

*The
Importance of
Addressing
Human
Health and
Safety in
Planning*

*Don Kostelec, AICP
Kostelec Planning*



*J. Scott Lane, AICP, CPTED
Stantec Consulting Services Inc.*

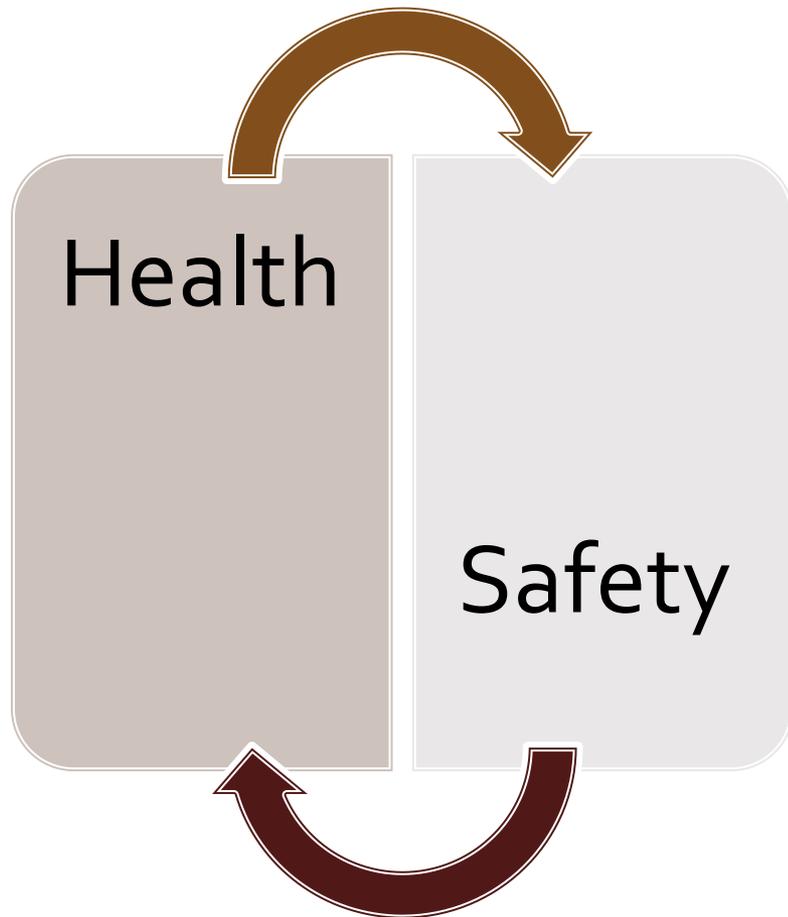


Part the First:

Personal Security



What We Do Boils Down to These



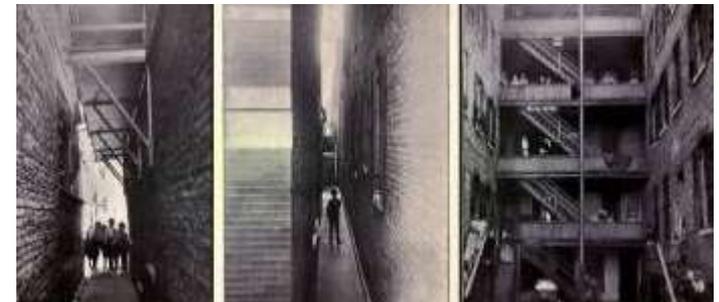
- Planning Emphasizes Suitable Relationships between Land Uses and Travel Between Them
- Engineering Stresses Improving Performance, Satisfying the Need to Move Things & People

Why Planners Have a Job

- ❑ **Sanitation Reform Movement** (Late 1700's to early 1900's)
 - Many blamed sickness on overcrowding and “miasma”
 - Although theories turned out to be untrue, it was too late to change public opinion
- ❑ **Other Reasons**
 - Contributing factors were the predominant (over 40%) immigrant populations in cities and the fears that this triggered in other segments of society
 - Landscape architects like Olmstead further promoted miasma, light, and air theories based on then-dominant city design features, like “light shafts” in tenements
 - Social factors were also invoked to describe the ills brought about by tenement living at the turn of the 20th century
 - New demand for land commensurate with rise in incomes

“A tainted spot on the
body politic”

Reverend Josiah Strong, *Our Country* (1885), referring to the presence of immigrants in American cities



Chicago tenements, circa 1900

The Rise of Zoning

- Health and Hygiene
 - Similar figures that argued for more light and space shaped the first zoning laws such as those in Los Angeles and New York
 - Rigid separation of uses demarcated the U.S. efforts from those of previous, German efforts
- Protection of Property Values
- Restricting the Movements of Lower-Income and “Others”

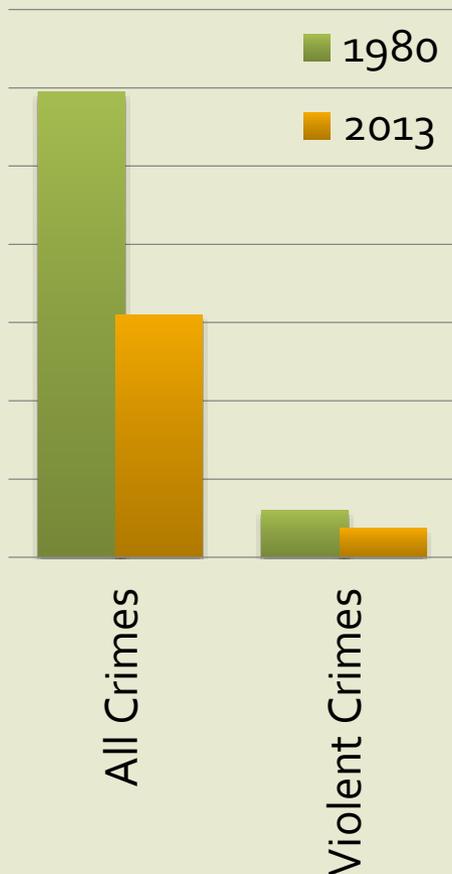


Moving Walking Out of the Street

- Roads started out as means to get goods to distant marketplaces (urban) or as migration routes (rural)
- Streets were for people – and horses, carriages and, later, streetcars
- As time went on, the emergence of segregated land uses, first facilitated by the streetcar, exploded with the coincidence of the private automobile and its mass production
- By the early 1960s, the dominant pattern of automobile use was firmly entrenched



“Free-Range Parenting”



Police picked up the children of Danielle and Alexander Meitiv on Sunday as they were walking home alone from a park that’s nearly a mile from their house. This time, instead of bringing the children home, police took them directly to Child Protective Services.

“It’s beyond ridiculous,” Danielle Meitiv said Monday. “The world is safer today, and yet we imprison our children inside and wonder why they’re obese and have no focus.”

The Meitivs, who live 6 miles from Washington in Silver Spring, Maryland, believe in “**free-range**” parenting, which includes allowing their children to play and walk alone in the neighborhood to teach them self-reliance and responsibility.

Moving Health Out of Planning

- Property Value Protection is Hardwired into Many Euclidean Zoning Decisions
- NEPA Regulations Generally Ignore or Indirectly Address Human Health and Security Concerns



Personal Safety in Planning

or, Why People Don't Walk Even When there are Sidewalks



Asking the



Crime Prevention through Environmental Design (CPTED)

Jane Jacobs



- Wrote the book, “The Death and Life of Great American Cities,” in 1961.
- “Eyes on the street” – must be able to look onto the street from inside the buildings
- Fought against remote neighborhoods advocated by the city planners of her day.

Overlap between CPTED and Sound Planning / Design

CPTED shares and reinforces many of the "smart" design principles encapsulated by neo-traditional planning, form-based / design-based codes, and Complete Streets.

Your New Best Friend: Who will City Council listen to when it comes time to adopt the controversial ordinance change: the planner or the police chief (or both, together)?

Principle	CPTED	Planning
"Eyes on the Street"	✓	✓
Landscaping / Streetscaping	✓	✓
Public Art	✓	✓
Definition of Public, Semi-Public and Private Spaces	✓	✓
Mixing of Complimentary Land Uses	✓	✓
Front Porches, Street Orientation, Build-to Lines, etc.	✓	✓
Pedestrian-Level Lighting	✓	✓
Excellent Maintenance	✓	✓
Community Cohesion and Support for Group Activities	✓	✓
Create Gathering Places	✓	✓
Variety of Income Groups Living in the Same Area	✓	✓
Strong Public Engagement	✓	✓

Doing CPTED with Transportation

- Research Crime Statistics
- Audit / Inventory of Site, Corridor or Area
- Talk to People
- Prepare Draft Report
- Review
- Prepare Final Report
- Before and After the Project:
 - UDO Updates
 - Ordinance Revisions
 - Standards Development
 - Site Plan Review Processes

A Lot is Wrapped Up into 3 Overarching Principles

Territorial Reinforcement

Natural Surveillance

Natural Access Control

40%

REDUCTION IN CRIME THROUGH CPTED

POLICE LINE DO NOT CROSS

Not Just About Lighting

(but there's more to lighting than you think...)



- On-going presentations to new businesses and community groups, such as over 900 Red Hat employees
- Assisting Citrix with preparing new employees moving into the Warehouse District

- Monthly meetings with Raleigh police district captain to strategize on ways to lower crime in downtown
- Certified training for all ambassadors through North Carolina Private Protective Services

94%

“What I like most about living in downtown Raleigh is feeling safe and the ability to get to all the events on bike or walking.”²

- Over **83% of people feel safe** walking the streets of downtown Raleigh¹
- Over 94% of people claim that **safety is a very important factor** in influencing downtown’s likeability¹
- 80% of downtown residents believe the **DRA Ambassador Safety Team is important to downtown’s quality of life** and sense of safety²

“One of our Marbles employees was out on the town recently and left her parking lights on. When she returned to her car she found a nice note from an ambassador with a phone number to call if she needed a jump!”

Ambassador Safety Team Hours:
 Monday-Wednesday: 6 am-12 midnight
 Thursday-Friday: 6 am-6 pm

Training

don't fake it.

- National Institute of Crime Prevention
 - CPTED Professional Designation
 - 5-10 Days of Instruction
 - Greenville, SC
- International CPTED Association
- Books
 - Crime Prevention through Environmental Design (Crowe)
 - 21st Century Security & CPTED (Atlas)



Part the Second:

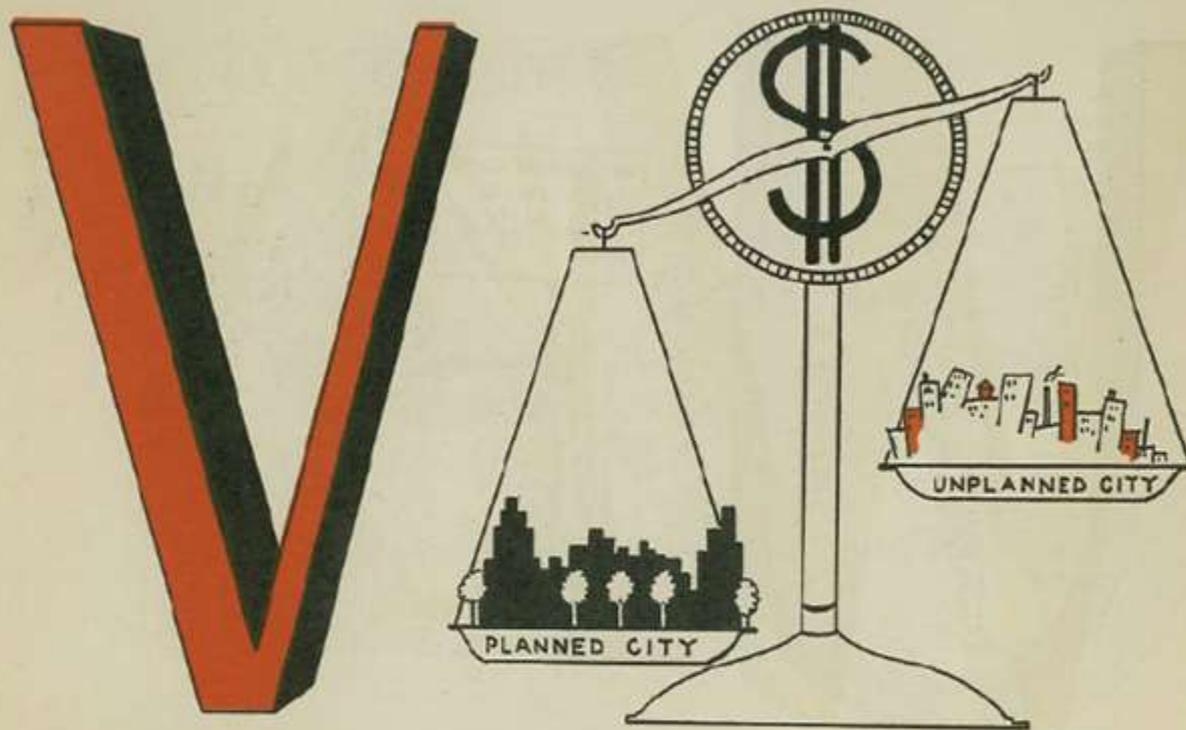
Personal Health





We want a healthy community!
(What does that really mean?)

Planning & health—we meet again!



V—is for **VALUE**
Not measured in wealth.
Planners think wisely
Weighing comfort and health.



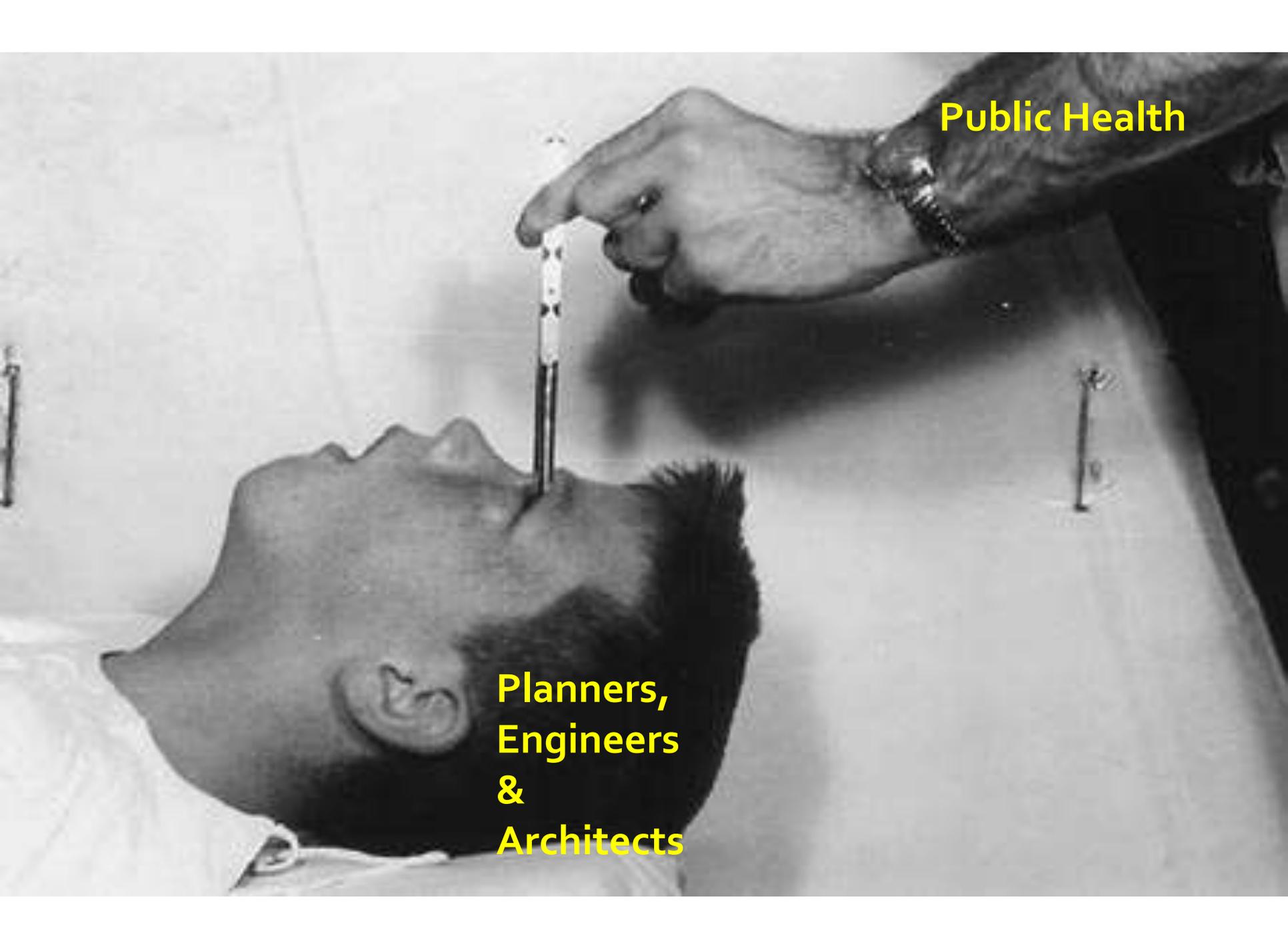


What **Makes** Us Healthy



What We **Spend** On Being Healthy



A black and white photograph showing a close-up of a doctor's hand holding a dental mirror. The mirror is positioned to reflect the patient's mouth. The patient is lying down, and the doctor is wearing a white coat and a watch. The text "Public Health" is overlaid in yellow in the upper right corner.

Public Health

**Planners,
Engineers
&
Architects**



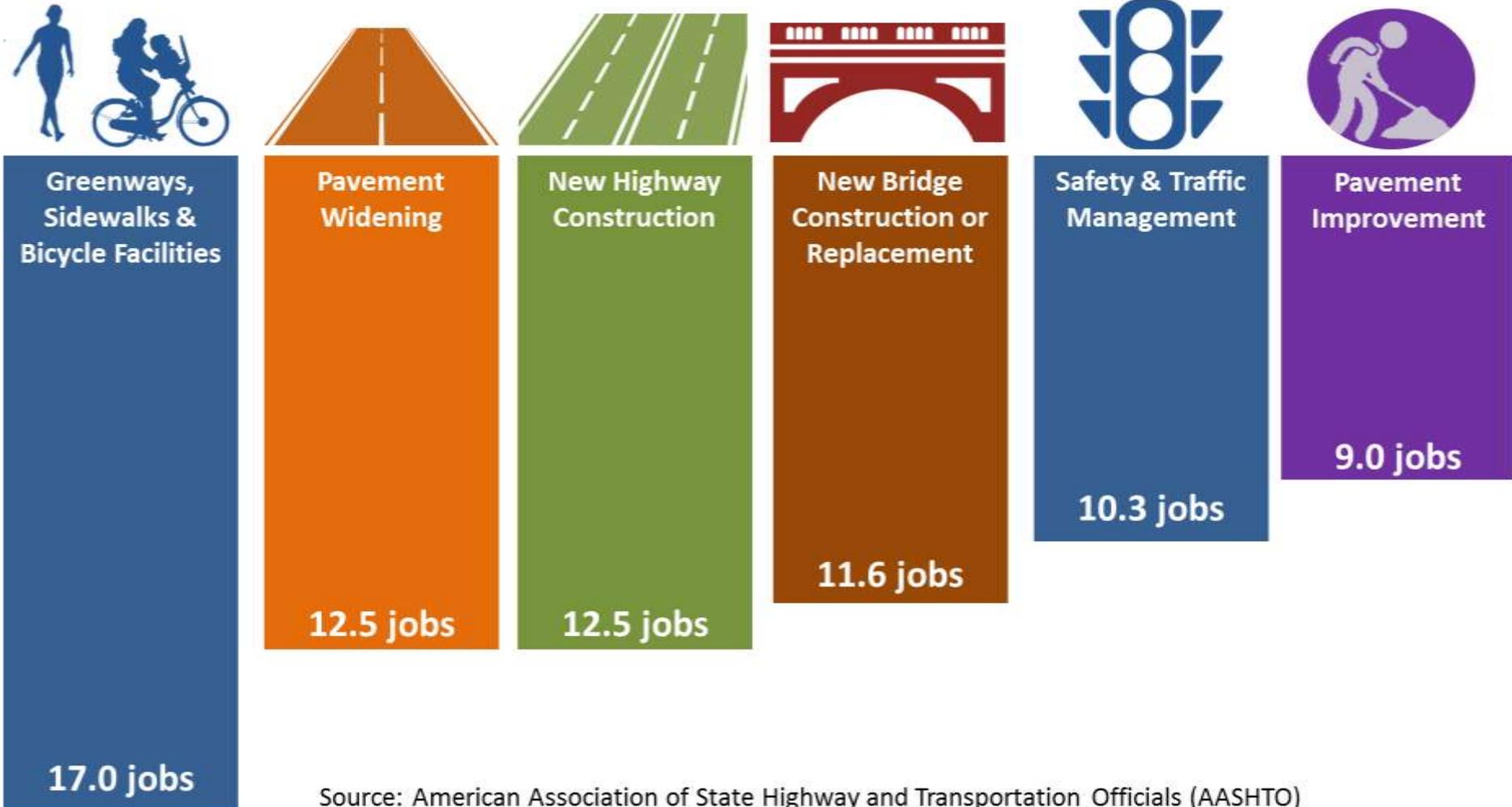
Sarah Kareshi, MD & Kim Bullock, MD
*Journal of Healthcare for the
Poor and Underserved (2011)*

“As clinicians, we are trained to focus on each individual patient and his/her health problem. When epidemics of chronic illnesses such as diabetes, cardiovascular disease, asthma, obesity, and depression are seen we must realize that these are resulting from more than just the product of individuals’ unhealthy choices...

“They are resulting from the built environment in which we live. We must widen our view of health to include everything surrounding a patient and our interventions must address the environmental opportunities and obstacles that shape health behavior.”

Job Creation: Making a Case for Healthy Transportation Investments

Jobs Created Per Million Dollars Spent



Source: American Association of State Highway and Transportation Officials (AASHTO)
Average Direct Jobs by Project Type (2012); Job in terms of full-time equivalents (FTE)



HIA + Transport in North Carolina



**Robbinsville
Pedestrian Plan**

**Haywood County
Comprehensive Bicycle Plan**



**Capital Area MPO:
NE Area Study**



**MOUNTAIN
elements**

**8-County Health
+ Planning HIA**



**Buncombe County
Greenways & Trails
Master Plan**



GRAHAM COUNTY HOT SPOT TRIGGERS



Below average number of health care workers



High rates of mortality from heart disease



Higher percent of population living below poverty line



Higher portion of households spending < 30% on rent



Lower than average High School graduate percent of population



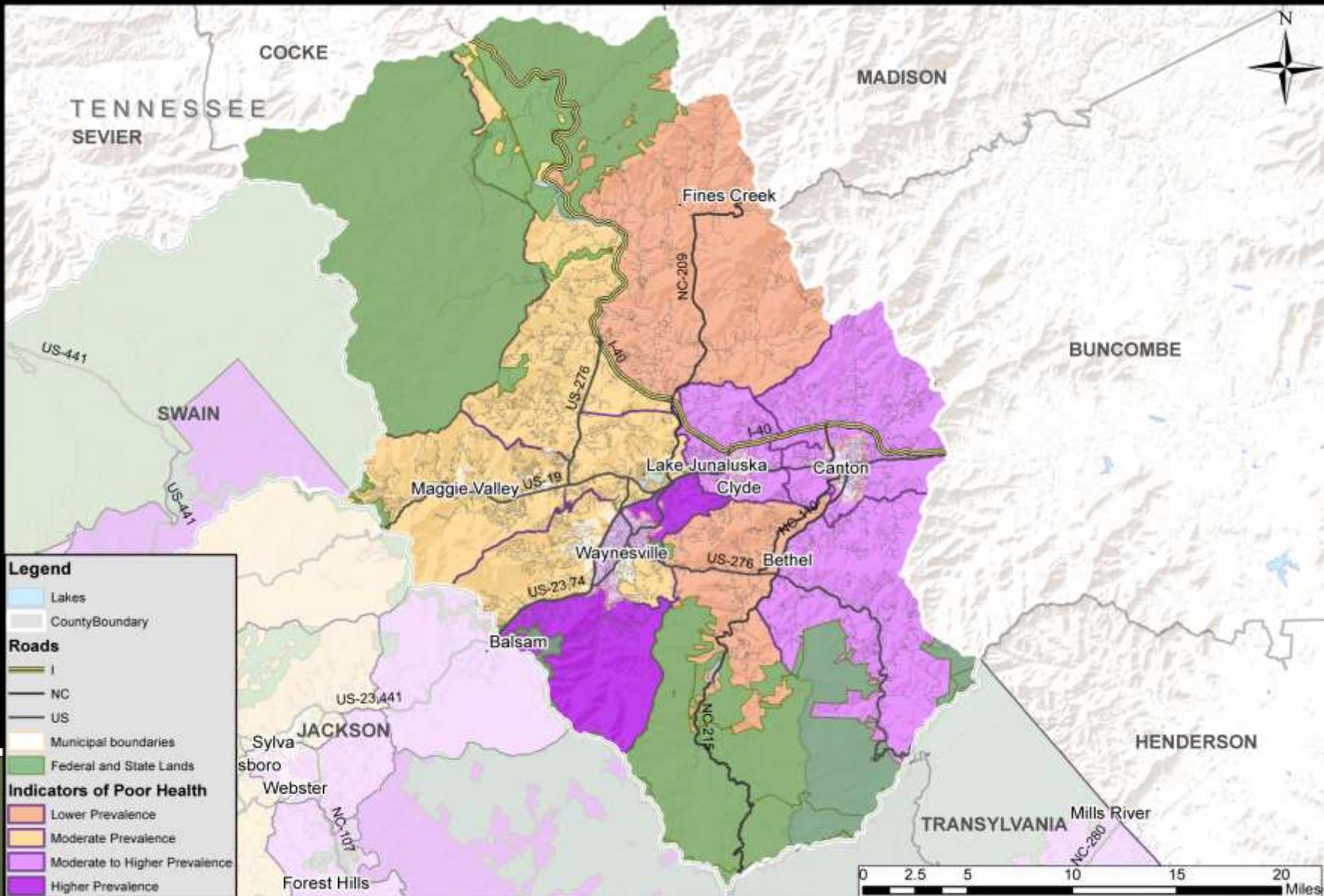
Higher than average number of people receiving food stamps

MOUNTAINwise

GRAHAM COUNTY Health Info

Source: 2012 PRC Community Health Assessment





Haywood County Prevalence of Indicators of Poor Health



Data sources: USGS, US Census, American Community Survey, Esri, NC OneMap, NCDOT, Southwestern Commission, and the NC State Center for Health Statistics (SCHS)

SCHS Indicator thresholds modified to reflect greater diversity among WNC Census tracts

FOOD SYSTEMS PLANNING WEB

Farmland Preservation

Food Security

Economic Development

Environmental Impacts

Food Systems
Planning

Land Use Impacts & Policy

Transportation Networks

Partnerships & Stakeholders

Likely Health Impacts

Logic Framework &
Evidence-Based Research

LOGIC FRAMEWORK

Possible Strategies

Resulting Changes to Systems or Built Environment

Behavioral Changes

Long-Term Health Impacts

Food Systems

- Regional Network offers educational opportunities to small and large producers.
- Regional Network tackles compliance issues and regulatory barriers to production, value-added processes, and distribution.
- Regional Network develops and markets a buy local campaign.
- Increase community development opportunities based on agricultural growth.

- Increased knowledge of how to grow things, manage a farm, care for livestock, build hoop houses/ beds, etc.
- Context sensitive structures are built in the appropriate locations
- More acres in production- greater number of and larger farms/ gardens/ hoop houses etc.
- More acres protected- fewer farms lost to development
- Fewer barriers to institutional purchasing
- Agri-tourism opportunities and facilities built
- Increased community awareness and appreciation of the benefits to growing and buying local
- New private/supporting businesses developed



Food Systems & Food Security

- Make local farming a viable economic opportunity.
- Provide incentives to low-income populations to buy locally grown food.
- Provide support to low-income populations for growing local foods.
- Make buying local foods more convenient to low-income populations.

- More farmers stay in farming/new farmers start- more farms
- Farmer markets and other places selling local food are set up to accept vouchers/ EBT/ SNAP
- Increase in the number of community gardens, households doing container gardening, hoop houses
- More produce trucks/ CSAs/food delivery
- Transit routes changed or better advertised for their access to healthy/ local foods
- More produce stands in high foot traffic areas/ workplaces
- Corner/ convenient stores equipped with facilities (cold storage) and produce needed to offer healthy, local options

Food Security

- Provide food to children during summer months or out-of-school hours.
- Increase gleaning opportunities and the amount of food in food pantries.

- Programs are in place for providing hungry children food
- Farms are gleaned and area churches have food to distribute
- Food pantries are stocked

- Children eat healthier and adequate amounts of food
- Adults eat healthier
- Adults get physical activity farming, gardening, or gleaning
- Less likely to abuse drugs if employed in legal activities
- Less likely to abuse others if not stressed

- Greater number of jobs
- More income/ greater number of sales
- Greater financial security/ less risk
- Expansion of farms or facilities
- More efficient production and distribution

- Greater interaction between farmers, customers, businesses, agencies, volunteers, food distributors, gleaners, instructors, etc.
- Opportunities to contribute to society/ give back
- Social cohesiveness as low-income populations more likely to shop in farmer's markets/ grocery stores
- Greater sense of place

- Less stressed over financial concerns or access to food
- Higher self-esteem or self-efficiency as grow own food or help others
- Stigma of being poor or needing assistance

- Learn better if not hungry
- Learn more about where food is coming from and how produced/ prepared

- More sustainable agricultural practices
- Less air pollution as rely more on locally produced food
- Concerns about water quality with greater production

- Increase of faith-based organizations participation and biblical tenants of gleaning and helping others
- Heritage and spiritual connection to working the land

- Reduced levels of obesity and associated health risks
- Type 2 Diabetes
- Heart Disease
- Stroke
- Sleep Apnea/ Fatigue

- Increased levels of physical activity and associated health benefits
- Weight Management
- Reduced risk of Type 2 Diabetes
- Reduced risk of Heart Disease
- Reduced risk of Stroke
- Reduced risk of Some Cancers
- Strengthened bone and muscles
- Greater flexibility/ fewer falls
- Longer life expectancy
- Stress Reduction

- Improved nutrition and associated health benefits
- Weight Management
- Reduced risk of Type 2 Diabetes
- Reduced risk of Heart Disease
- Reduced risk of Stroke
- Reduced risk of Some Cancers
- Healthy childhood development
- Strengthened bone and muscles

- Mental Health Benefits
- Less Stress/ Depression
- Sense of Belonging
- Sense of Support/ Security
- Fewer Suicides
- Higher Self-Esteem
- Less Stigmatism
- Less substance abuse



Capital Area MPO: Northeast Area Scenario Planning Study

Wake Co. Leading Causes of Death, Rates for African-Americans compared to White population

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

Northeast Area Study – Pedestrian Crashes by Race, percentage of overall Crashes (2006-2011)

Pedestrian Race	#	%
Black	51	40.8%
Hispanic	10	8.0%
White	58	46.4%
other	3	2.4%
unknown	3	2.4%
Total	125	100.0%

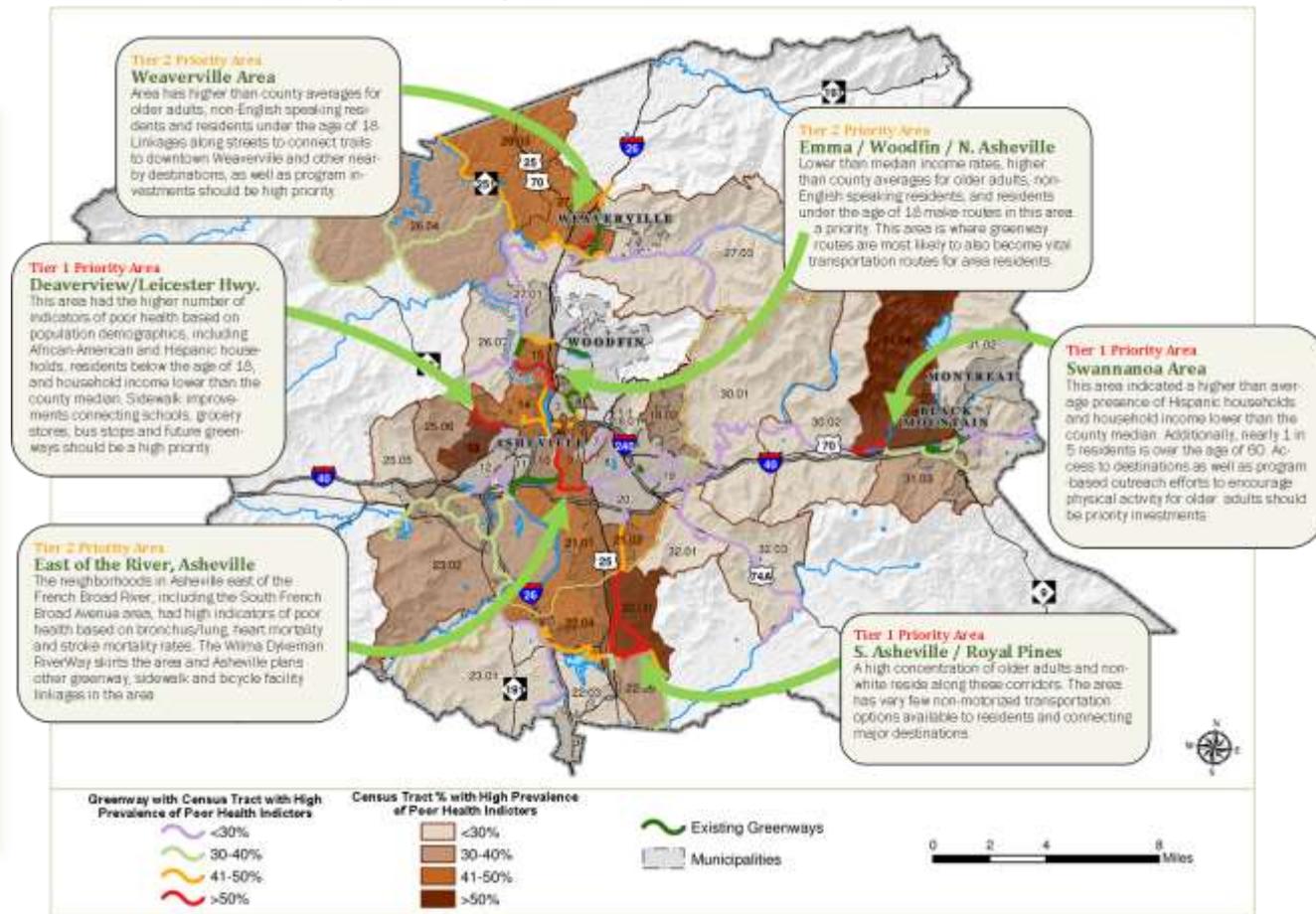
African-American population is 20% of total, but is 40.8% of pedestrian crash victims.



Buncombe County Greenways Master Plan

HIA for Countywide greenways & trails master plan; *Identifying geographic areas where there is a prevalence of poor health conditions to prioritize greenway corridor investments.*

Exhibit 1-6: Health-based Priority Areas for Greenways & Trails Master Plan Corridors



Lessons Learned:

1. Getting health data at Census tract level is difficult & time consuming.
2. Results from this HIA have informed other ongoing studies in the region since the Tract-level analysis is transferrable.



HIA for Countywide bicycle master plan; *Health as a driving factor in formulation of various bike plan recommendations.*

Haywood County Comprehensive Bicycle Plan

Lessons Learned:

1. *Be prepared to explore health claims that you never expected (e.g. health impacts of loose dogs on bicycling perceptions)*
2. *Identify Recommendations that balance short-term success with long-term needs.*
3. *Go beyond the here and now of health; consider future impacts on those just learning to ride*



What are the impacts on one's desire to ride a bike when loose dogs are a community problem?

Two local stores are now "Bicycle-Friendly Outposts", stocking healthy foods and supplies for bicyclists in rural areas.



Questions? Ideas?

If these two can do it, you can certainly do it, too.



Scott Lane, AICP, CPTED
scott.lane@stantec.com

Don Kostelec, AICP
don@kostelecplanning.com