Division of Bicycle and Pedestrian Transportation

Municipal Plans
Regional Plans
Coordination with other units to scope projects
Coordination with AASHTO, MUTCD, etc
Data collection and research
Staff training for best practices

Policy and Planning

Manage Enhancement Bicycle projects in STIP
Safe Routes to School
Access to Transit
Complete Streets
Coordination with other state agencies
Safety and education programs

Technical Oversight and Programs

Administration and Finance
Improve pedestrian and bicycle safety in the through educational safety messaging and enforcement targeting drivers and pedestrians

- FY 12-14 comprehensive pilot focus on Triangle
- Limited outreach through Outer Banks in 2013
Yield to people in crosswalks. It's the law.

WatchForMeNC.org

Make room for bikes.

WatchForMeNC.org
SRTS: “Let’s Go NC” Bicycling and Walking Curriculum

- Design of “In the Class” curriculum materials
- Video and exercises
SRTS: Active Routes to School Partnership
Complete Streets Program

- January – December 2013: 24, two-day training sessions statewide
- Training to cover process for designing complete streets
- Call for projects with divisions – case studies ready by end of year
**Neighborhood – Transportation**
- Wayfinding and bike racks
- Sidewalks and signals

**Community – Connectivity**
- Greenways
- Bike Lanes

**Journey – Recreation**
- Bike routes
- Trails
A framework for guiding State and partners and informing policy, funding and programming of projects at state, regional and local level

A process for planning and decision-making built on public-public and public-private partnerships

• Leaders
• Funders
• Owners
5 Pillars of Walk Bike NC

- Mobility
- Safety
- Health
- Economy
- Environment
Resource Coordination

2012-2013 Statewide Plan for Walking and Cycling in North Carolina (Walk Bike NC)

- Involves multi-agency and private funding
- Identifying action steps for improved coordination
Health Impact Assessments

- Different scales
- Different geographies

Active Transportation: Pathway to Health

- Active Transportation System
- Increased Physical Activity (Walking + Bicycling)
- Reduced Obesity + Overweight
- Less Diabetes, High Blood Pressure, Certain Cancers, Depression
- Fewer Chronic Disease Deaths, Increased Life Expectancy, Better Mental Health, Quality of Life
- Better Air Quality
- Fewer Respiratory Illnesses
Figure 1. Winterville existing pedestrian facilities (left) and proposed improvements (right)
Figure 2. BRRC existing open space and trails (left) and proposed open space, trails, and improved sidewalks (right)
<table>
<thead>
<tr>
<th>Desired Change</th>
<th>Related to Walkability?</th>
<th>Related to Active Transportation Infrastructure?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Make it more aesthetically pleasing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sidewalks/crosswalks on major roads</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Build more things to walk to</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Bike lanes/bike racks</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Better connected public transit</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Educational opportunities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Better publicity, signage, maps, etc.</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>More walking trails</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Better access to walking trails/open space</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Mixed-use development</td>
<td></td>
<td></td>
</tr>
<tr>
<td>More water fountains and restrooms for walkers/runners</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Increased density</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Figure 3. Sparta proposed downtown streetscape improvements
Disease Selection

Criteria

- **Plausibility:** diseases of interest should have a demonstrated relationship with physical activity
- **Validity:** disease prevalence and/or incidence should be monitored using appropriate methods

Selected Diseases

- Coronary Heart Disease
- Diabetes
- Hypertension
- Stroke

Not included: COPD (plausibility), cancer (validity)
Dynamic: predicts health outcomes over time

Markov Chain modeling approach
- Estimates outcomes in a system at discrete time steps
- Time steps are memoryless
Figure 12. BRRC Predicted Health Outcomes
Winterville

Figure 11. Winterville Predicted Health Outcomes
Figure 13. Sparta Predicted Health Outcomes
Active transportation improvements can be justified in two of three communities by healthcare cost savings alone.

Transportation behavior researchers and epidemiologists need to use comparable units (mode choice vs physical activity).

Quantitative HIA is possible and very useful – but tools and methods need to be simplified to be useful for practitioners in real-world decision-making settings.
Questions?

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