

NC Initiatives to Increase Physical Activity

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Three different behaviors Three different approaches One great combination

- Tobacco use: don't do it
- Nutrition: do it smart
- Physical Activity: do it more



Overview of talk

Creating and supporting opportunities for physical activity

- Roles and infrastructure
- Approach to work
- Work underway

Emerging Field

- From individual level health promotion to policy and environmental change
- Community Guide to Preventive Services
- IOM Recommendations
- Following evidence based practice
- Creating practice based evidence



Statewide Movement

Eat Smart, Move More North Carolina

- One plan
- One movement
- Many tools, resources, and efforts
- 57+ State Level Partners
- Countless partners at community level



Community Infrastructure

- Statewide Health Promotion Program
 - 83 of 85 Health Departments
 - Physical Activity, Nutrition, Tobacco
 - Focus on Policy / Environmental Change
- Healthy Carolinians
 - Over 82 counties certified
- School Health Advisory Councils
 - 115 Local Education Agencies
- Partnerships on every issue!

Demonstration Projects

Childhood Obesity Prevention Project

- 1st state funds dedicated to Childhood Obesity
- 4 Communities being selected
- \$475,000 per community
- Multi-level, multi-sector, integrated interventions
- Community partnerships
- Evaluation: partnerships, policy / environmental change, process measures, intervention specific

Move More Scholars Institute

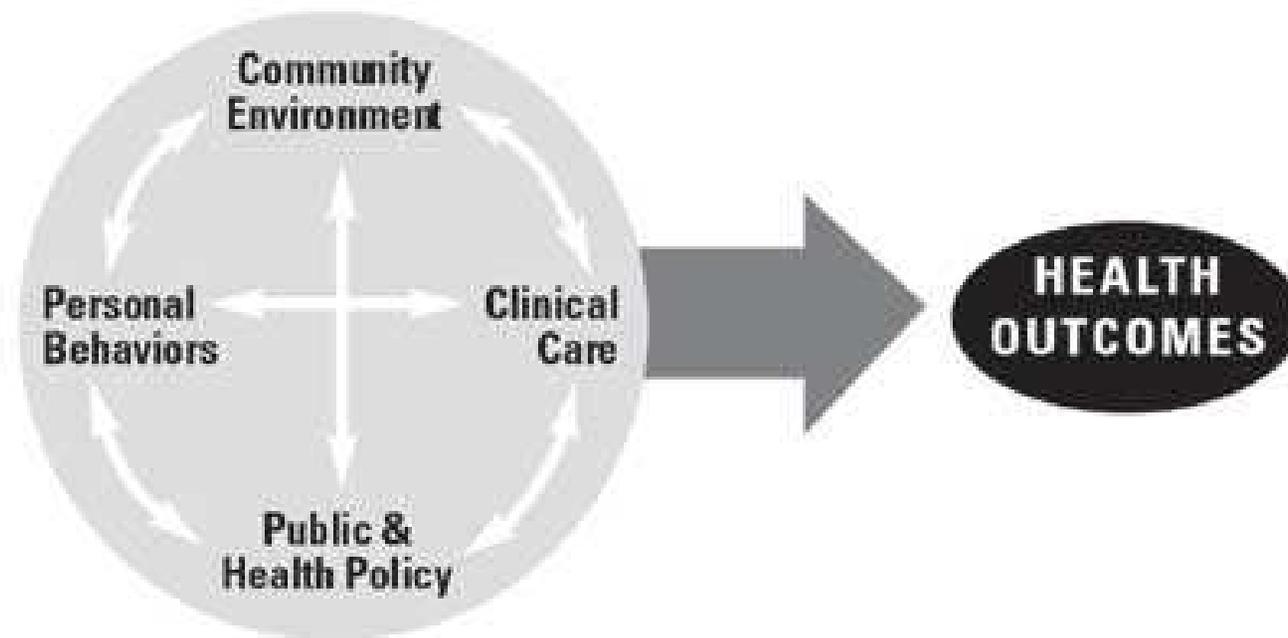
- Focus: Planning, implementing and evaluating evidence based strategies to promote and support physical activity.
- Intensive, highly interactive, four day training course delivered by National and State experts
- Designed for community based physical activity professionals across NC



Overview of work

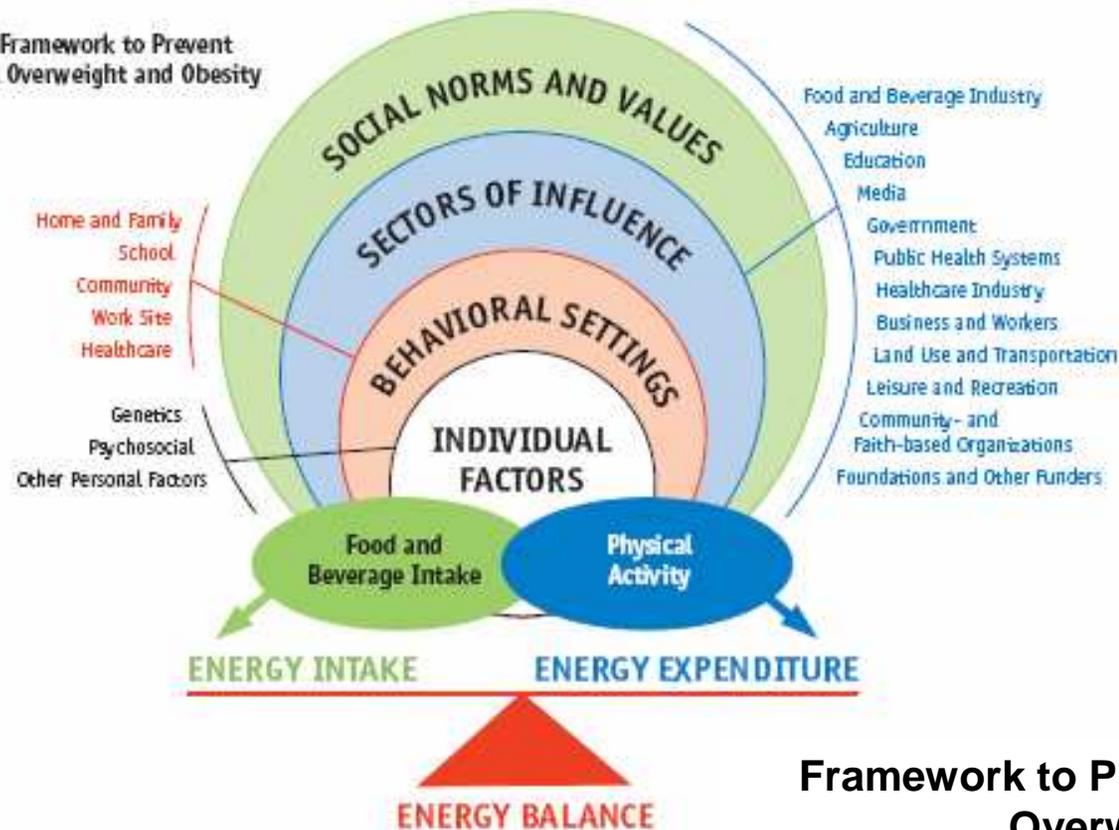
- Analyze and Articulate the Problem
- Create and Maintain Partnerships
- Propose Solutions
- Influence the Change Process *
- Assess and Support Implementation Process
- Evaluate the Impact

Interconnected relationships



Multi-Level Approach

Figure 1. A Framework to Prevent and Control Overweight and Obesity



Framework to Prevent and Control Overweight and Obesity

Adapted from *Preventing Childhood Obesity*, Institute of Medicine, 2005.

Multi-Setting Approach

Work accomplished in settings:

- Community Environment
- Schools
- Faith Communities
- Worksites
- After School
- Child Care
- Healthcare

Community Environment

Fortunate to be able to work with national organization located here in NC:



Physical Activity and the Built Environment

August 27, 2008



NC I.O.M. Prevention Task Force

Philip Bors
Project Officer



What is the Built Environment?

“Environments that are **human modified**, including homes, schools, workplaces, highways, urban sprawl, and air pollution.”

–Samuel H. Wilson, MD, Deputy Director, NIEHS
2004 Summit: Obesity and the Built Environment

Broader definition also includes:

Public policy, **political action**, and **access** to fresh food, physical activity, and even leisure time

- sidewalks, parks in suburban neighborhoods
- fast food outlets and lack of fresh fruits and vegetables in urban neighborhoods

The Built Environment Matters

It influences:

- What activity happens where
- How we move
- Access to opportunities and choices
- Community character



“Built in” Barriers to Active Transportation e.g. walking, bicycling

- Few sidewalks, bike lanes and greenways
- Disconnected and dead end streets
- Concentrated traffic on wide, high-speed roads
- Poor investment in street scenes

- Long distances between destinations
- Single family only and commercial only zones
- Large parking lots, long blank walls
- Decline of neighborhood schools

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

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?

Recreation

- People with access to **neighborhood parks** were nearly twice as likely to be physically active
- Enhanced access to **places for physical activity** increases the frequency of physical activity and weight loss



Brownson, Ross et al., American Journal of Public Health (2001); Kahn, et al, AJPM, 2002

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

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



Children and Physical Activity

- Access to facilities like **parks and time outdoors** is associated with **more activity** for both children and adolescents
- More children walk to school where there are **sidewalks and safety improvements**
- Elementary and middle school students are more active at school with **more facilities, equipment and supervision**
- Parental concerns about traffic and “**stranger danger**” are clearly linked to children’s activity levels



Sallis et al, 2001, 2000; 1993; Klesges et al, 1990; Baranowski et al, 1993; Ewing; Staunton et al, 2003; Boarnet et al, 2005; Jago t al, 2004; Gomez, 2004; IOM/TRB, 2005; Timperio et al, 2004

Crime and Physical Activity

- Reducing crime and fear of crime lessens a **major deterrent** to outdoor physical activity
- **Crime Prevention Through Environmental Design** (CPTED) has been shown to reduce crime
- Many of its principles enhance **walkability**
- Access to parks, facilities and programs is strongly linked with lower crime and juvenile delinquency



Saelens et al. 2003; Mair 2003, Crowe 2000, Taylor 1996

Public Health Synergies

Safety and Physical Activity

- **Safety in numbers:**
increasing the number of pedestrians reduces injury rate



North Carolina Examples...

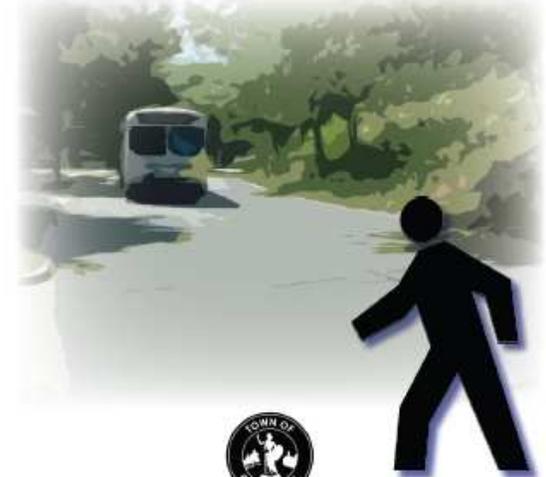
Chapel Hill Active Transportation

Public Involvement



Neighborhood Plan

NORTHSIDE Mobility Plan



Adopted January 22, 2007



Streetscape Improvements

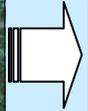


Blue Bikes Program



Chapel Hill

Neighborhood Improvements



Lansing/Ashe County Greenway/Park



Lansing Memorial Park

The Town of Lansing in Ashe County is in the process of adding a “pocket park.” The group has already paved a well used walking trail along with a swing set for children to enjoy. Future plans for this addition to Lansing include additional playground equipment, a shelter, and bathrooms.



Burnsville Gym Renovation



Black Mountain Community Garden



Valley Living

Arts & Entertainment BZ - B4

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Gardening is more popular than ever

By Barbara Hootman
STAFF WRITER

More people are gardening this year than in recent times.

"I could not keep vegetable plants this spring," Mary Glenn Mason, owner of Masons Lawn and Garden Center, said. "I reordered numerous times, and the plants sold immediately. People bought tomatoes, peppers, squash, and cucumbers."

Most of the area gardeners seem to want fresh food for their table, and aren't too concerned with growing to freeze or can.

Diana McCall, manager of the Black Mountain Community Gardens, says most gardeners want to make a difference.

McCall combines coordinating the efforts of the community garden with raising three children, and working as a chef at The Swannanoa School of Culinary Arts. She describes herself as Dr. John Wilson's assistant in the gardens.

"We have grown tremendously in the number of gardeners," she said. "We have expanded to accommodate 12 to 15 new beds

this year. Some are gardening to cut down on the grocery bills, and others just love to garden."

Local resident Brooke Laram, loves to dig in the dirt.

"I garden because I love to play in the dirt, and because I love to eat and share what my garden produces," she said. "I love to see things grow. I love the beauty of a nice garden. I think more people should have their veggie gardens in the front of their homes so others can enjoy them as they pass by."

"I am reminded of what St. Paul said, along the line of 'I have planted, Apollos watered, but God gave the increase' (First Epistle of Paul to the Corinthians, chapter 3)

I hate paying the prices now being asked for food. I believe if we ate locally, we'd be healthier, and the county would prosper in a different way from now. We'd not be trucking produce from California to North Carolina."

Gardening is not an inexpensive hobby. These are the costs of:

- Seeds and fertilizer.
- Approximate water usage
- Time spent planting, weeding, and harvesting



Photos by Barbara Hootman

(above) Gardeners at the Black Mountain Community Gardens work together learning from each other. Gardeners in photo include Diana McCall, coordinator of the community gardens, Becki Jones, Elizabeth Lovejoy, and Judith C. Bush.

See Gardening on page B4

Outer Banks Bikeways

Pathways to Prosperity

THE ECONOMIC IMPACT OF INVESTMENTS IN BICYCLE FACILITIES

Bicycling visitors to the northern Outer Banks generate an economic impact of

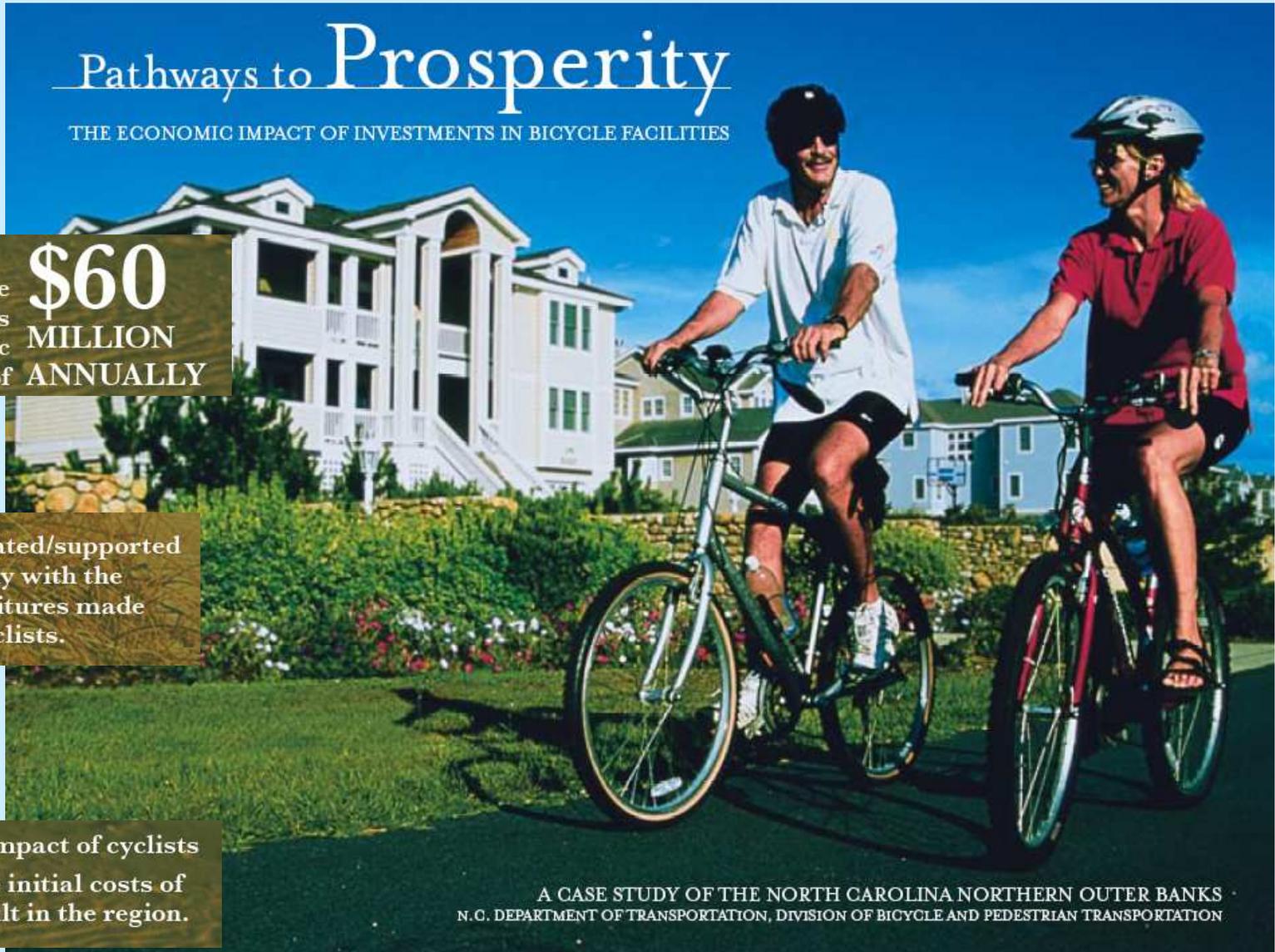
\$60
MILLION
ANNUALLY

1,400
JOBS

are created/supported annually with the expenditures made by bicyclists.

The *annual* economic impact of cyclists is **nine times** the initial costs of the bicycle facilities built in the region.

A CASE STUDY OF THE NORTH CAROLINA NORTHERN OUTER BANKS
N. C. DEPARTMENT OF TRANSPORTATION, DIVISION OF BICYCLE AND PEDESTRIAN TRANSPORTATION



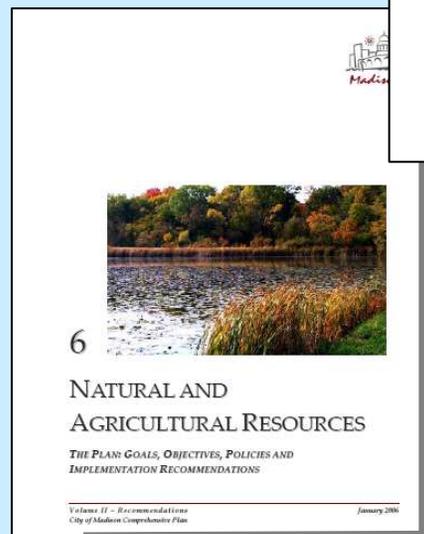
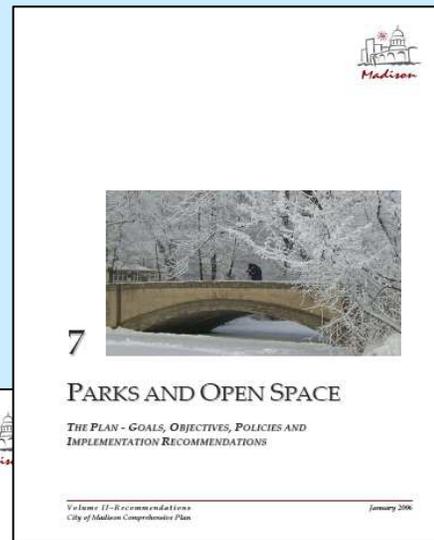
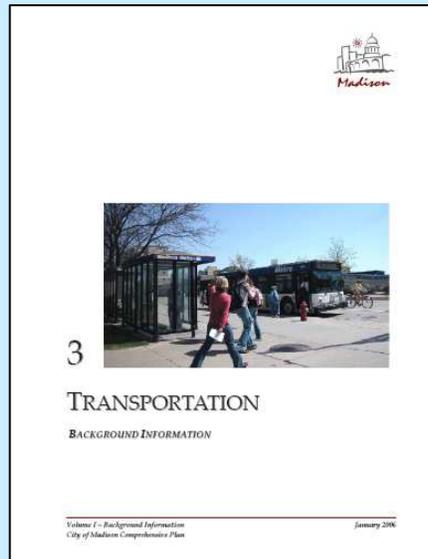
Integrating Active Living and Healthy Eating



Holyoke, MA

Integrated Policy

Healthy Comprehensive Plan



Madison, WI

Built Environment

- Favor compact development & mixed use
- Specify standards for pedestrian & bicycle friendly streets
- Declare goals and indicators for greenways, parks and open space

Healthy Eating/Food Systems

- Create food policy council
- Connect local growers to consumers
- Protect surplus property for public gardens; specify indicators for garden space per # of households

Reminder About Health Equity

1/3 of our population does not drive a car

- Older adults, children, people with disabilities, people who cannot afford a car. (U.S. Census, 2000)

Low-income communities and communities of color

- Report less access to green space and recreational facilities
- More concerns about crime and traffic safety

“In developing-world cities, the majority of people don’t have cars, so I will say, when you construct a good sidewalk, you are constructing democracy. A sidewalk is a symbol of equality.”

-Enrique Peñalosa,
Former Mayor of Bogota, Columbia

The New York Times

June 8, 2008



Healthy Environments Collaborative

The Healthy Environments Collaborative integrates and influences interdepartmental efforts to improve the health of North Carolina's people, environments, and economy.

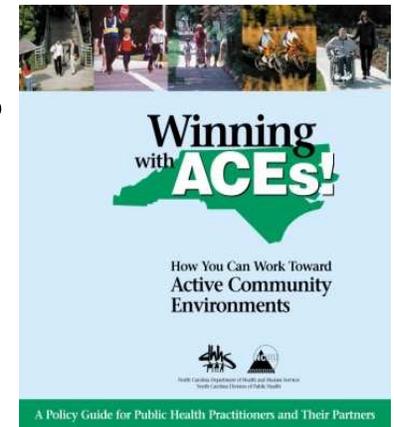
Working together to:

- Increase physical activity
- Secure a strong network of protected open space
- Sustain economic development while maintaining quality of life
- Reduce transportation impact on air quality
- Maintain efficient transportation infrastructure
- Reverse the trend of increasing overweight, obesity, asthma, and other chronic diseases
- Reduce injury



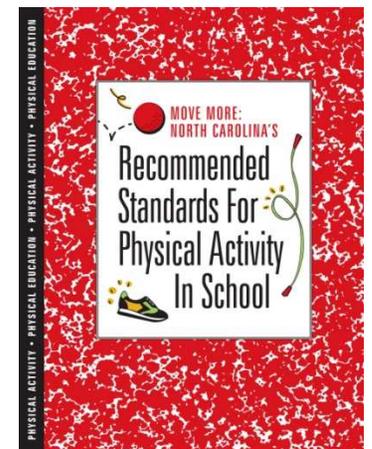
Community Environment cont.

- Community Grants
 - ESMM Community Grants (all settings)
 - NC DOT Bike / Ped Planning Grants
 - Fit Community Grants
 - Health Wellness Trust Fund with ALbD
 - Active Comm. Neighborhood Grants
 - John Rex Endowment
- Tools / technical assistance



Schools

- Healthy Active Children - SBE policy
 - 30 minutes of daily PA, grades K-8
 - PA cannot be used as punishment
 - School Health Advisory Committees
- Move More School Standards
 - NC Department of Public Instruction,
 - NC Division of Public Health,
 - NC Cooperative Extension Service



Schools cont.

- In-School Prevention of Obesity and Disease (IsPOD)
 - Kate B. Reynolds with NC AAHPERD
- Energizer Training
 - Be Active NC and DPI
- NC Action for Healthy Kids
 - supports local implementation of USDA required Local Wellness Policy
- Walk To School / Safe Routes to School
 - NC DOT grants for bike / ped improvement projects and school safety programs

Schools cont.

Relevant Policy Issues:

- Daily, Quality Physical Education for all children, all abilities
- School Siting (selecting new school locations) that considers community health impact e.g.:
 - Proximity to neighborhoods
 - Appropriate supporting transportation infrastructure

Faith Communities

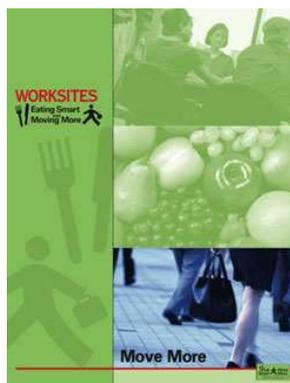
Faithful Families Eating Smart Moving More

- Faithful Families ESMM Curriculum
- Policy and Environmental Change Guide
- African American Churches Faith Guide



Worksites

- Worksites Eating Smart and Moving More
- NC HealthSmart Worksite Wellness Toolkit and Training
 - OSP Wellness Policy
- Tools and Guides for worksite use
- Encourage supportive worksite policies



Child Care

- Nutrition and Physical Activity Self Assessment for Child Care (NAP-SACC)
- Color Me Healthy
- Be Active Kids



Under development:

Recommended Standards for PA in After School Programs

- ECU Brody School of Medicine
- Goldsboro Family YMCA
- Health and Wellness Trust Fund
- NC 4-H Youth Development
- NC Afterschool Coalition
- NC Alliance of Boys and Girls Clubs
- NC Center for Afterschool Programs
- NC Dept of Juvenile Justice and Delinquency Prevention
- NC Dept of Public Instruction
- NC Division of Social Services
- NC Division of Public Health
- NC Pediatric Society
- NC PTA
- NC Recreation and Park Association
- WakeMed Corporate and Community Health
- YMCA of Greater Charlotte

Healthcare

- Pediatric Obesity Tools – *newly released*
 - Clinical Reference Guide
 - BMI Charts
 - BP Table
 - Prescription Pad promoting 5-3-2-1-Almost none
- Starting the Conversation tools
 - NC Prevention Partners

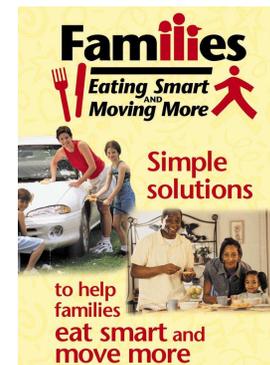
Healthcare

Relevant Policies Issues:

- Equitable access to preventive and treatment services
- Tracking of BMI, coupled with counseling

Individual and Interpersonal

- Families Eating Smart and Moving More
 - Used by WIC, Cooperative Extension, etc.
- ESMM Weigh Less
- EFNEP's Eating Smart and Moving More
- www.MyEatSmartMoveMore.com



“So What?”

- Critical need for support of the state and local infrastructure
- Address all levels of intervention, especially policy and environmental
- Address all settings
- Partner! best use of resources, reducing gaps and duplication