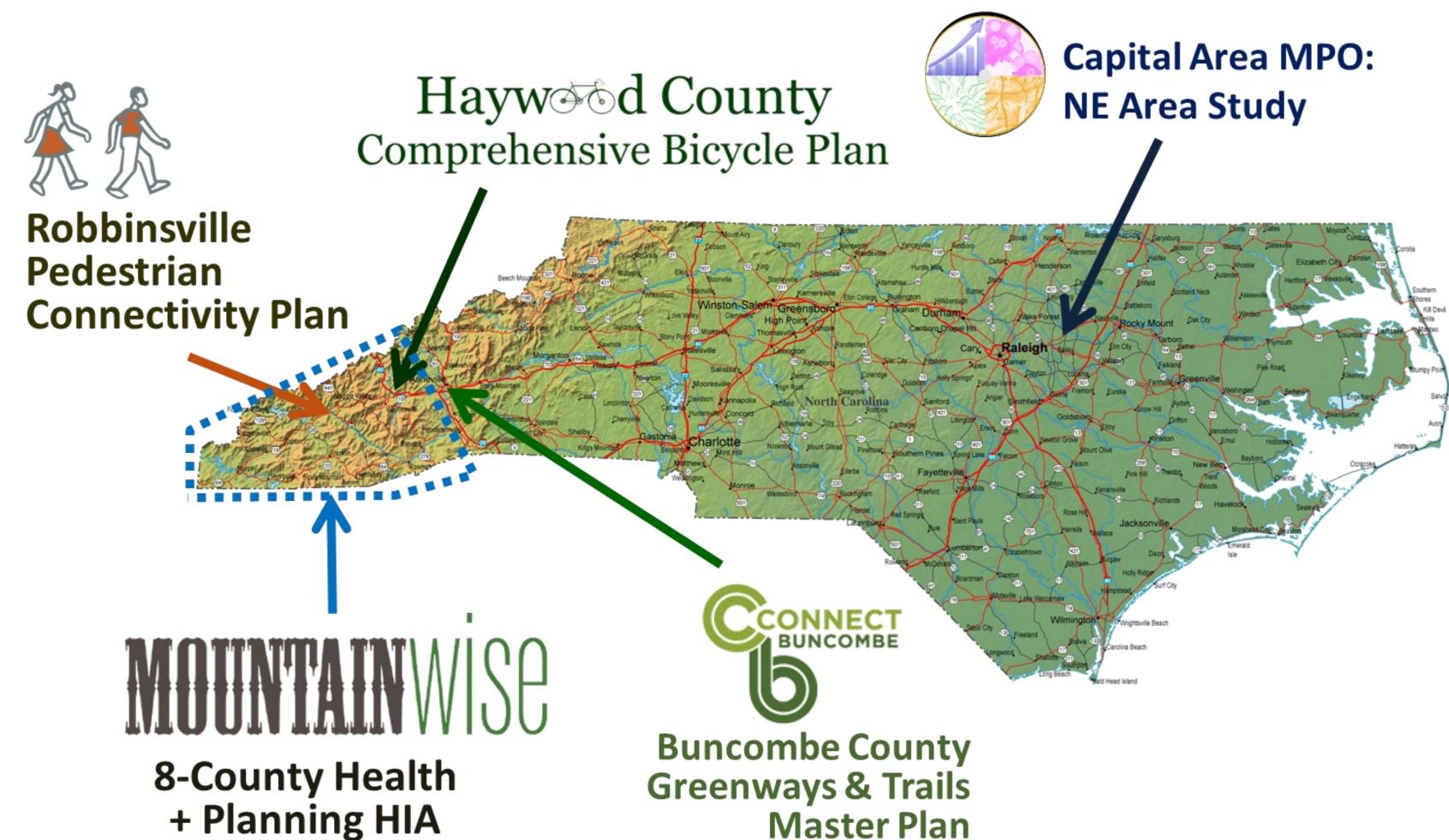
Creative Use of Data in Transportation and Public Health Planning (P14-5751)

Donald Kostelec, AICP – Kostelec Planning & Chris Danley - Vitruvian Planning



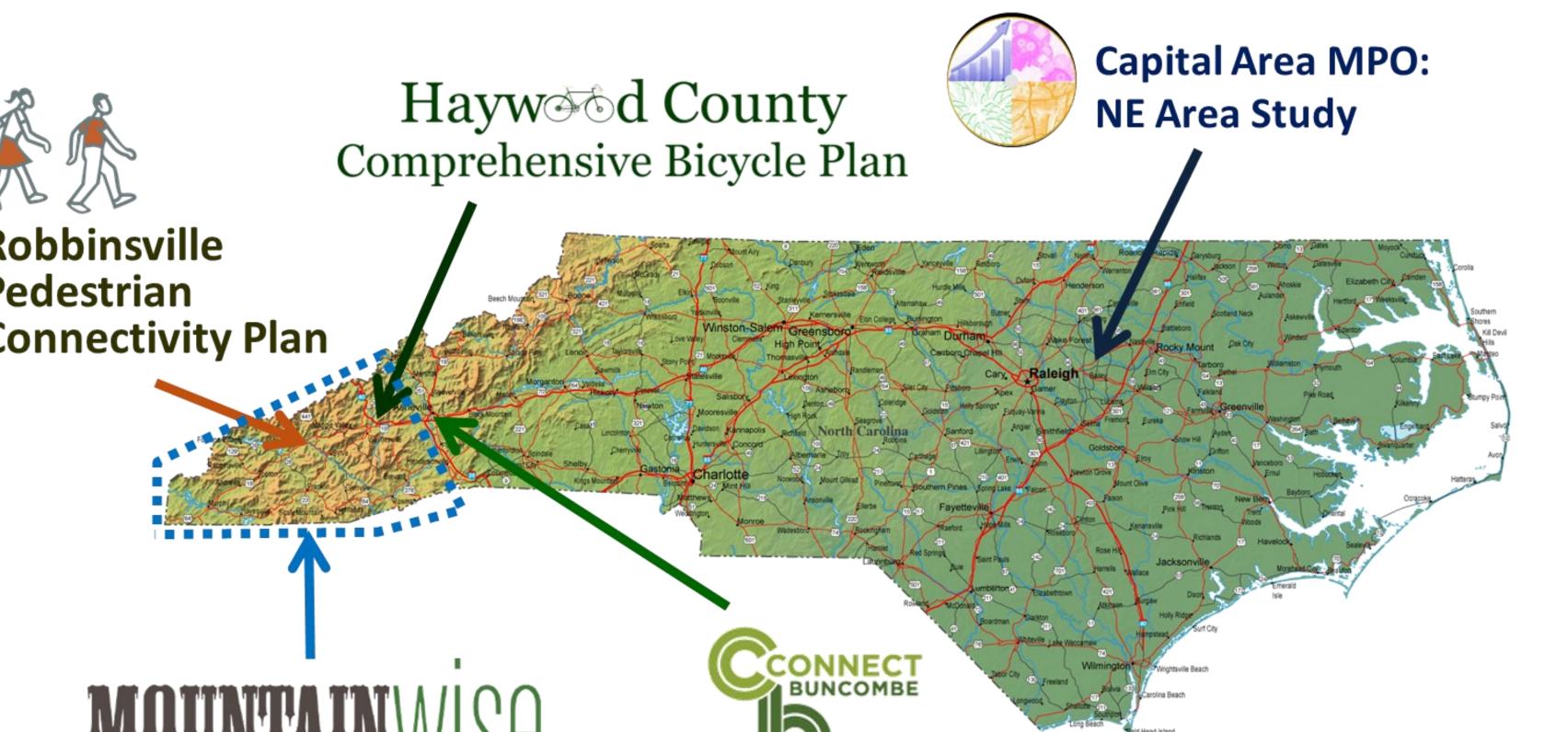
Introduction

impacts on a number of both physical and psychological health related issues.

How data is collected, evaluated and utilized within integrated HIA and planning efforts varies greatly based on data that are available. A challenge with prevailing health data and statistics is that they are oftentimes aggregated to the county level. This is seen throughout the United Community Health Assessments. County-level data offers little opportunity for more discrete

This poster summarizes how transportation and comprehensive planning efforts have found

- Understanding the varying levels of data available within a community or region;
- Identifying methods to reassess existing health data to make it usable for planning;
- Acknowledging when prevailing datasets such as the County Health Rankings are limited in terms of their utility in evaluating and comparing community health; and
- ♦ Building a case through the HIA among MPOs, DOTs, cities, health organizations and agencies to collect more geographically-specific data.



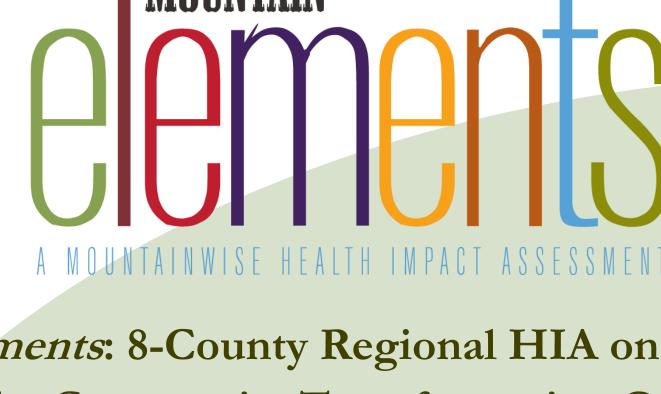
The use of Health Impact Assessment (HIA) in the United States is growing and more communities are looking to conduct HIAs as part of communitywide or regional planning studies. Though historically used to evaluate various proposals and policies, HIAs can be utilized on a larger scale for a variety of transportation plans and projects to help determine

States with the County Health Rankings, state-level health statistics, and county-level analysis of specific geographies or comparing projects within a county.

creative ways to identify and utilize data at a scale that is more conducive to evaluation on a level common to planning and transportation efforts—the Census tract level.

This includes:

- Recognizing that popular datasets and tools don't tell the whole story or are insufficient;



MountainElements: 8-County Regional HIA on Comprehensive Planning for the Community Transformation Grant

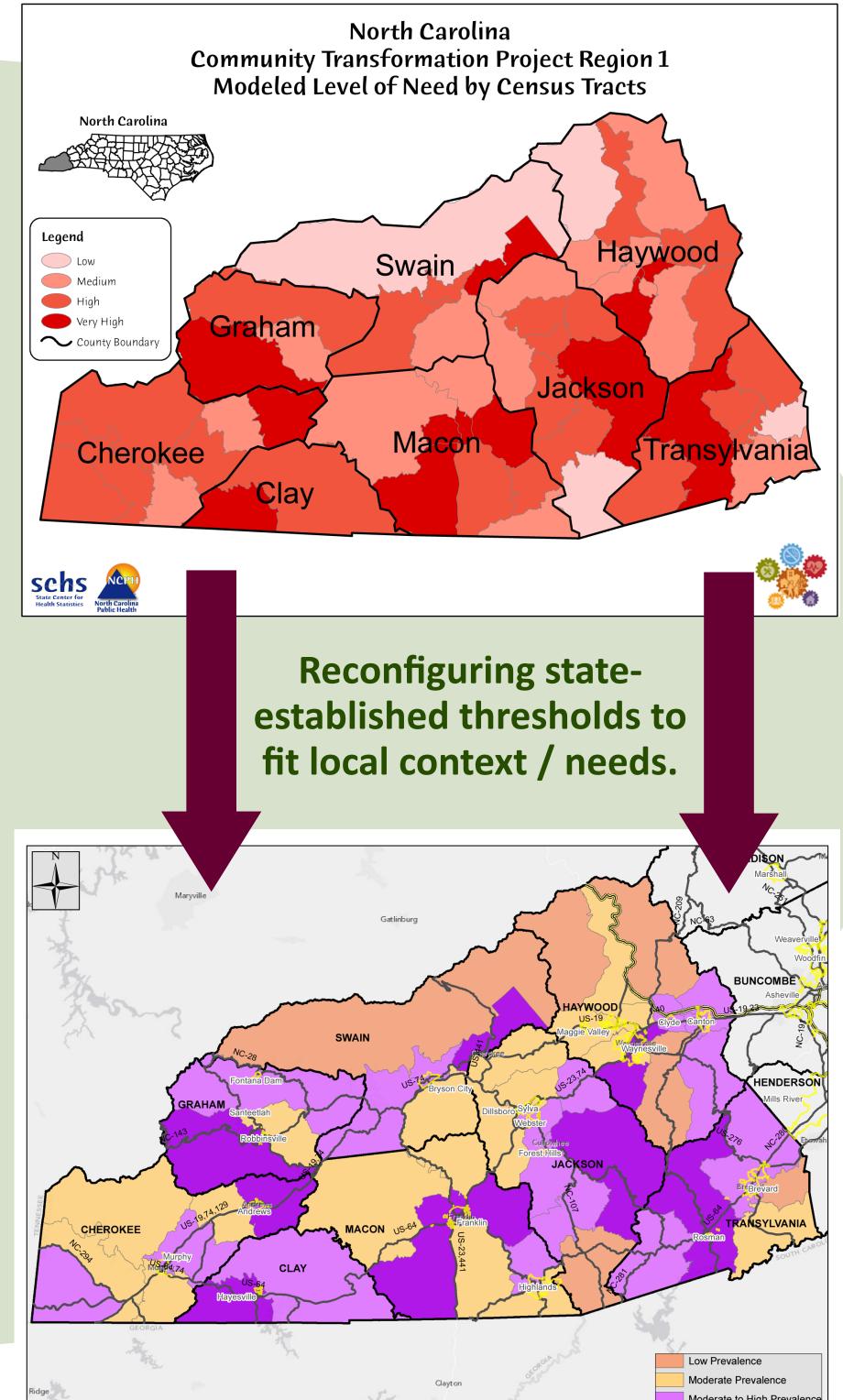
The first HIA of its kind in the nation, the MountanElements 8-County Health Impact Assessment in Western NC is intended to evaluate the impacts of comprehensive and transportation planning efforts as well as unearth health related issues or initiatives regarding the built environment.

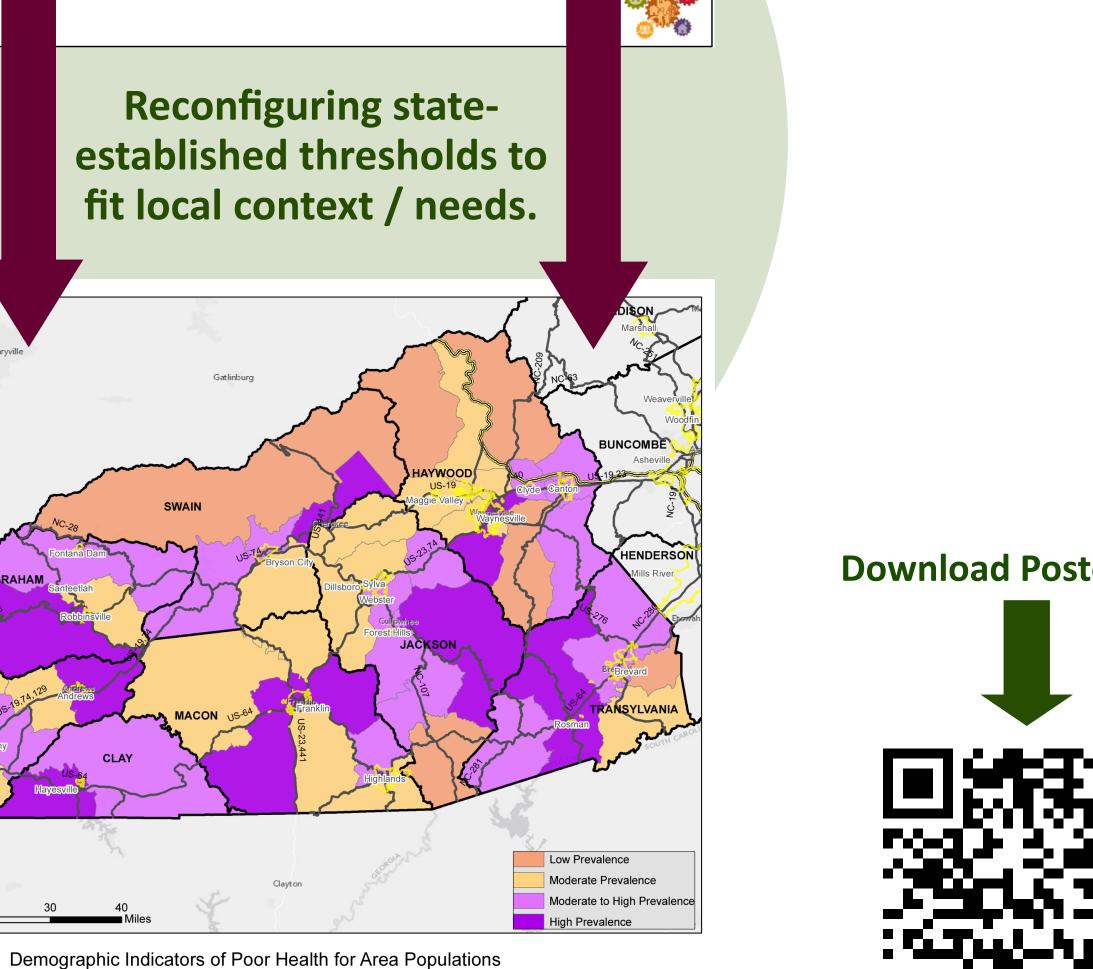
Information and data sources collected include the numerous plans themselves, extensive demographics and Census figures, Community Health Assessment reports and interviews from several area health directors and staff and planning

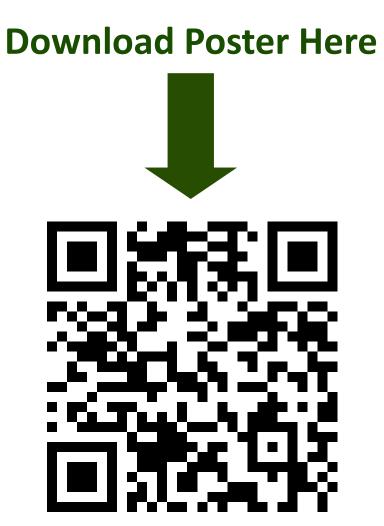
Key findings early in the project have included an awareness of how topography and other factors can skew state-level datasets and how various dimensions of health have not traditionally been acknowledged through broad based

Lessons Learned

- . Data comparisons across 8 counties for health and built environment issues are challenging. State Center for Health Statistics information is calibrated for statewide evaluation, which offers little differentiation for evaluation purposes within a region.
- 2. Try to steer away from "health = healthcare" and "planning = zoning" perceptions through strategic use of data. The project is using the "Seven Dimensions of Health & Wellness" as a foundation to address this.
- 3. Using data to identify "Hot Spots" of poor health conditions can vield ideas for more detailed planning, project evaluation and further surveys/analysis.
- 4. Exploring challenges associated with access due to topographical challenges and large swaths of land within public ownership (e.g. federal or state) creates a new paradigm for health considerations (still being explored).

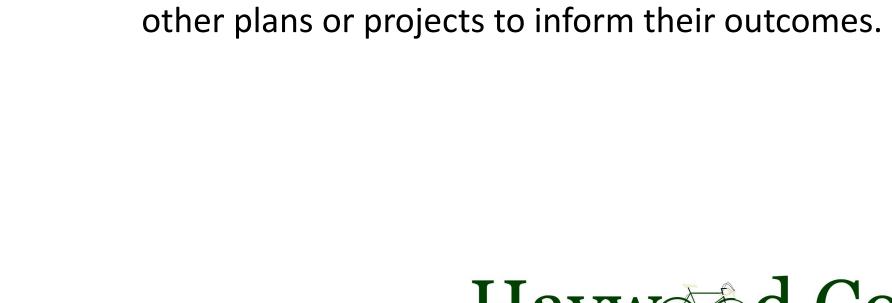














AREA STUDY

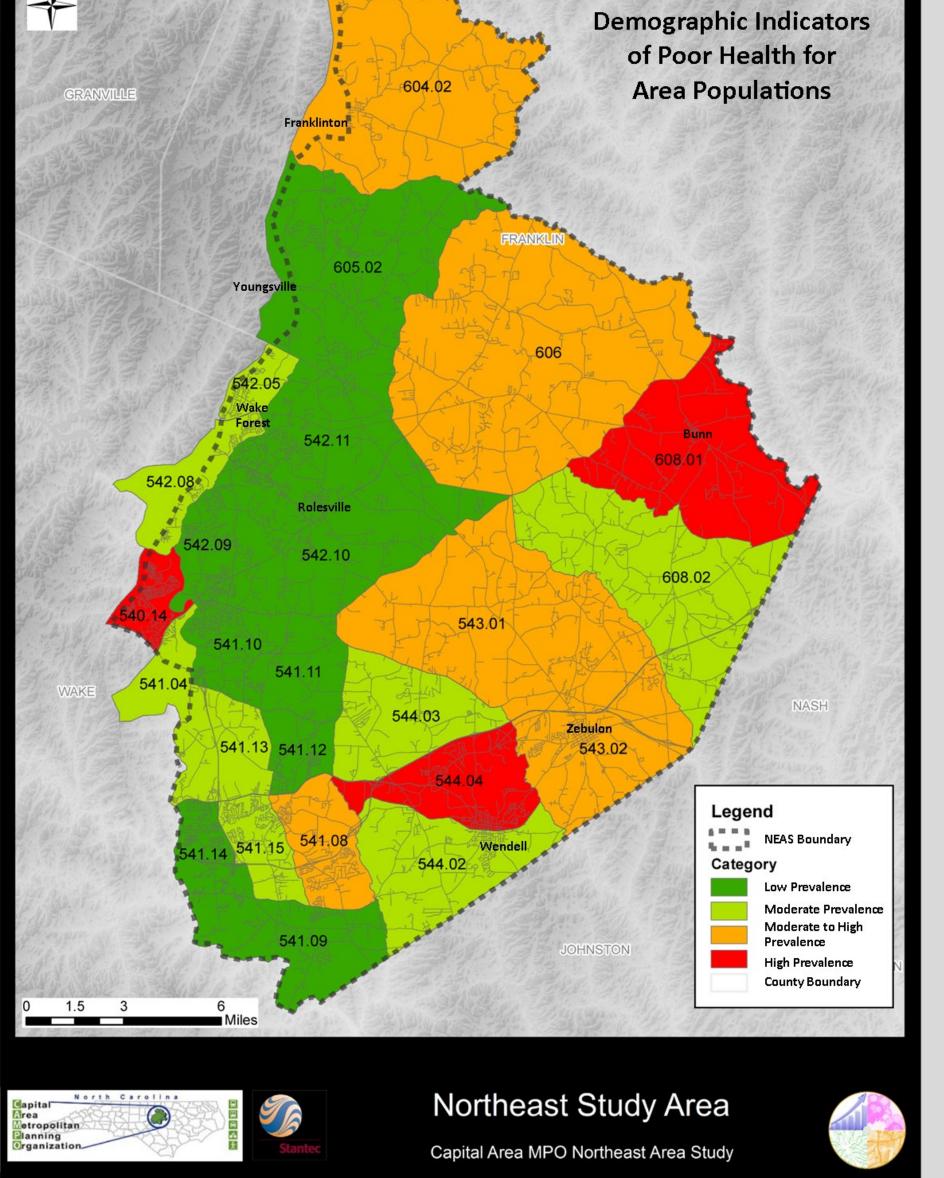
African-Americans compared to White population **Health Assessment:**

| | % Higher in | |
|------------------------|------------------|--|
| Cause of Dooth | African American | |
| Cause of Death | Population | |
| Cancer | 23% | |
| Heart Disease | 32% | |
| Stroke | 49% | |
| Diabetes | 318% | |
| Septicemia | 96% | |
| Motor Vehicle Injuries | 47% | |
| | | |

Wake Co. Leading Causes of Death, Rates for

African-American population is 20% of total population, but represents 40.8% of pedestrian crash victims.

| Northeast Area Study – Pedestrian Crashes by Race, percentage of overall Crashes (2006-2011) | | |
|--|-----------------|--------------------|
| Pedestrian Race | # of Crashes | % of Total Crashes |
| Black | 51 | 40.8% |
| Hispanic | 10 | 8.0% |
| White | 58 | 46.4% |
| Other | 3 | 2.4% |
| Unknown | 3 | 2.4% |
| Total | 125 | 100.0% |
| | | |



Capital Area MPO—NE Area Study (Wake & Franklin Counties)

The HIA affiliated with the Northeast Area Study—a 327-square mile sub-area planning process led by the Capital Area MPO in the Raleigh region—was used to help determine the impacts of proposed transportation and land use scenarios and project outcomes for the study plan.

The Plan focused on a quadrant of a region containing two North Carolina counties, generally rural in nature, with close proximity to urbanized centers near

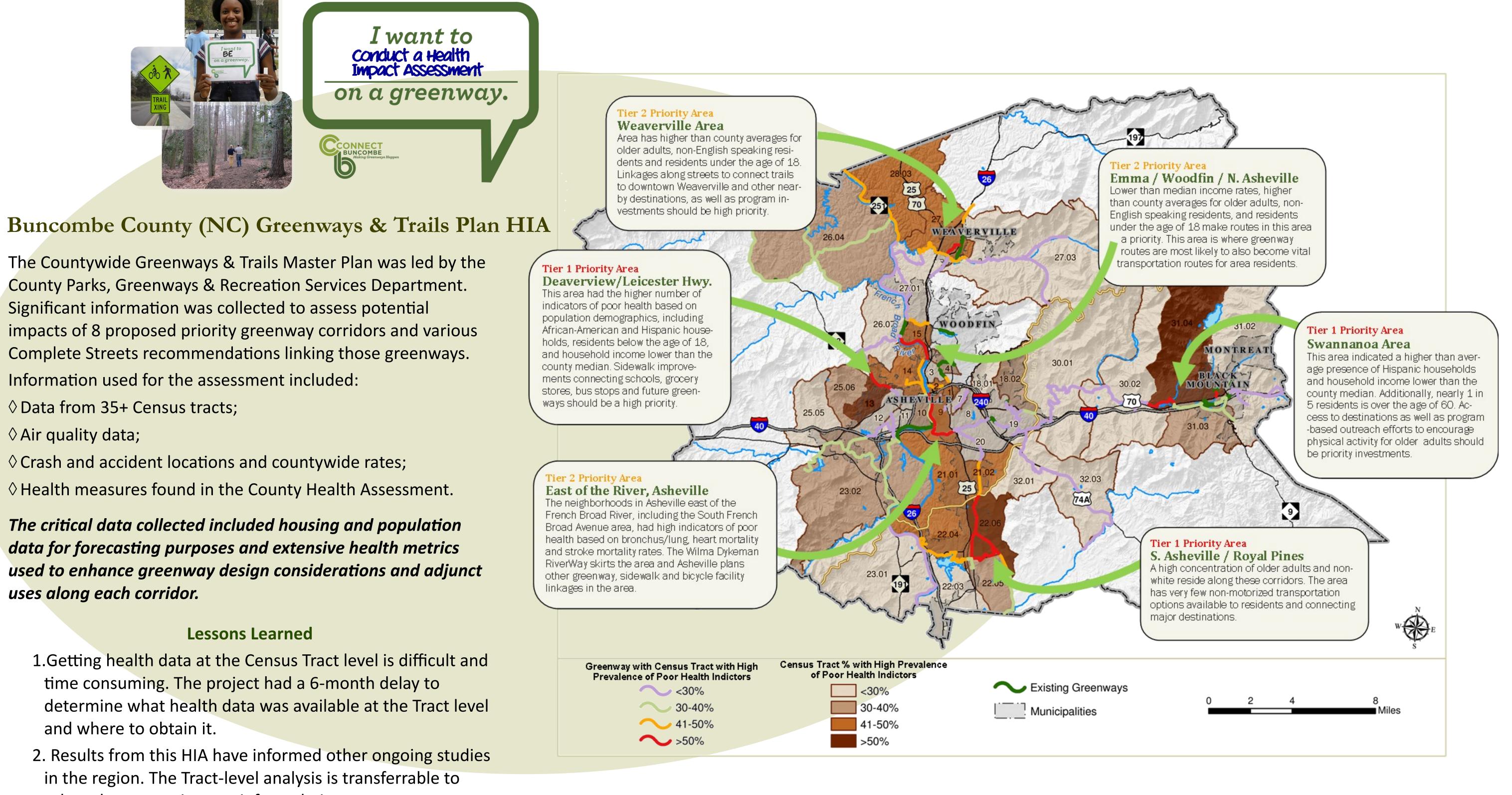
Data collected included: Health statistics contained within Community Health Assessment documents, extensive demographic figures and University of Wisconsin / Robert Wood Johnson Foundations County Health Rankings used to determine needs of infrastructure, policies and programs.

Key data findings of the project included a lack of consistency in Community Health Assessment survey efforts, and an understanding of how countywide information often fails to differentiate between urban and rural issues.

Lessons Learned

- 1. There are inconsistencies in how health organizations, even within the same state, collect and organize health data. This makes it difficult to conduct an "apples to apples" comparison or use the same metrics.
- 2. The County Health Rankings are limited and there are major concerns when using it for built environment evaluation as they do not include public recreation facilities.

3. Social determinants of health manifest themselves in several themes within



Haywood County Comprehensive Bicycle Plan

Significant information was collected to assess potential

Information used for the assessment included:

♦ Crash and accident locations and countywide rates;

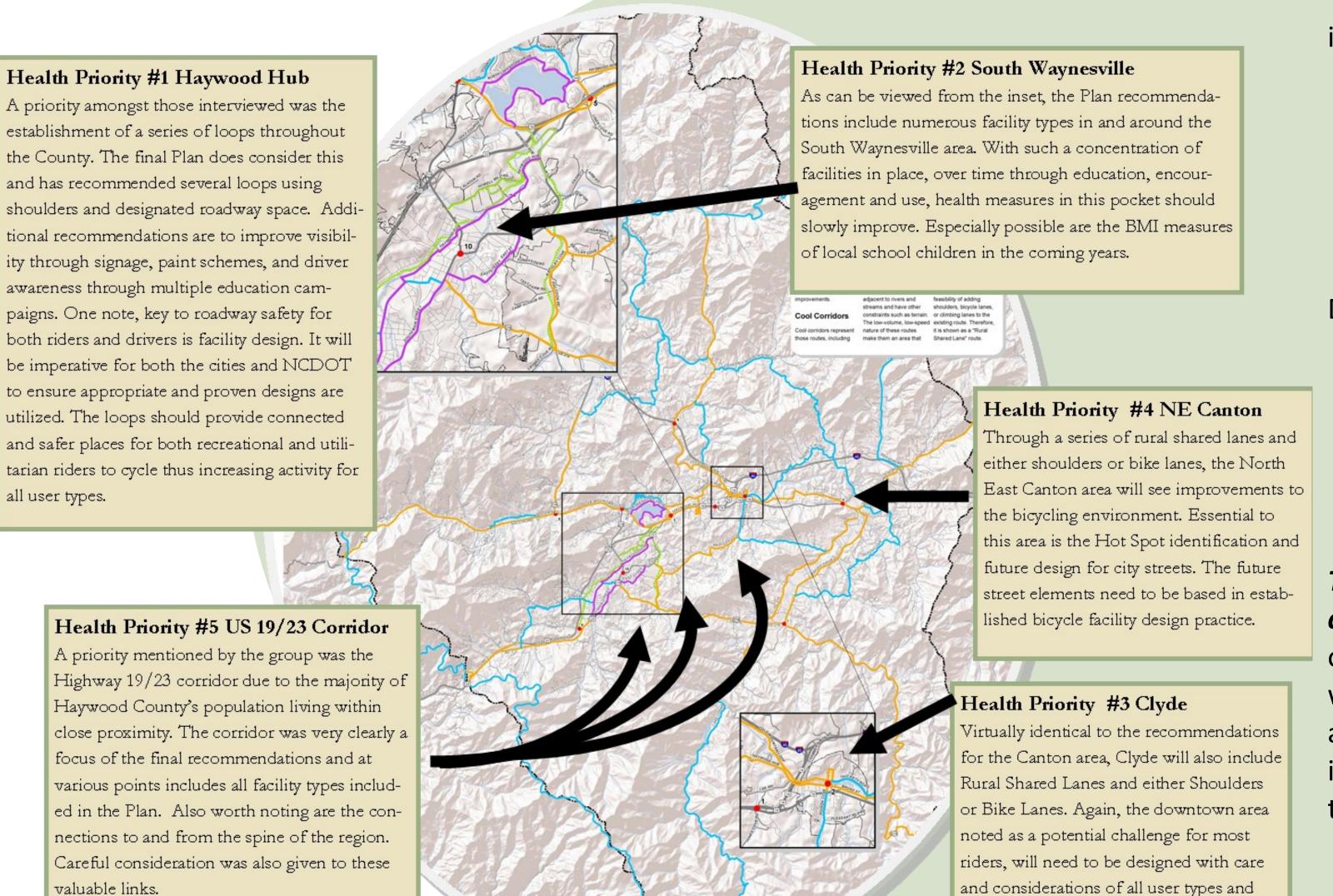
Lessons Learned

♦ Data from 35+ Census tracts;

uses along each corridor.

and where to obtain it.

♦ Air quality data;



Haywood County (NC) Comprehensive Bicycle Plan HIA

This HIA was conducted for a countywide bicycle plan and utilized information and data related to:

- ♦ Basic demographics;
- ♦ Area planning goals and objectives;
- ♦ Survey information, and
- ♦ Interviews with area stakeholders.

Data sources included:

- ♦ Community Health Assessment;
- ♦ Bicyclist crash data, by location and type;
- ♦ Body Mass Index for elementary schools; and
- ♦ Census Tract and American Community Survey.

The most critical piece of data collected was Body Mass Index collected from local elementary schools. When overlaid with each

other, the information and data layers painted a clear picture as to where hot spots of poor health lay thus giving decision makers assistance for purposes of prioritization efforts for future infrastructure and programmatic improvements recommended

through the planning process.

1. Health data is not always readily available at a scale smaller than a county perspective.

Lessons Learned

- 2. Be prepared to explore health claims that you never expected (e.g. health impacts of loose dogs on bicycling perceptions)
- 3. Go beyond the here and now of health; consider future impacts of those just learning to ride.



