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# Common Ground on the Road to Health

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# Finding Common Ground

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A substantial body of research shows that certain aspects of the transportation infrastructure – public transit, greenways and trails, sidewalks and safe street crossings near schools, bicycle paths, traffic-calming devices, and sidewalks that connect schools and homes to destinations – are associated with more walking and bicycling, greater physical activity and lower obesity rates.

*-Robert Wood Johnson Foundation*

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# The Challenge

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**A transportation network that favors vehicles has contributed to a decline in more physically active modes of travel.**



- ❑ Of commuters in NC, 1.9% walk; 0.2% bike
  - ❑ 68% reduction in school age children nationwide who commute to school by walking or bicycling (1969 to 2001)
  - ❑ 60% of NC adults would increase their physical activity if more accessible sidewalks or trails
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# Common Roots of Planning and Public Health

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# Behaviors and Health

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## For Chronic Disease:

- Overweight/Obesity
- Type II Diabetes
- Heart Disease
- Stroke
- Hypertension
- Colon, breast cancers

Inactivity = a strong independent risk factor

Source: U.S. Department of Health and Human Services, 2008

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# PA Recommendations

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- ❑ Adults needs a minimum of 150 minutes of moderate physical activity each week
  - ❑ Can be obtained in small doses
  - ❑ Generally, the more you do, the more benefits you receive
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# Physical Inactivity

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2007 Physical activity levels:

US: 49%

NC: 44%

Unhealthy Lifestyles

NC: \$57.36 billion

Inactivity Alone Cost

NC: \$11.9 billion

## US DHHS Recommendation:

Adults: 30+ min. X 5+days/week.,  
moderate; can be 10 minute increments

Children and adolescents: 60+ min. of  
physical activity daily

# If You Build It.... Will They Be More Active?

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## Transportation

- ❑ People who report having access to **sidewalks** are more likely to be active
- ❑ People reporting access to walking/jogging **trails** are more likely to be active



# If You Build It.... Will They Be More Active?

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## Land Use

- ❑ The more facilities that are available and **destinations** that are close by, the more people walk
- ❑ People who live within walking **distance of trails, parks or stores** report higher walking than those who do not



# Where We Live Matters

## Communities that Support Active Living could...

- Generate 2 more walk/bike trips per person per week
- Prevent up to 1.7 pounds of weight gain per year; 35% lower risk of obesity
- Increase total minutes of physical activity (40% more)
- Increase life expectancy by 4 years



# Public Transportation

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- ❑ Most trips begin and end with small doses of activity.
- ❑ People who used public transportation for any reason were less likely to be sedentary or obese than adults who did not use public transportation.
- ❑ According to one study of obesity-related medical costs, the extra walking related to transit use was estimated at a lifetime savings of \$5,500 per person in 2007 dollars.

*–Robert Wood Johnson report*



# Light Rail

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- Surveyed 498 people living in one mile radius of South Corridor Light Rail line in Charlotte
  - Light Rail users experienced significant reduction in BMI and were less likely to become obese compared to those in the study area who did not use Light Rail.
- *American Journal of Preventative Medicine*, August 2010
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# Current Collaboration

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- Sustainable Communities Task Force
  - Healthy Environments Collaborative
  - Opportunities of Mutual Benefit
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# Sustainable Communities Initiative

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**The goal is healthy and equitable development without compromising natural systems and the needs of future generations of North Carolinians.**

*Includes mobility, health, economic vitality,  
safety, equitable/affordable housing*

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# Sustainable Communities Principles Include...

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- ❑ Better transportation choices. ...to offer non-motorized transportation options to ... promote public health.
  - ❑ Recognize and support communities and neighborhoods...by investing in healthy, safe, and walkable neighborhoods.
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# Healthy Environments Collaborative (HEC)

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- NC Departments of:
  - Transportation
  - Commerce
  - Environment and Natural Resources
  - Health and Human Services
- Mission: Integrate and influence interdepartmental efforts to improve the health of North Carolina's people, environments and economy.



# Healthy Environments Initiative

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## Current Efforts Include:

- Policy Analysis
  - Capacity Building
  - Media / Communications Campaign
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# Policy Analysis

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- 339 Policies in policy inventory
    - Being honed down for review by state agency staff
  
  - State / Local stakeholder interviews have produced 190 policy issues
  
  - Case Studies being developed by 11 community partners
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# Policy Issues from interviews

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- Data: planners/decision makers need more data linking health impacts with the built environment; economics of health impacts (6)
  - Economic: more funding needed at state and local level for bike/ped planning and infrastructure (16)
  - Greenways & Water: water quality regulations a common hurdle when constructing greenways (17)
  - Impacts: can impact on human health be addressed in similar ways as environmental impacts? (28)
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# Policy Issues from Interviews

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- Integration: state agencies need to collaborate more efficiently with each other and with local governments (19)
  - Land Use Planning: coordination needed between land use and transportation planning; planning that facilitates active communities needed (20)
  - Regulatory Interpretation: locals often lack capacity to work through regulatory requirements for bike/ped infrastructure(6)
  - Transportation Planning: including challenges to implementing Complete Streets, state/local and interagency interaction (60)
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# Examples of Transportation Planning Policy Issues & Solutions

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- ❑ The cost of sidewalk construction is shared between DOT and locals according to a sliding scale formula; locals frequently do not have the fiscal resources to fund their portion and therefore do not construct sidewalks at all
  - ❑ Complete Streets will require design innovation for local circumstances; regional transportation engineers may vary in capacity or willingness to provide that flexibility (barrier)
  - ❑ DOT's Community Impact Assessment (CIA) assesses the cultural and connectivity impact of sidewalks, but not broader positive health impacts
  - ❑ DOT needs to coordinate multimodal transportation planning across multiple functions (e.g., planning, design, construction, maintenance) (barrier)
  - ❑ Since 2004 DOT DBPT has provided funding for >100 municipal bike or pedestrian plans (support)
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# More Examples of Transportation Planning Policy Issues & Solutions

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- ❑ Locals have to request sidewalks during DOT planning because DOT staff are not currently required to suggest them (gap)
  - ❑ It is challenging for DOT to commit to implementing Complete Streets in municipalities or regional planning zones, if the local entities are not abiding by their approved land-use plans (barrier)
  - ❑ DOT would benefit from more emphasis on context-sensitive planning with more coordinated land use and transportation planning (gap)
  - ❑ DOT planners and engineers cannot emphasize bike/ped planning in local governments unless there is a local pedestrian or bicycle plan
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# DOT Examples to “build” on

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- Complete Streets
  - Safe Routes to School
  - Bike / Ped Planning Grants
  - Transportation Enhancement Grants
  - Light Rail
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# DOT Investments Pay Off

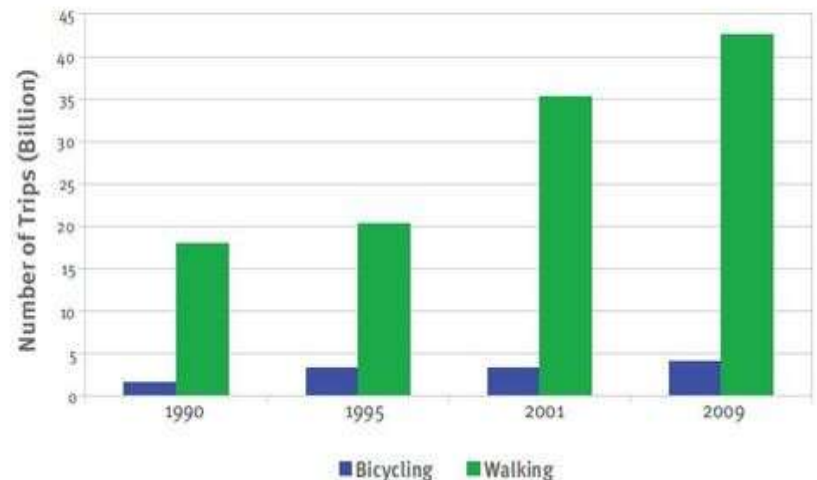
As funding for bicycle and pedestrian facilities has increased...

...biking and walking have ALSO increased.

Federal Pedestrian and Bicycle Funding, 1992–2009



Number of Trips Taken by Bicycling and Walking, 1990–2009



# Opportunities of Mutual Benefit

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- Health Impact Assessments
  - Connecting Land Use and Transportation
  - Health at the table
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# Health Impact Assessment (HIA)

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- Currently developing process to assess health impacts of infrastructure projects
  - Training communities to conduct HIA's
  - Opportunities to integrate HIA into other assessment systems (e.g., CIA, Sustainable Communities Scorecard)
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# Connect Land Use and Transportation Planning

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- Currently land use and transportation planning are not synchronized resulting in sprawling, inefficient communities
    - For example, School Siting
  
  - We need to know how can we support improvements here
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# Health at the table

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- ❑ Need to consider the health impacts of transportation and land use practices
  - ❑ Health impact help make the case
  - ❑ Need public health practitioners at the (state and local) table
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# Conclusions

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- ❑ Direct link between transportation and health
  - ❑ NC has tremendous opportunity to build on current efforts and momentum
  - ❑ We look forward to working together and learning how we can support efforts that support active modes of transportation
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# Your Questions

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