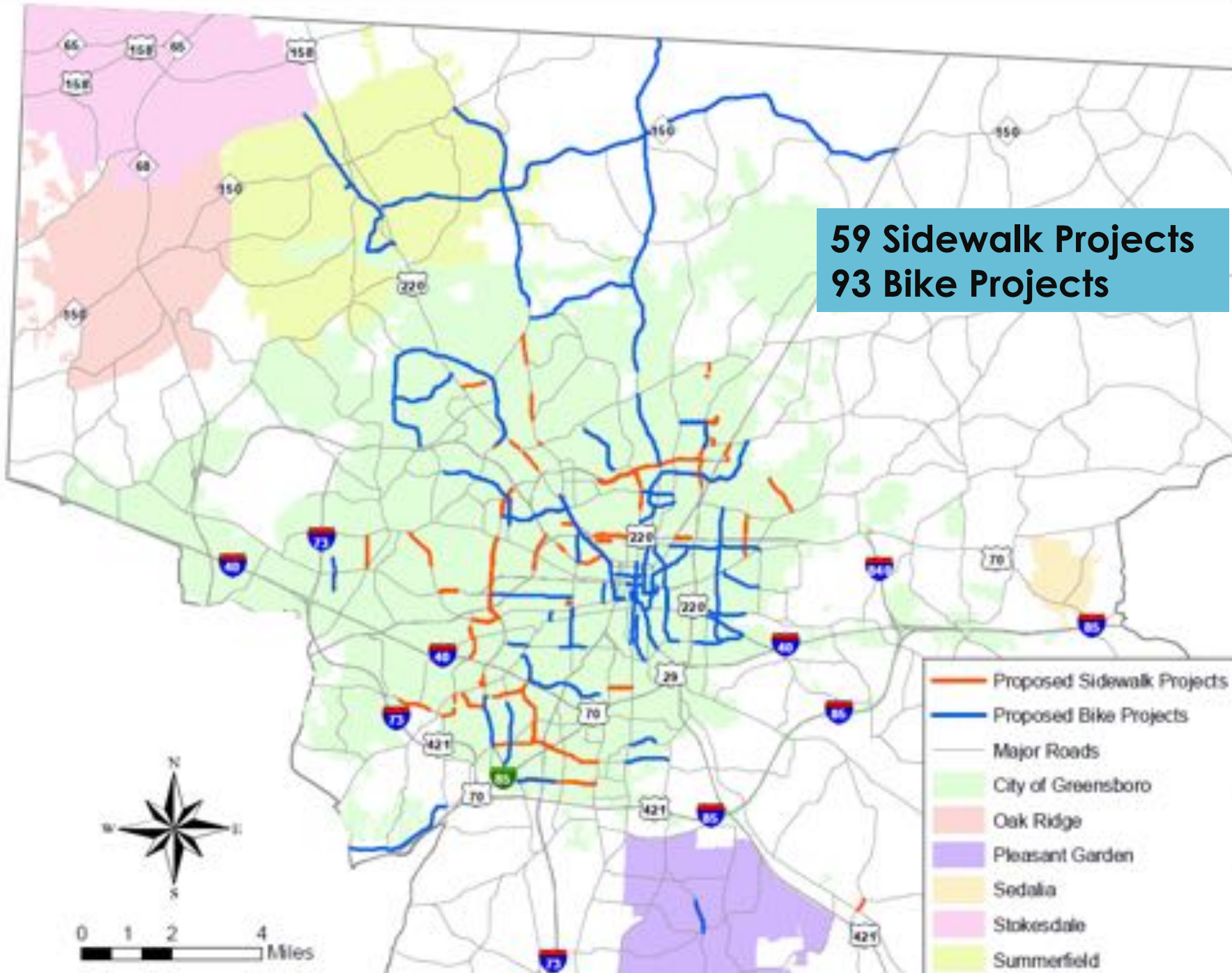


NCDOT DIRECTED FUNDING

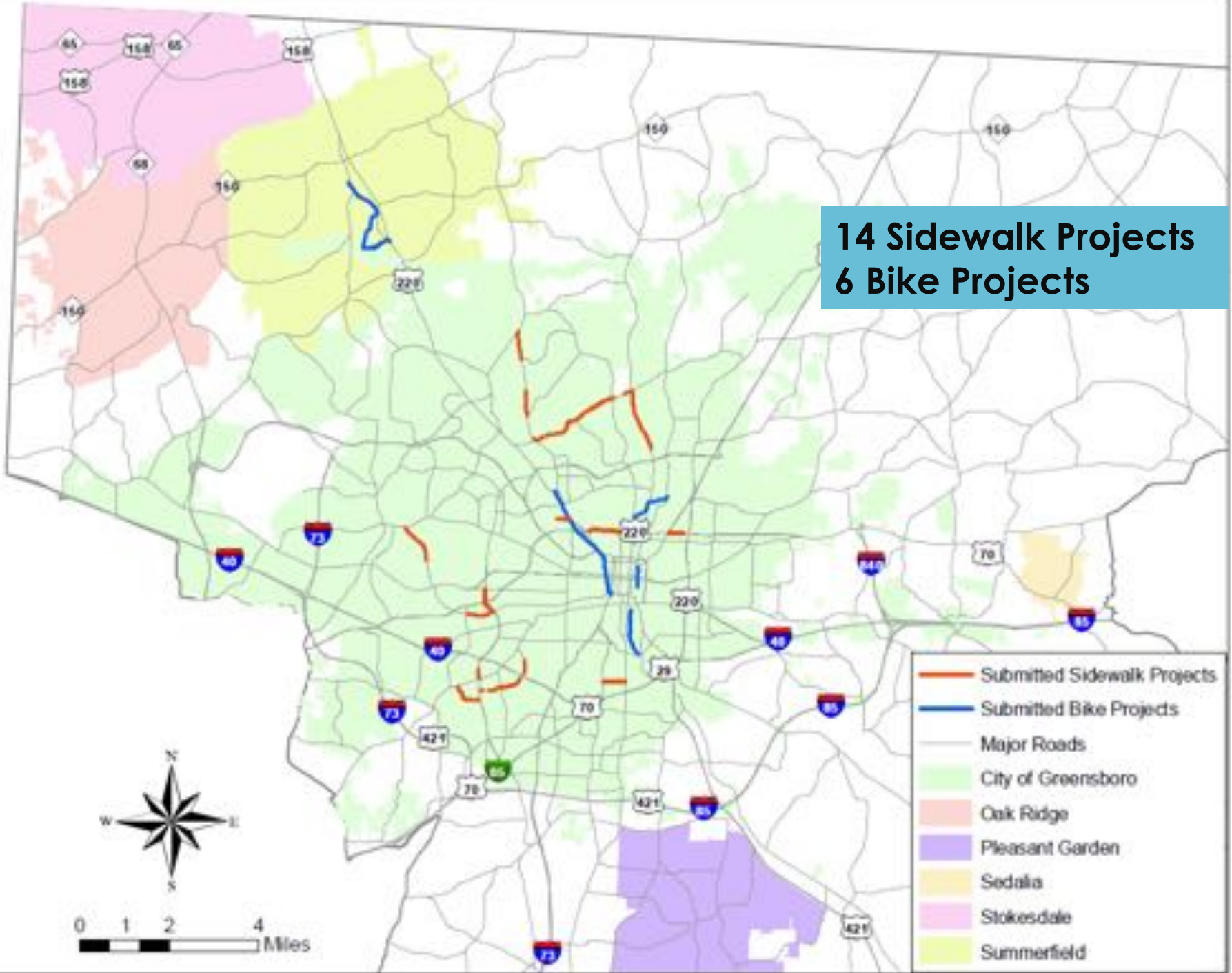
Bicycle and Pedestrian – SPOT 4.0 Criteria

| Criteria | Proposed Weight |
|--------------------|-----------------|
| Safety | 15% |
| Demand | 10% |
| Connectivity | 10% |
| Cost Effectiveness | 5% |
| Access | 10% |

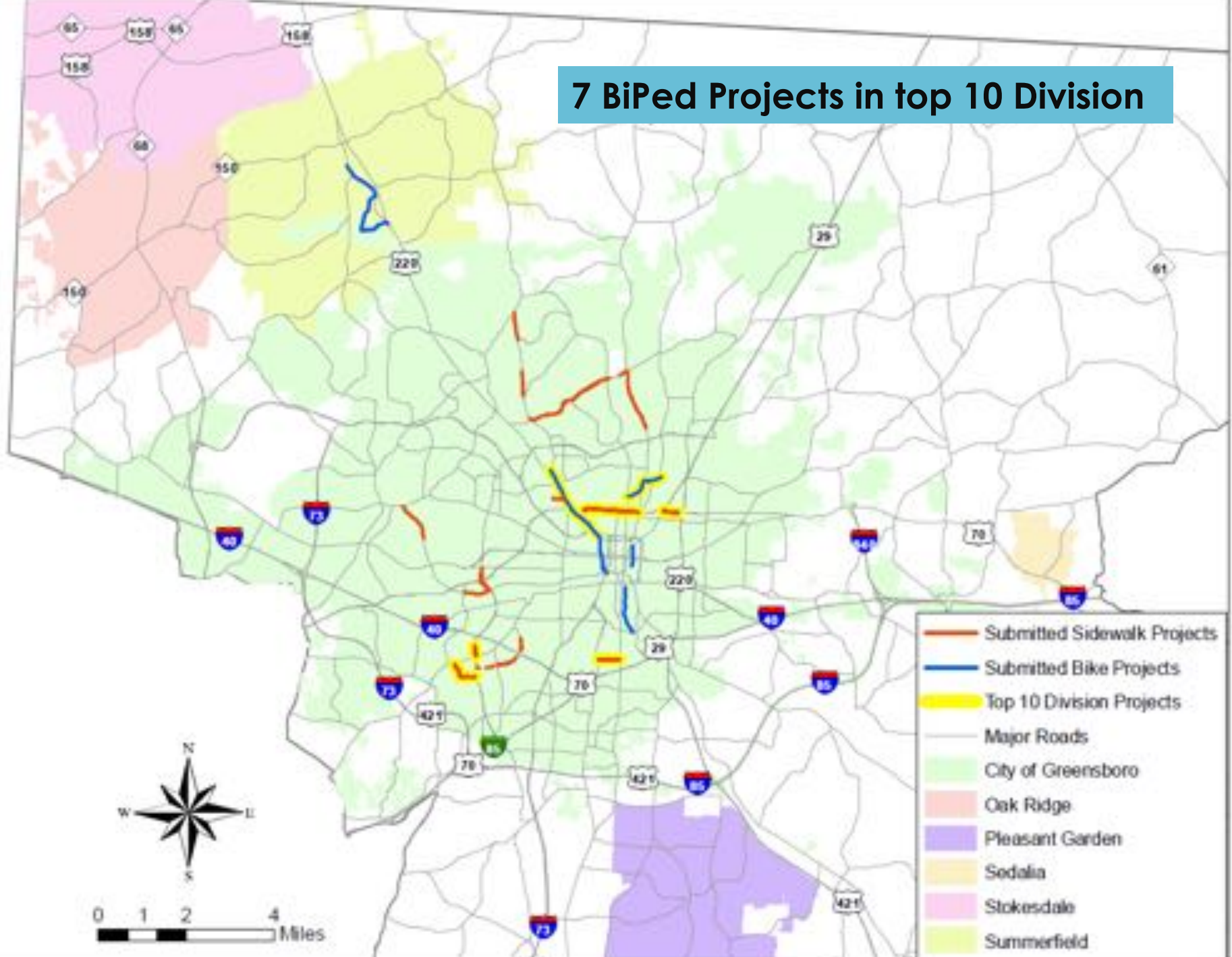
**59 Sidewalk Projects
93 Bike Projects**



**14 Sidewalk Projects
6 Bike Projects**



7 BiPed Projects in top 10 Division



CONCLUSION

- ▶ This approach is consistent with the performance planning requirements of MAP-21 and good planning practice
- ▶ **GIS models** can be effective to help implement **conceptual model** to analyze large amount of projects automatically, systematically, and efficiently
- ▶ **Criteria and their weights** are the most important part of any conceptual model
- ▶ **Validation** is important

Rochelle Carpenter



Senior Policy Analyst,
Nashville MPO &
Manager of Health & Transportation Programs
Transportation for America



NASHVILLE AREA

Metropolitan Planning Organization

Prioritizing Healthy, Equitable Transportation Projects

Rochelle Carpenter

T4America “Metropolitan Planning for Healthier, Safer, More Prosperous Regions” Webinar

September 22nd, 2016

Middle Tennessee: History of Expansive Development

- ➔ 15th highest pedestrian fatality rate (Smart Growth America report, *Dangerous by Design 2014*)
- ➔ 6th highest for sprawl (Smart Growth America report, *Measuring Sprawl 2014*)



Middle Tennessee Connected: Points for Health Equity and Active Transportation Potential

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

Data Collection: Middle Tennessee Transportation and Health Study

Transportation, Physical Activity and Health Data Collection and Analysis

The screenshot shows the homepage of the Middle Tennessee Transportation and Health Study website. The header features the title "Middle Tennessee Transportation and Health Study" and a graphic of a map of the region with icons for a person walking, a heart, a bicycle, and a bus. Below the header is a navigation menu with links: "Welcome", "About the Study", "Invited to Join?", "Report Travel", "FAQs", "Materials", and "Contact Us". The main content area is divided into several sections:

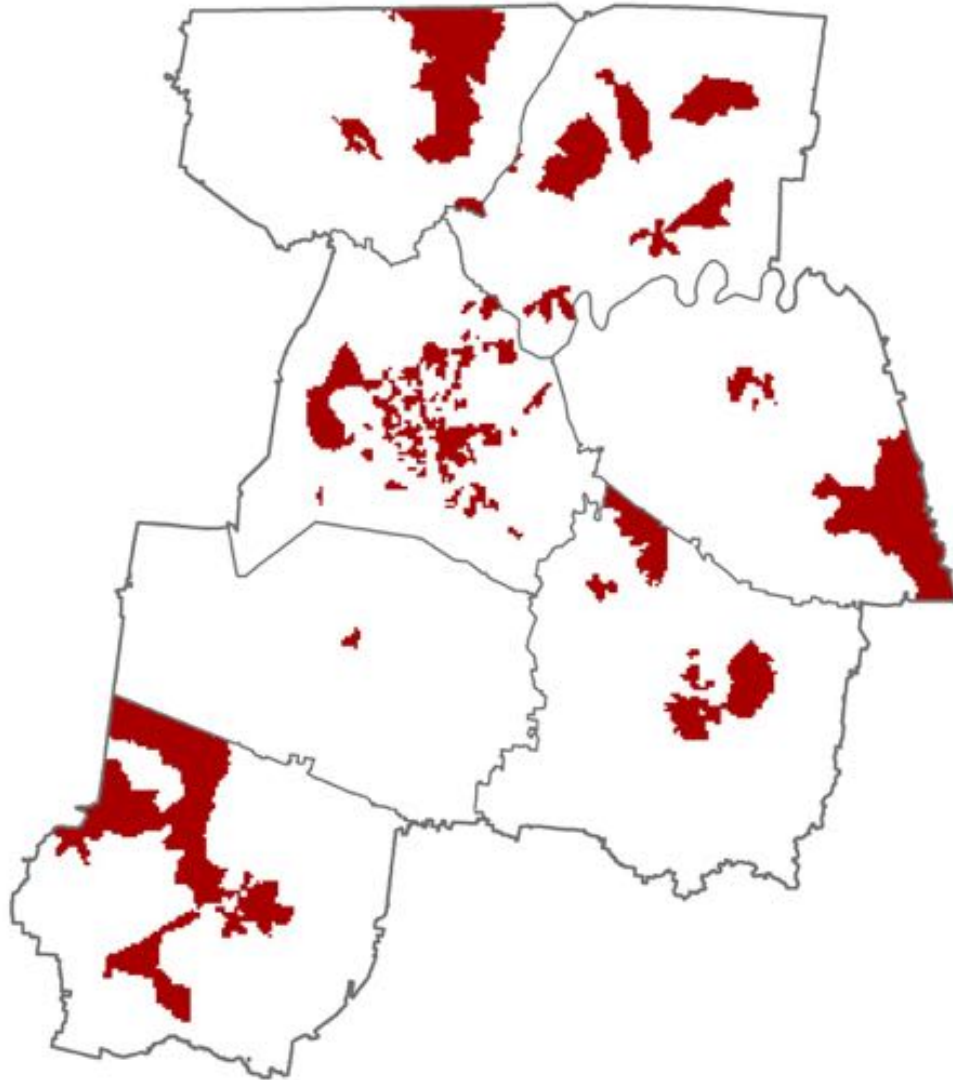
- Invited to Join?** A yellow box with a "Step 1" arrow pointing right. Text: "Invited to join? Complete a Household Questionnaire. [Start Here](#)".
- Record your travel** A yellow box with a "Step 2" arrow pointing right. Text: "Record your travel on your assigned day using your travel log. [Learn More...](#)".
- Report Travel** A yellow box with a "Step 3" arrow pointing right. Text: "After your travel date, please report your travel information. [Report Travel](#)".
- Take Health Survey** A yellow box with a "Step 4" arrow pointing right. Text: "If selected, complete the additional Health Survey. [Take Health Survey](#)".

Below the navigation menu, there is a "Welcome!" section with text: "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." Below this text are three small images: a highway with traffic, a person on a bicycle, and a bus.

At the bottom of the page, there is a paragraph: "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."



2040 Plan Prioritization: Health Priority Areas



Health Priority Areas

3 out of 4:

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

Bicycle/Pedestrian Trip Potential: Green Hills



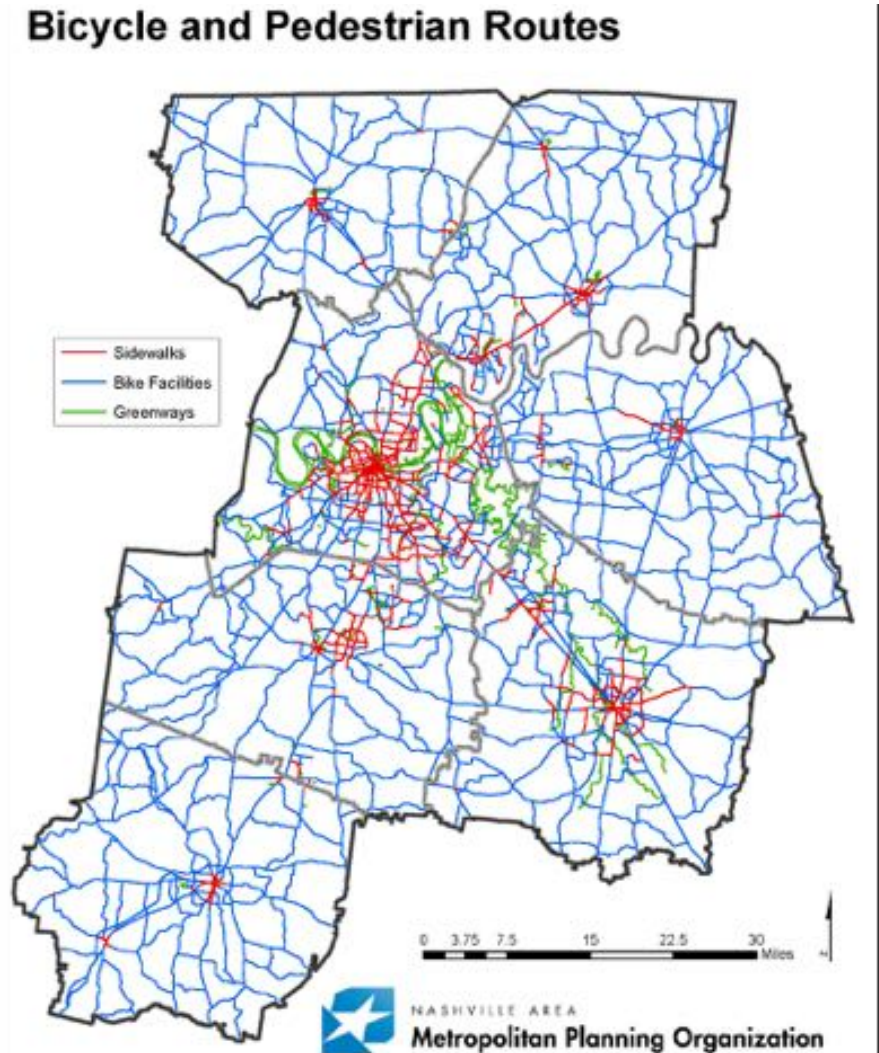
Existing Conditions

Columbia, TN: James Campbell Boulevard



Projects: Complete Streets

2040 Plan: 77% of roadway projects include sidewalks, bicycle lanes, or shared-use lanes (up from 2% in 2030 Plan and 70% in 2035 Plan)



Impacts of Physical Activity via Transportation on Disease Rates

| Moderate | Δ Disease Burden | | Δ Premature Deaths / Year |
|-------------------------|-------------------------|----------|----------------------------------|
| Cardiovascular Diseases | -3.1% | ↓ | 85.6 |
| Diabetes | -3.0% | ↓ | 9.3 |
| Depression | -1.1% | ↓ | 0.0 |
| Dementia | -1.3% | ↓ | 11.6 |
| Breast Cancer | -1.2% | ↓ | 2.2 |
| Colon Cancer | -1.1% | ↓ | 2.0 |
| Road Traffic Crashes | 0.0% | ↔ | 0.0 |
| Total | -1.0% | ↓ | 112.3 |

Thank you – Q&A

- 1) What challenges does your metropolitan planning organization have in funding bicycling and walking projects and/or helping your members build them?
- 2) What information would be most helpful to you in a forthcoming guidebook for MPOs on planning for, funding, and helping your members build bicycling and walking projects?

Please send answers to these questions to T4America staff using the chat box to the left of your screen. Also let us know what questions you have for our presenters.



REGISTER: t4america.org/capital-ideas

CAPITAL IDEAS II

The 2nd edition of the premier conference
on state transportation funding and policy
November 16-17, 2016 // Sacramento, CA

Congress passed a five-year transportation bill in late 2015.
Now states have an opportunity to lead the way on policy and
funding for transportation. A range of experts will cover emerging
innovations at the state level and what state legislators and advocates
can do to increase transparency, get better returns on their
investments and raise new money for transportation.

\$250 for T4A members/\$350 for non-members