



**TWIN COUNTY**

Regional Healthcare

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Duke LifePoint Healthcare

# Community Health Needs Assessment

Carroll and Grayson Counties and Galax  
City, Virginia

January 23, 2014



# Community Health Summit Agenda

Welcome	Jon Applebaum, CEO
State Health Initiatives	Vicky Richardson, Health Dept
Data Analysis/Focus Group/Interview	
Summary	Lee Ann Lambdin, Stratasan
Community Health Indicators	Stephanie Bailey, MD, Stratasan
Exercise 1	All
Break	
Exercise 2	All
Summary	Jon Applebaum, CEO

# Jon Applebaum, CEO Twin County Regional Hospital

# Vicky Richardson, Virginia Department of Health

# Lee Ann Lambdin

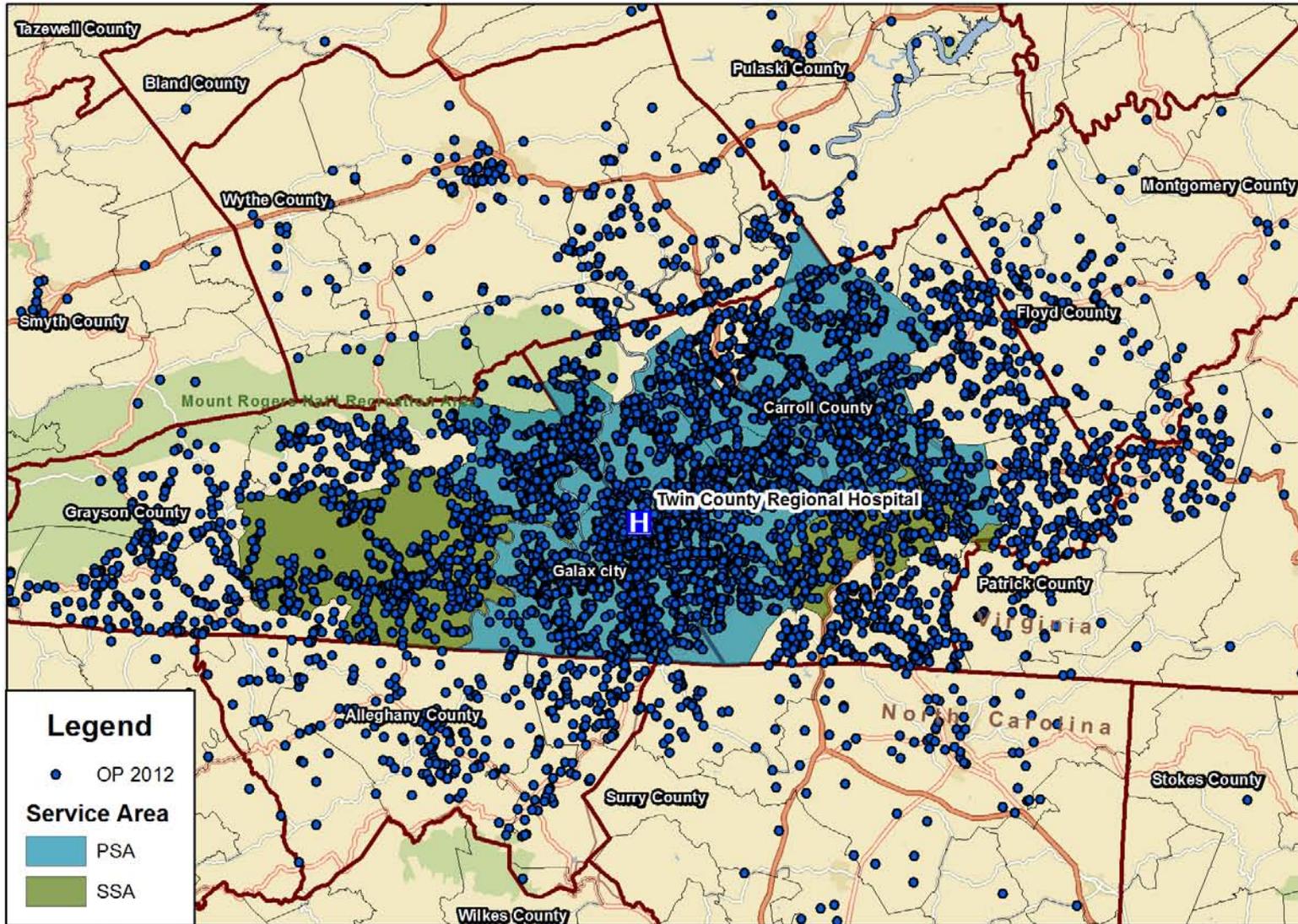
## VP Strategy, Stratason



Data Analysis

# DEMOGRAPHICS

# Twin County Regional Hospital Outpatient Origin 2012



Source: LPNT SRG (2013), Stratasan (2013)

# Demographic Dashboard

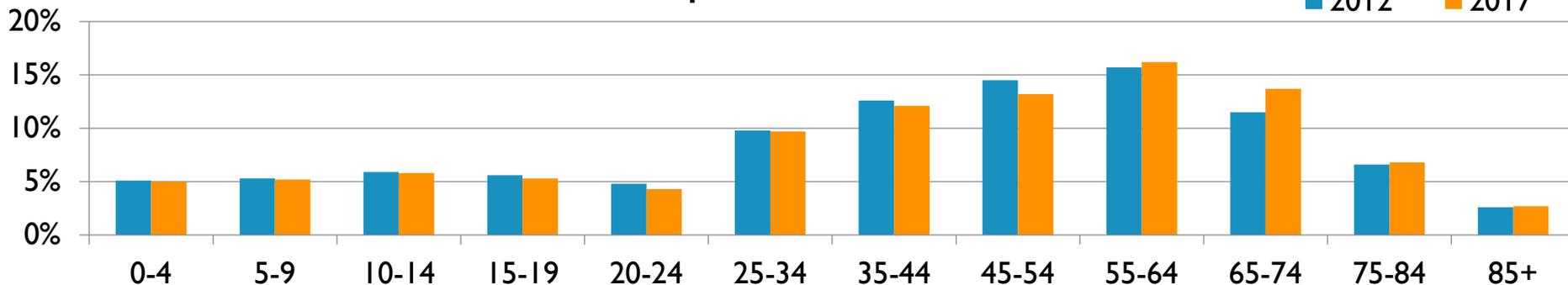
Category	Carroll Co.	Grayson Co.	Galax City, VA	Virginia	USA
Population (2012)	30,185	15,578	7,047	8,142,122	313,129,017
Median Age (2012)	45.3	47.4	42.9	37.6	37.3
Median Household Income (2012)	\$37,141	\$35,245	\$31,947	\$58,369	\$50,157
Annual Pop. Growth (2012-17)	0.1%	-0.5%	-0.2%	0.9%	0.7%
Household Population (2012)	12,844	6,826	2,926	3,106,762	118,208,713
Dominant Tapestry (2012)	42 – Southern Satellites	46 – Rooted Rural	56 – Rural Bypasses	4 - Boomburbs	12 – Up and Coming Families
Business (2011)	1,521	803	572	465,383	12,239,616
Employees (2011)	6,935	3,260	4,985	3,398,581	146,234,698
Medical Care Index*	79	81	74	122	100
Average Health Expenditures (2011)	\$3,269	\$3,351	\$3,090	\$5,138	\$3,611
Total Health Expenditures (2011)	\$41,987,820	\$22,875,761	\$9,041,777	\$15,963,604,095	\$424,173,676,593

\*The Medical Care Index is household-based, and represents the amount spent out of pocket for medical services relative to a national average of 100.

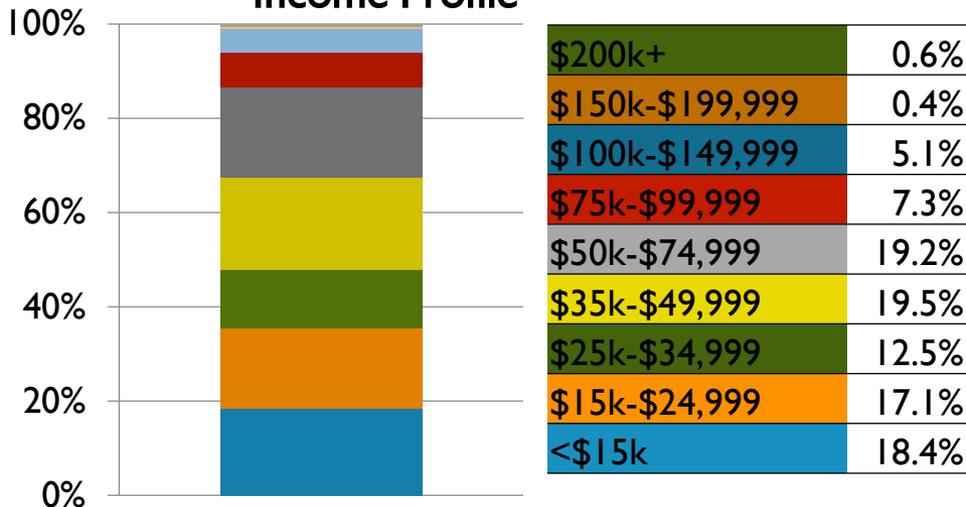
# Demographics— Grayson, Carroll Counties and Galax City

## Population Growth

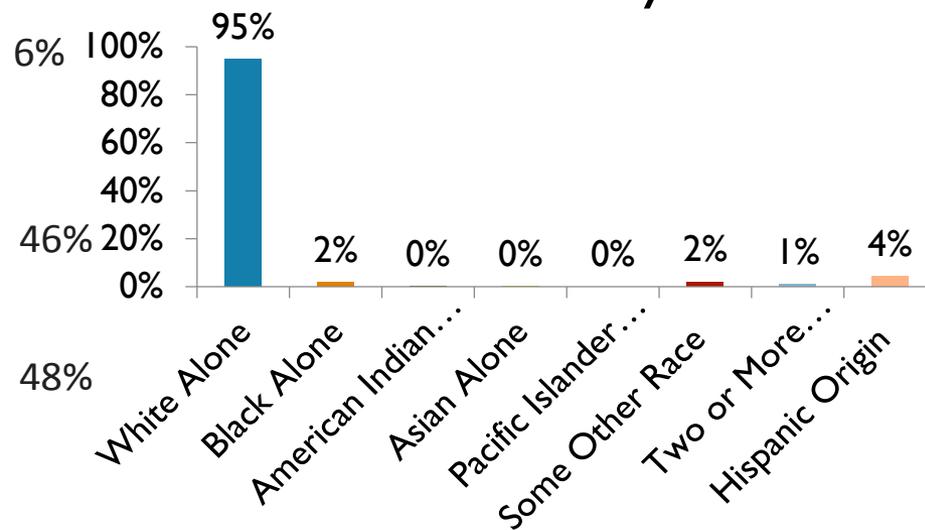
2012 2017



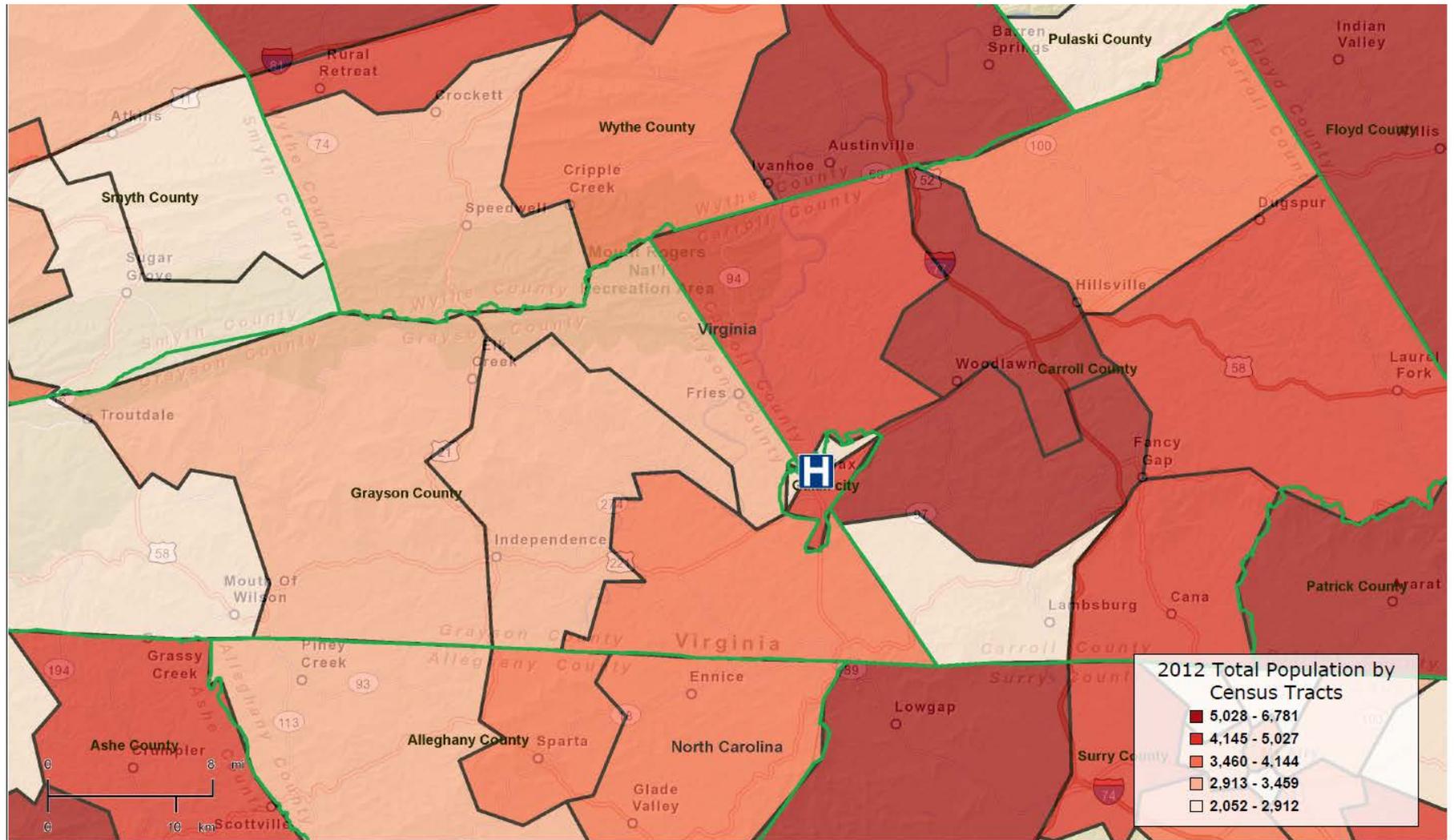
## Income Profile



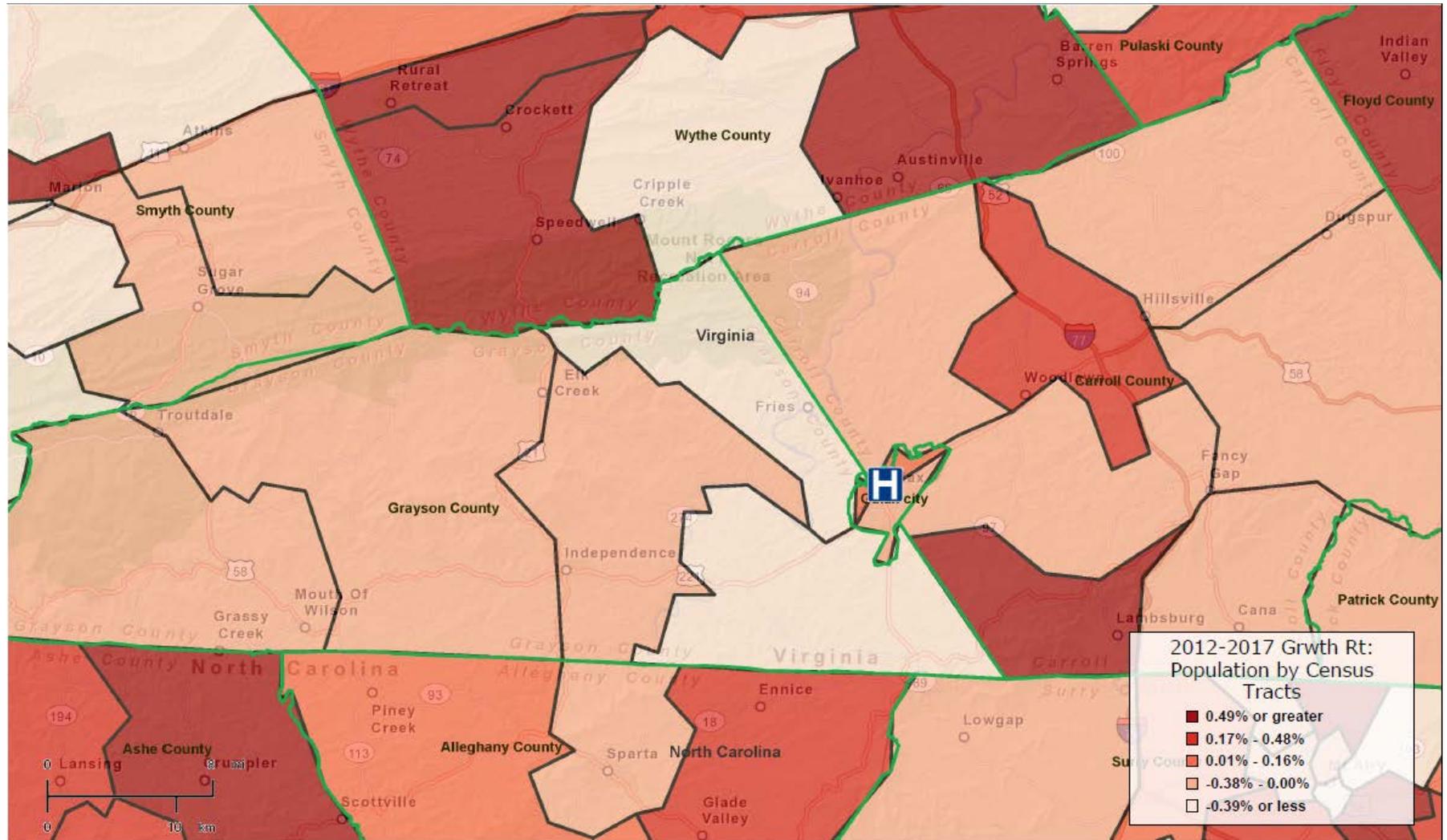
## Race and Ethnicity Profile



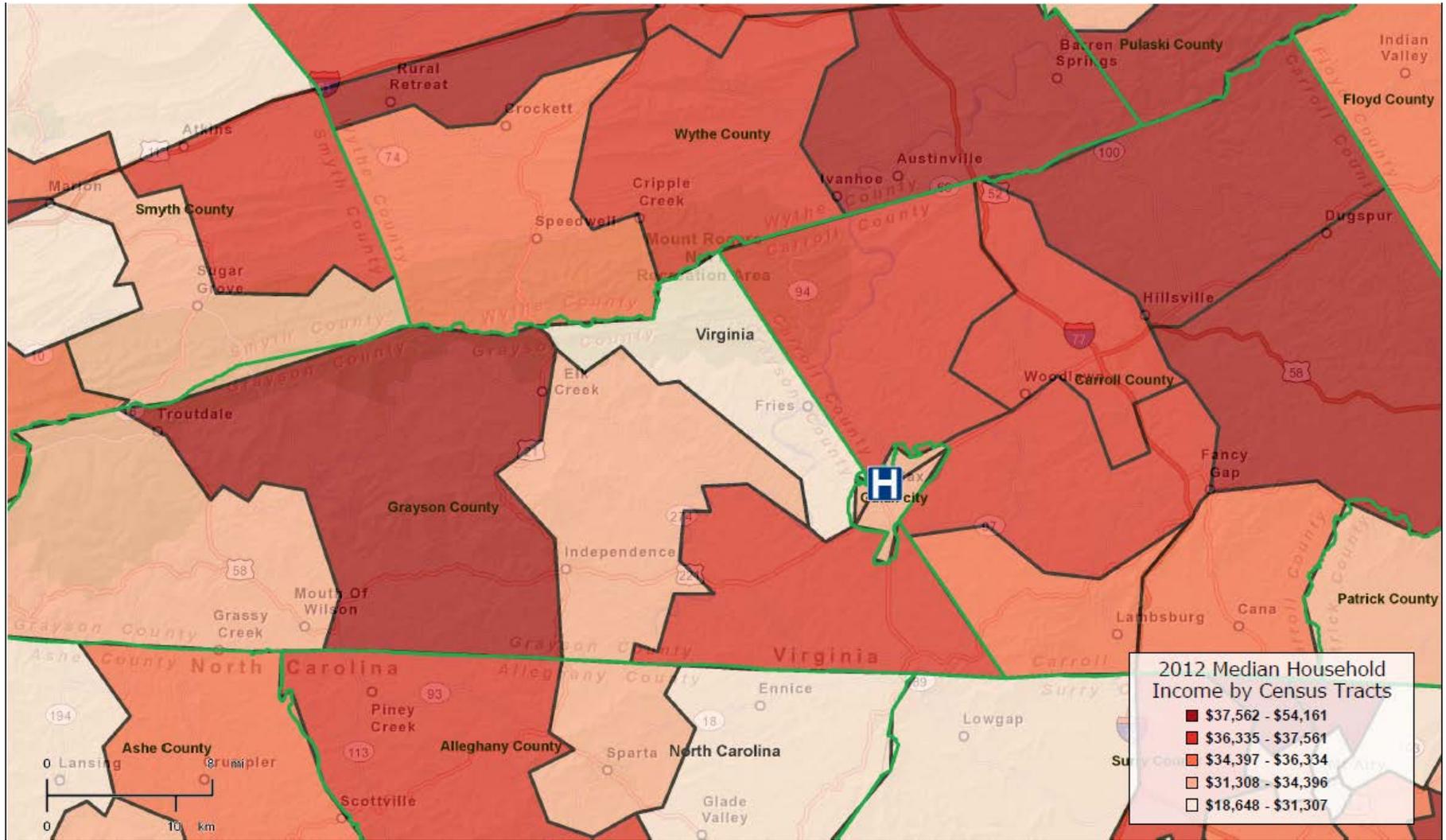
# 2012 Population by Census Tract



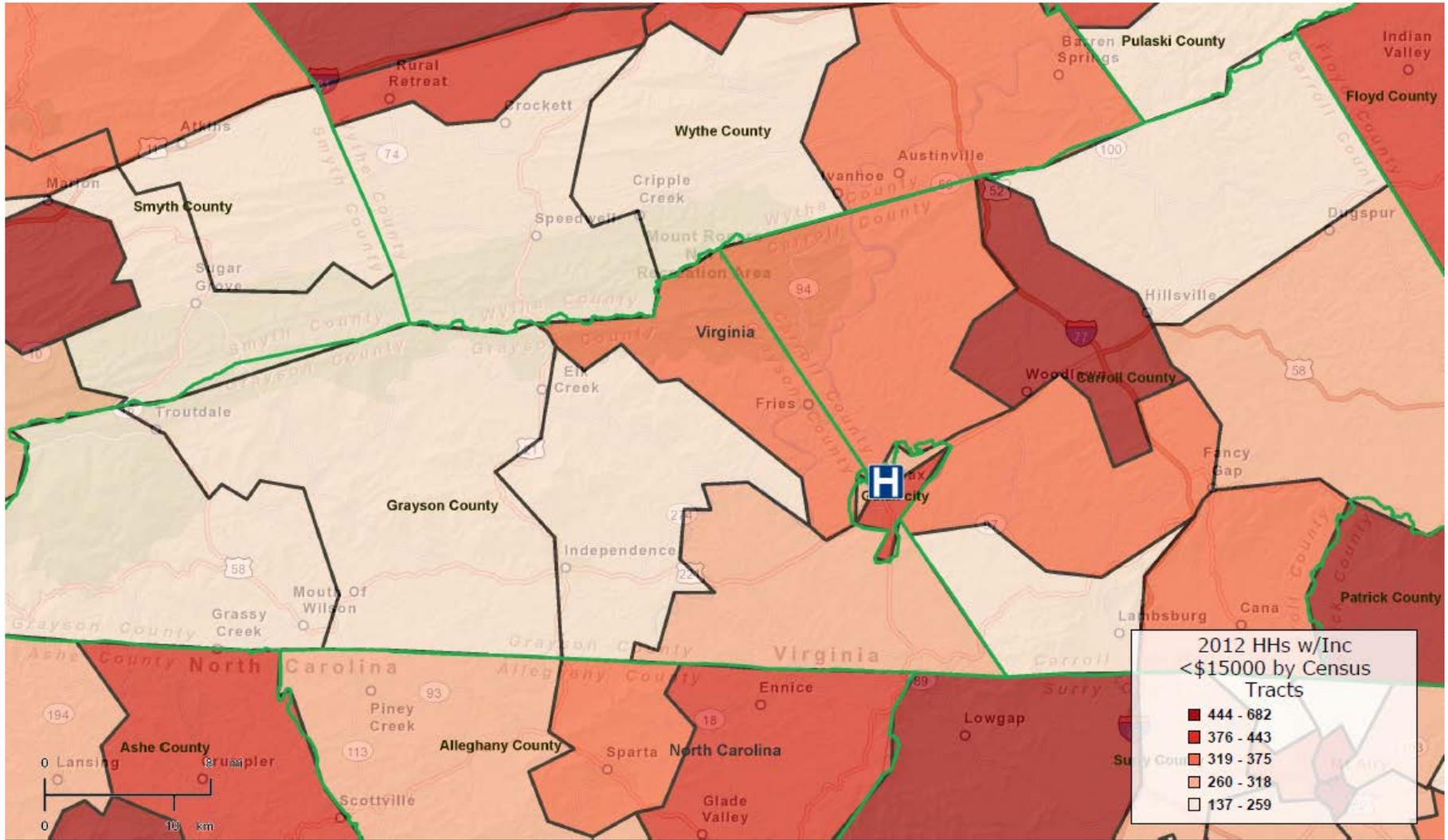
# 2012-2017 Population Growth Per Year



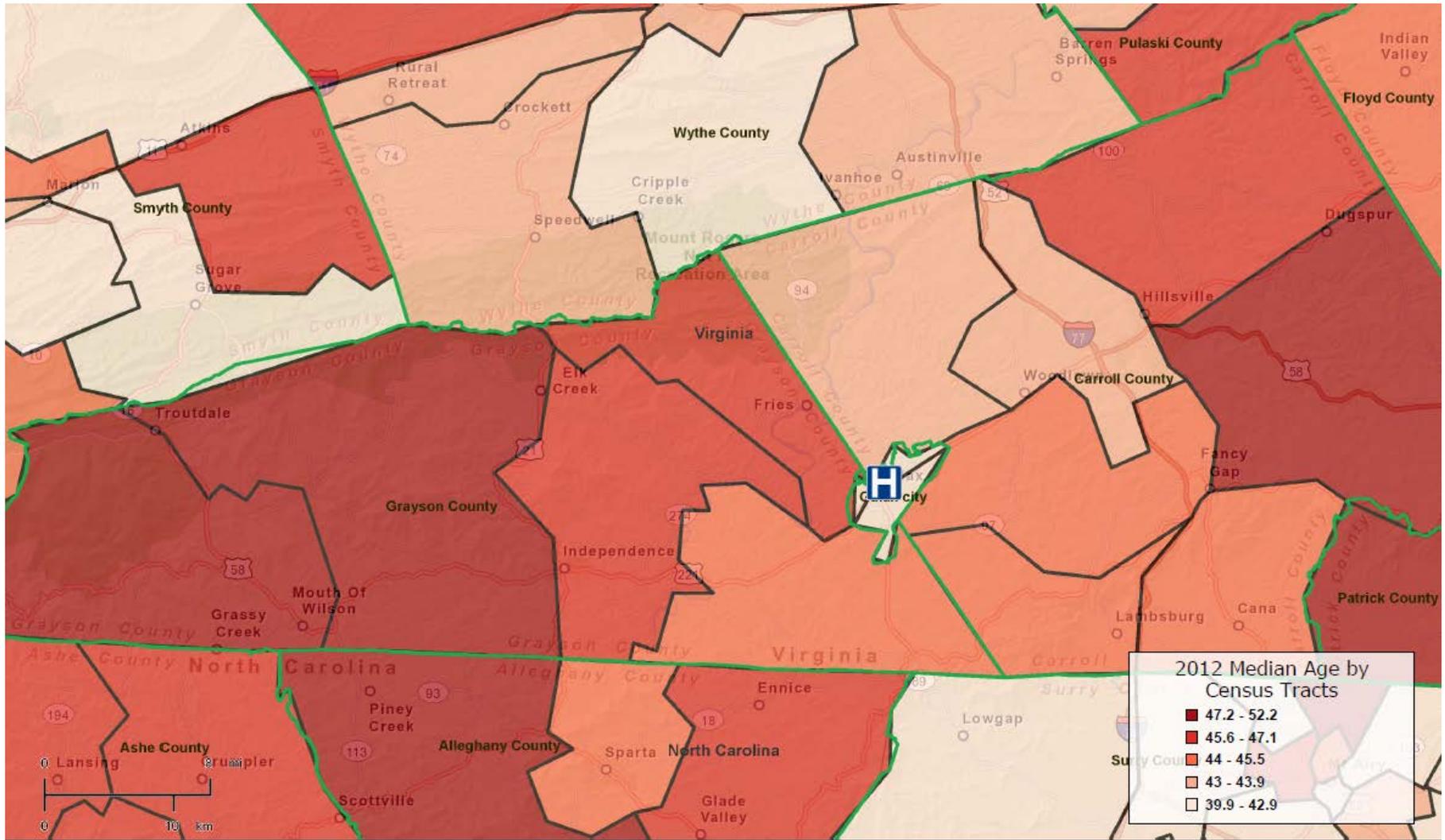
# Median HH Income



# HH Income < \$15,000



# Median Age



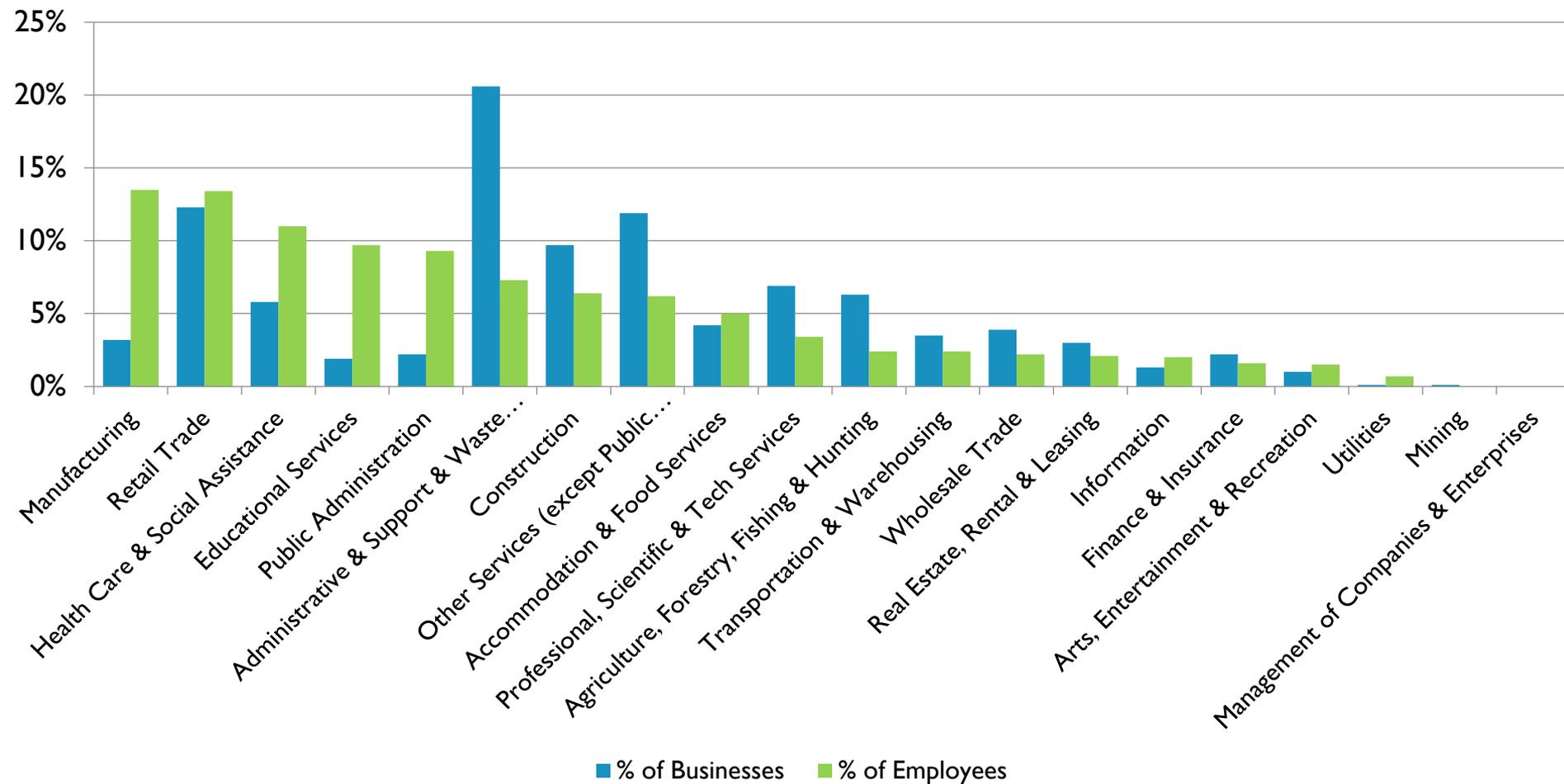
Median age = 45.8, 37.3 US



Data Analysis

# BUSINESS ENVIRONMENT

# Business Summary

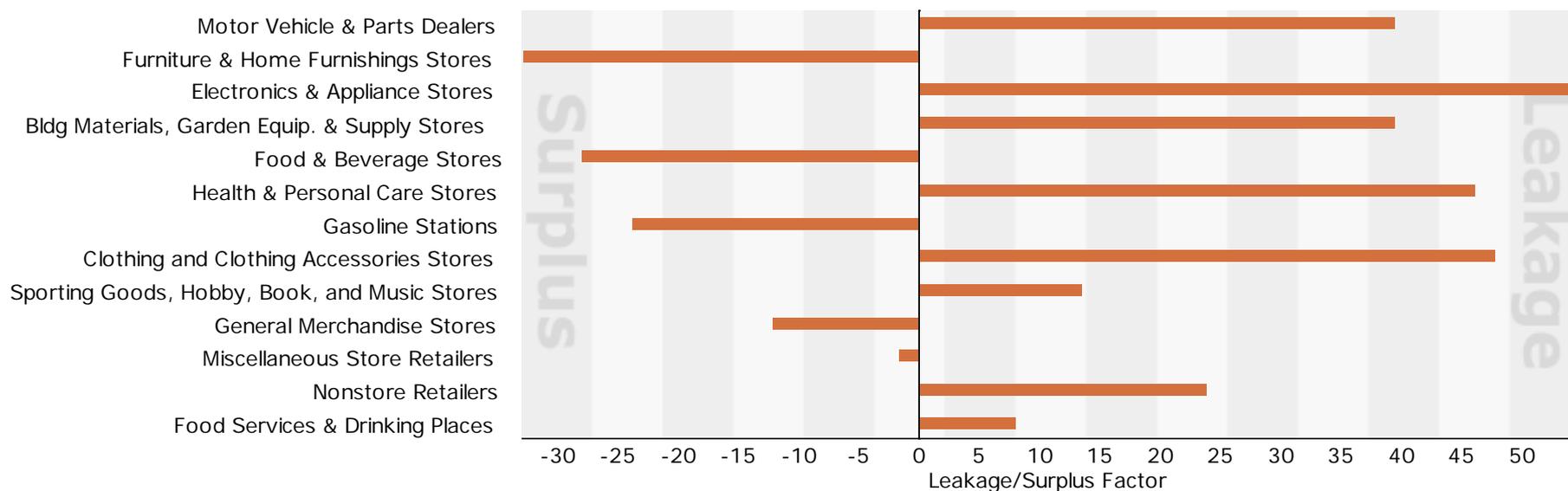


A category may have higher % of Businesses than % of Employees when there are many small businesses in the area.

# Leakage/Surplus Factor by Industry Subsector

Residents leave the Twin County area for most all industry subsector.s They stay for furniture stores, gas stations, food and beverage stores, and general merchandise stores, but leak out to other areas for most everything else.

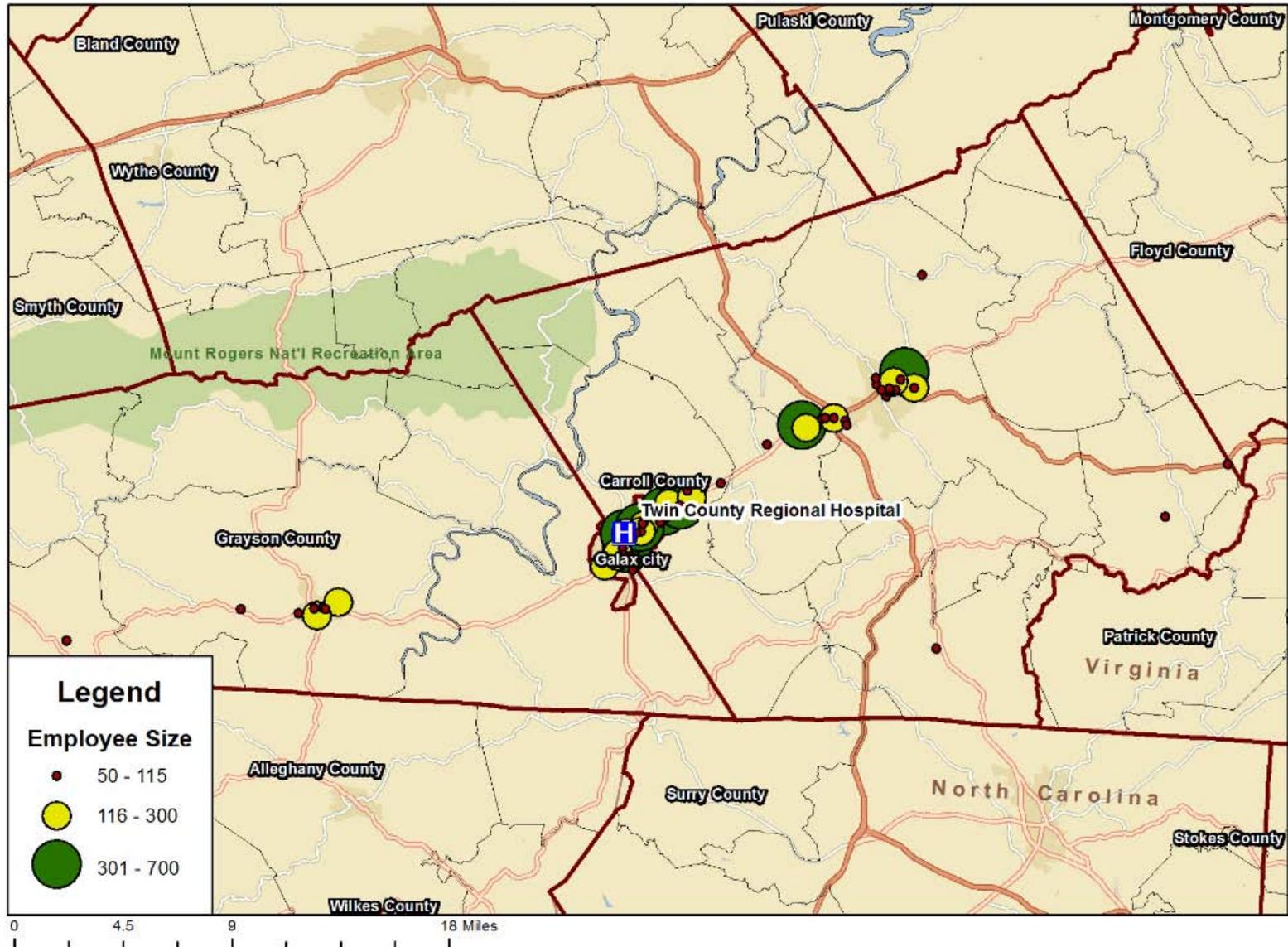
Leakage/Surplus Factor by Industry Subsector



Leakage: Demands for services/goods not being met within the service area (ex. Residents leave the service area for retail)

Surplus: Excess of services/goods being sold in the area (ex. The service area attracts shoppers from outside the service area)

# Twin County Regional Hospital Major Employers



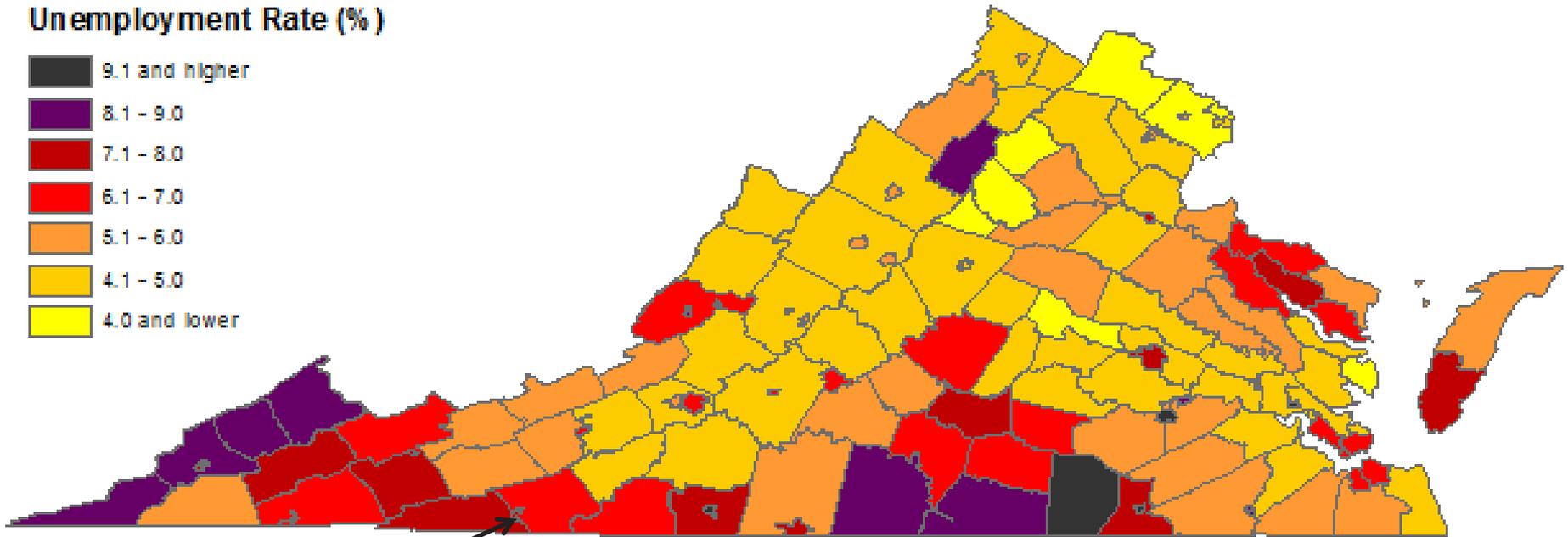
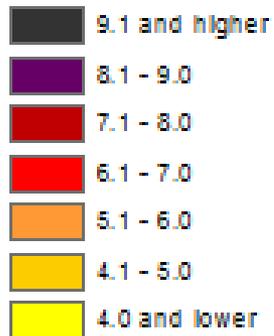
Source: LPNT SRG (2013), Stratasan (2013), ESRI (2013)

# Largest Employers in the Area

Employer	Product	Employees
Vaughan-Bassett Furniture Co	Furniture	700
Twin County Reg Healthcare	Healthcare	585
Parkdale Mills	Cotton Manufacturing	550
Webb Furniture Enterprises Inc	Furniture	500
Southwestern Va Training Ctr	Healthcare	470
Walmart Supercenter	Retail	450
Parkdale Mills	Cotton Manufacturing	400
Consolidated Glass & Mirror	Glass Manufacturing	300
Twin County Regional Hospital	Healthcare	290
Parkdale Mills	Cotton Manufacturing	201
Mt Rogers Youth Svc	Youth Counseling	200
Mt Rogers Idc	Community Services	175
Horizon Equipment Rental	Retail	170
Turman Hardwood Flooring	Flooring	170
Waddell Nursing & Rehab Ctr	Healthcare	155
Medfit Systems	Exercise Equipment Manufac.	150
Grayson Nursing & Rehab Ctr	Healthcare	150
Webb Furniture Enterprises	Furniture	150
Mohawk Industries Inc	Home Construction	150
Life Center Of Galax	Rehabilitation	140

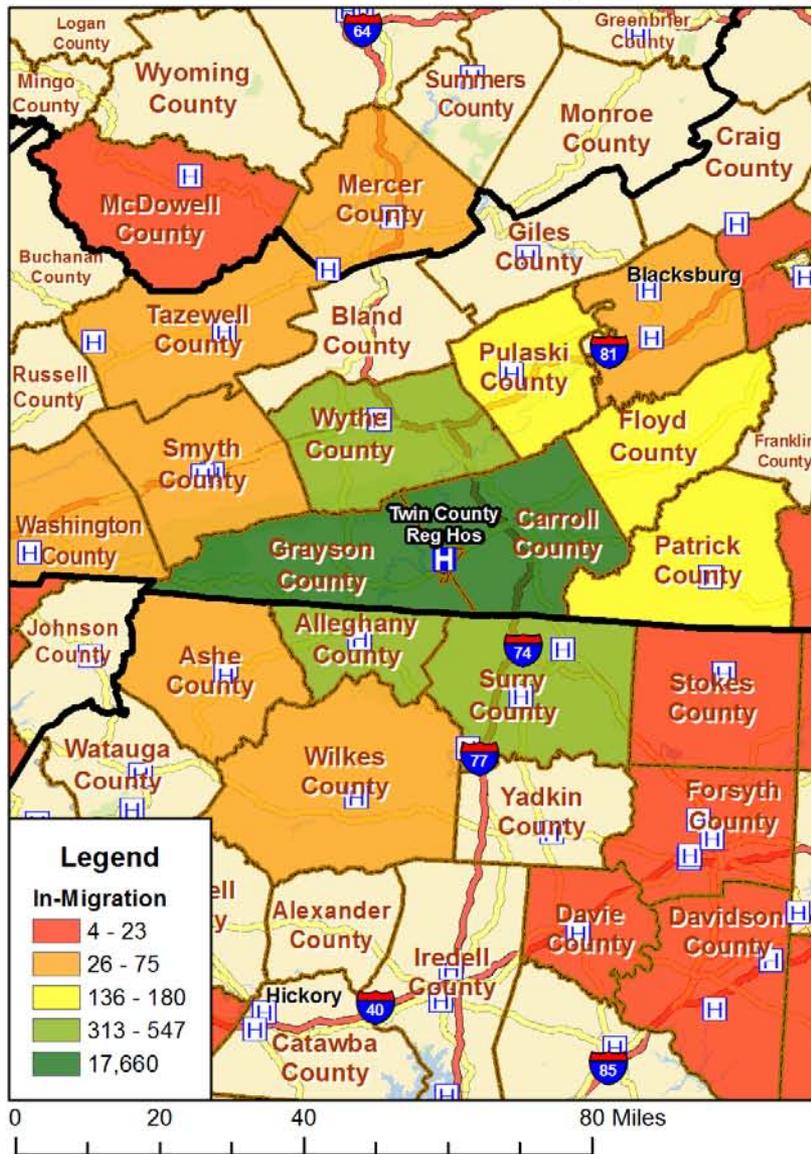
# Unemployment November 2013

## Unemployment Rate (%)

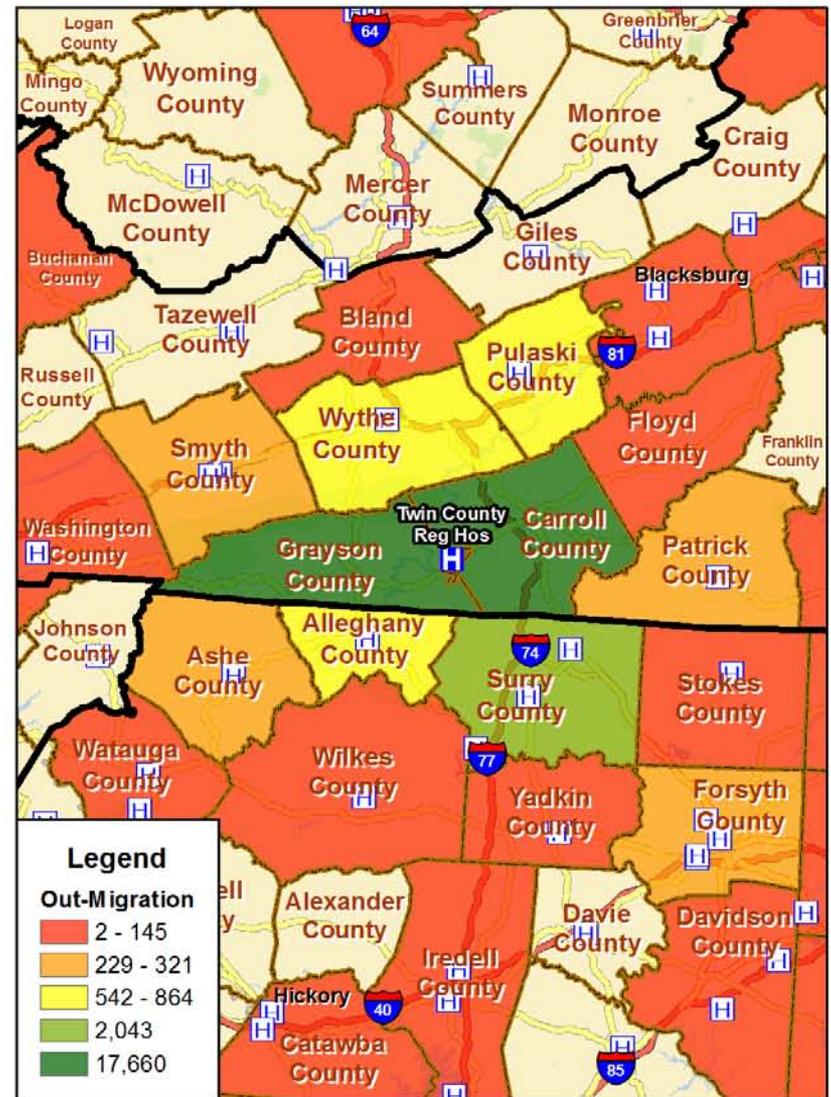


6.9% – Carroll Co.  
7.8% – Grayson Co.  
7.5% – Galax City, VA  
7.0% – U.S.

# Commuter In-Migration



# Commuter Out-Migration



17,660 live and work in the Twin County area.

County Name	In-Migration	Out-Migration	Net Flux
Galax City, VA	4,765	1,215	3,550
Grayson County	757	5,248	-4,991
Carroll County	3,314	6,641	-3,327
<b>Total</b>	<b>8,836</b>	<b>13,104</b>	<b>-4,768</b>

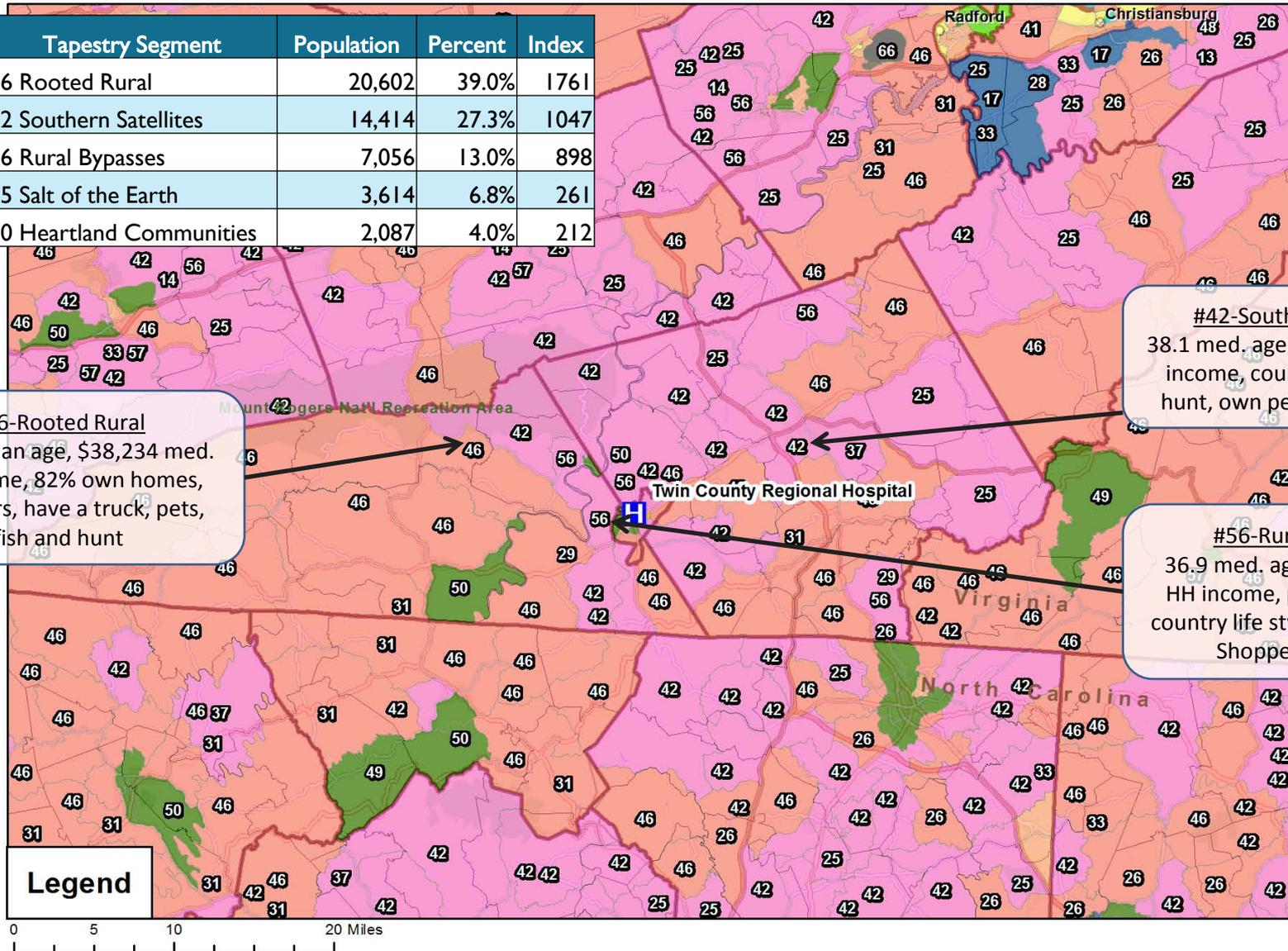


Data Analysis

# PSYCHOGRAPHICS

# Twin County Regional Hospital Dominant Tapestry Segment by Block Group

Rank	Tapestry Segment	Population	Percent	Index
1	46 Rooted Rural	20,602	39.0%	1761
2	42 Southern Satellites	14,414	27.3%	1047
3	56 Rural Bypasses	7,056	13.0%	898
4	25 Salt of the Earth	3,614	6.8%	261
5	50 Heartland Communities	2,087	4.0%	212

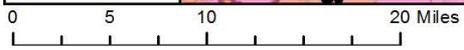


**#46-Rooted Rural**  
42.3 median age, \$38,234 med. HH income, 82% own homes, gardeners, have a truck, pets, fish and hunt

**#42-Southern Satellites**  
38.1 med. age, \$39,969 med. HH income, country life, fish and hunt, own pets, domestic cars

**#56-Rural Bypasses**  
36.9 med. age, \$28,595 med. HH income, public assistance, country life style, DIY, Wal-Mart Shoppers, NASCAR

**Legend**



# Who Report

## The Health and Behavior Habits of Your Community

Health Habits of Your Community	More-Likely
Used prescr drug for diabetes (insulin dependent)	347
Used prescr drug for diabetes (non-insulin)	270
Diet control for blood sugar level	238
Diet control for salt restriction	219
Wear bi-focals	206
Used doctor`s care/diet for diet method	194
Used prescription drug for high blood pressure	189
Used prescription drug for heartburn/acid reflux	184
Used prescription drug for arthritis/rheumatism	180
Used prescription drug for high cholesterol	176
Used last 6 mo: hemorrhoid remedy	173
Visited nurse practitioner in last 12 months	167
Used last 6 mo: diarrhea remedy	161
Used last 6 mo: toothache/gum/canker sore remedy	160
Diet control for cholesterol level	150
Used last 6 mo: laxative/fiber supplement	146
Used prescription drug for sinus congest./headache	142
Used prescription drug for backache/back pain	141
Used last 6 mo: medicated throat remedy	141
Bought prescription eyewear: from eye doctor	133
Used prescription drug for depression	133
Used last 6 mo: pain relieving rub/liquid/patch	129
Visited doctor in last 12 mo: cardiologist	124

Behavior Habits of Your Community	More-Likely
Shopped at grocery store/6 mo: Piggly Wiggly	1,352
Fam rest/steak hse last 6 mo: Ryan`s	974
Radio format listen to: gospel	730
Shopped at grocery store/6 mo: IGA	658
Fast food/drive-in last 6 mo: Captain D`s	609
Fast food/drive-in last 6 mo: Hardee`s	600
Cell phone srv on main phone: Alltel	556
HH owns riding lawn mower	531
HH has satellite dish: Dish Network	493
HH owns lawn or garden tractor	490
Connection to Internet from home: dial-up modem	477
HH owns ATV/UTV	458
Bought oil filter: at Wal-Mart	451
HH owns welder	449
HH owns garden tiller	424
Shopped at grocery store/6 mo: Food Lion	419
Used Luvs in last 6 months	397
HH has satellite dish	396
Smoked 9+ packs of cigarettes in last 7 days	395
Participated in hunting with rifle	376
Radio format listen to: country	356
HH owns 2+ dogs	349
Used prescr drug for diabetes (insulin dependent)	347

US Index is 100



# Who Report

## The Communication and Technology Habits of Your Community

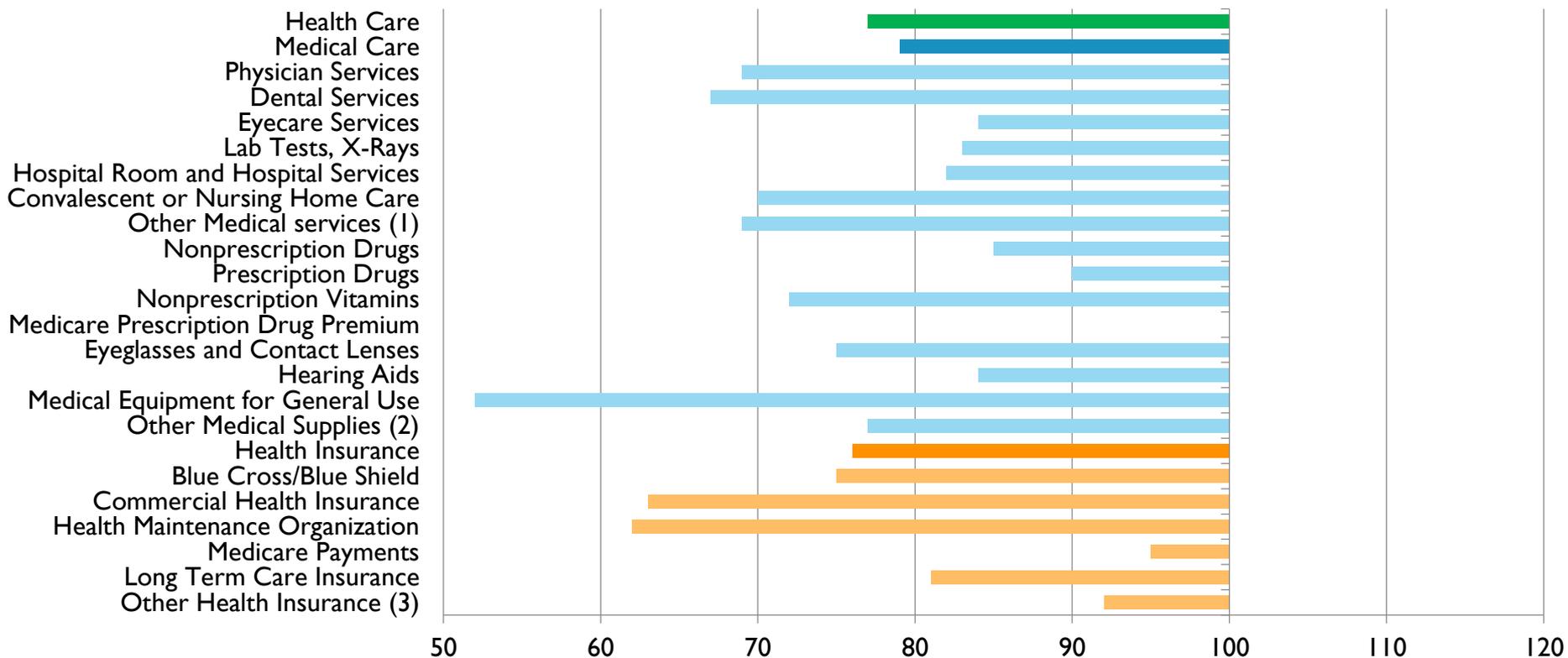
Communication Habits of Your Community	More-Likely
Radio format listen to: gospel	730
HH has satellite dish: Dish Network	493
HH has satellite dish	396
Radio format listen to: country	356
HH has satellite dish: DirecTV	342
Watched last week: Outdoor Channel	339
Watched last week: CMT (Country Music Television)	296
Read fishing/hunting magazines	294
Watched last week: TV Land	239
Watch early morning TV (M-F): The Early Show	237
Watch TV aired once/wk: CBS Evening News-Sun	225
Watch Syndicated TV (M-F): Divorce Court	220
Watched last week: Hallmark Channel	219
Radio listening: auto racing	212
Watch Syndicated TV (M-F): Wheel of Fortune	191
Light magazine reader	183
Watch on TV: auto racing (NASCAR)	179
Read newspaper: classified section	179
Watch Syndicated TV (M-F): The Jerry Springer Show	178
Watched last week: Lifetime Movie Network	175
Heavy viewer of daytime TV	173
Watch TV aired once/wk: Amer.'s Funniest Hm Videos	172
Watch on TV: rodeo/bull riding	169

Technology Habits of Your Community	More-Likely
Connection to Internet from home: dial-up modem	477
Purchased film in last 12 mo: department store	262
Spent on cameras in last 12 months: <\$100	250
Purchased film in last 12 mo: discount store	226
Bought Kodak camera in last 12 months	191
Purchased home PC at department store	188
Bought Fuji film in last 12 months	179
Use Internet 1-2 times per week	175
Own Polaroid camera	174
Use Internet less than once a week	167
Bought 7+ blank video tapes in last 6 months	164
Bought video tape/DVD last month: horror	156
Own Fuji camera	155
Had film processed at discount store	153
Bought film in last 12 mo: 35mm (color prints)	153
Own Kodak camera	153
Bought film in last 12 months: 3-6 rolls	150
Own 35mm auto focus zoom camera	138
Most recent TV purchase: regular screen (13-26 in)	134
Bought film in last 12 mo: instant developing	124
Had film processed at 1 hour service store	122
Most recent TV purchase: large screen (27-35 in)	122
HH owns 1 TV	119

US Index is 100



# Medical Expenditure Index



Data Note: The Spending Potential Index (SPI) is household-based, and represents the amount spent for a product or service relative to a national average of 100. Detail may not sum to totals due to rounding.

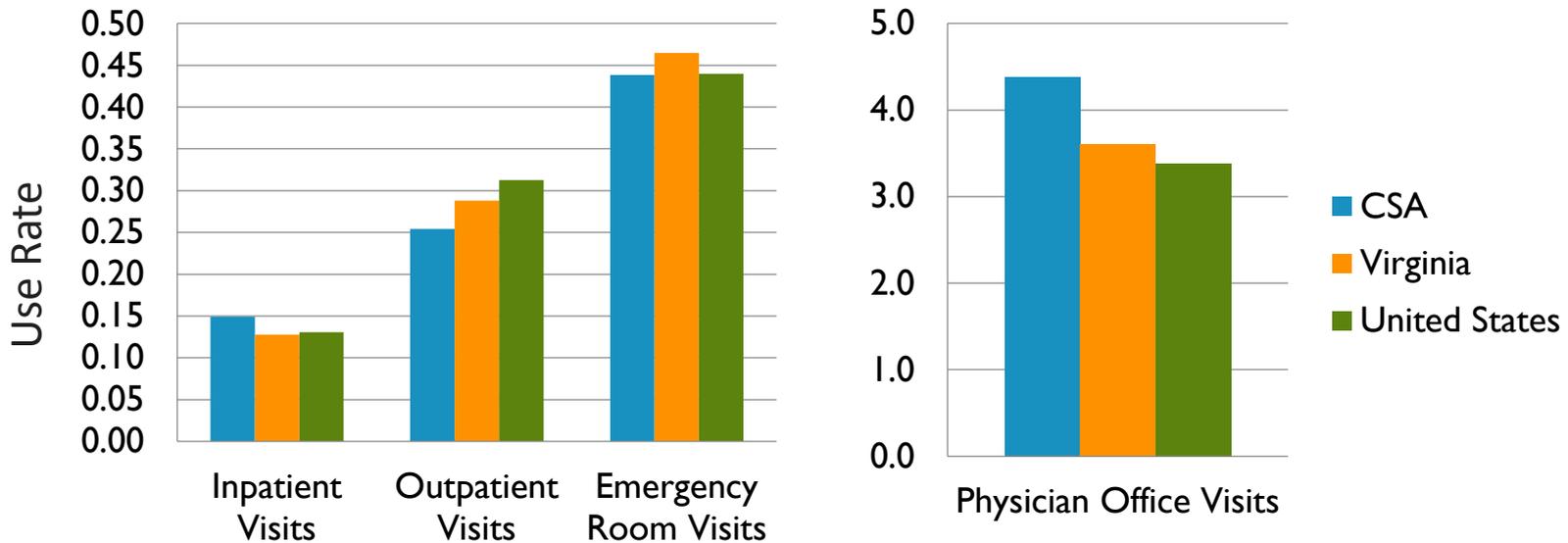
- (1) Other Medical Services includes Services by Medical Professionals other than Physicians, Nursing Services, Therapeutic Treatments, Blood Donation, Ambulance, Emergency Room, and Outpatient Hospital Services
- (2) Other Medical Supplies includes Topicals, Dressings, Supportive and Convalescent Medical Equipment, Rental of Medical Equipment for General Use, and Rental of Supportive and Convalescent Medical Equipment.
- (3) Other Health Insurance includes Medicare Supplements and Other Health Insurance excluding Blue Cross/Blue Shield.



Data Analysis

# HEALTH SERVICE DEMAND

# Health Demand Overview



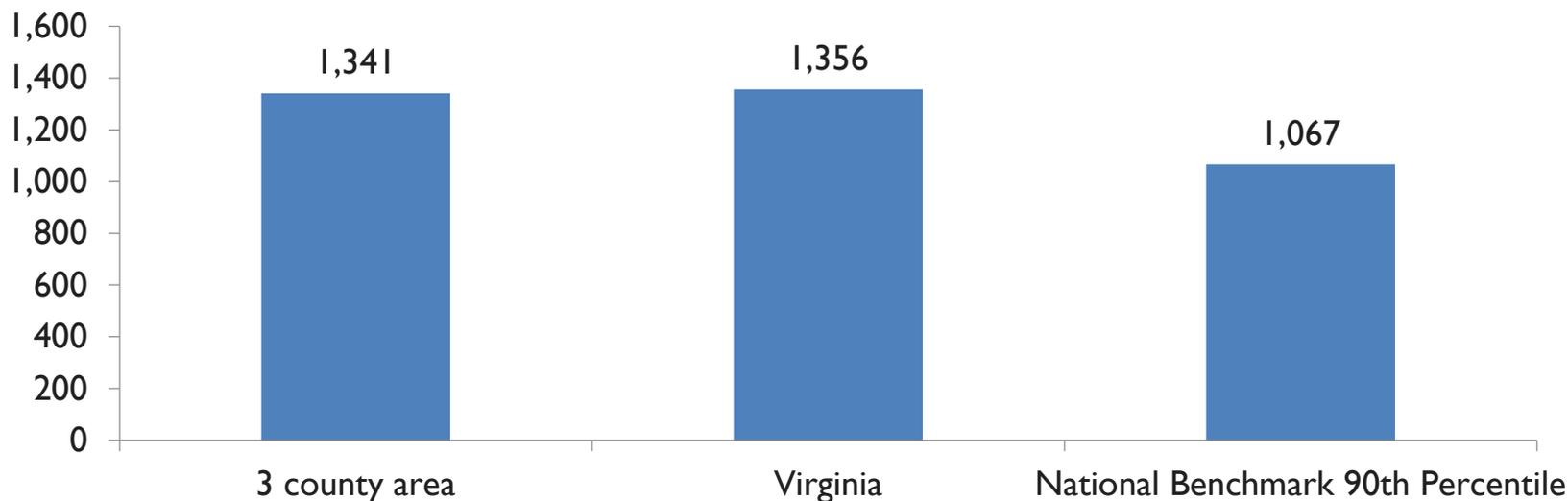
Total Visits	CSA	Virginia	United States
Inpatient Visits	7,910	1,052,980	41,321,073
Outpatient Visits	13,461	2,372,483	98,896,273
Emergency Room Visits	23,211	3,830,882	139,169,893
Physician Office Visits	232,135	29,722,873	1,071,087,938
Visit Use Rates	CSA	Virginia	United States
Inpatient Visits	0.15	0.13	0.13
Outpatient Visits	0.25	0.29	0.31
Emergency Room Visits	0.44	0.46	0.44
Physician Office Visits	4.38	3.61	3.39

The rate = the rate of occurrence in the CSA  
 Rate = # Patients / Total Population

# Access to Primary Care

- Based on two physician demand studies and the population per physician calculation from the County Health rankings, the Twin County area has just enough primary care physicians, but lacks certain specialties.

Primary care physicians (Pop per physician)

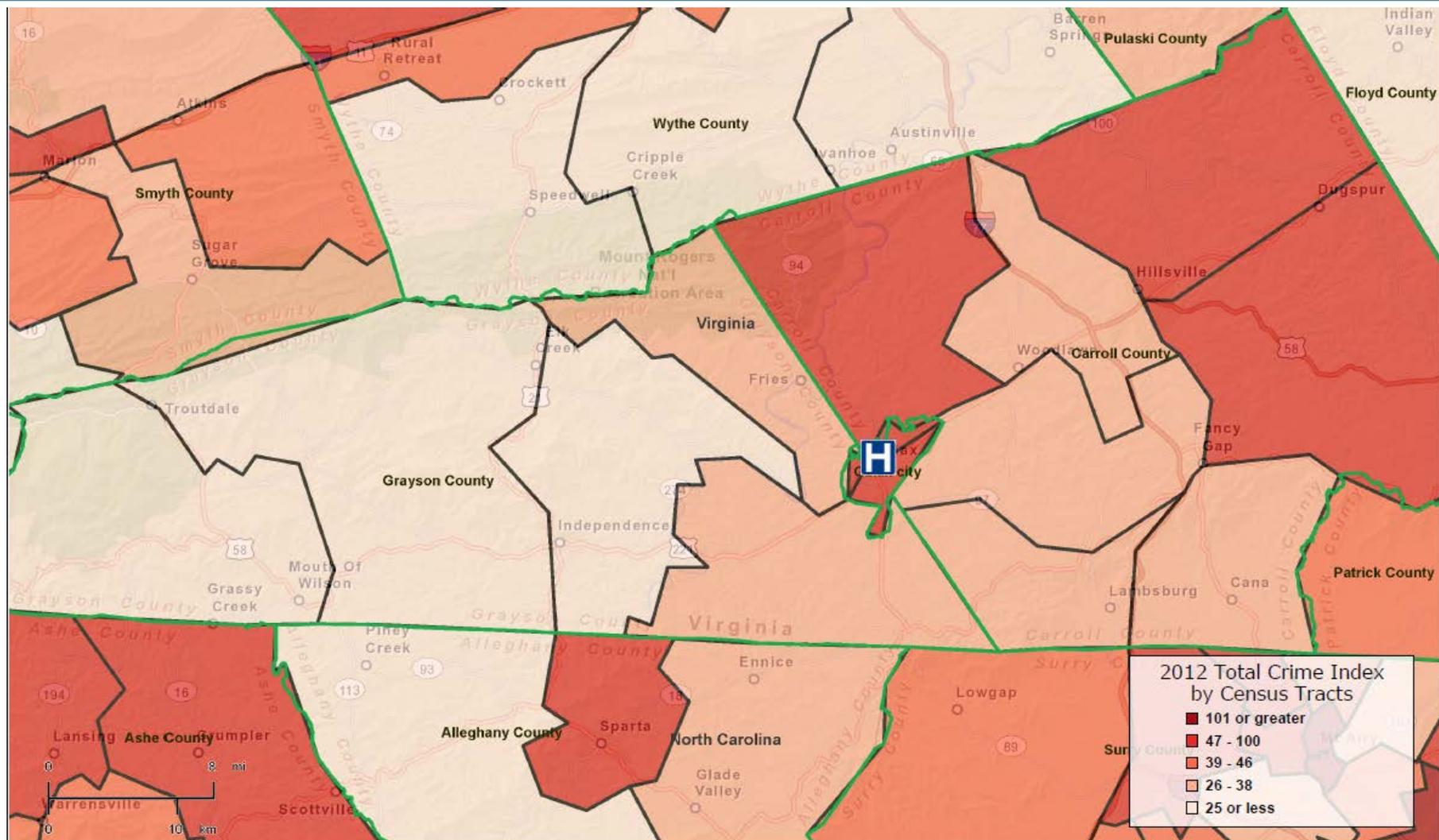




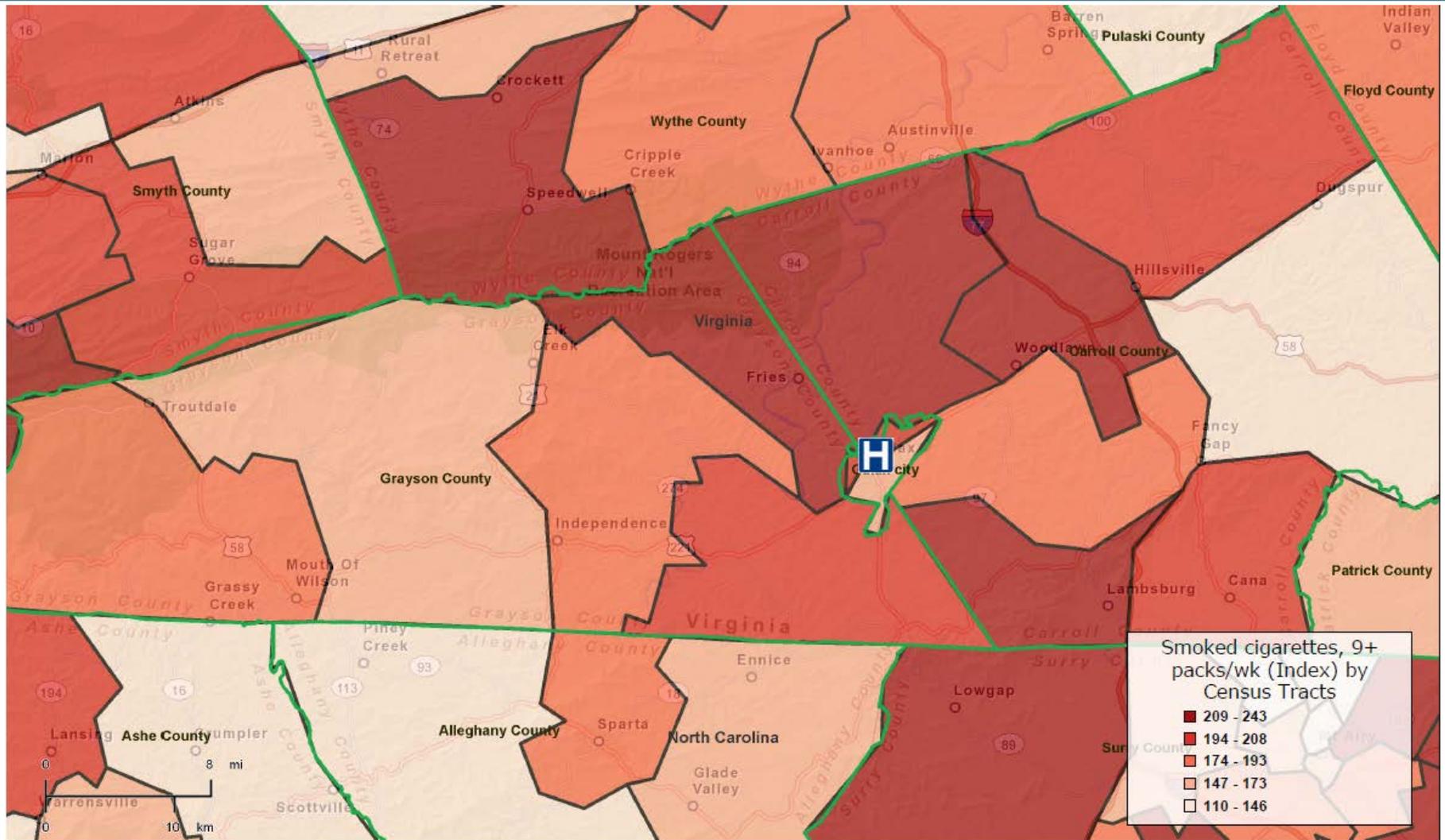
Data Analysis

# ENVIRONMENT & HEALTH DATA

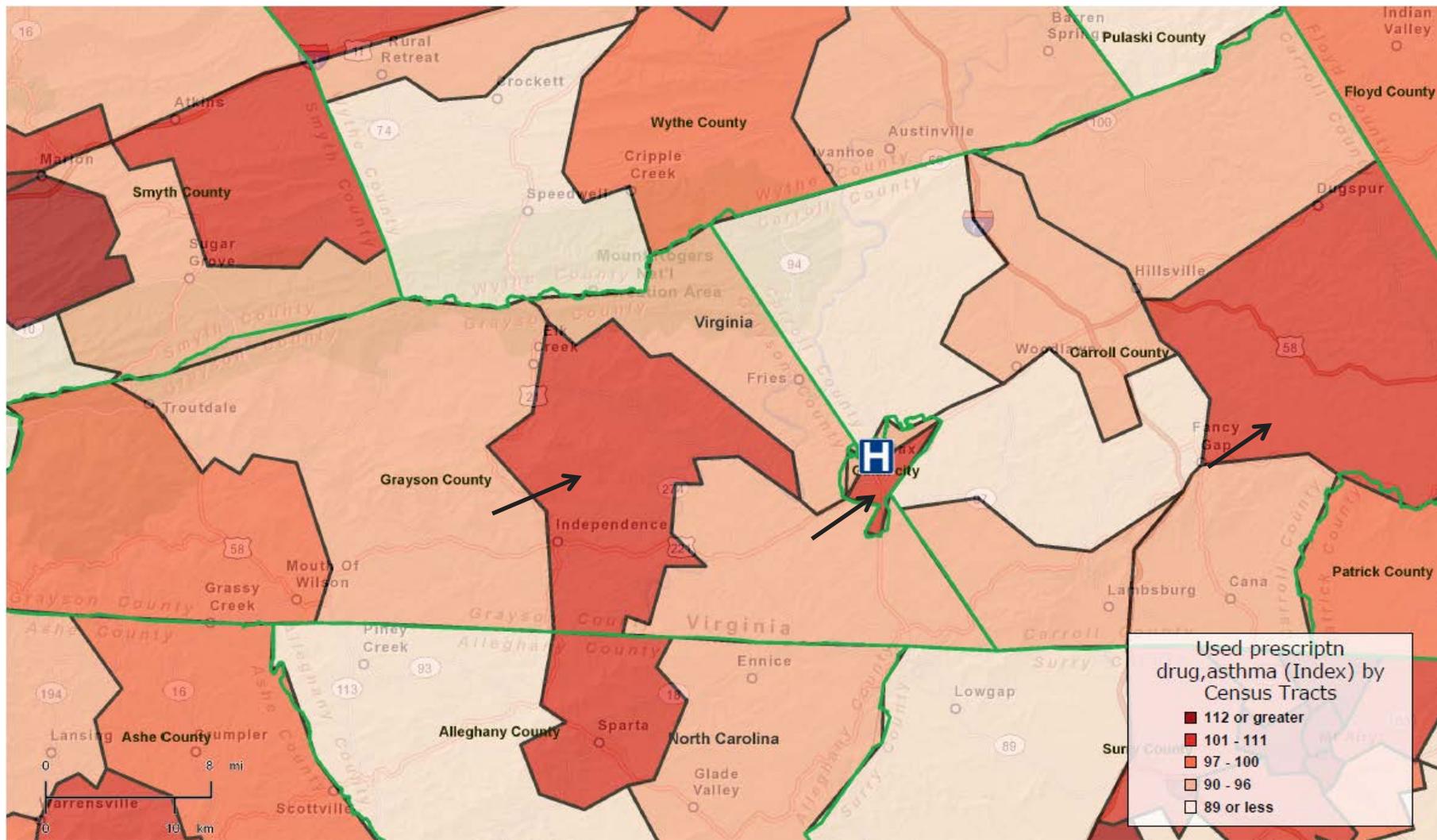
# Crime Index



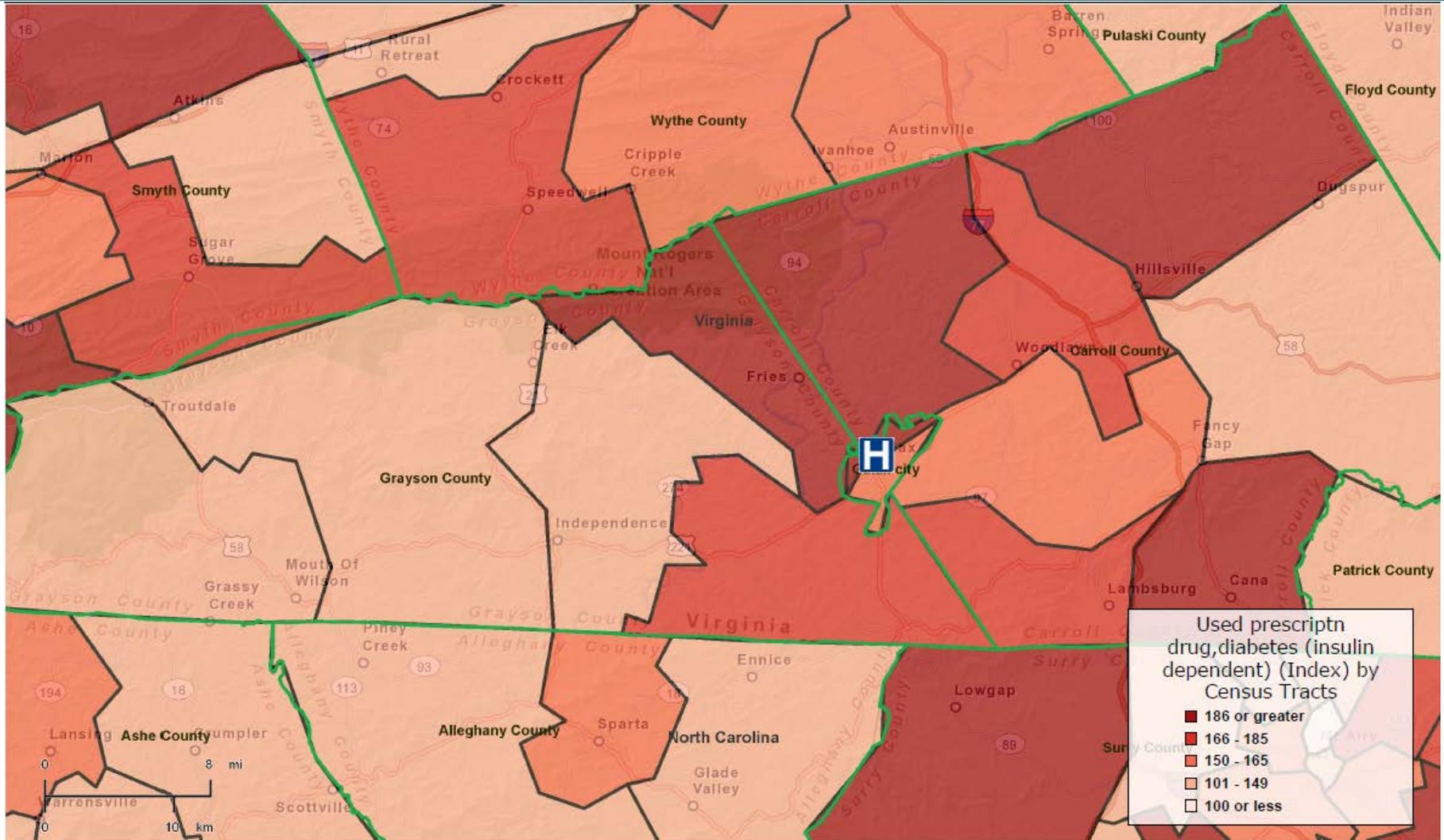
# Smoked 9+ Packs of Cigarettes per Week



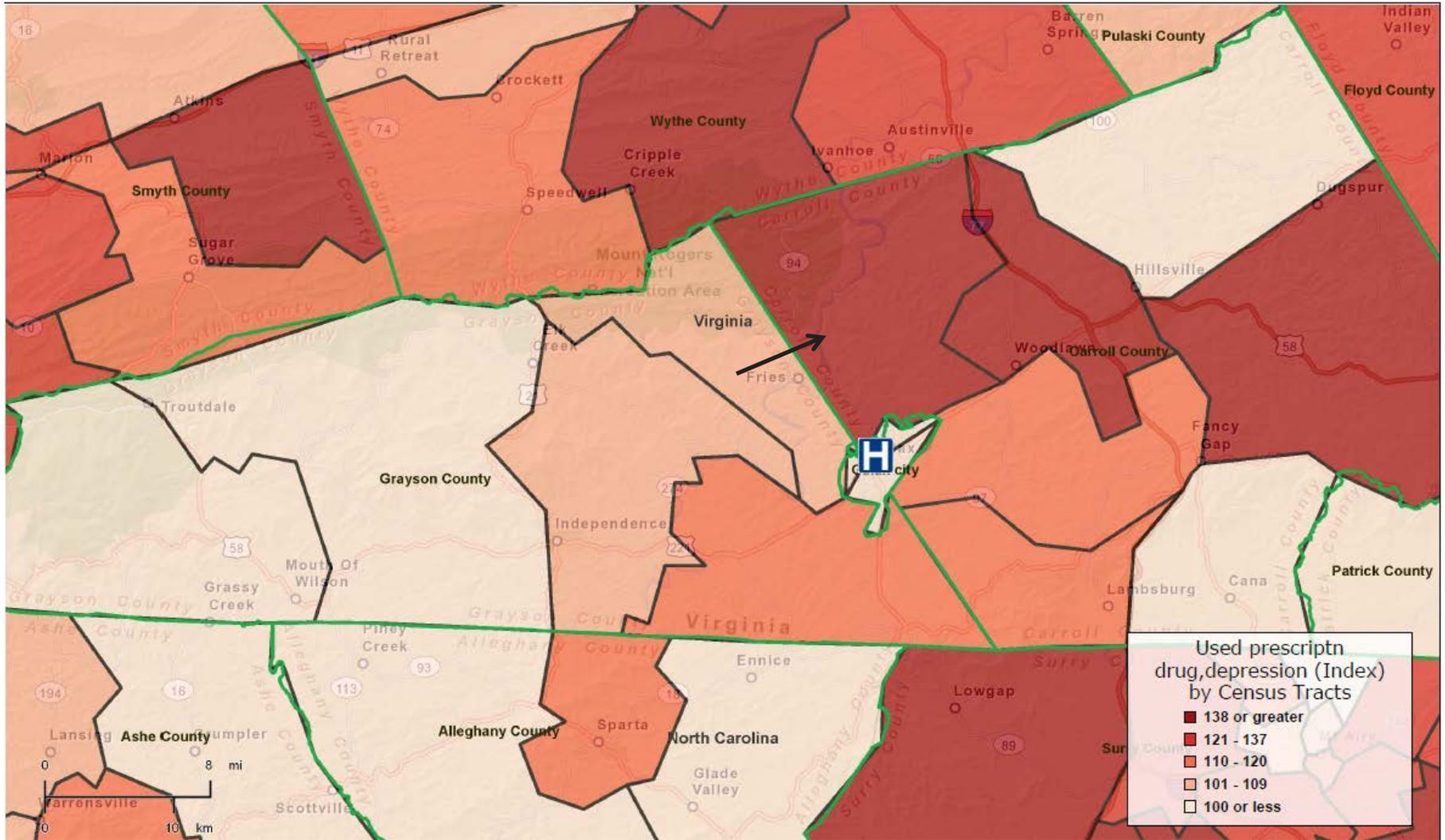
# Used Prescription Drug for Asthma



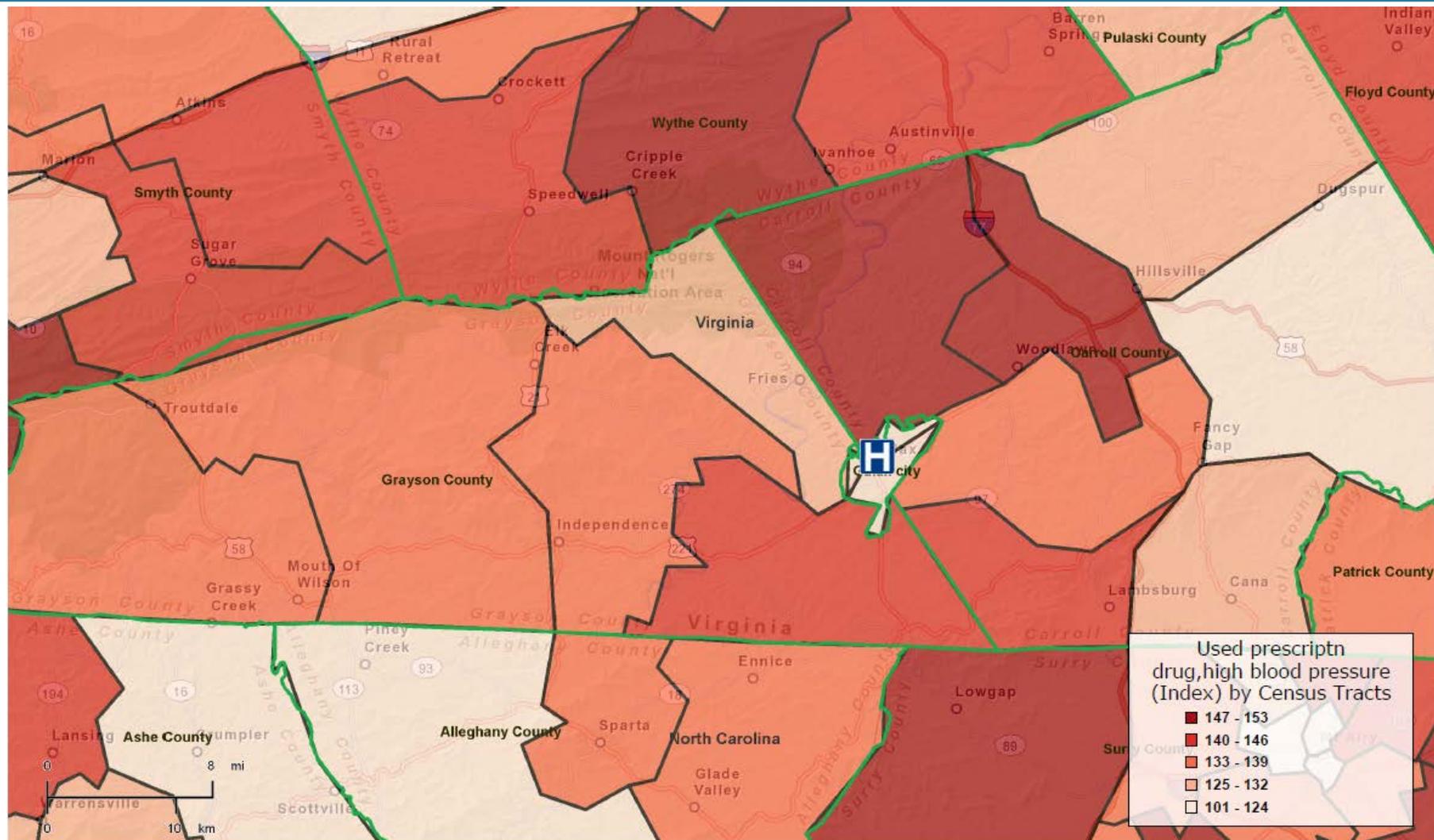
# Used Prescription Drug for Diabetes



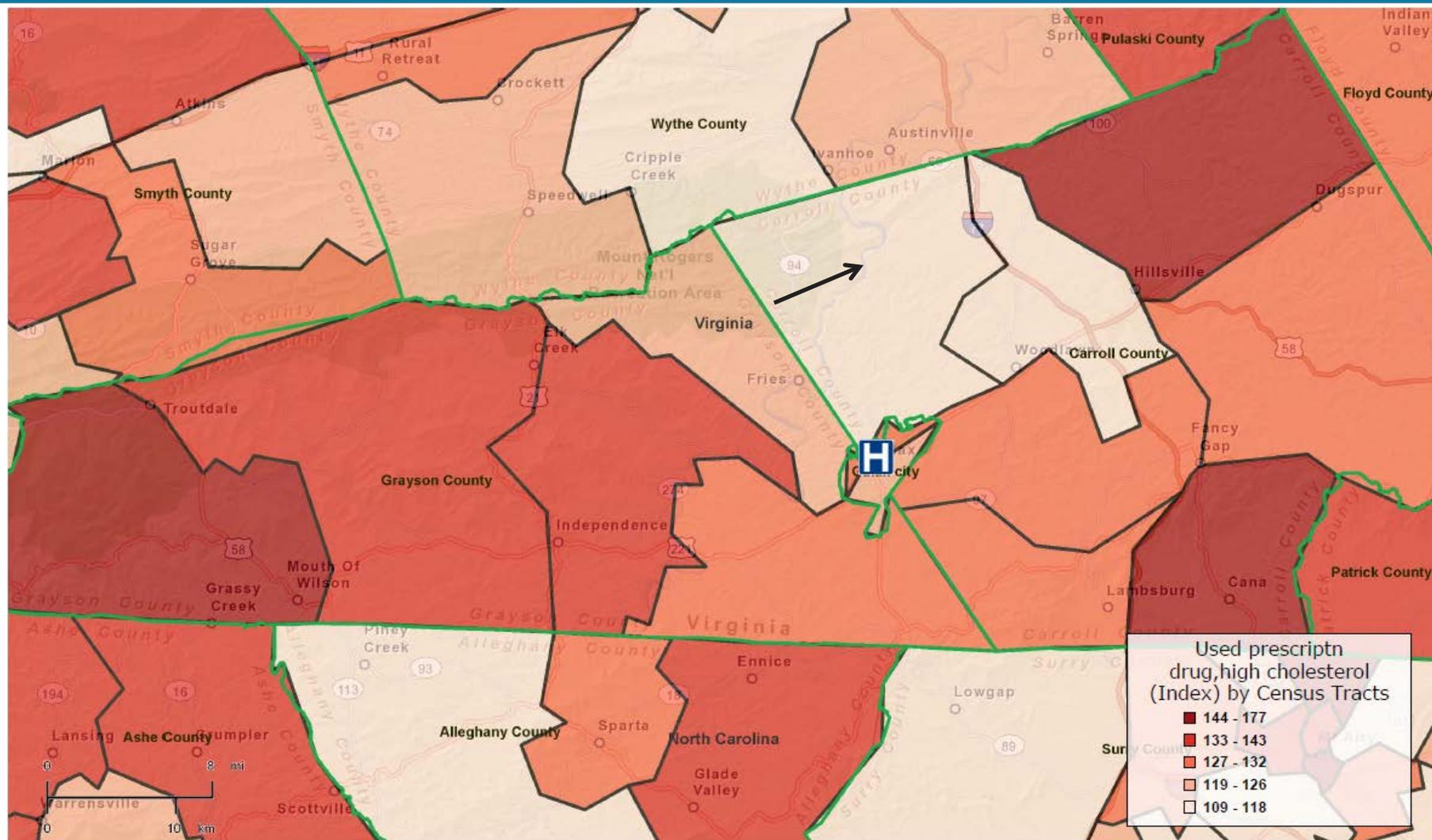
# Used Prescription Drug for Depression



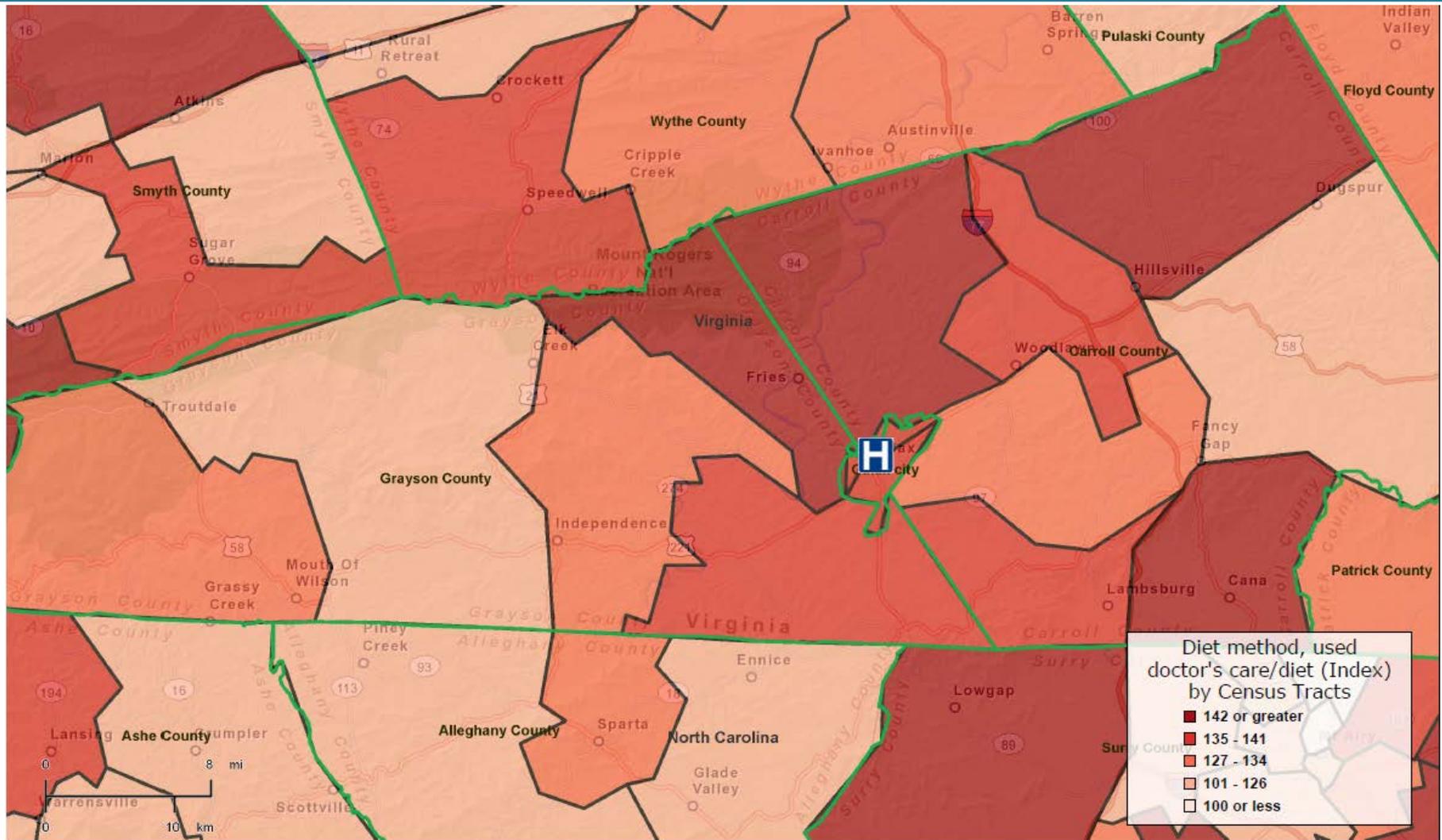
# Prescription Drug for High Blood Pressure



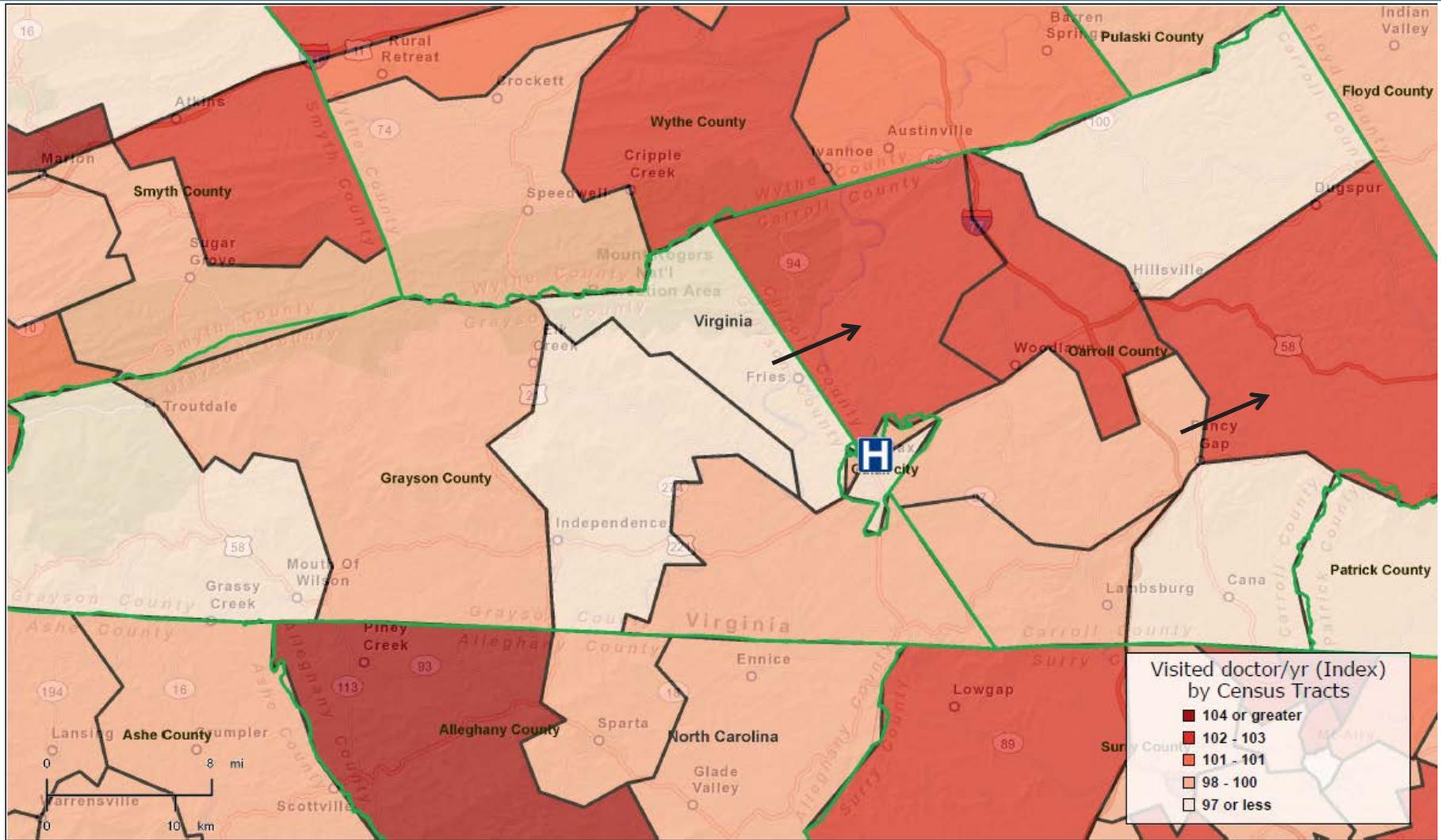
# Used Prescription Drug for Cholesterol



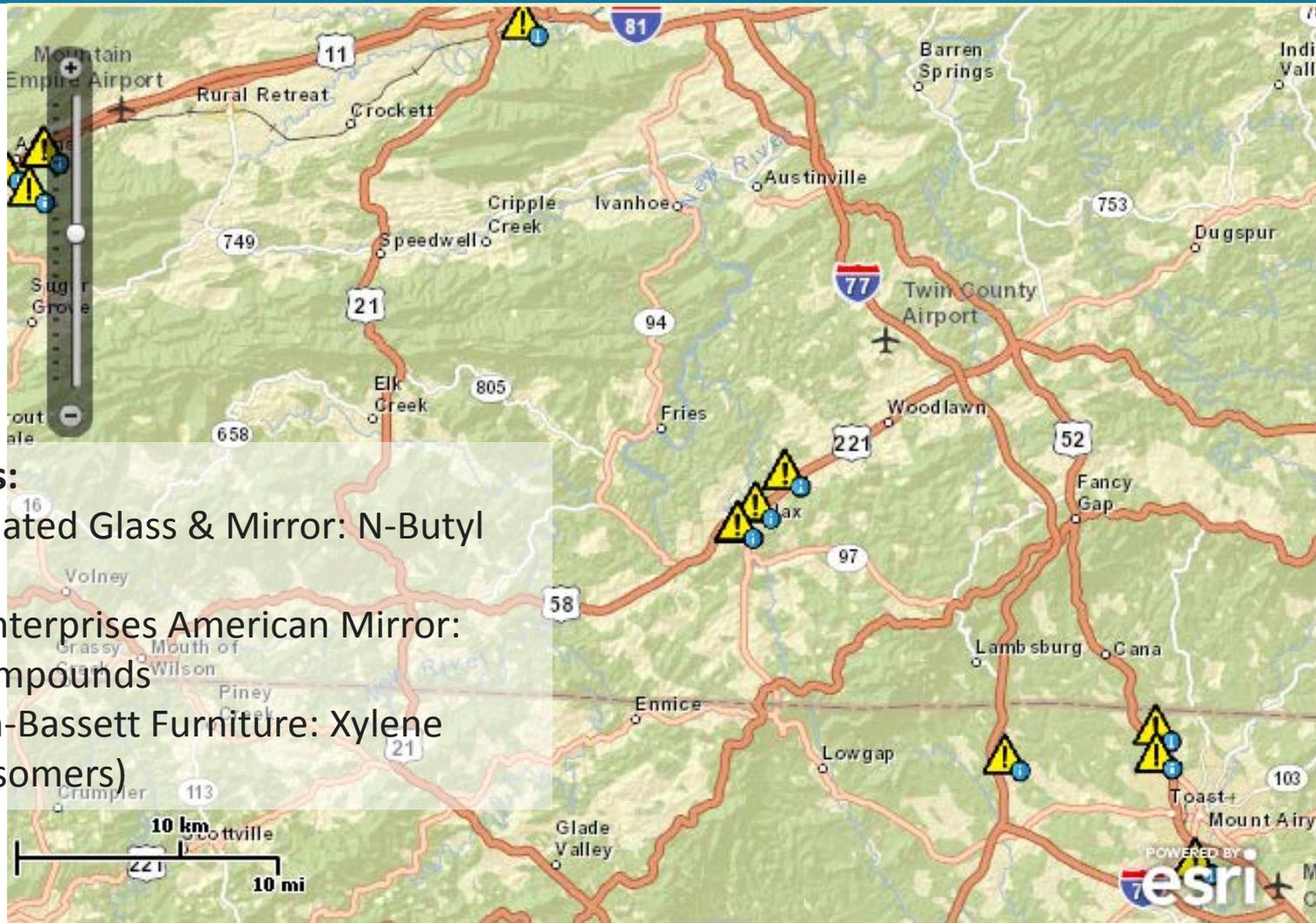
# Doctor's Care for Diet



# Visited a Doctor in the Last 12 Months



# Toxic Release Inventory



## Releases:

Consolidated Glass & Mirror: N-Butyl Alcohol  
Webb Enterprises American Mirror: Lead Compounds  
Vaughan-Bassett Furniture: Xylene (mixed isomers)

# Disease Outbreaks

Outbreaks in Current Location



**12 Respiratory Alerts**  
Influenza (11), Swine Flu H1N1 (1)



**2 Gastrointestinal Alerts**  
Waterborne Illness (1), Norovirus (1)



**1 Environmental Alerts**  
Environmental (1)



**1 Animal Alerts**  
Equine Herpes Virus (1)



**1 Skin/Rash Alerts**  
Measles (1)





# COMMUNITY FOCUS GROUP

# Focus Group Summary

- On January 9, 26 community members attended a focus group to give input into community health needs.

**SPORTS**  
GRAYSON  
COUNTY  
VS.  
GALAX  
PAGES 6-7

The  
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*The Voice of the City of Galax, Carroll County & Grayson County*

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## How healthy is the area's healthcare?

*TCRH assesses  
community's  
health needs*

By SHAINA STOCKTON  
Staff

The Community Advisory Groups of Carroll, Grayson and Galax held a joint meeting at Twin County Regional Hospital on Jan. 9 to discuss topics for a community health needs assessment.



This assessment is Twin County Regional Healthcare's newest project, which has been taken on in an effort to pinpoint health concerns in the

# Generally, how would you describe the health of the community as a whole?

- Below Average

# Most Important Health Issues

- Chronic Diseases – pulmonary, cardiology, diabetes, obesity, cancer
- Socio-Economic issues – high unemployment, lower wages, disability, lack of jobs, inability to get higher education
- Smoking
- High cost of healthcare and health insurance
- Drug abuse – Methamphetamine, alcohol, Oxycodone, Vicodin
- Aging population – transportation, prescription drug abuse
- Mental health needs
- Using the Emergency Department instead of primary care providers
- Difficult to afford healthy foods

# Most Important Health Issues - Children

- Poverty – lack of resources for healthy food
- More opportunities for children to exercise
- With 2 parents working, fast food is easier and quicker than cooking meals

# Where people turn for basic healthcare needs:

- Primary care physicians
- Employer clinics

## Discussion about access to primary care:

- Can't depend on just physicians, need a team approach to primary care
- Need more primary care providers, physicians, nurses, social workers, pharmacists working together

# What people need to manage their health:

- More technology – home monitoring.
- Put together systems of care for people – nurses, educators, nurse practitioners. With the shortage of primary care physicians and changing reimbursement. It is the only way.
- More health education
- Motivation
- Personal responsibility
- Education from someone they trust
- Cheerleaders to keep them motivated
- Free or discounted dental care. Lots of people don't have dental insurance.
- Cultural, economic aspect to eating well/motivation
- Need a Nephrologist
- More cancer care available locally

# Responsible for Improving Health

- Individuals are responsible but other groups may nudge them
- Nudgers (working as a team):
  - Employers
  - Hospital
  - Physicians
  - School system
  - Faith-based nursing program
  - Churches
  - Local government
  - Federal government
  - Insurance companies

# How to Collaborate/Barriers

## Collaboration

- The three areas work together regularly and extremely well
- Realized they are better together than separate
- Business development is an excellent example
- Christmas Drive all worked together
- Nurse LPN Program
- Free Clinic of Twin Counties in Galax- industry, churches, hospital, physicians all working together

## Barriers

- None

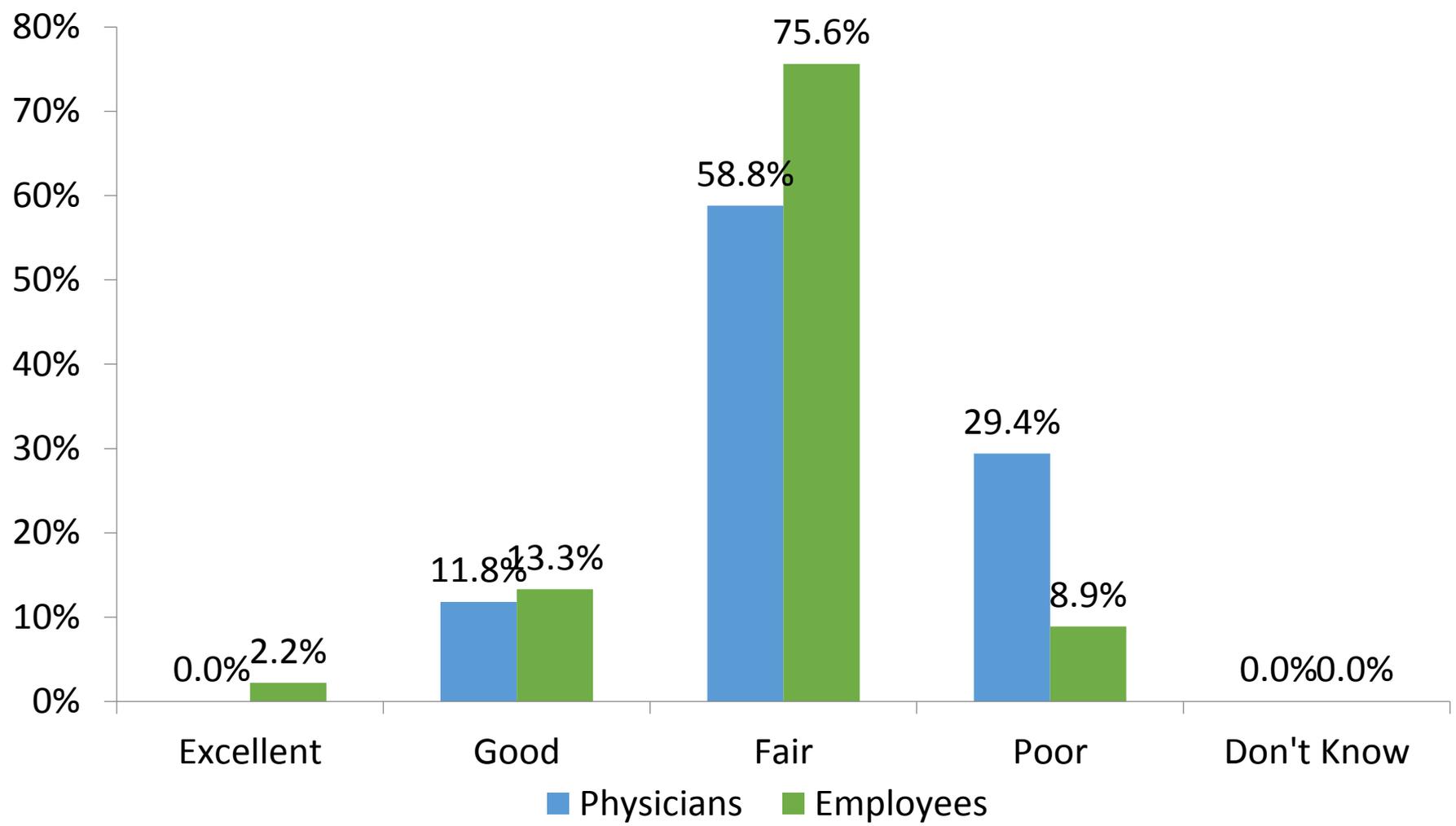
# Wellness Initiatives

- Vaughan Bassett has incentives to exercise and not miss work
- Hospital Vitality program – health risk assessment, opportunity to earn rewards
- Training Center has Flu shot incentives
- Most workplaces have tobacco v non tobacco user rates

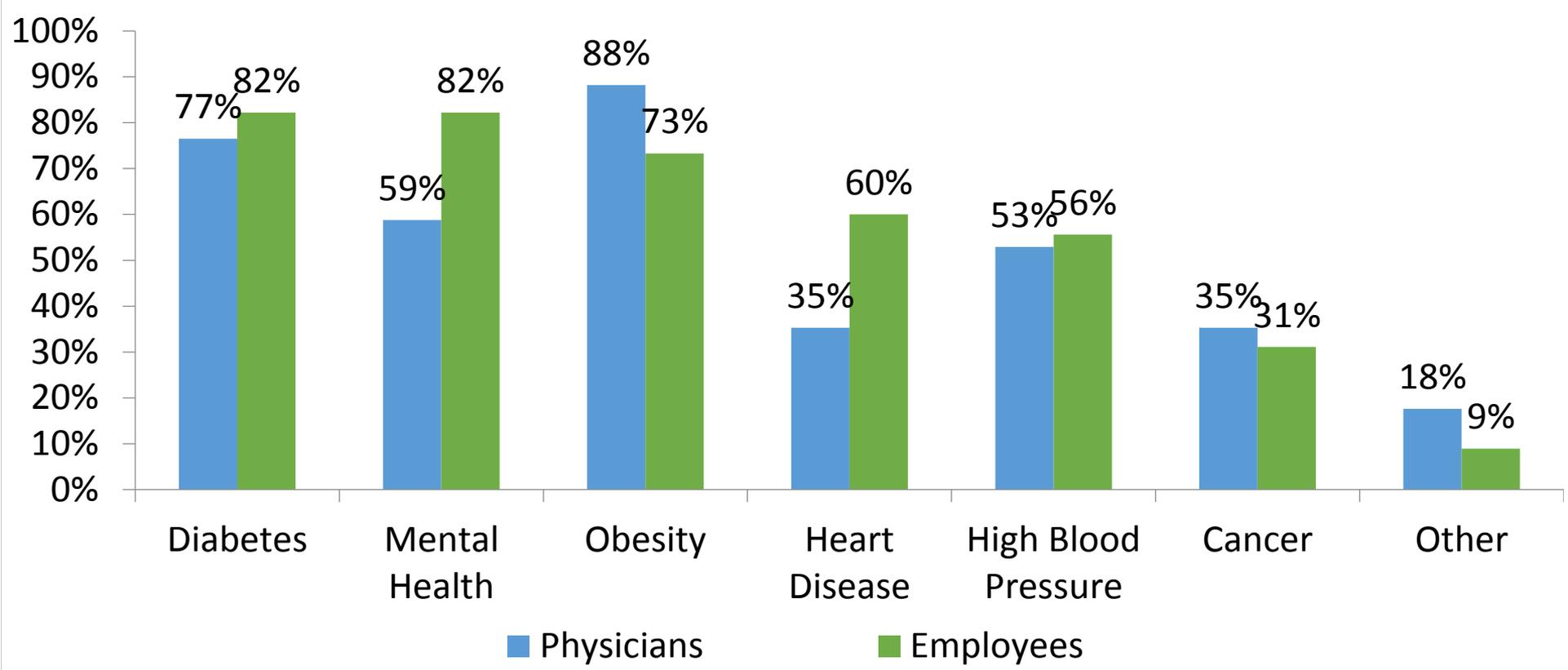


# PHYSICIANS AND EMPLOYEES SURVEY

59% of the physicians and 76% of the employees believe the community's health is fair. However, 29% of physicians and 9% of TCR employees believe the health of the community is poor. 12% of physicians and 13% of employees believe the health of the community is good. 12% of physicians and 13% of employees believe the health of the community is good.



Employees believe the most prevalent disease is diabetes followed by mental health, obesity, then heart disease. Physicians believe the most prevalent disease is obesity followed by diabetes.

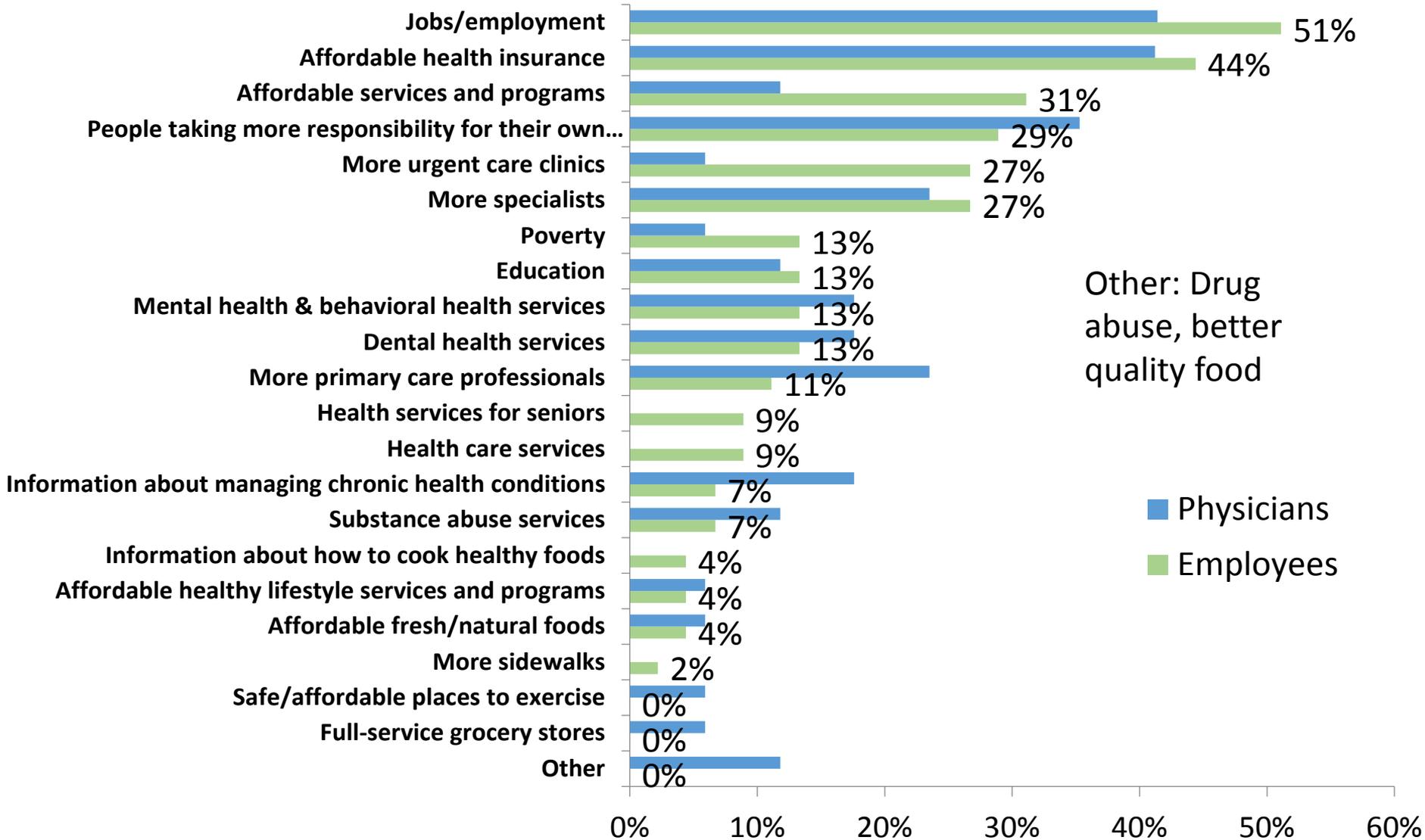


Ranked by # of employee responses.

Other physicians = Drug abuse, COPD, Smoking

Other employees = Substance abuse, COPD

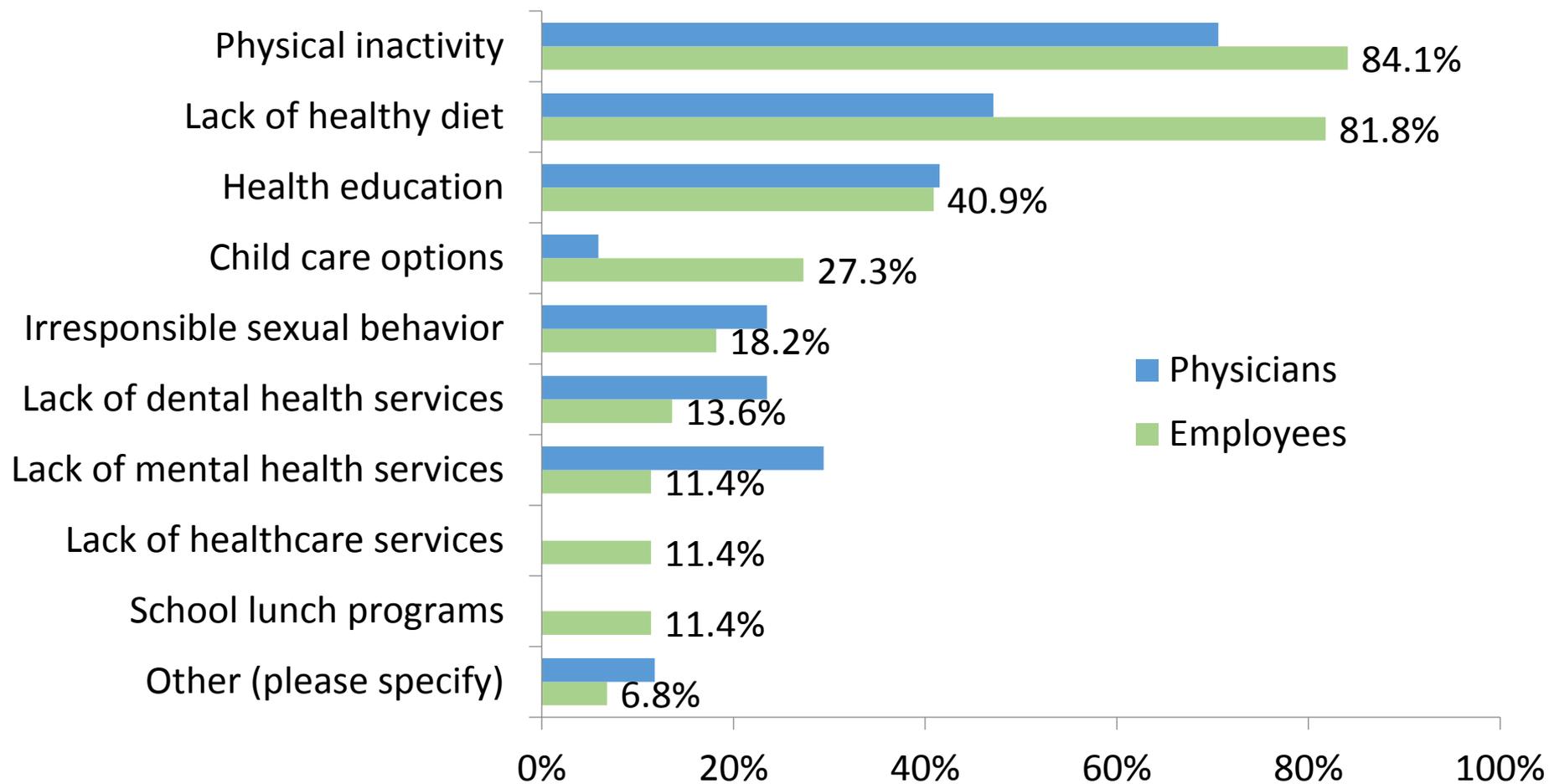
Both physicians and employees believe that jobs/employment and affordable health insurance are the most impactful issues. Physicians believe people taking more responsibility for their own health is impactful while employees believe affordable services and programs are more impactful.



N=17, 45

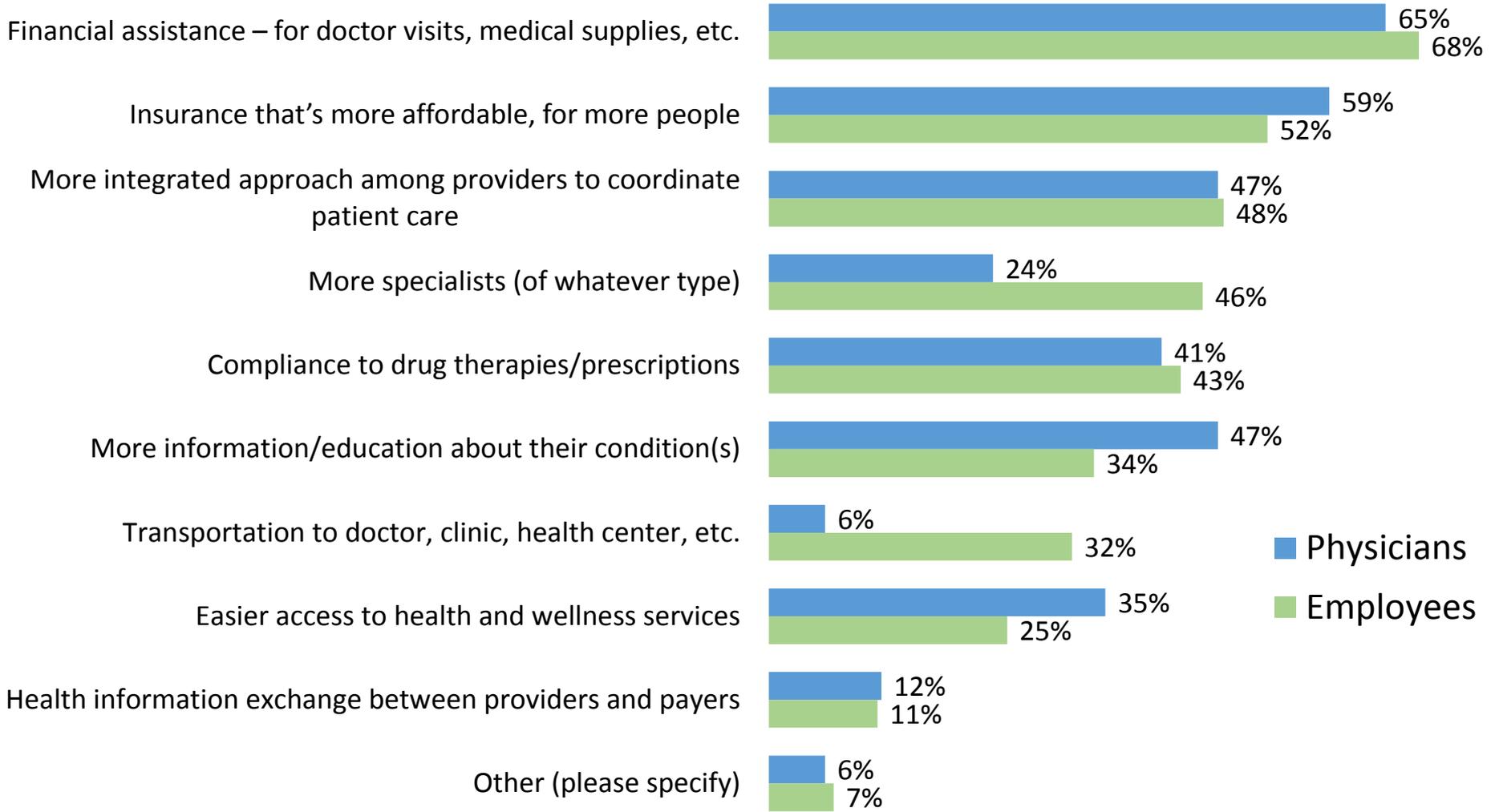
Q3. In your opinion, what are the top 2 or 3 issues that need to be addressed in your community that impact people's health?

The health concerns for children are physical inactivity, lack of healthy diet, and health education . Physicians believe lack of mental health services is a big issue.



Other employees = education for parents on keeping children healthy, educated parents, poverty  
 Other physicians = Drugs, cigarettes, alcohol abuse by teens

**Financial assistance is most needed to manage their health, followed by affordable insurance and more integrated approach among providers. Employees believe more specialists are needed and physicians believe people need more information about their conditions.**



# Beneficial services for TCR to offer:

## Employees

- Cardiology
- Cancer
- Prevention/Wellness
- Endocrinology
- Neurology
- Pulmonology
- Education on lifestyle and nutrition
- Primary care
- Mental health

## Physicians

- Cardiology
- Pulmonology
- Nephrology
- Vascular Surgery
- Mental Health
- Drug abuse education
- Nutrition education
- Smoking Cessation
- Lifestyle education
- Primary care
- Free clinic

N= 12, 28

Q6. What healthcare, health education or public health services or programs would be most beneficial to your community for Twin County Regional to provide/offer?

# Stephanie Bailey, MD

## Stratasan

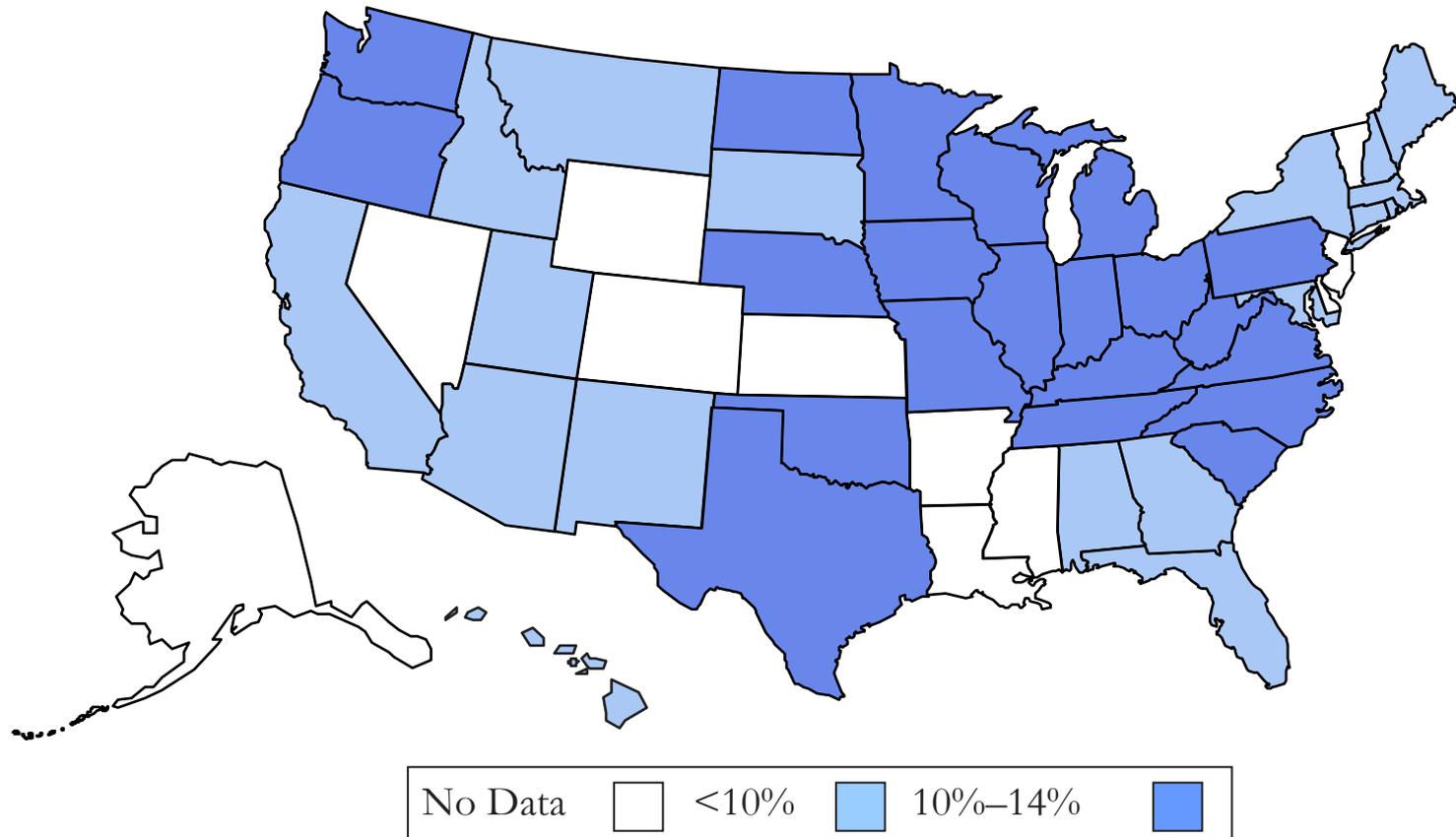
The Health of the Community



# Obesity Trends\* Among U.S. Adults

1989

(\*BMI  $\geq 30$ , or ~ 30 lbs overweight for 5'4" woman)





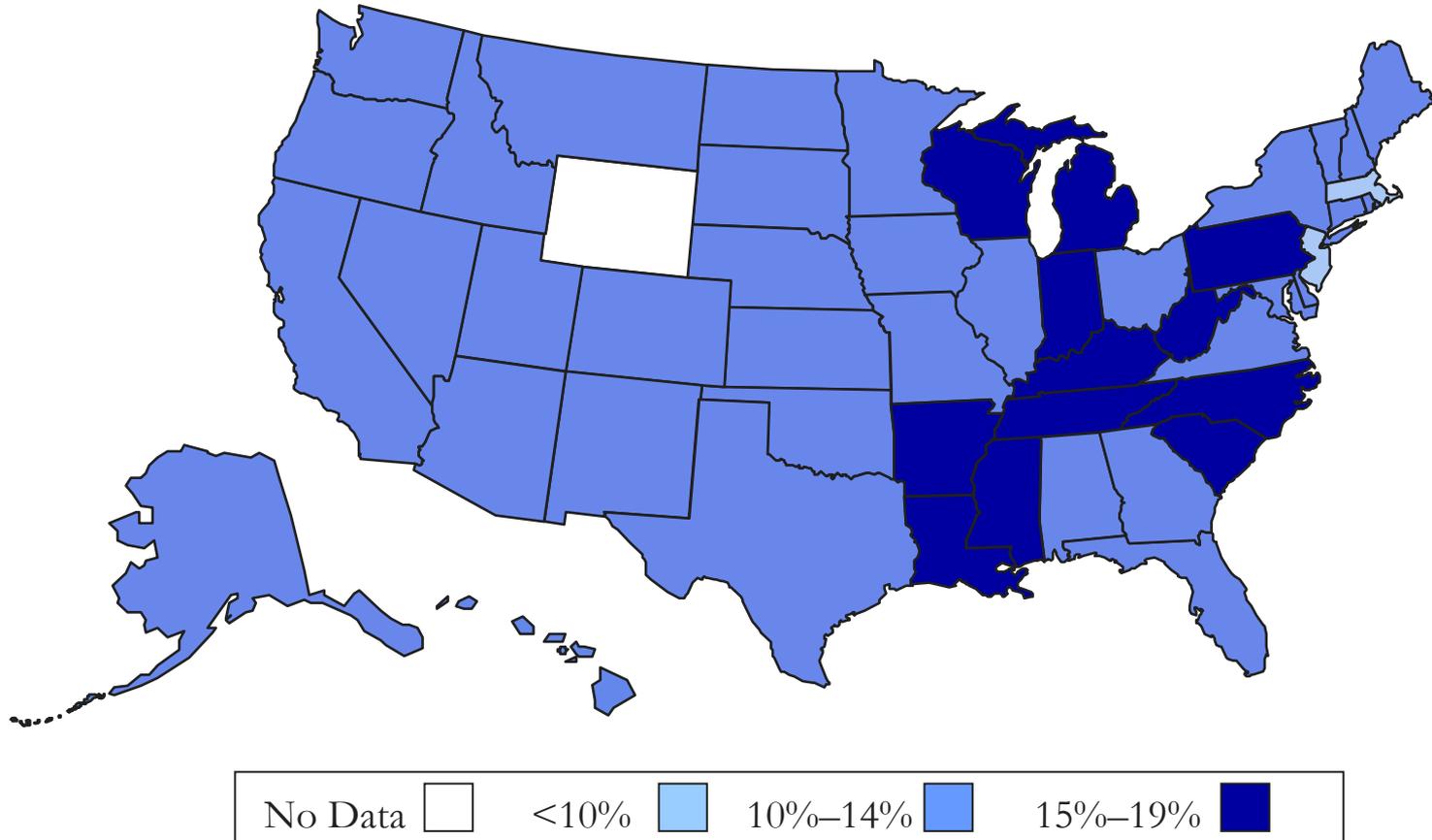




# Obesity Trends\* Among U.S. Adults

## 1993

(\*BMI  $\geq 30$ , or ~ 30 lbs overweight for 5'4" woman)



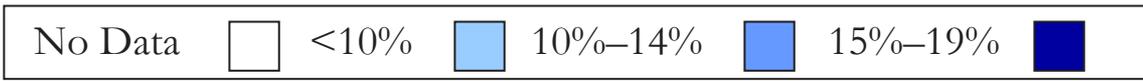
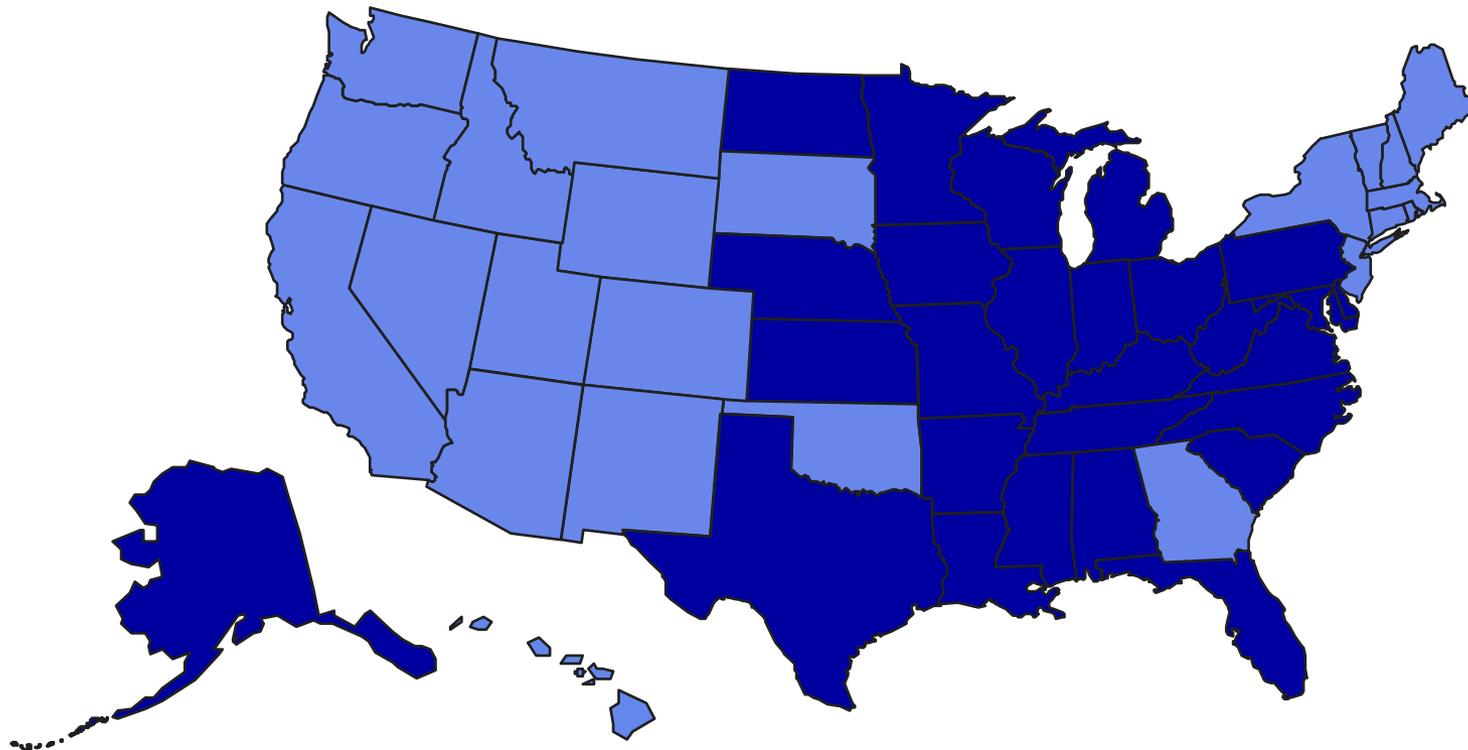
Source: Behavioral Risk Factor Surveillance System, CDC



# Obesity Trends\* Among U.S. Adults

## 1995

(\*BMI  $\geq 30$ , or  $\sim 30$  lbs overweight for 5'4" woman)



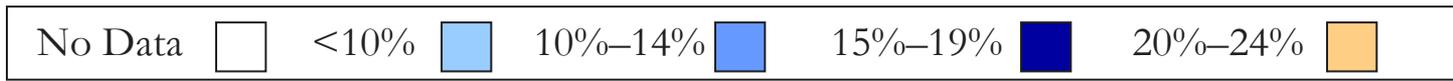
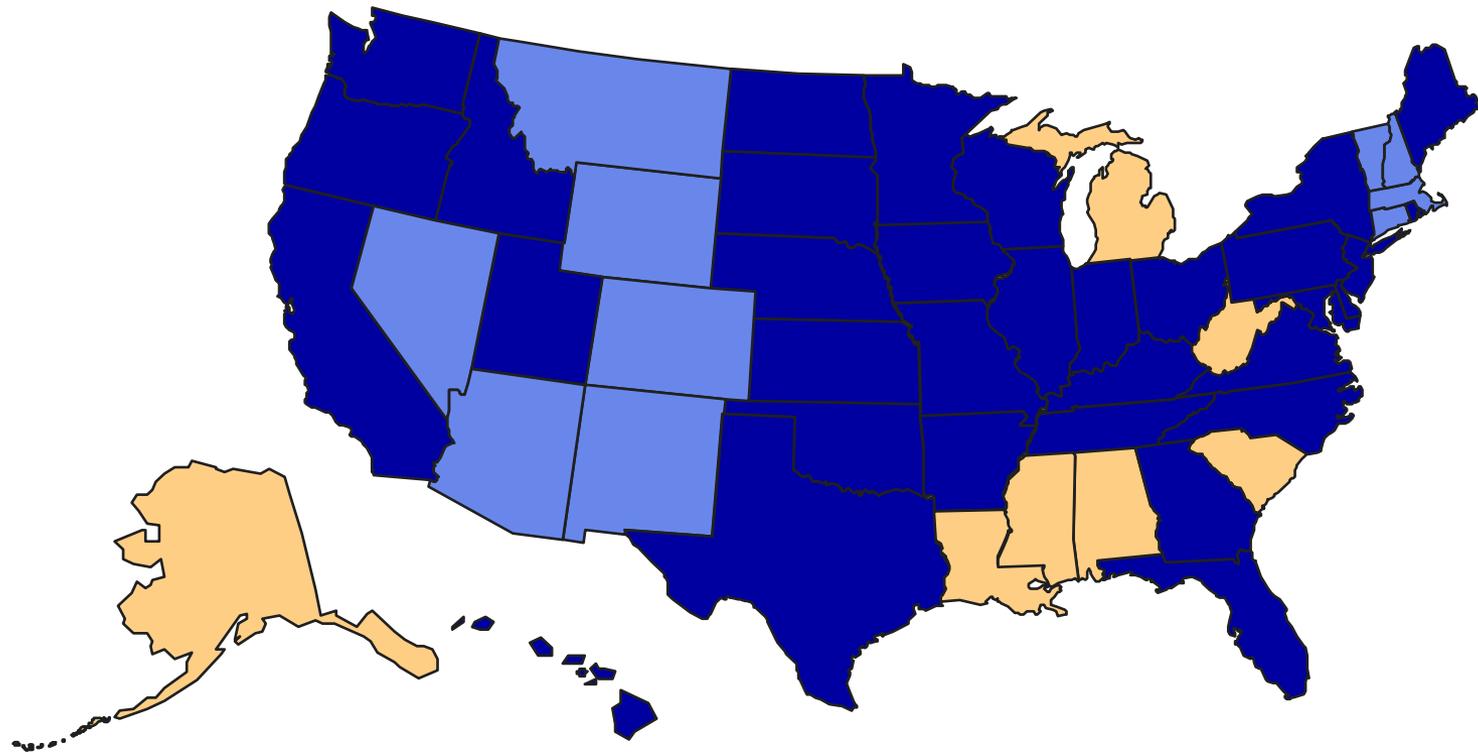




# Obesity Trends\* Among U.S. Adults

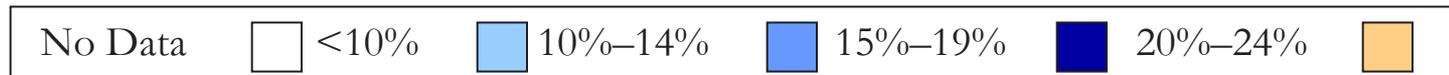
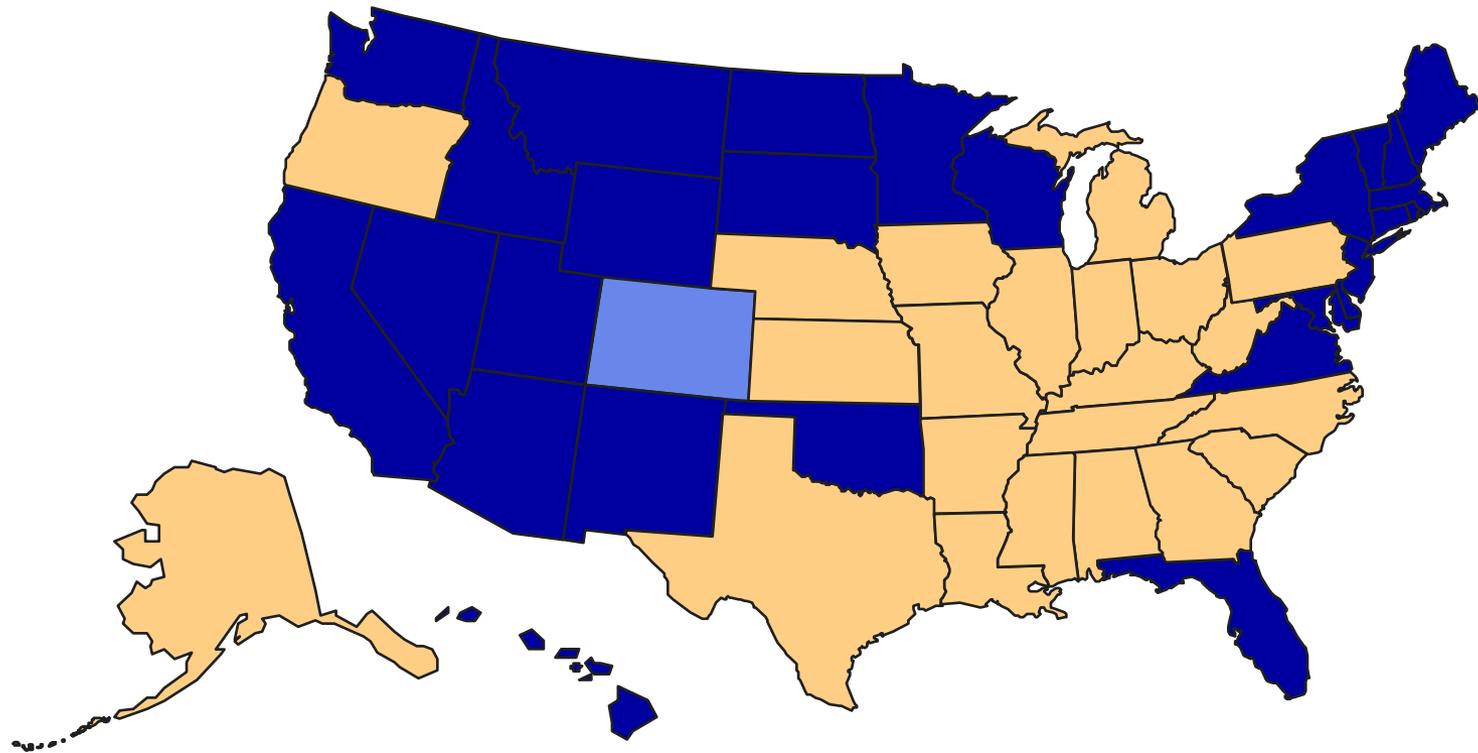
## 1998

(\*BMI  $\geq$  30, or ~ 30 lbs overweight for 5'4" woman)



# Obesity Trends\* Among U.S. Adults 2000

(\*BMI  $\geq$  30, or ~ 30 lbs overweight for 5'4" woman)

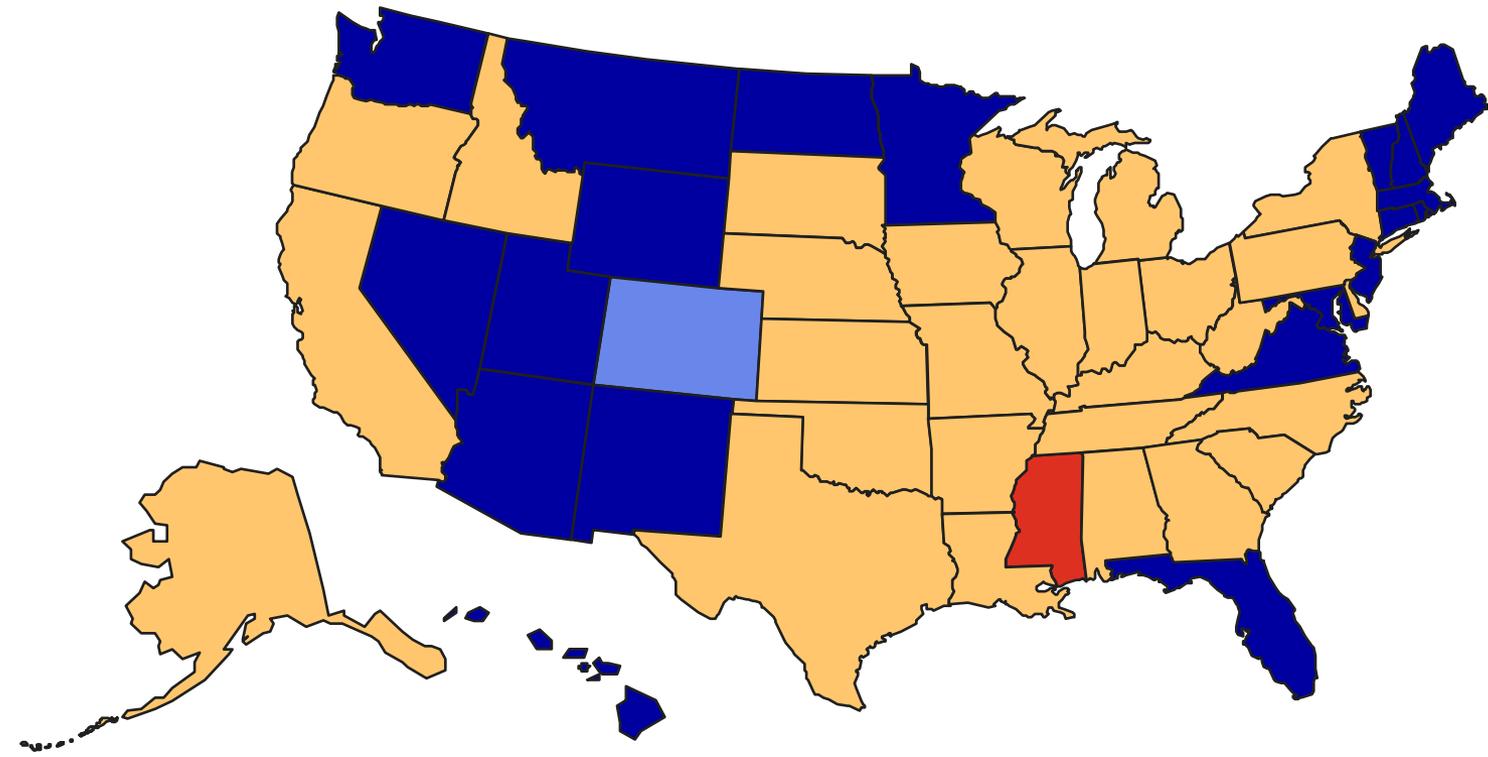


Source: Behavioral Risk Factor Surveillance System, CDC

# Obesity Trends\* Among U.S. Adults

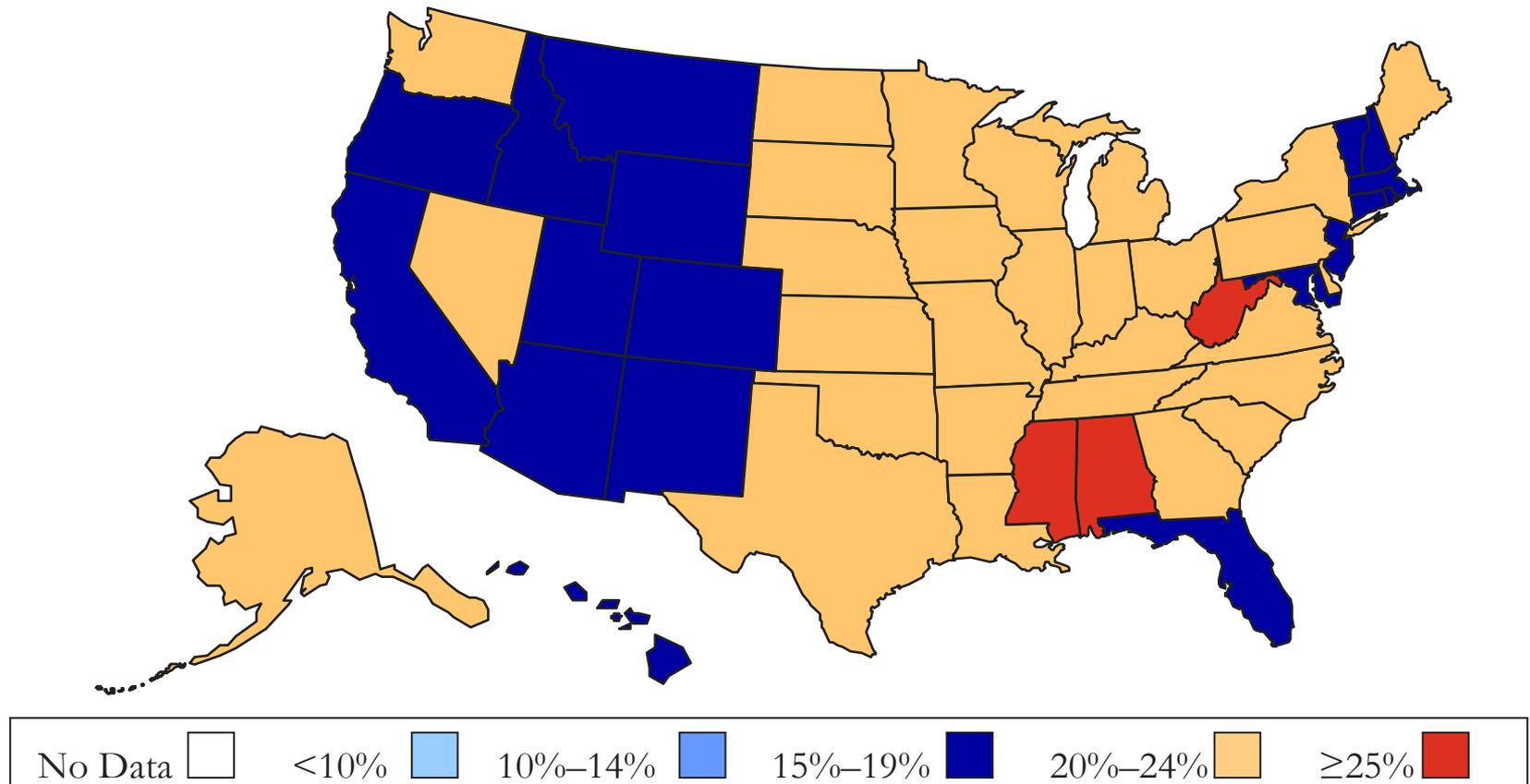
2001

(\*BMI  $\geq 30$ , or  $\sim 30$  lbs overweight for 5'4" woman)



# Obesity Trends\* Among U.S. Adults 2002

(\*BMI  $\geq 30$ , or ~ 30 lbs overweight for 5'4" woman)

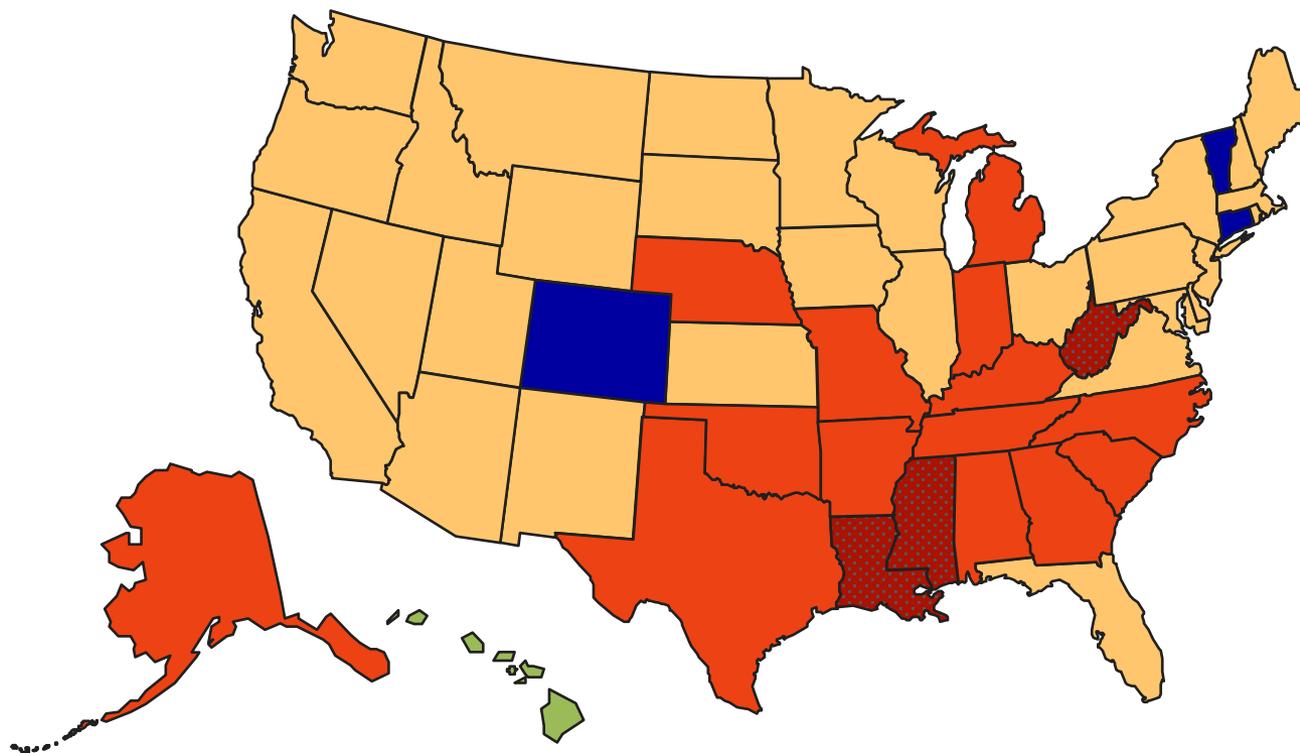






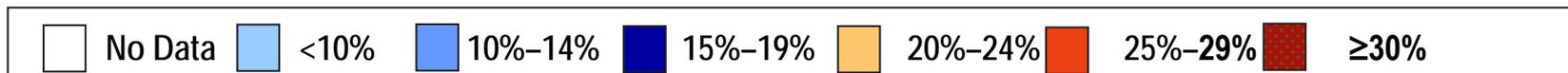
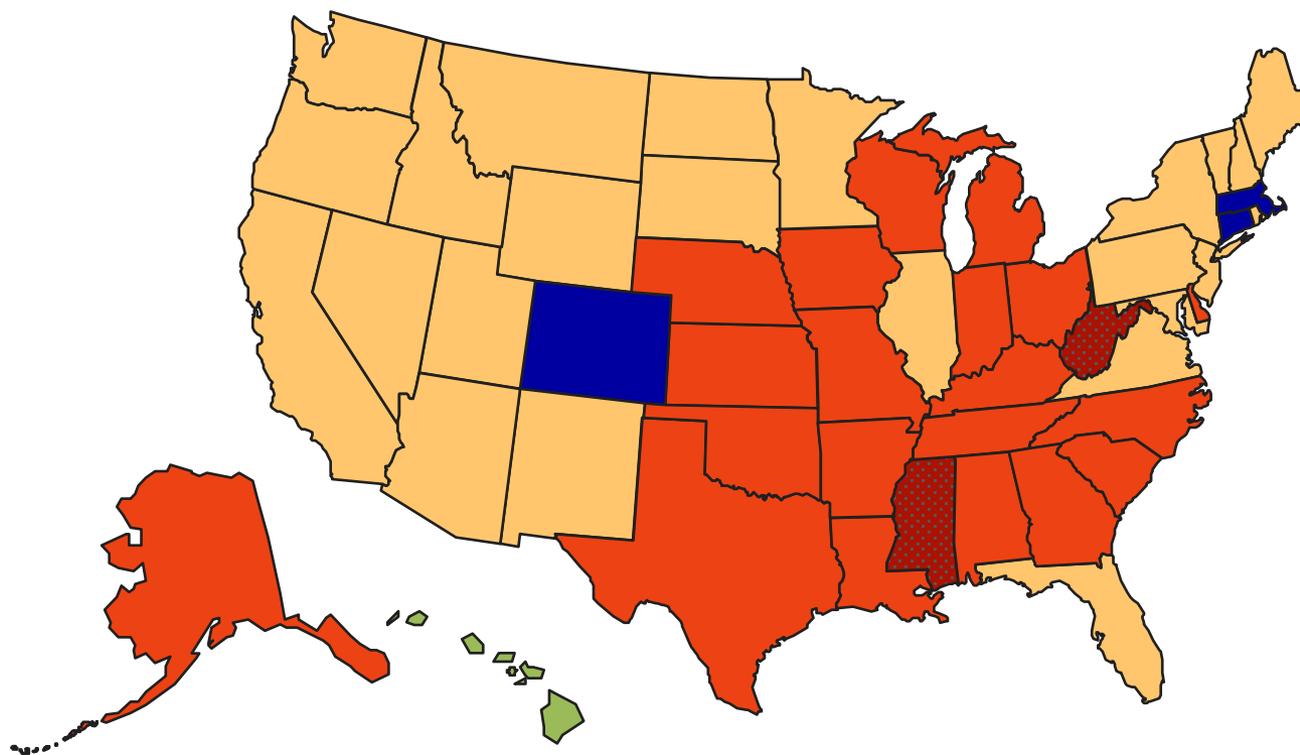
# Obesity Trends\* Among U.S. Adults 2005

(\*BMI  $\geq 30$ , or  $\sim 30$  lbs. overweight for 5' 4" person)



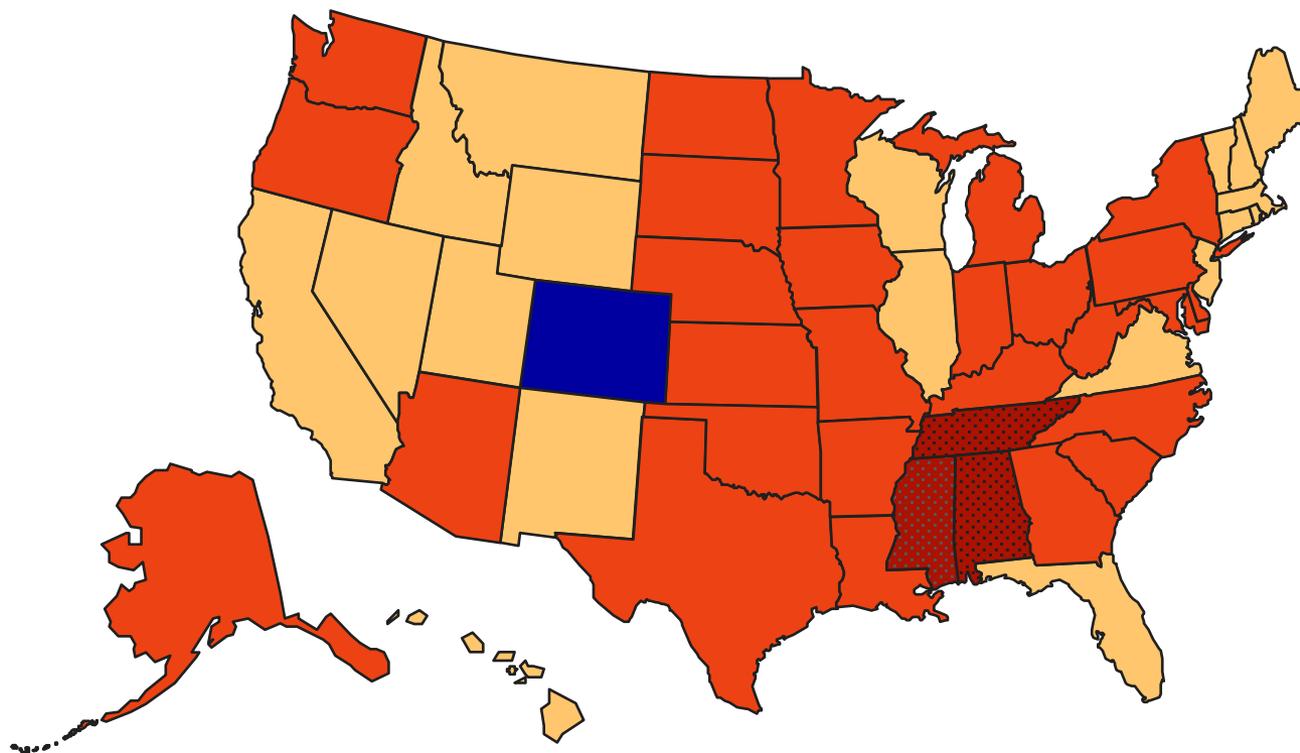
# Obesity Trends\* Among U.S. Adults 2006

(\*BMI  $\geq 30$ , or  $\sim 30$  lbs. overweight for 5' 4" person)



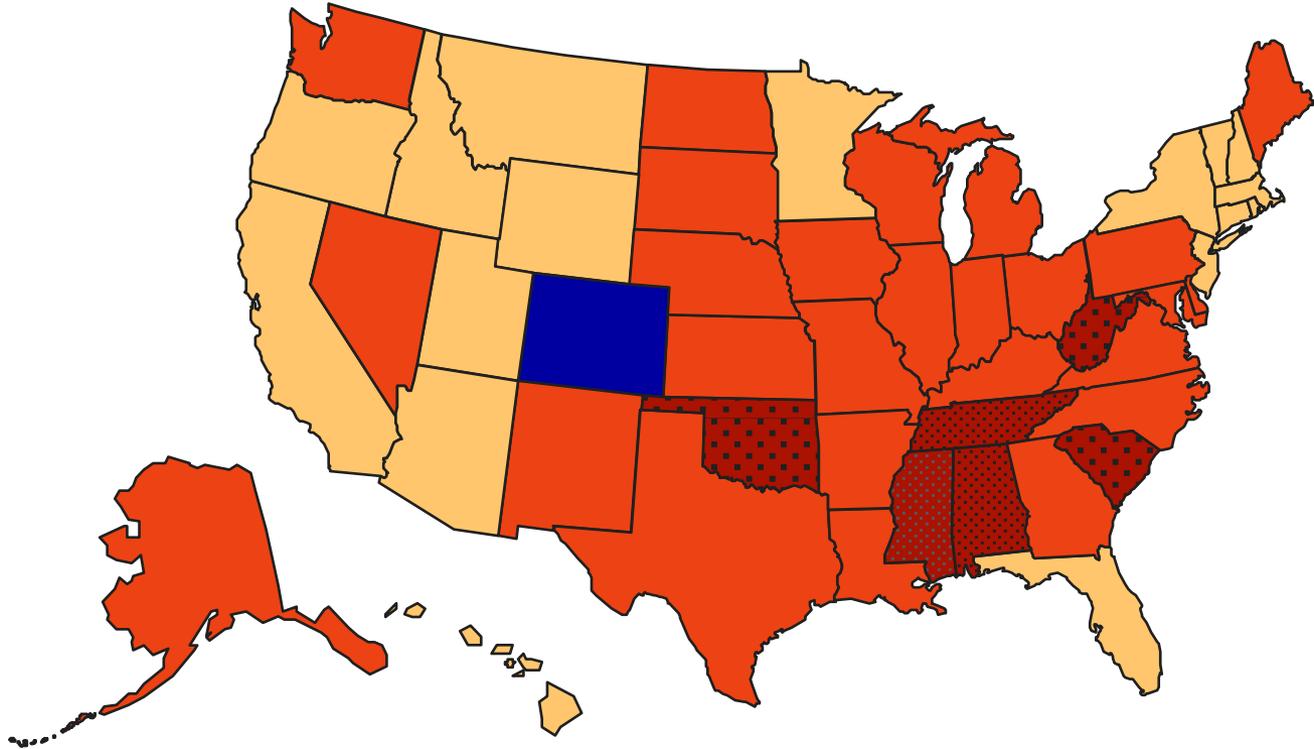
# Obesity Trends\* Among U.S. Adults 2007

(\*BMI  $\geq 30$ , or  $\sim 30$  lbs. overweight for 5' 4" person)



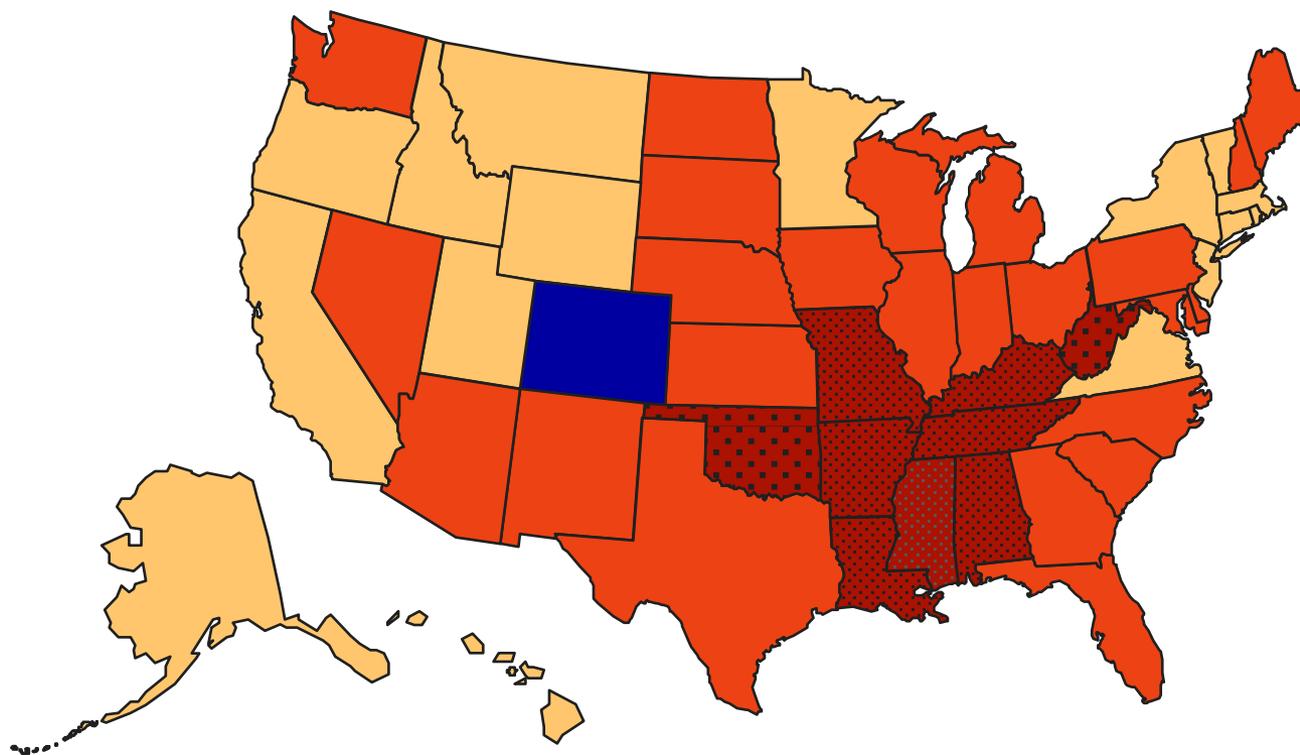
# Obesity Trends\* Among U.S. Adults 2008

(\*BMI  $\geq 30$ , or ~ 30 lbs. overweight for 5' 4" person)



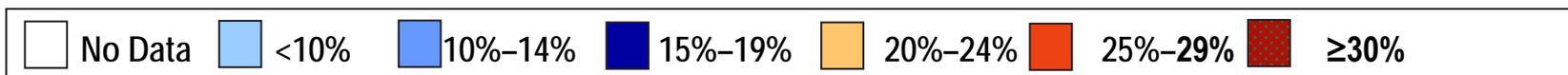
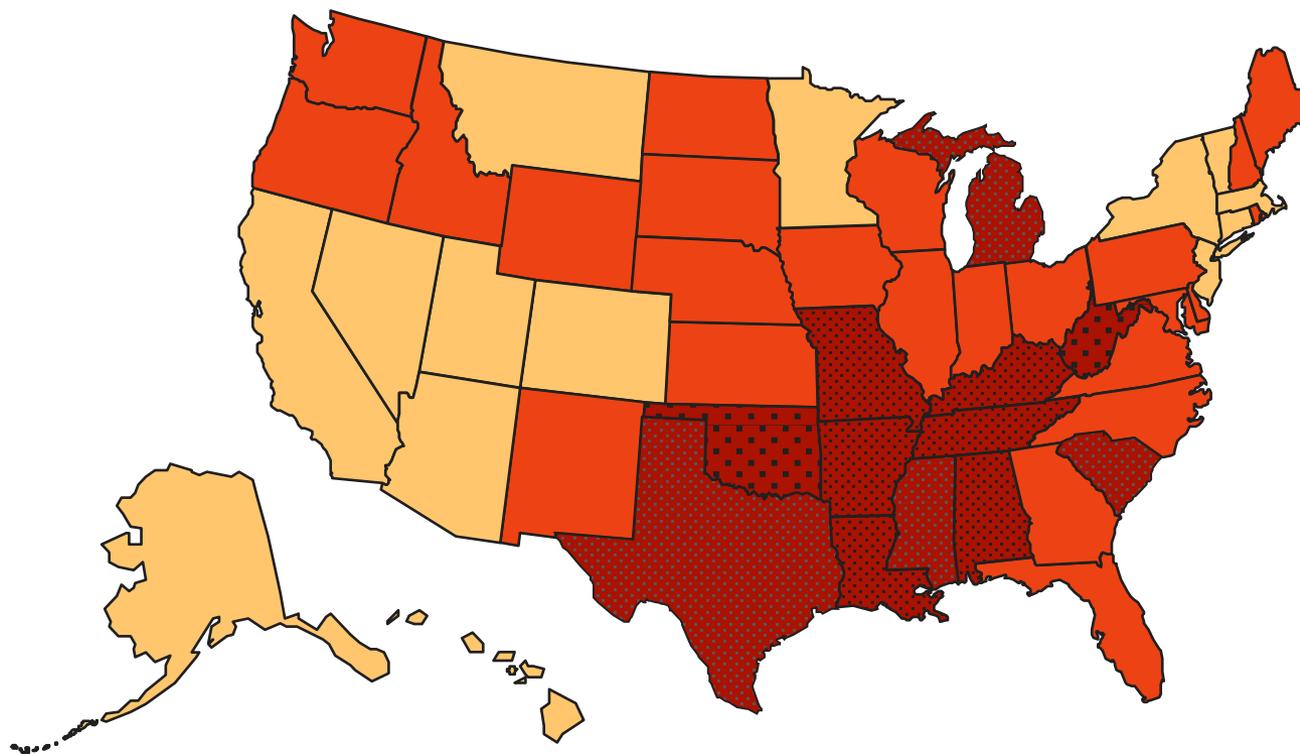
# Obesity Trends\* Among U.S. Adults 2009

(\*BMI  $\geq 30$ , or  $\sim 30$  lbs. overweight for 5' 4" person)



# Obesity Trends\* Among U.S. Adults 2010

(\*BMI  $\geq 30$ , or  $\sim 30$  lbs. overweight for 5' 4" person)



# Virginia State Health Rankings - 26

## Strengths:

- Low rate of drug deaths
- Low violent crime rate
- Low percentage of children in poverty

## Challenges:

- High prevalence of diabetes
- High infant mortality rate
- Large disparity in health status by educational attainment

## Highlights:

- In the past year, the **prevalence of smoking declined** from 20.9 percent to 19.0 percent of adults; however, nearly 1.2 million adults still smoke in Virginia.
- In the past year, the rate of **drug deaths decreased** from 9.3 to 8.0 deaths per 100,000 population.
- Although the prevalence of **obesity dropped** from 29.2 percent to 27.4 percent of adults in the past year, **obesity remains high**; more than 1.7 million adults are obese in Virginia.
- In the past 5 years, **air pollution decreased** by 35 percent from 12.6 to 9.3 micrograms of fine particulate per cubic meter.
- In the past 5 years, **public health funding decreased** by nearly 60 percent from \$111 to \$69 per person
- In the past 10 years, the **percent of children living in poverty increased** from 8.4 percent to 13.5 percent of person younger than 18 years.

28 Outcomes Rank  
18 Determinants Rank  
26 Overall Rank  
35 Diabetes Rank  
23 Smoking Rank  
24 Obesity Rank

# Virginia - 26 of 50

Category	Rank	
Violent Crimes	4	Strengths
Poor Mental Health Days	12	
Binge Drinking	17	
Poor Physical Health Days	20	
Occupational Fatalities	20	
Premature Deaths	21	
Smoking	23	Opportunities
Child Immunizations	23	
Obesity	24	
Cardiovascular Death	26	
Infectious Disease	26	
Outcomes	28	
Cancer Death	29	
Infant Mortality	35	
Diabetes	35	

# Virginia Causes of Death

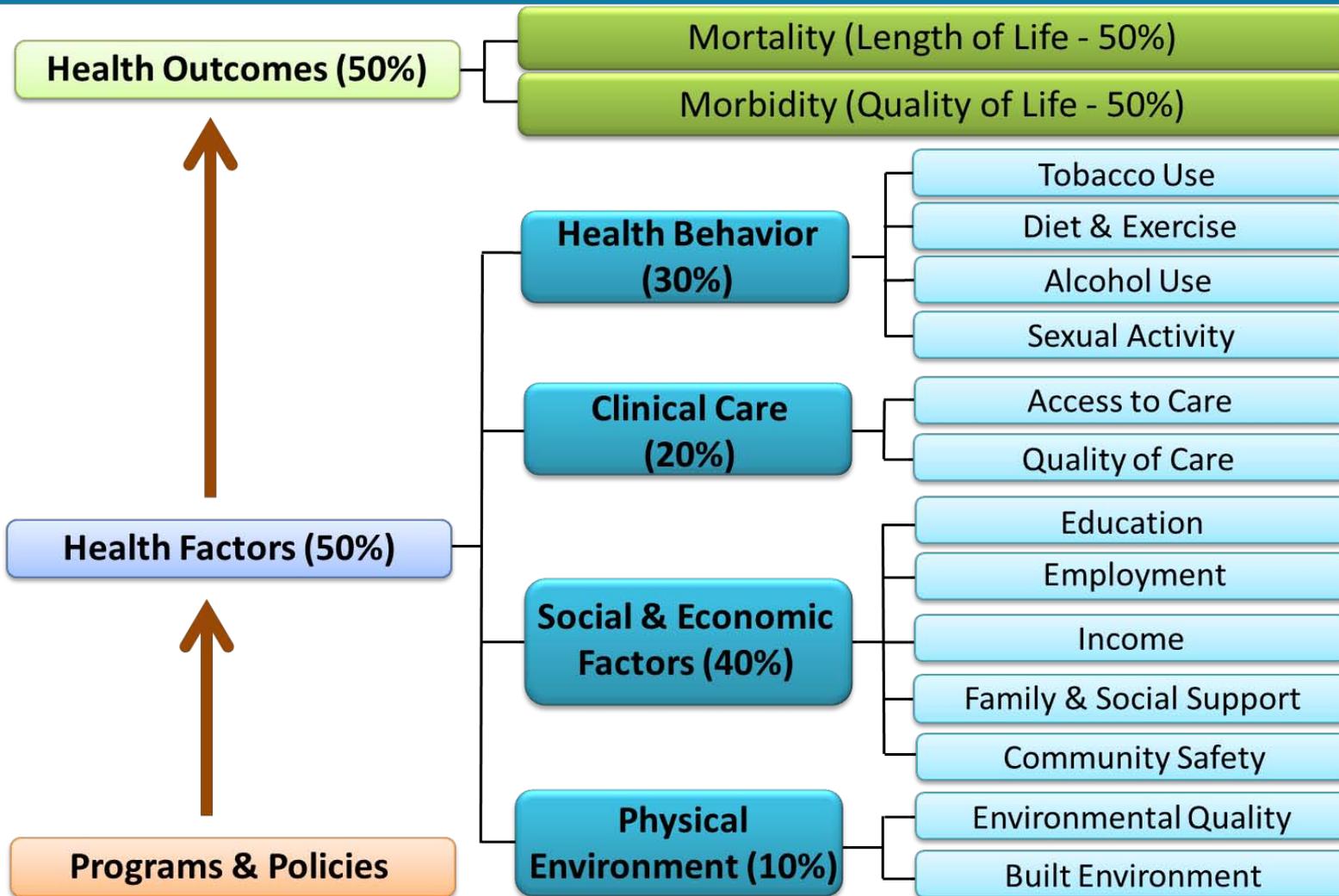
Rank	Cause	Number	Rate
1	Heart Disease	13,397	180.1
2	Cancer	14,122	173.2
3	Chronic lower respiratory disease	3,013	42.3
4	Stroke	3,244	38.9
5	Accidents	2,622	37.3
6	Alzheimer's disease	1,738	23.5
7	Diabetes	1,560	20.9
8	Influenza and Pneumonia	1,237	16.2
9	Kidney disease	1,521	14.9
10	Suicide	963	11.8

# Cancer Death Rates

- Death Rate Report for Virginia by County, death years through 2010
- Higher in Carroll and Grayson Counties
- Lower in Galax City

State/County	Met HP 2020 Objective of 160.6?	Death Rate	Average Deaths per Year over rate period	Rate Period	Recent Trend (2)	Recent Average Annual Percent Change (2) in Death Rates
Virginia	No	179.3	14,004	2006 - 2010	falling	-1.8
United States	No	176.4	566,112	2006 - 2010	falling	-1.5
Carroll County	No	183.9	79	2006 - 2010	stable	0.2
Galax City	Yes	159.7	16	2006 - 2010	falling	-2.9
Grayson County	No	183.8	45	2006 - 2010	stable	0.1

# How do we rank for health?



# Carroll, Grayson, Galax City County Rankings

Mortality (length of life): 50% Rank #79, 87, 104 out of 133

Morbidity (quality of life): 50% Rank #52, 80, 50 out of 133

**Health Outcomes**  
Rank #67, 84, 79 out of 133



**Health Factors**  
Rank #111, 103, 108 out of 133



**Programs and Policies**

**Health behaviors (30%)**  
Rank #121, 75, 83 out of 133

**Clinical care (20%)**  
Rank #105, 118, 57 out of 133

**Social & economic factors (40%)**  
Rank #101, 110, 126 out of 133

**Physical environment (10%)**  
Rank #106, 111, 36 out of 133

Adult Smoking

Diet & exercise

Alcohol use (Excessive drinking)

Sexual Activity

Access to care

Quality of care

Education

Employment

Income

Family & social support

Community safety

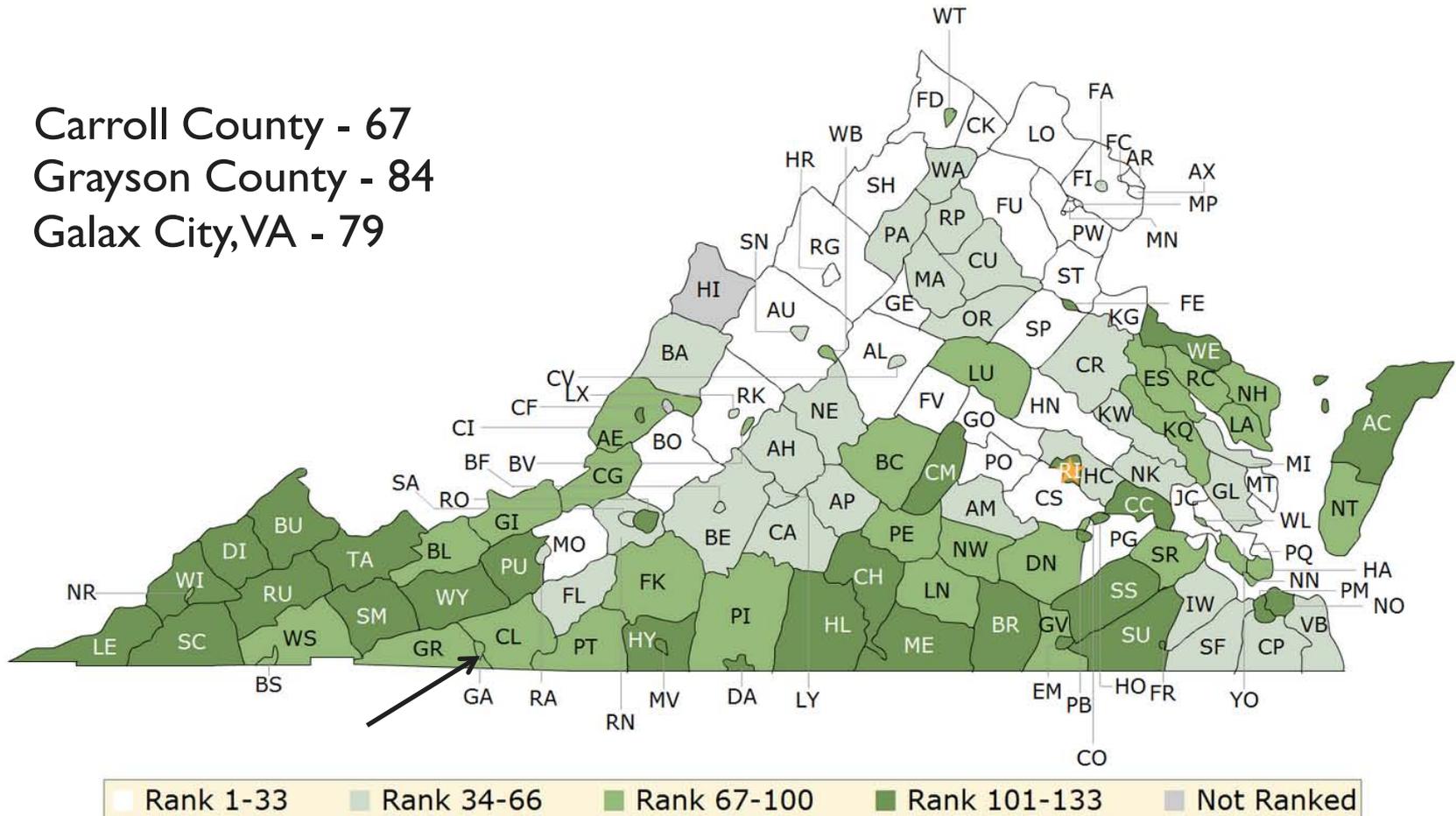
Environmental quality

Built environment

# Virginia Health Outcomes Rankins

## 2013 Health Outcomes - Virginia

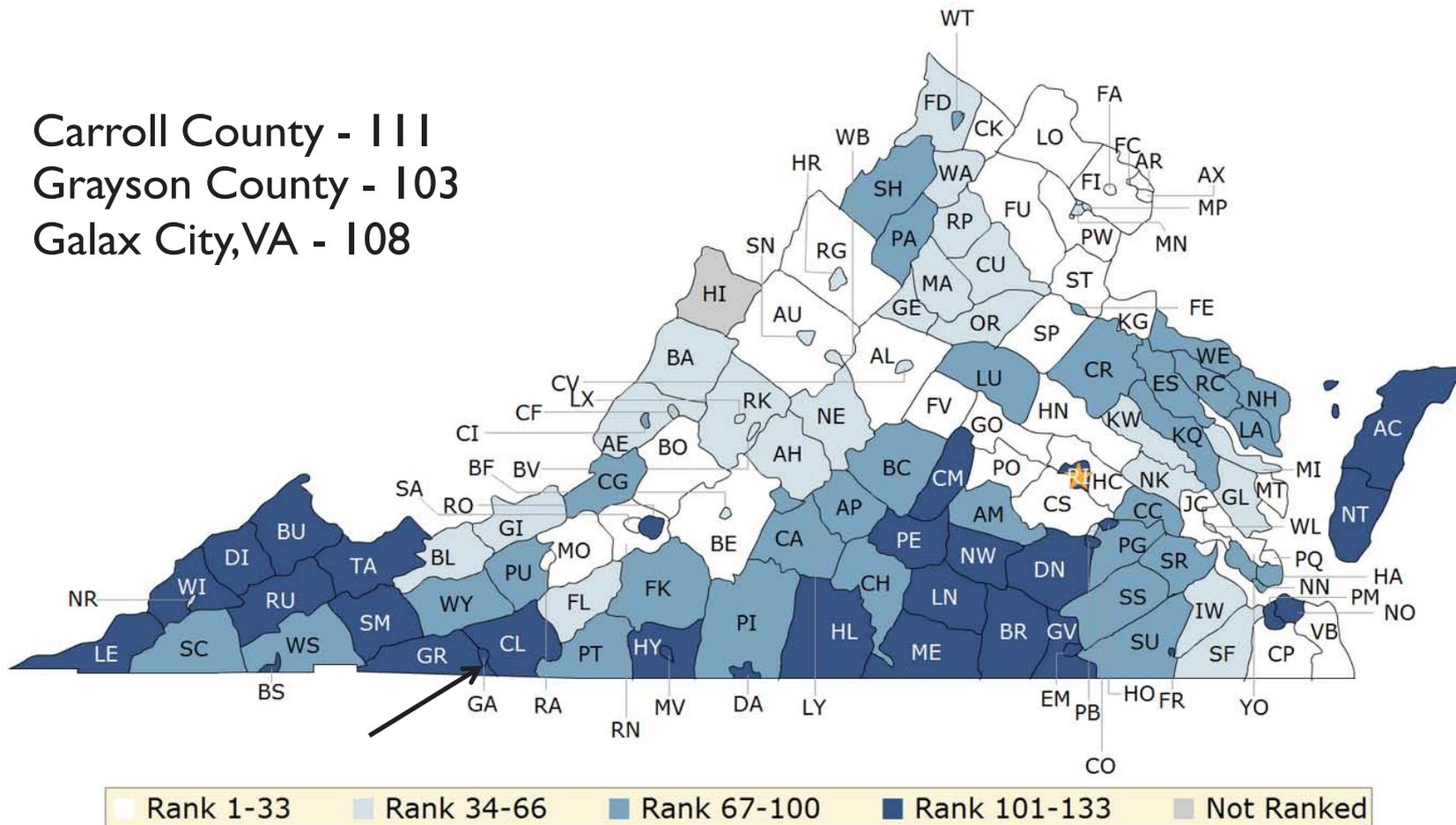
Carroll County - 67  
Grayson County - 84  
Galax City, VA - 79



# Virginia Health Factors Rankins

## 2013 Health Factors - Virginia

Carroll County - 111  
Grayson County - 103  
Galax City, VA - 108



# County Health Rankings

Rank out of 133 in Virginia and out of 100 for counties in North Carolina.

Selected Indicators	Overall Rank	Health Outcomes	Mortality	Morbidity	Health Factors	Health Behaviors	Clinical Care	Social & Economic Factors	Physical Environment
Carroll	89	67	79	52	111	121	105	101	106
Grayson	94	84	87	80	103	75	118	110	111
Galax City	94	79	104	50	108	83	57	126	36
Smyth	111	113	112	121	109	88	104	112	127
Wythe	97	106	96	114	87	85	96	80	95
Pulaski	106	119	114	125	93	93	86	81	117
Floyd	53	53	69	34	52	46	84	46	102
Patrick	88	83	83	81	92	82	112	88	83
Washington	82	96	89	98	68	63	73	51	126
Ashe*	45	42	31	58	47	23	81	67	25
Alleghany*	67	79	67	84	54	59	88	54	1
Surry*	56	61	66	50	51	56	74	46	31

\* Ashe, Alleghany, and Surry Counties are located in North Carolina

Health Factors: health behaviors, clinical care, social and economic, and the physical environment.

Health Outcomes: how long people live (mortality) and how healthy people feel and low birth weight babies (morbidity).

# County Health Rankings Measures

Selected Indicators	Low	Adult	Adult	Physical	Teen			HS	Un-	Daily Fine	Fast Food
	Birthweight	Smoking	Obesity	Inactivity	Birth Rate per 1,000 female population, ages 15-19	Diabetes	Uninsured	Graduation	Employmnt	Part. Matter	Restaurants
Carroll	6.6%	33.8%	30.6%	30.4%	45.4	12.0%	20.3%	89.0%	9.3%	12.7	45.0%
Grayson	8.1%	23.7%	28.5%	28.5%	47.1	12.0%	19.6%	85.0%	10.3%	12.8	27.3%
Galax City	7.4%	0.0%	29.0%	26.0%	88.7	11.0%	20.4%	88.0%	10.1%	12.8	40.0%
Smyth	9.3%	23.8%	32.3%	24.6%	55.4	10.0%	16.4%	88.0%	9.7%	12.7	59.0%
Wythe	9.4%	28.3%	28.9%	25.9%	44.5	11.0%	18.6%	87.0%	7.8%	12.7	49.0%
Pulaski	9.5%	32.7%	26.6%	24.7%	50.1	11.0%	15.9%	87.0%	7.0%	12.6	66.7%
Floyd	6.8%	0.0%	27.5%	24.7%	29.6	11.0%	20.3%	92.0%	6.8%	12.6	40.0%
Patrick	8.3%	22.5%	29.9%	26.7%	36.5	12.0%	19.3%	94.0%	9.5%	12.6	40.9%
Washington	8.5%	25.2%	27.4%	29.9%	43.7	12.0%	16.8%	91.0%	7.9%	12.9	51.5%
Ashe*	8.5%	24.4%	23.0%	26.3%	56.6	9.0%	23.0%	80.0%	12.2%	13.0	41.5%
Alleghany*	9.2%	27.9%	25.0%	29.9%	57.2	11.0%	30.1%	86.0%	12.4%	12.9	29.4%
Surry*	8.3%	26.5%	31.4%	27.9%	49.3	13.0%	22.0%	85.0%	11.3%	12.8	45.5%

\* Ashe, Alleghany, and Surry Counties are located in North Carolina

Health Factors: health behaviors, clinical care, social and economic, and the physical environment. Health Outcomes: how long people live (mortality) and how healthy people feel and low birthweight babies (morbidity).

# County Health Rankings Trend

Carroll County						
Category	2010	2011	2012	2013	Rank Change	
Health Outcomes Rank	84	77	79	67	17	★
Health Factors Rank	118	111	102	111	7	★
Health Behaviors Rank	130	127	117	121	9	★
Clinical Care Rank	85	54	73	105	-20	★
Category	2010	2011	2012	2013	% Change	
Mentally Unhealthy Days	5	4.4	4.3	3.7	-26.0%	★
Premature Death Rates YPLL	425	416	429	458	7.8%	★
% Smokers	36.8%	37.4%	33.2%	33.8%	-8.2%	★
% Adult Obese	31.7%	29.9%	30.6%	30.6%	-3.5%	★
Teen Birth Rate	50.5%	56.6%	49.7%	45.4%	-10.1%	★
% Uninsured	16.8%	22.2%	18.1%	20.3%	20.8%	★
% Diabetics	N/A	12.0%	12.0%	12.0%	N/A	
Violent Crime Rate	191	200.1	159.7	134.8	-29.4%	★

# County Health Rankings Trend

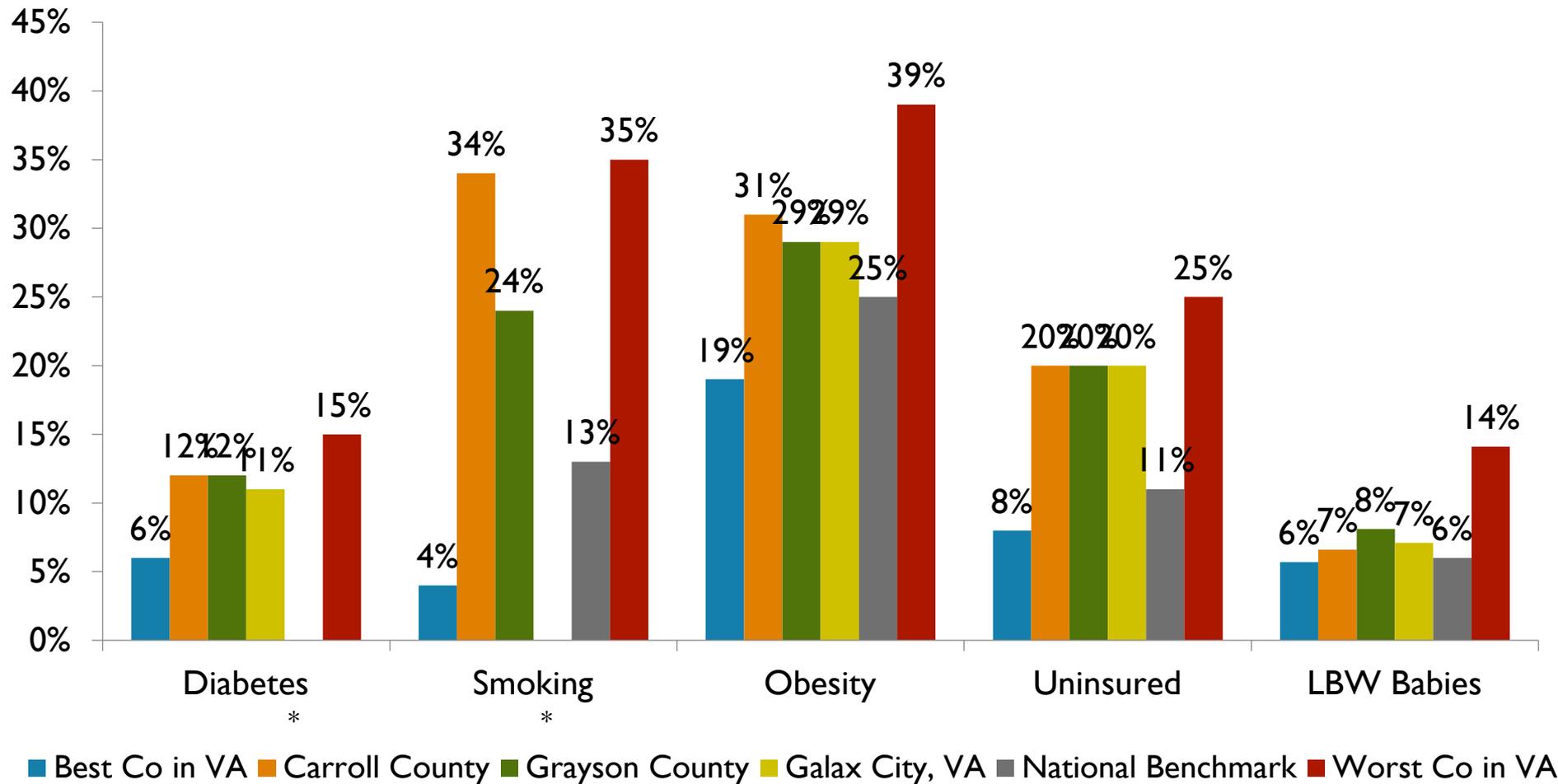
Grayson County						
Category	2010	2011	2012	2013	Rank Change	
Health Outcomes Rank	87	90	73	84	3	★
Health Factors Rank	75	75	95	103	-28	★
Health Behaviors Rank	32	47	62	75	-43	★
Clinical Care Rank	92	35	119	118	-26	★
Category	2010	2011	2012	2013	% Change	
Mentally Unhealthy Days	3.6	4	4.3	4.7	30.6%	★
Premature Death Rates YPLL	278	277	255	256	-7.9%	★
% Smokers	N/A	N/A	N/A	23.7	N/A	★
% Adult Obese	24.9	26.6	28.5	28.5	14.5%	★
Teen Birth Rate	47.7	56.5	50.6	47.1	-1.3%	★
% Uninsured	17	20.2	18.3	19.6	15.3%	★
% Diabetics	N/A	11.6	12	12	N/A	
Violent Crime Rate	126.1	130.8	137.9	152	20.5%	★

# County Health Rankings Trend

Galax City, VA					
Category	2011	2012	2013	Rank Change	
Health Outcomes Rank	76	84	79	-3	★
Health Factors Rank	98	105	108	-10	★
Health Behaviors Rank	63	70	83	-20	★
Clinical Care Rank	113	107	57	56	★
Category	2011	2012	2013	% Change	
Mentally Unhealthy Days	N/A	N/A	N/A	N/A	
Premature Death Rates YPLL	118	124	110	-6.8%	★
% Smokers	N/A	N/A	N/A	N/A	
% Adult Obese	26.4	29	29	9.8%	★
Teen Birth Rate	110.3	91.8	88.7	-19.6%	★
% Uninsured	23.3	19.8	20.4	-12.4%	★
% Diabetics	10.7	10.5	10.5	-1.9%	★
Violent Crime Rate	391.4	424.3	421	7.6%	★

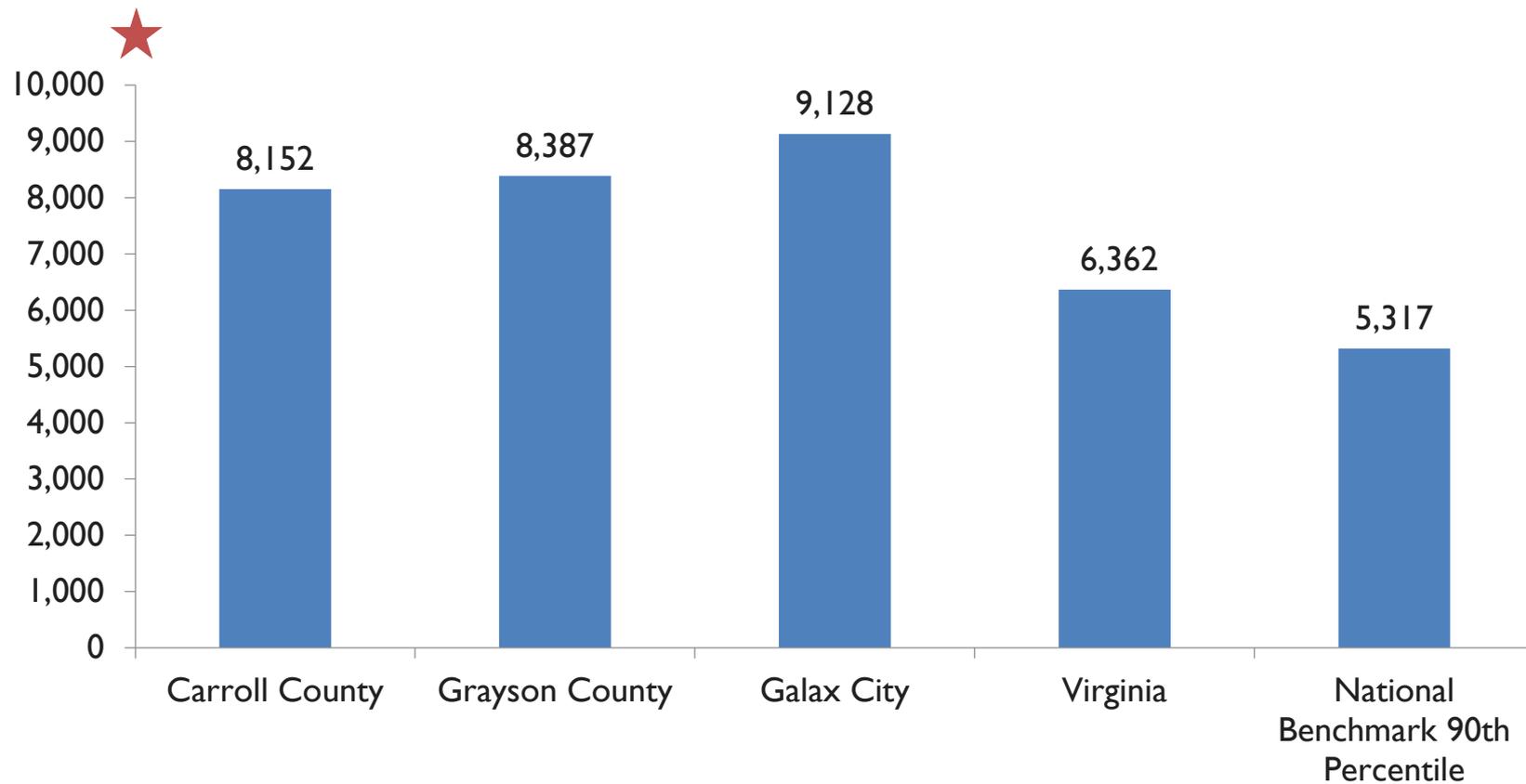
\*2010 data was not available

# County Rankings Compared to VA and US



\*No data available for specific health factor

# Mortality – Carroll-79, Grayson-87, Galax-104

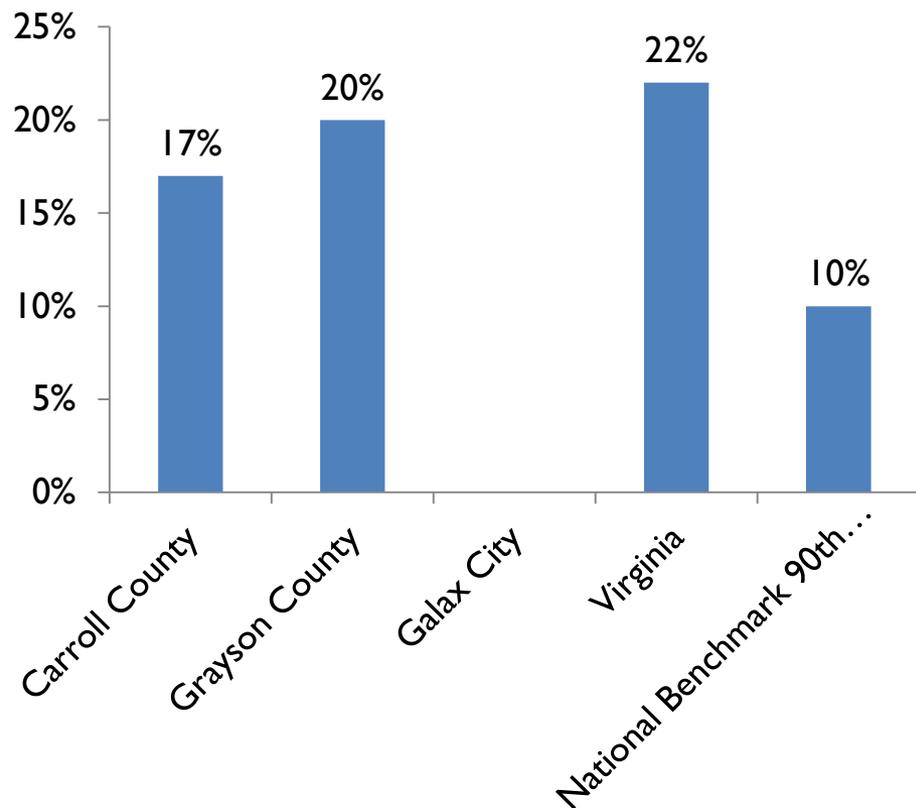


Years of potential life lost before age 75 per 100,000 population (age-adjusted)

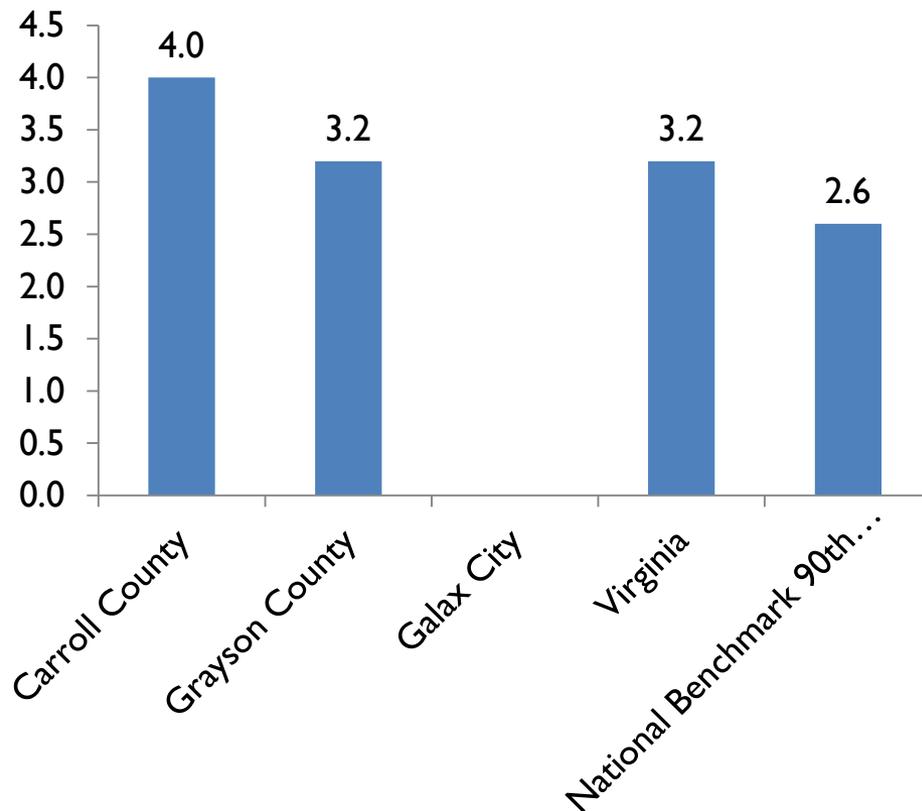
# Morbidity – 52, 80, 50



Poor or fair health (% reporting age-adjusted)



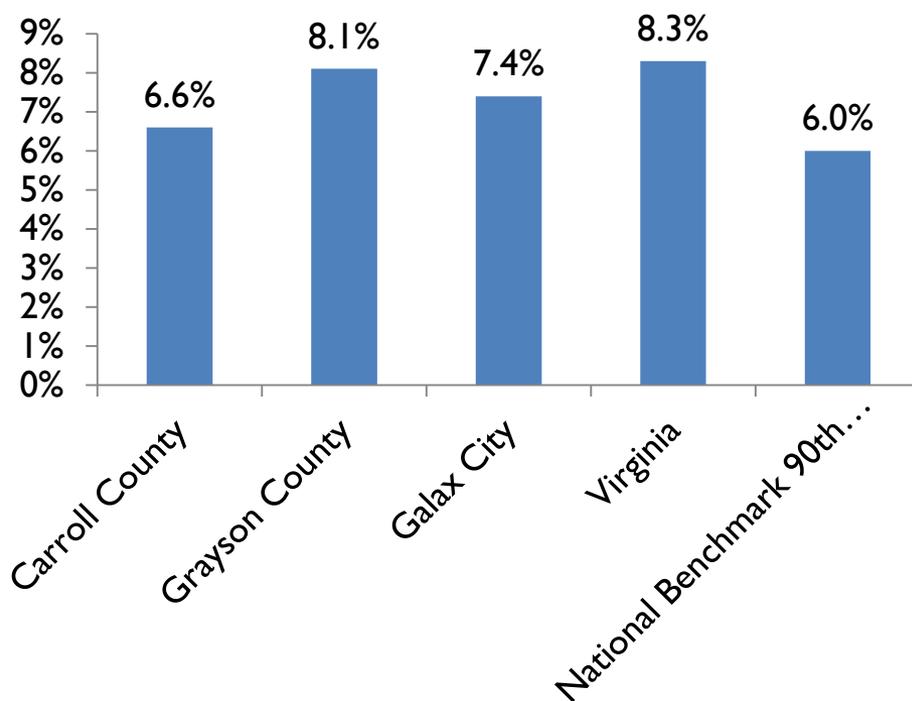
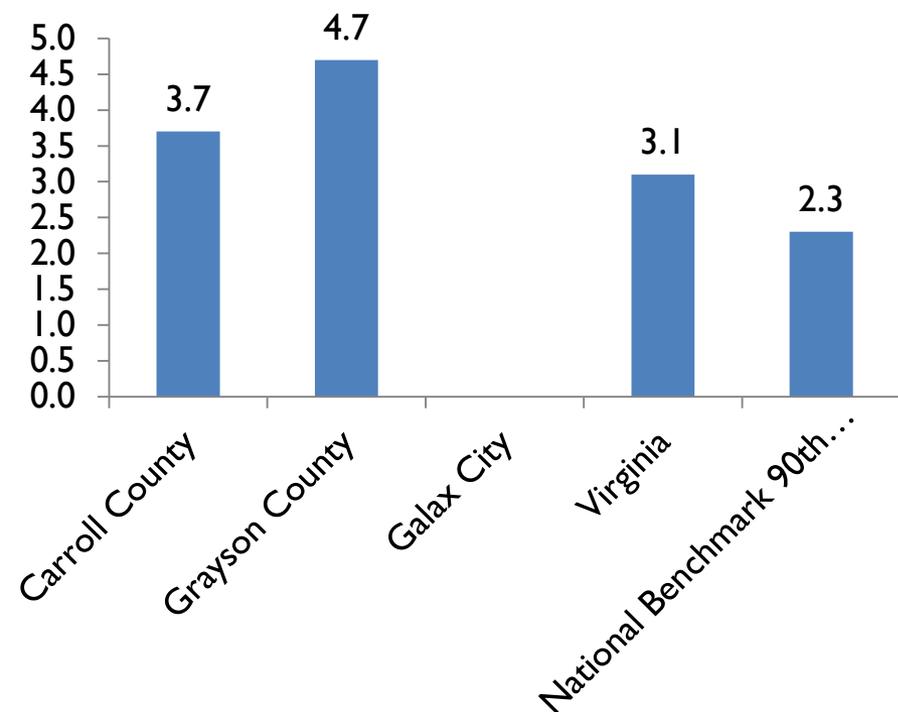
Poor physical health days (Avg # of days past 30 days)



# Morbidity Cont.

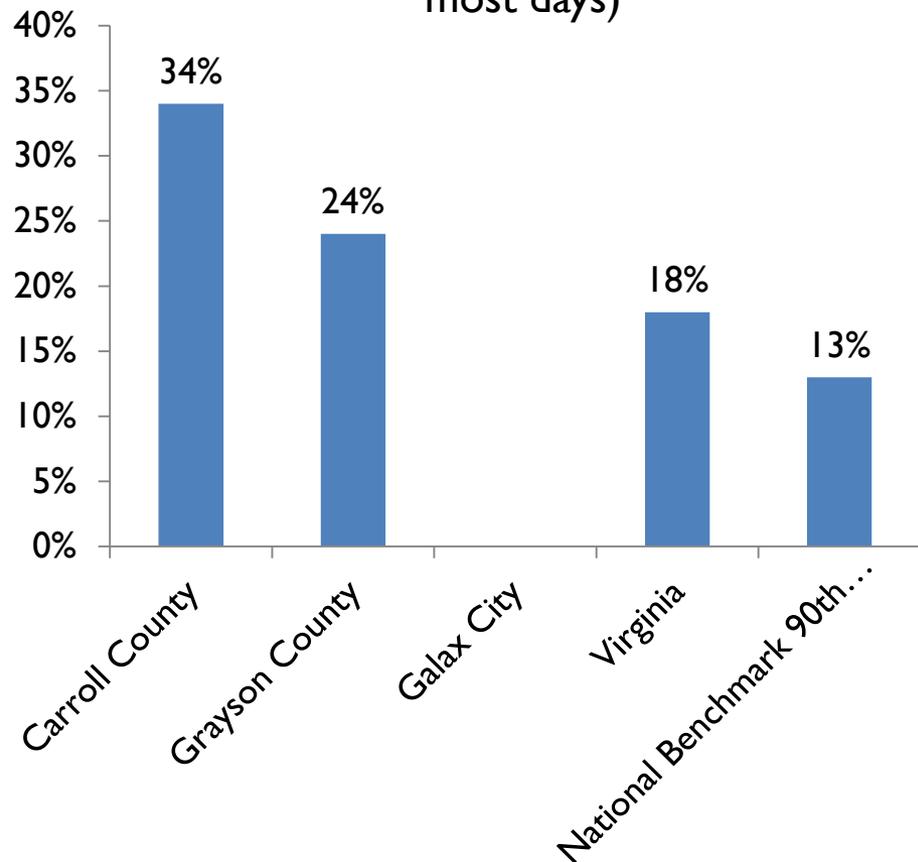
★ Poor mental health days (Avg # of days past 30 days)

★ Low birthweight (% of live births with birthweight <2500 grams)

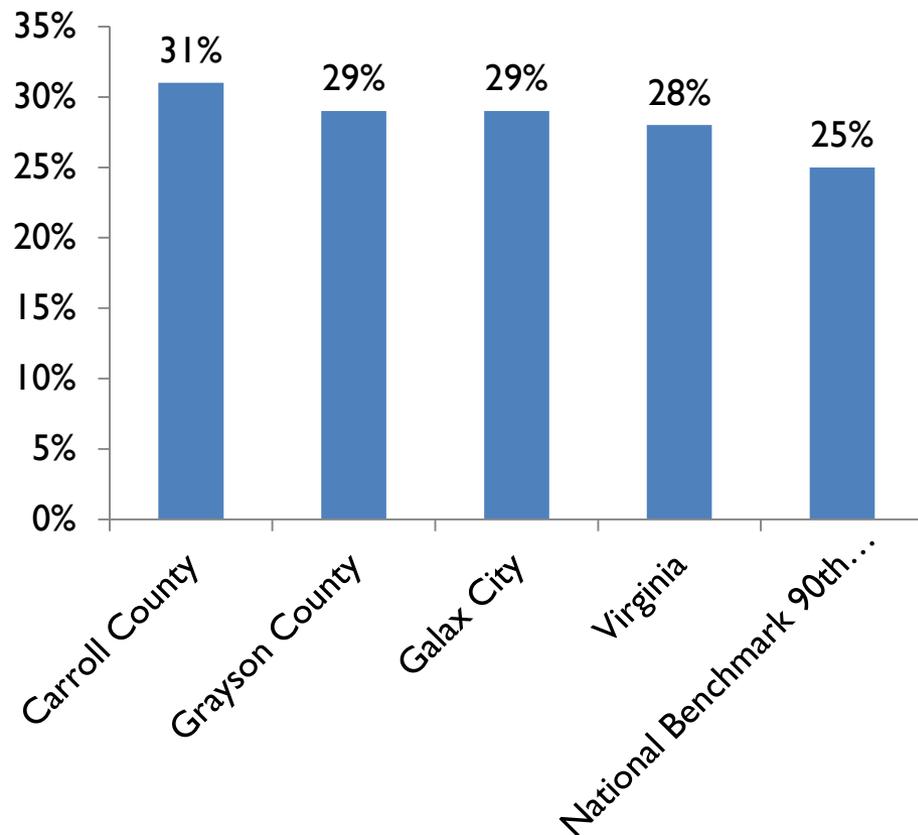


# Health Behaviors – 121, 75, 83

★ Adult smoking (smokes every day or most days)

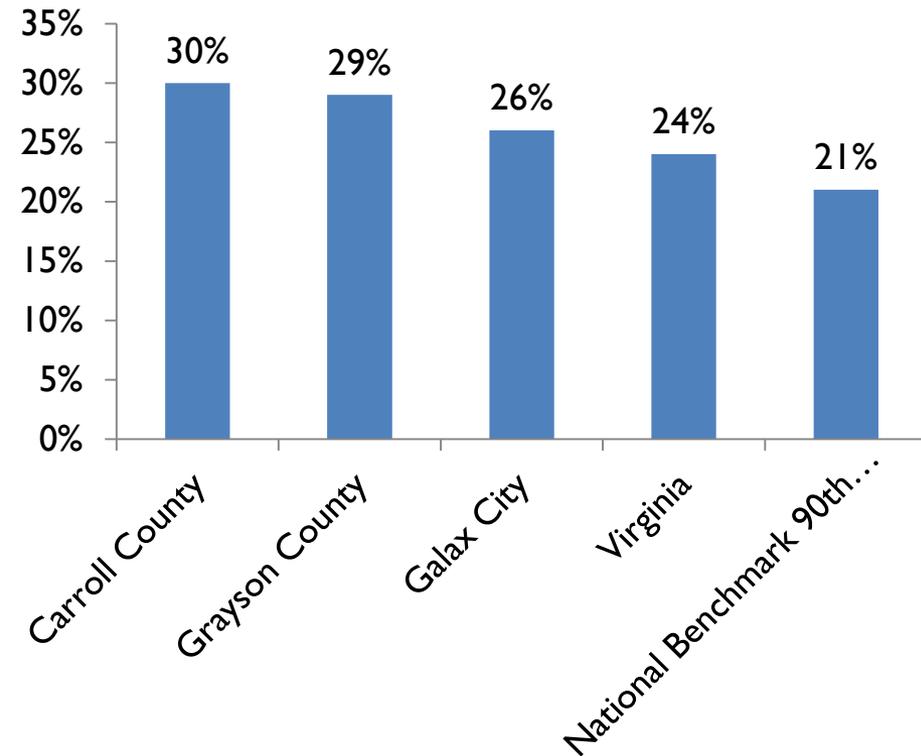


★ Adult obesity (BMI  $\geq 30$ )

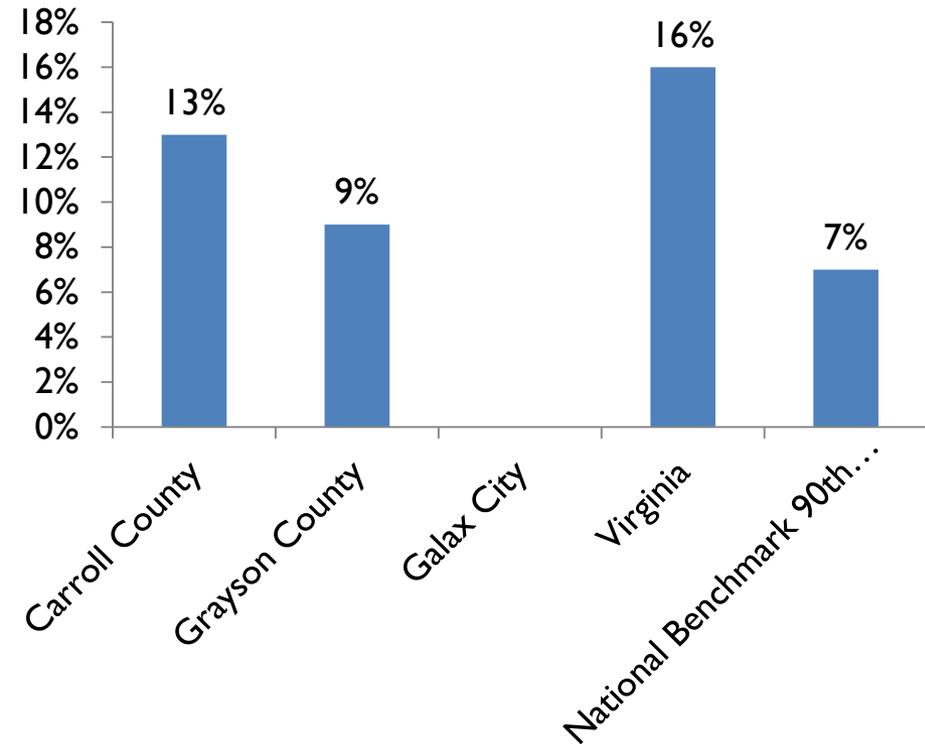


# Health Behaviors Cont.

★ Physical inactivity (% 20 yo and older reporting no leisure time physical activity)

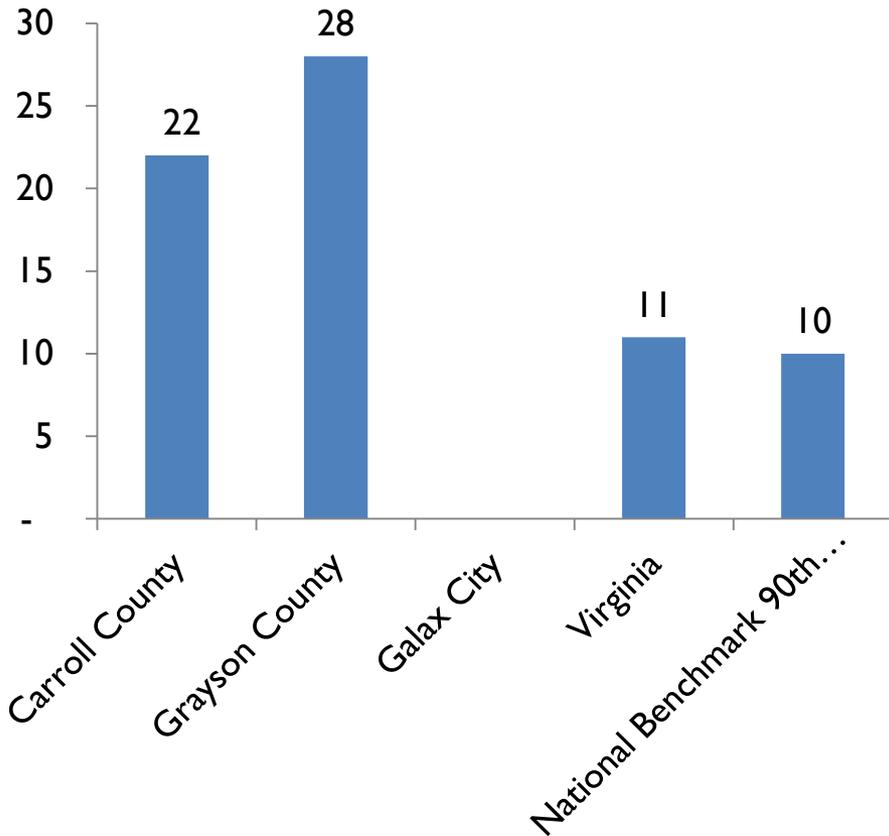


★ Excessive drinking

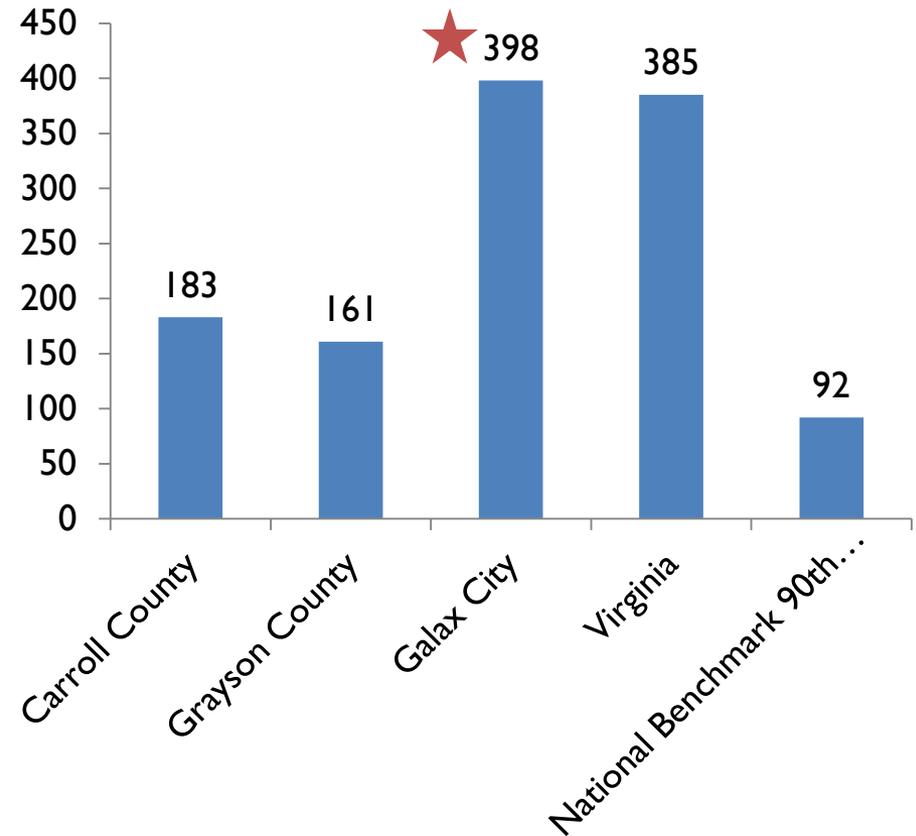


# Health Behaviors Cont.

★ Motor vehicle crash death rate (crude mortality per 100,000 pop)

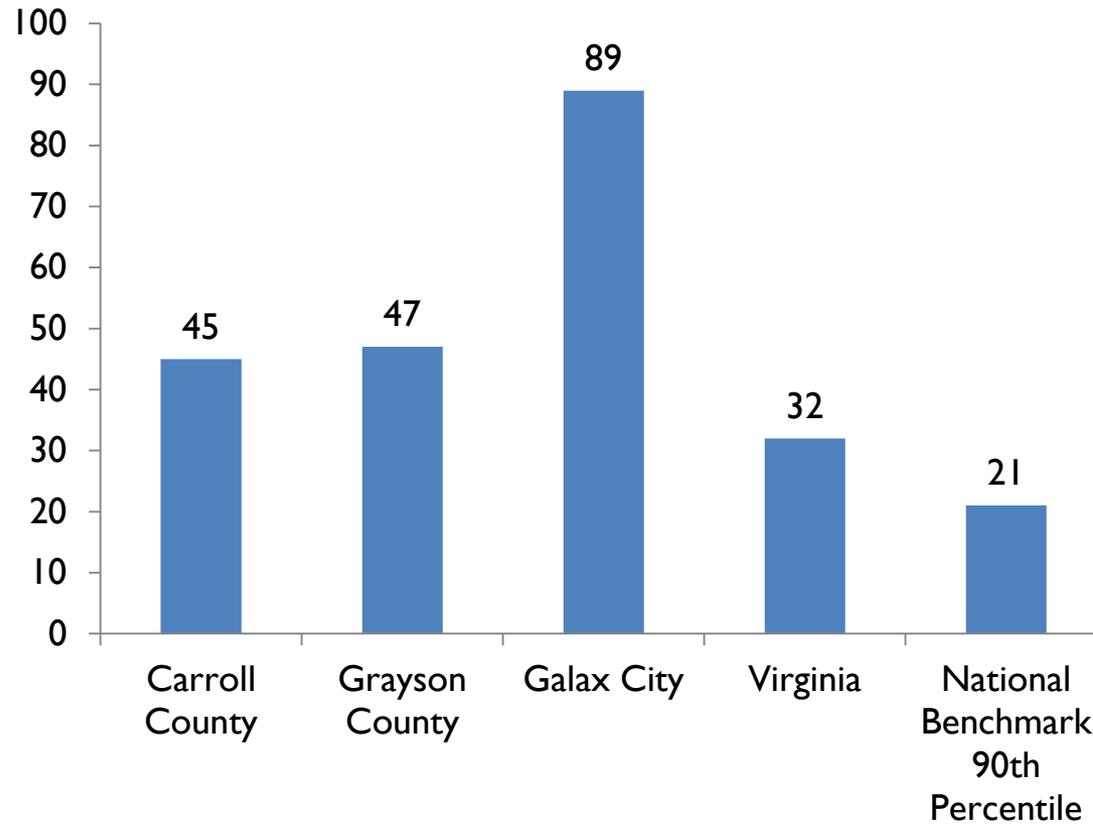


★ Sexually transmitted infections (Chlamydia rate per 100,000 pop)



# Health Behaviors Cont.

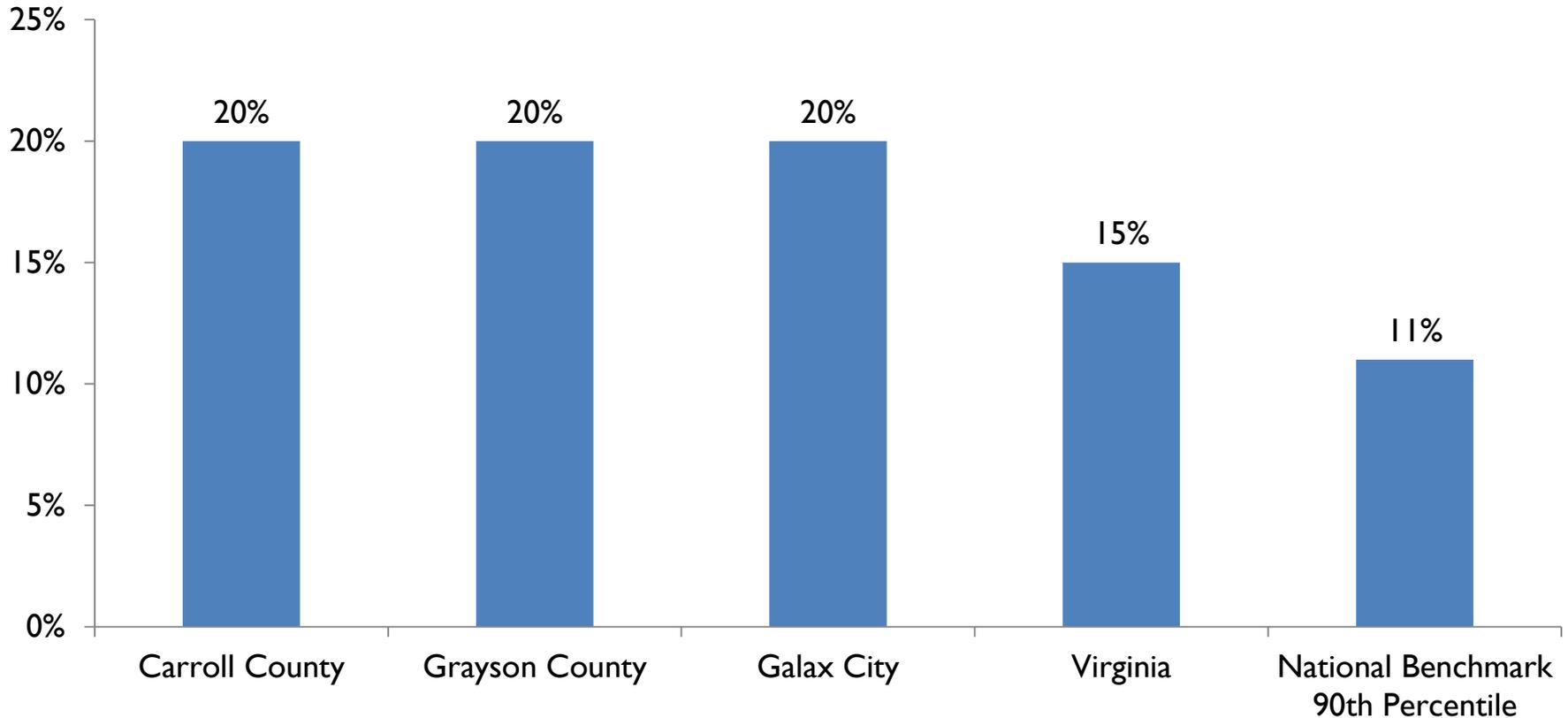
★ Teen birth rate (ages 15-19 per 1,000 female pop)



# Clinical Care – 105, 118, 57



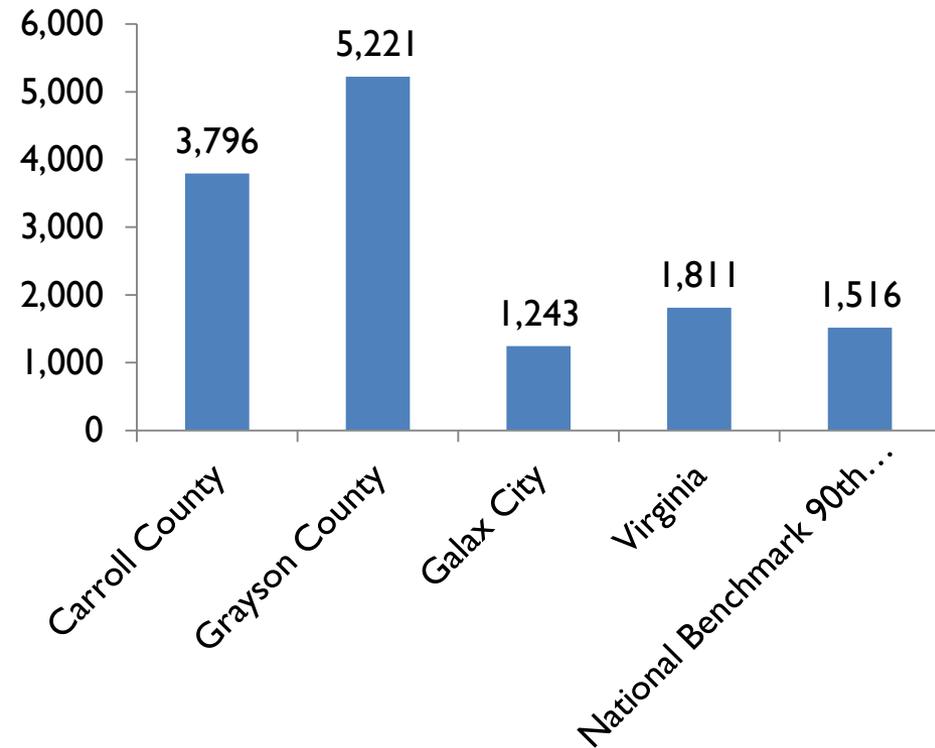
Uninsured (%<65 w/o health insurance)



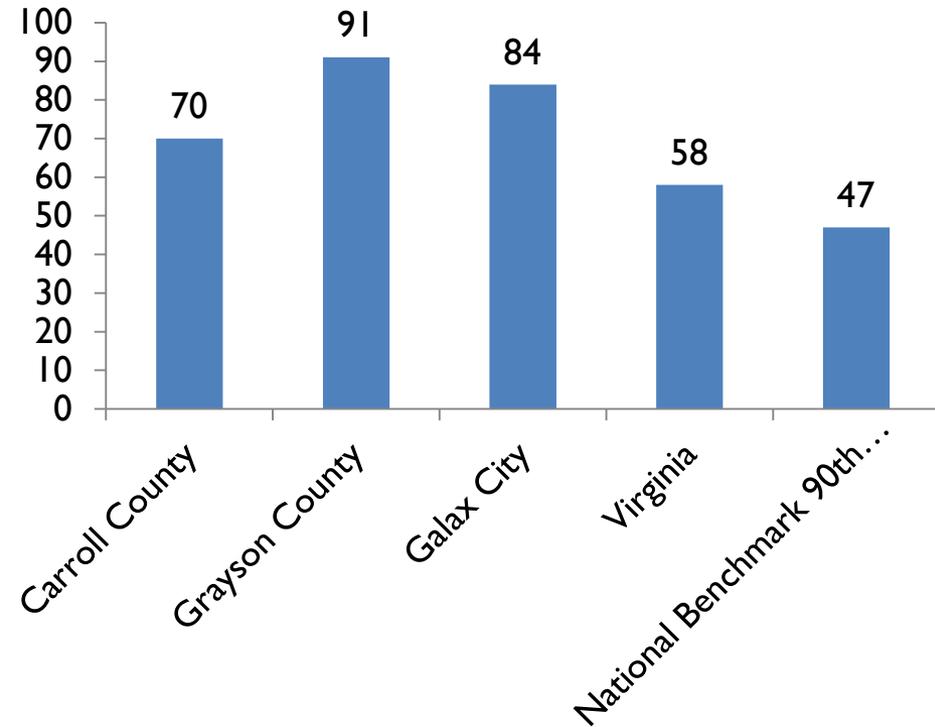
# Clinical Care Cont.



Dentists (Pop per Dentist)



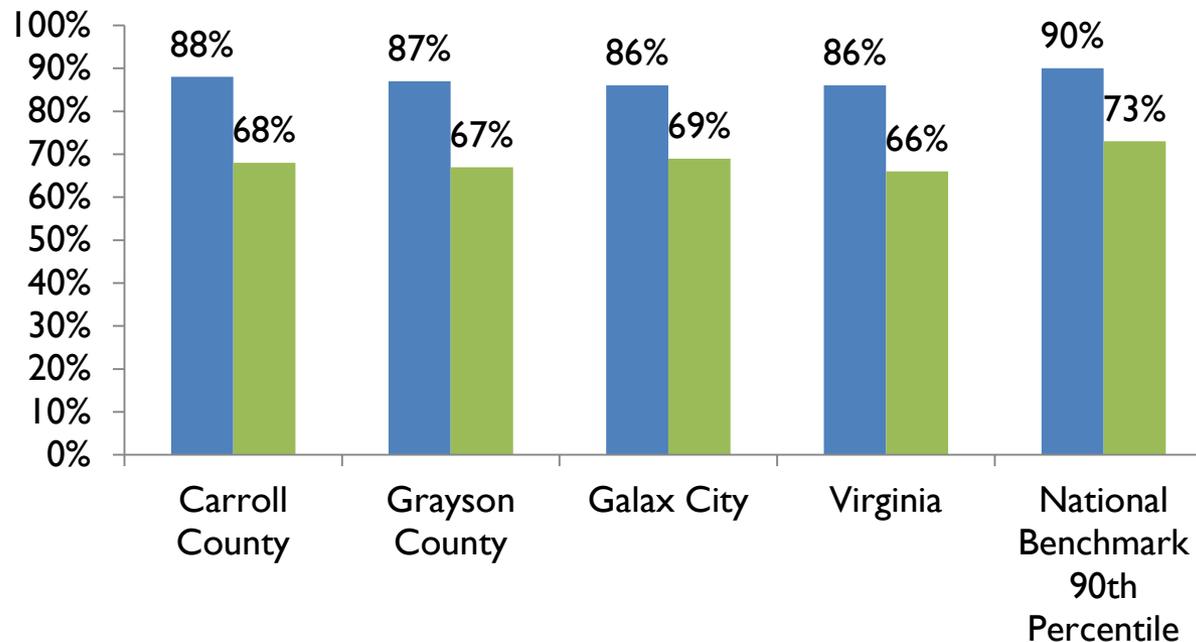
Preventable hospital stays  
(Hospitalization rate for ambulatory-sensitive conditions per 1,000 Medicare enrollees)



# Clinical Care Cont.

★ ■ Diabetic screening (%diabetic Medicare enrollees receiving HbA1c screening)

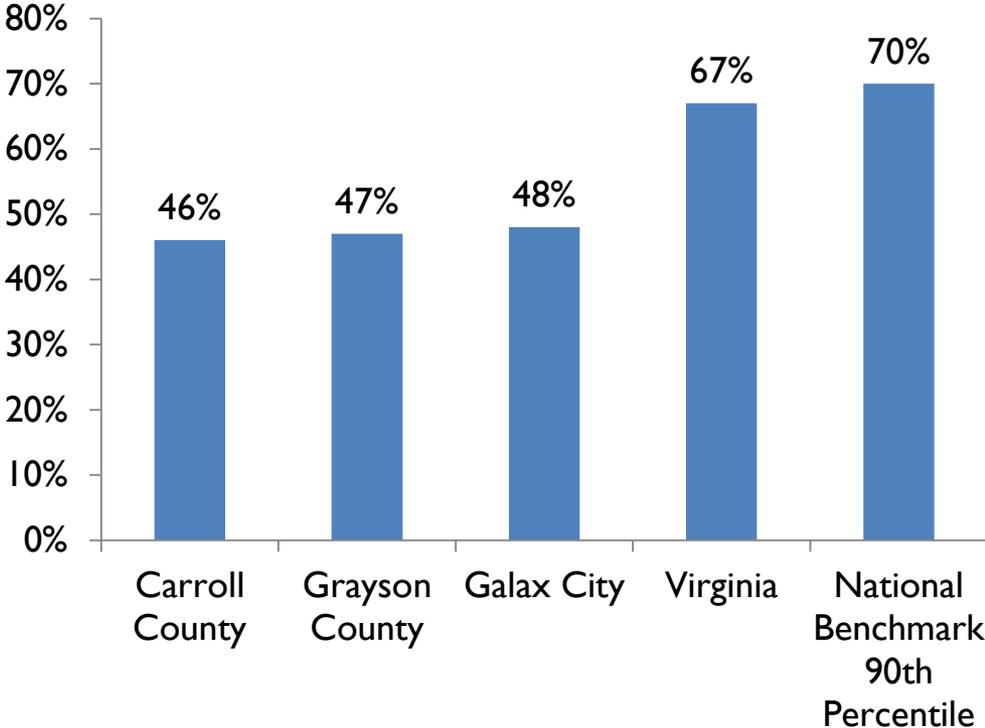
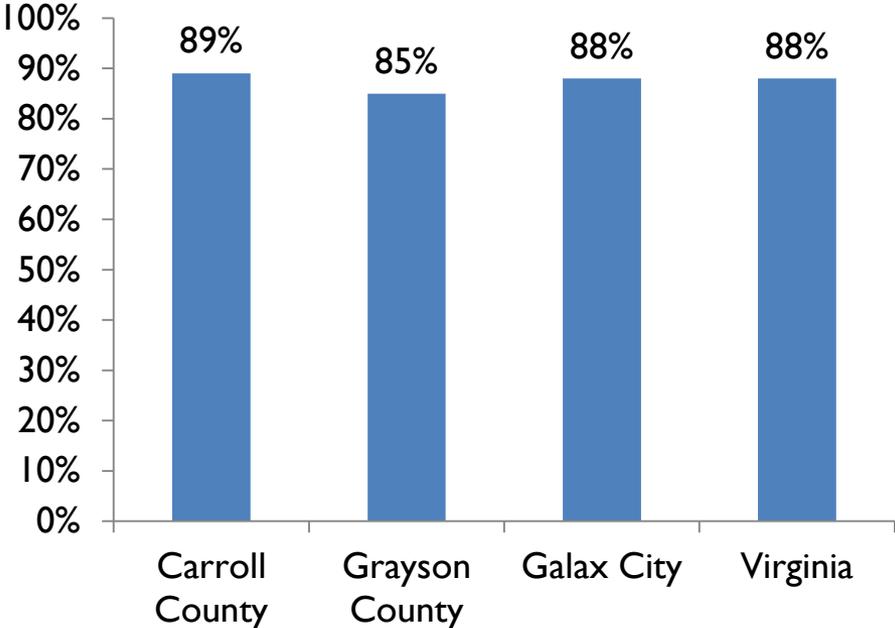
★ ■ Mammography screening (%female Medicare enrollees receiving mammo screening)



# Social & Economic Factors – 101, 110, 126

★ High school graduation (% of 9th grade cohort graduating in 4 yrs)

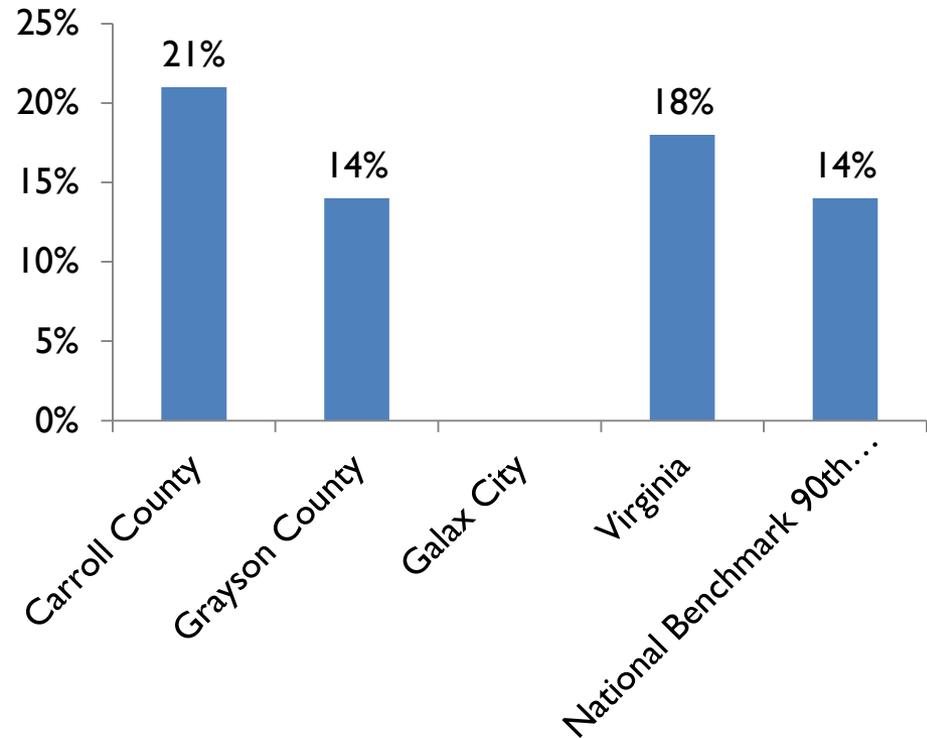
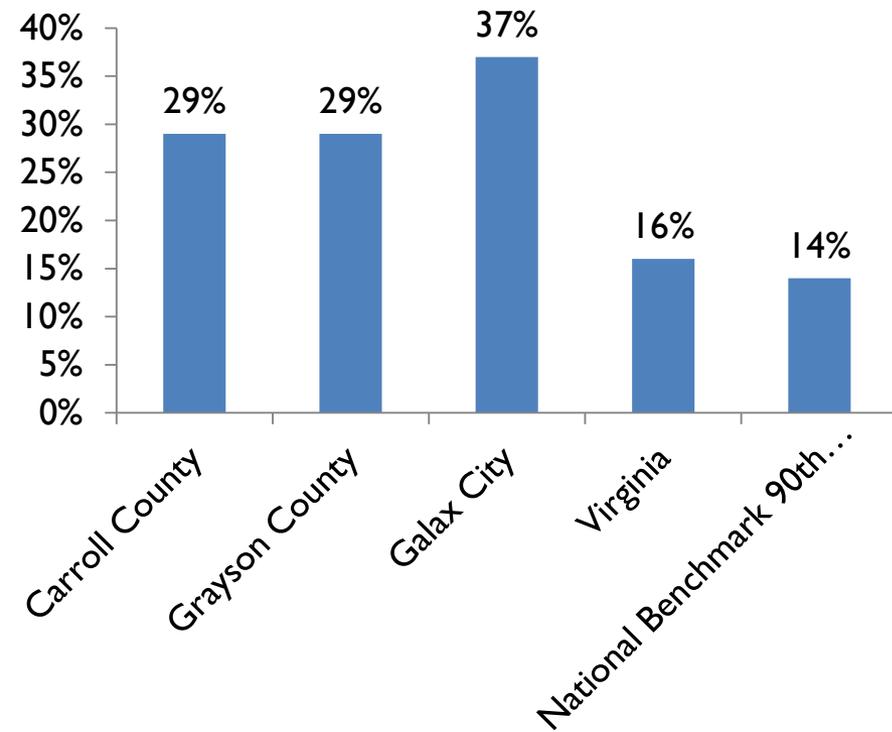
★ Some college (% of adults 35-44 w/ some postsecondary ed)



# Social & Economic Factors Cont.

★ Children in poverty (% under age 18 in poverty)

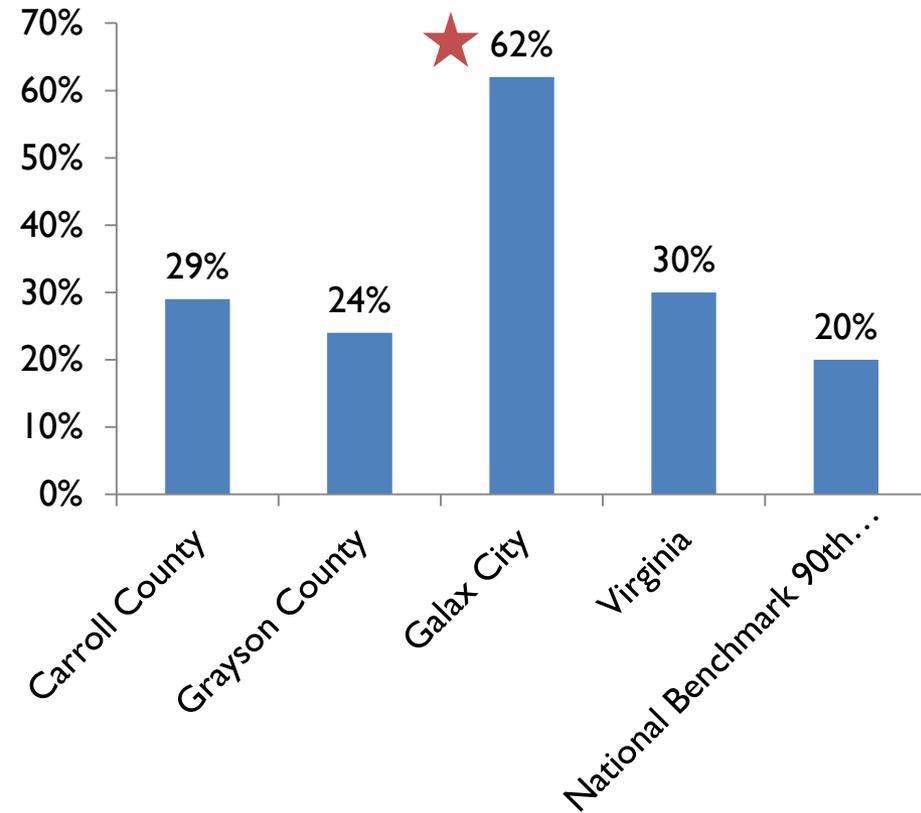
★ ★ Inadequate Social Support



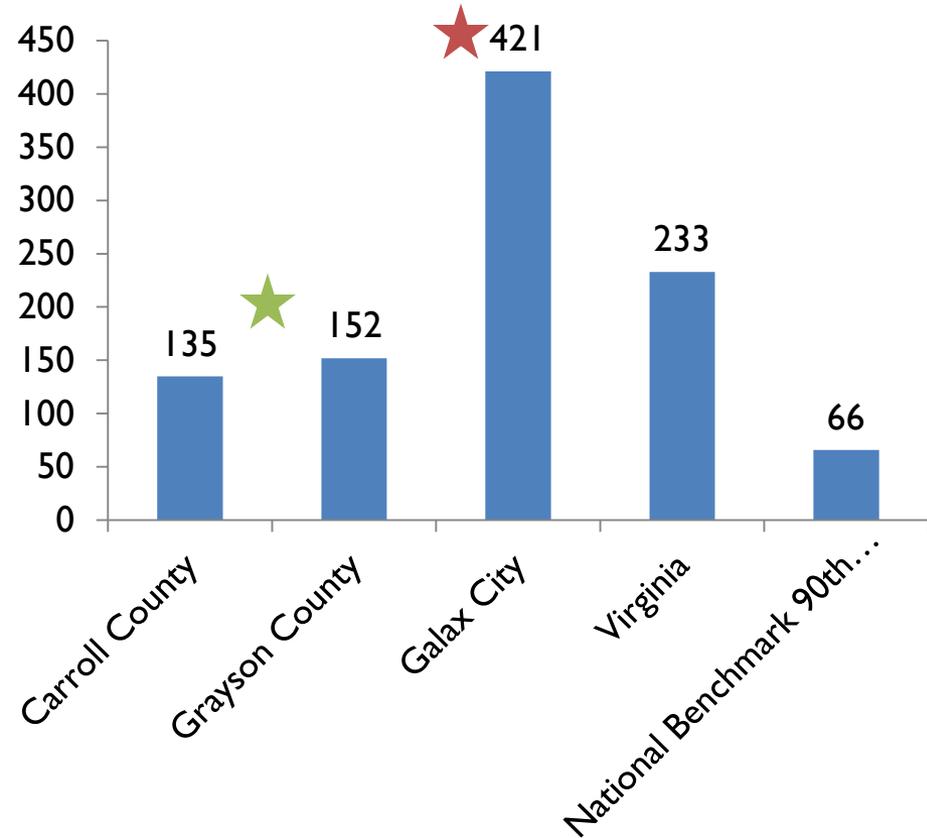
# Social & Economic Factors Cont.



## Children in single-parent households

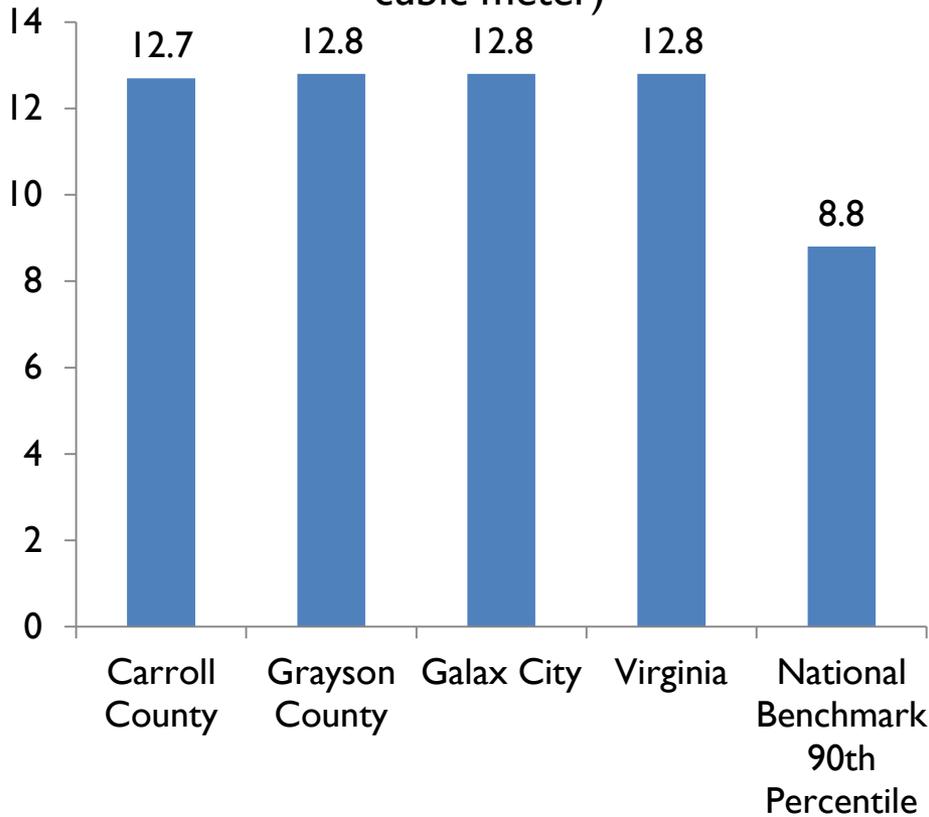


## Violent Crime Rate

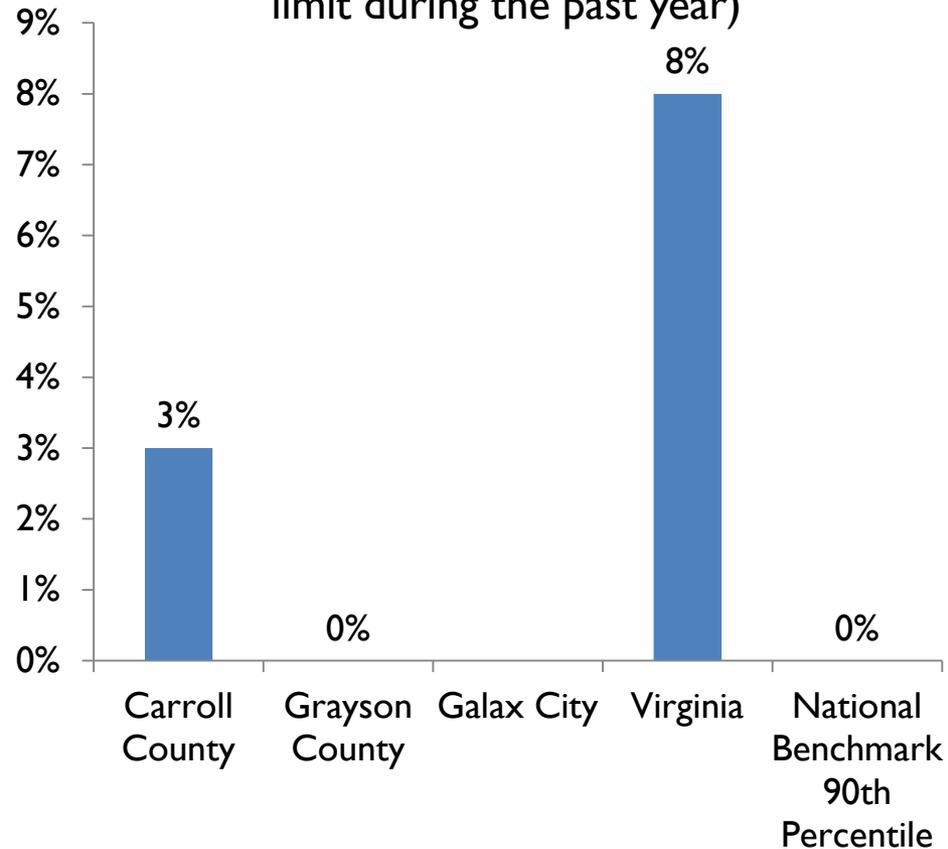


# Physical Environment – 106, 111, 36

★ Daily fine particulate matter (Avg daily measure of matter in micrograms per cubic meter)

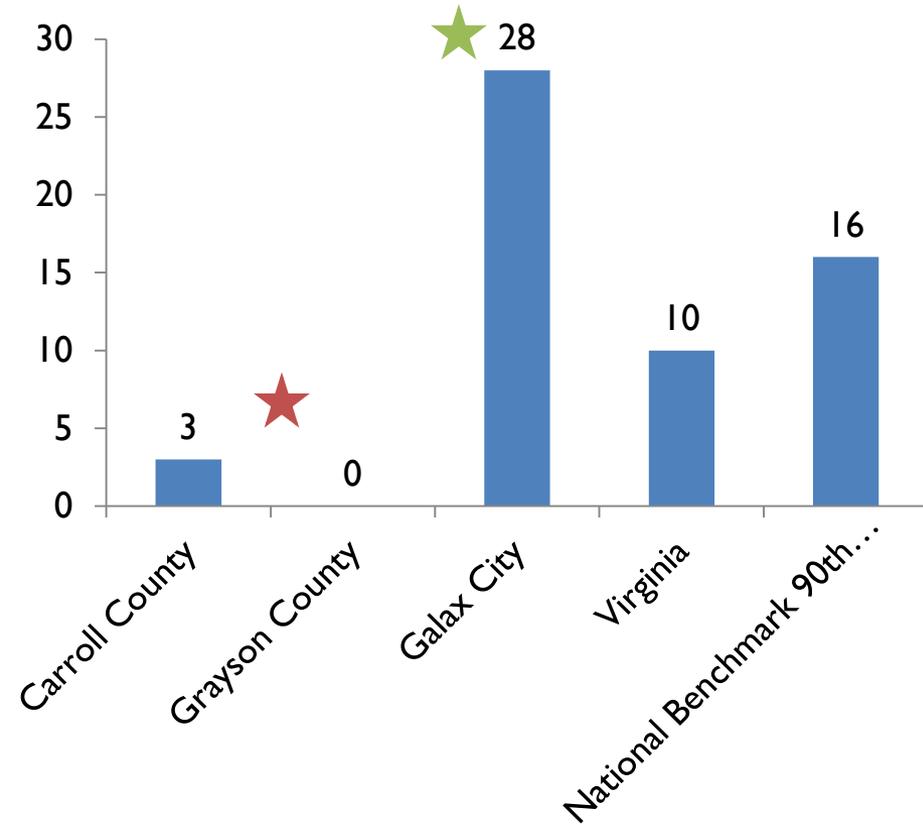


★ Drinking water safety (% of pop exposed to wager exceeding a violation limit during the past year)



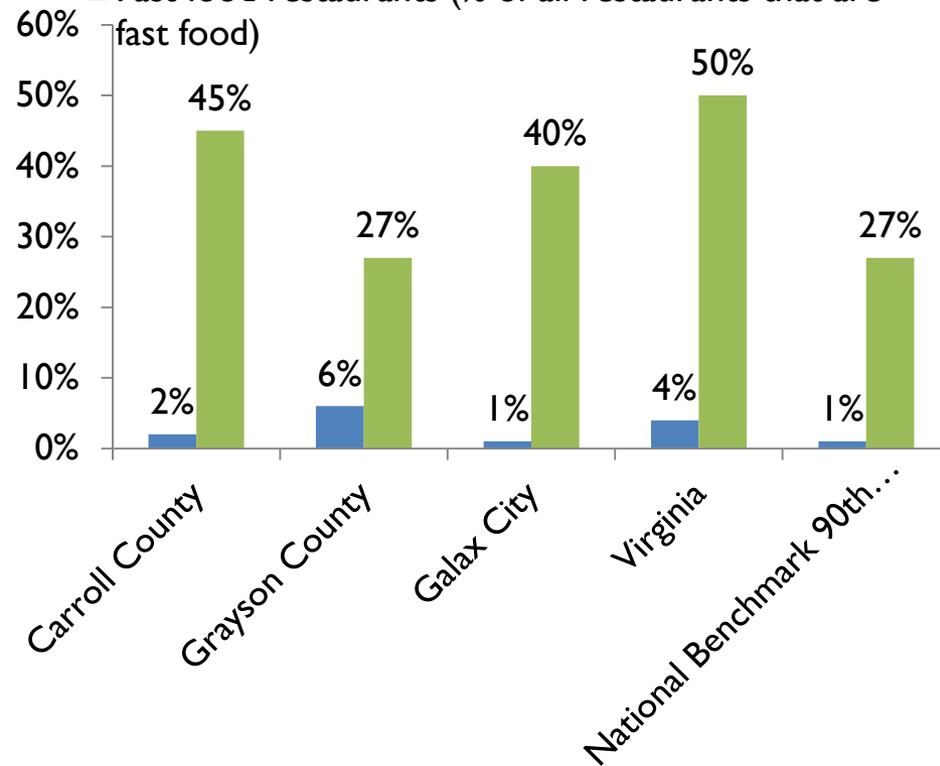
# Physical Environment Cont.

Access to recreational facilities  
(Recreational facilities per 100,000 pop)



★ Limited access to healthy foods (% of pop who are low income and do not live close to a grocery store)

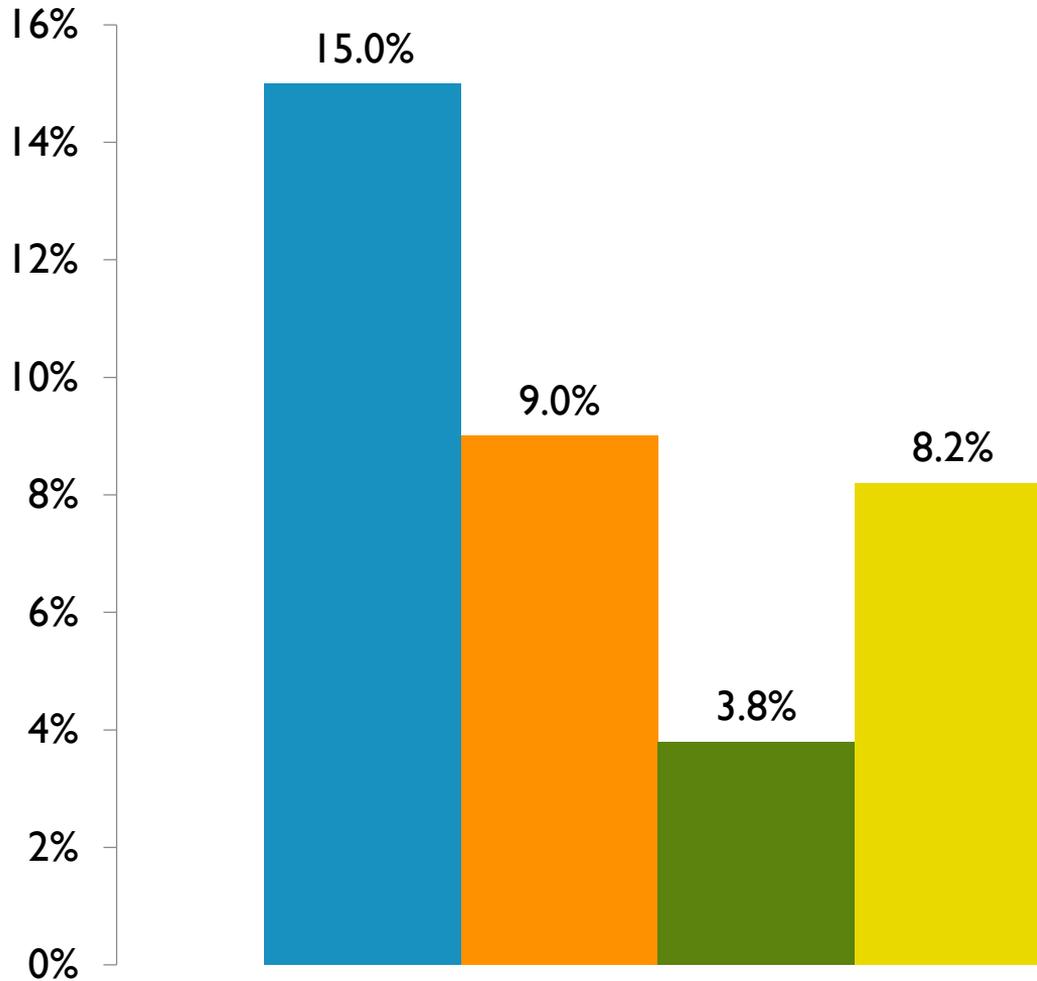
★ Fast food restaurants (% of all restaurants that are fast food)



# Top Health Issues – based on all data

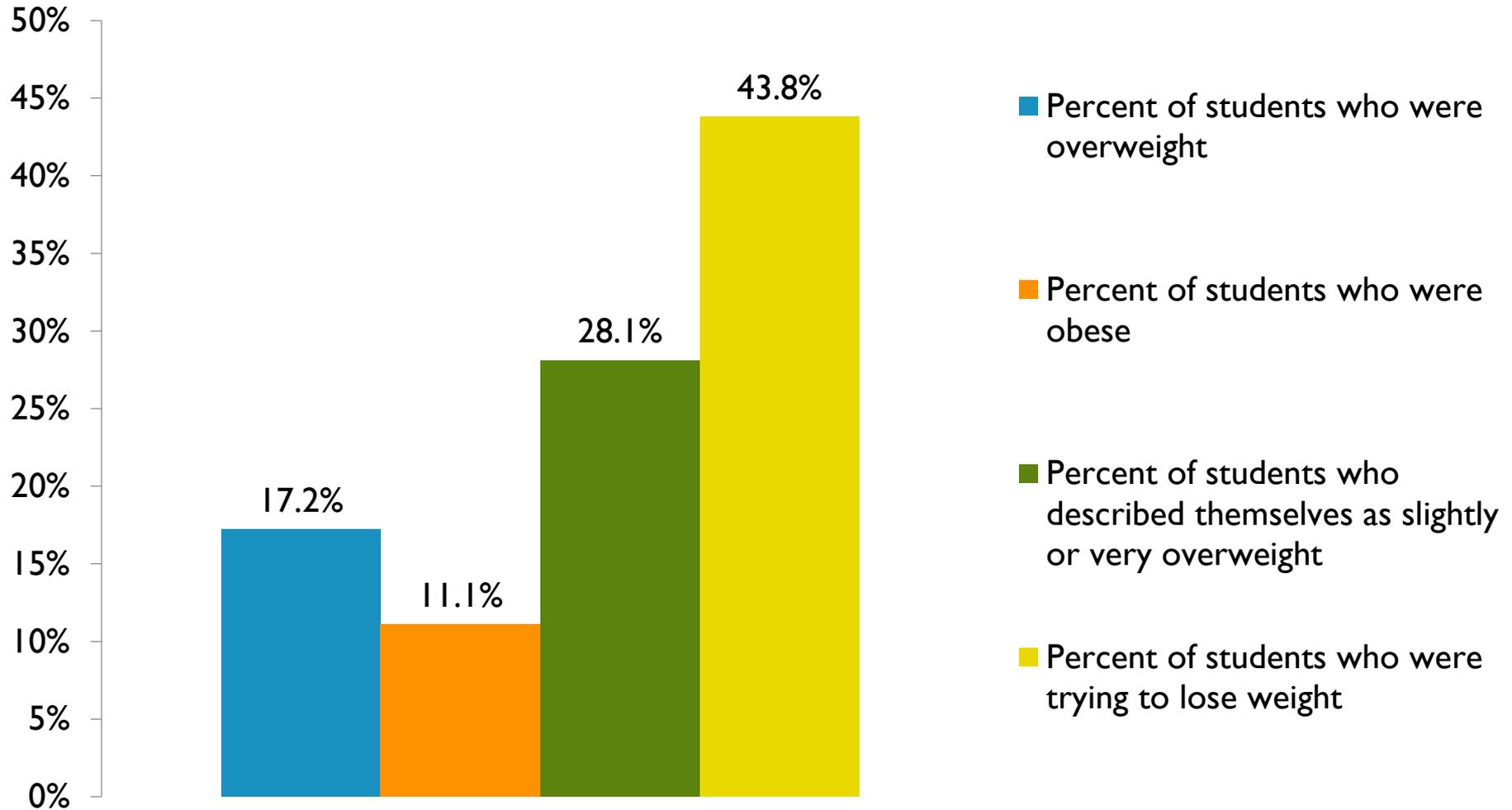
- Lifestyle issues
  - Diet/Nutrition
  - Exercise/Activity
  - Smoking
- Uninsured, access to insurance and healthcare
- Socioeconomic Issues
  - Children in poverty
  - Post-secondary education
  - Low wages
- Teen birth rate
- Chronic diseases: Diabetes, Pulmonary, Heart Disease, Cancer rates
- Poor mental and physical health days

# Youth Risk Behavior Survey VA – Tobacco Use

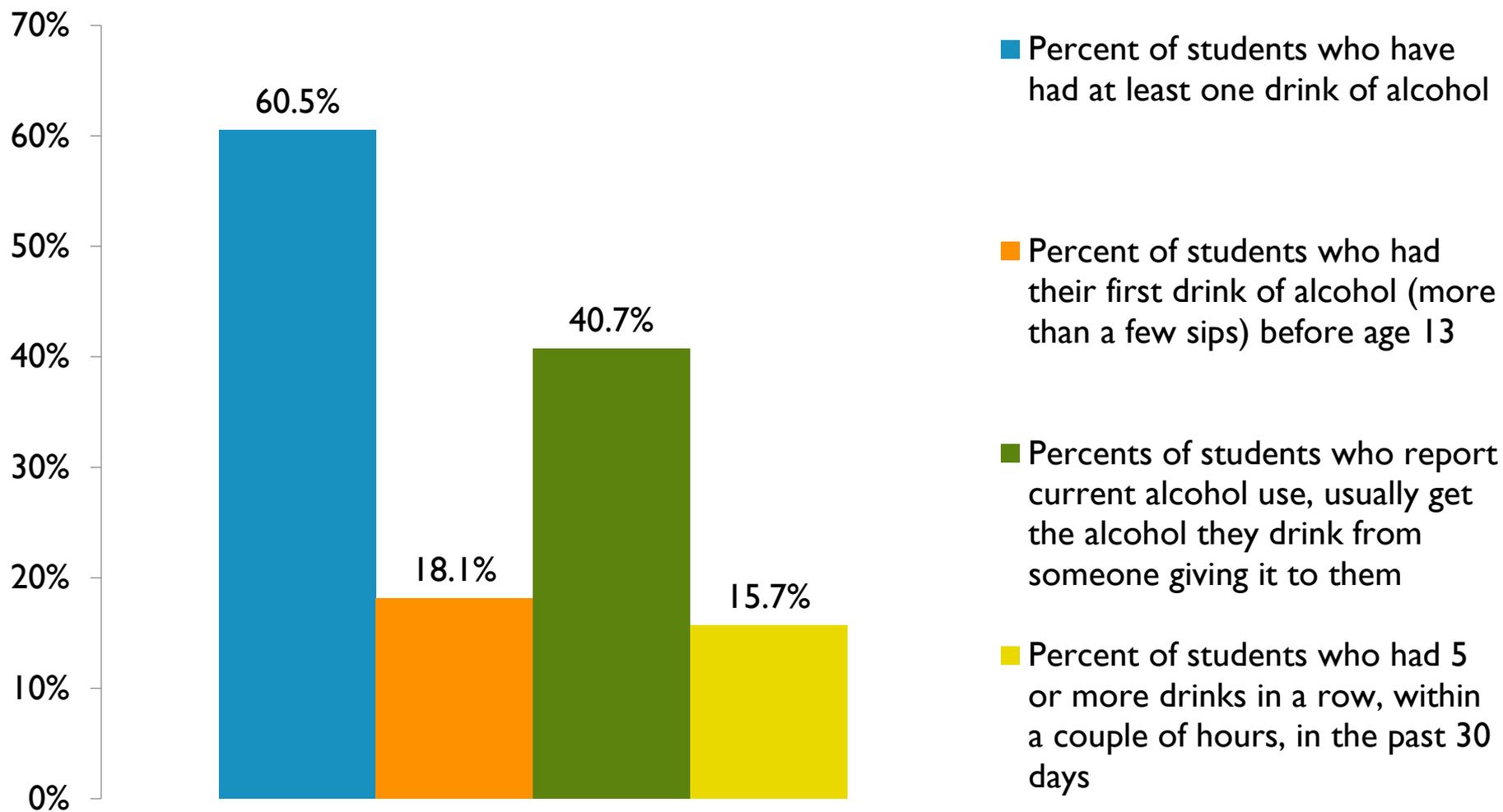


- Percent of students who smoked cigarettes on one or more of the past 30 days
- Percentage of youth who have ever smoked cigarettes daily (one cigarette per day per 30 days)
- Percent of students who smoked cigarettes on school property in the past 30 days
- Percent of students who used chewing tobacco, snuff, or dip one or more times in the past 30 days

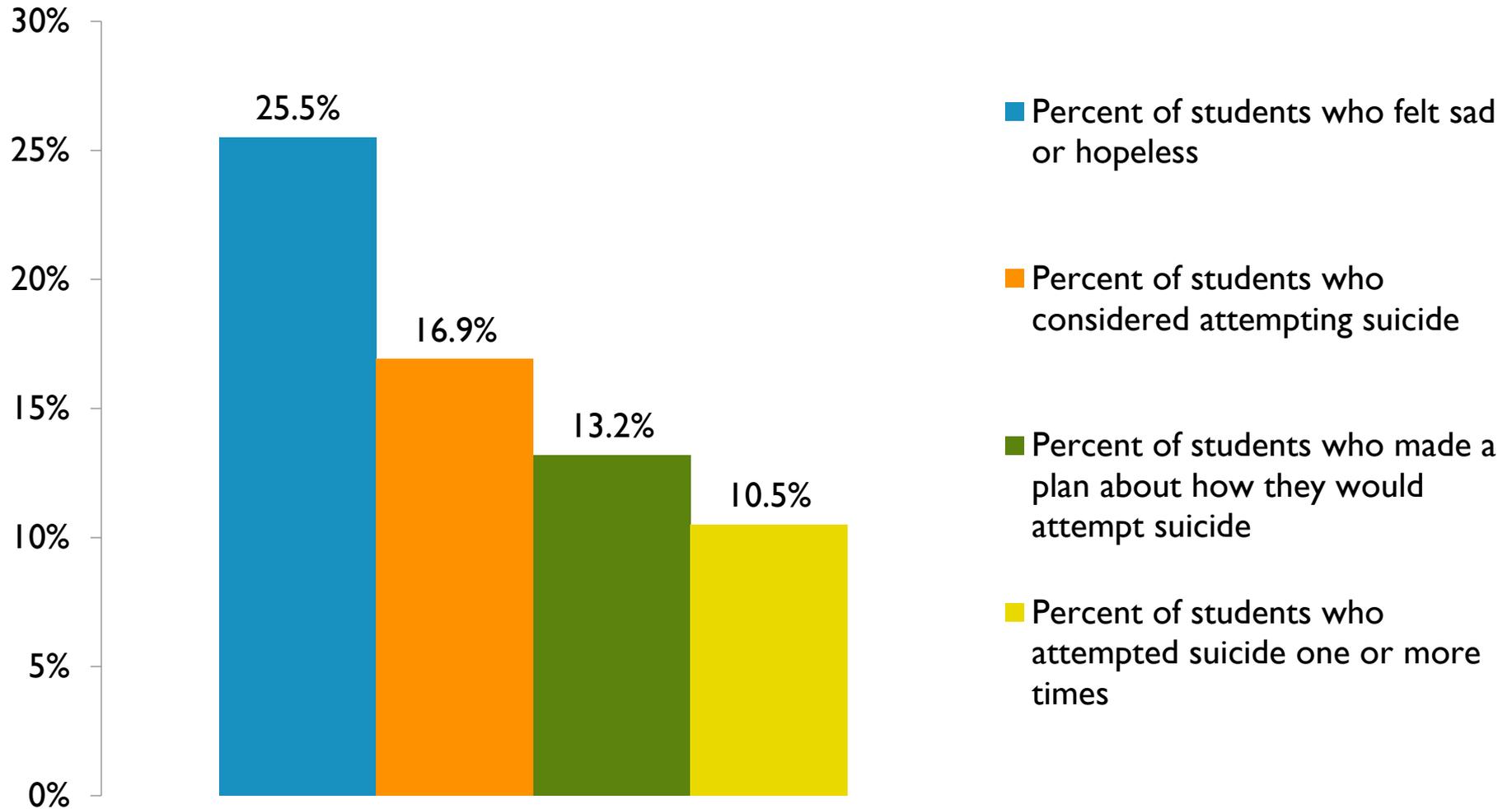
# Youth Risk Behavior Survey VA – Overweight and Obese



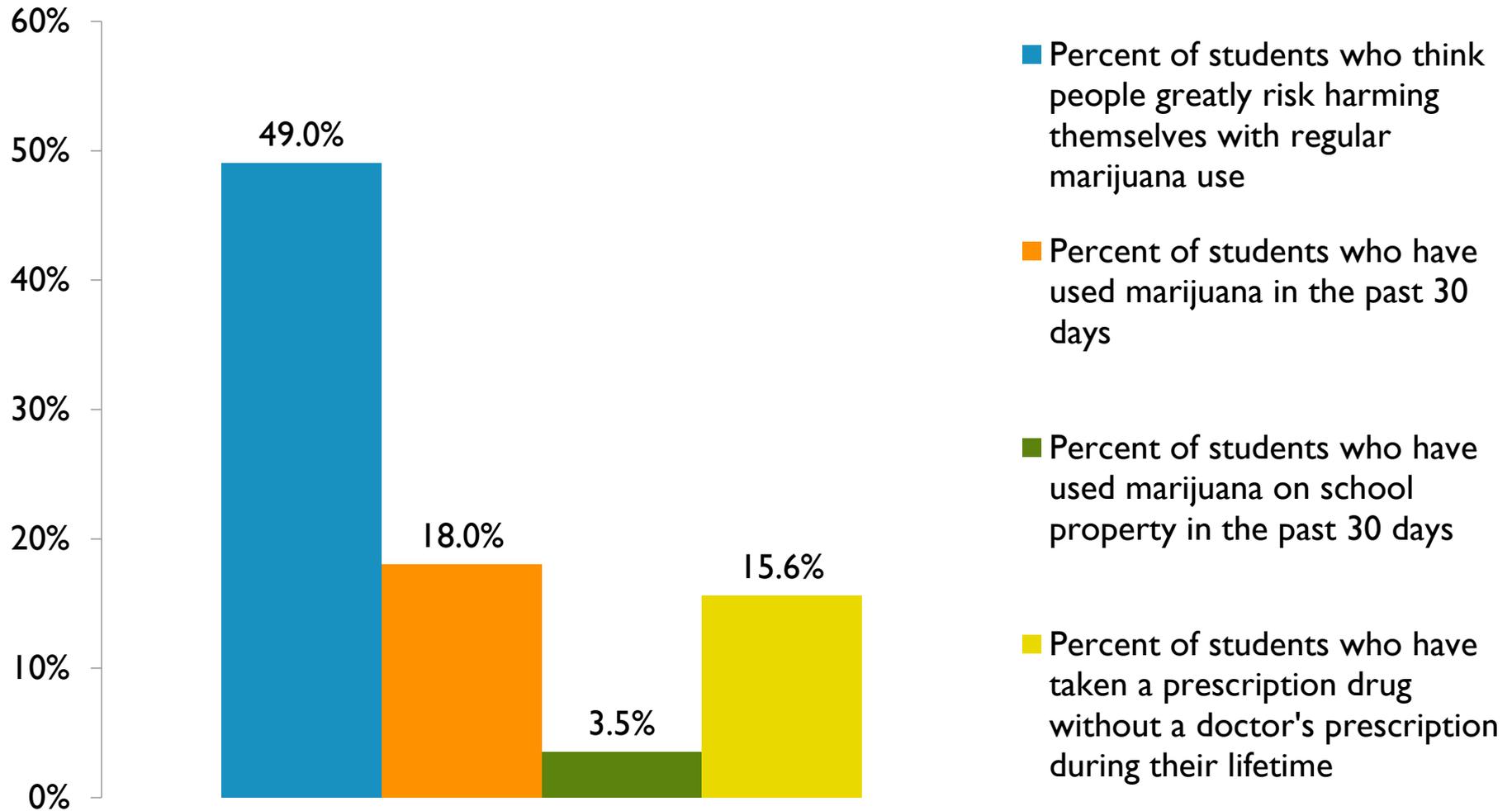
# Youth Risk Behavior Survey VA – Alcohol Use



# Youth Risk Behavior Survey VA – Depression



# Youth Risk Behavior Survey VA – Drugs



# Health Issues → Utilization

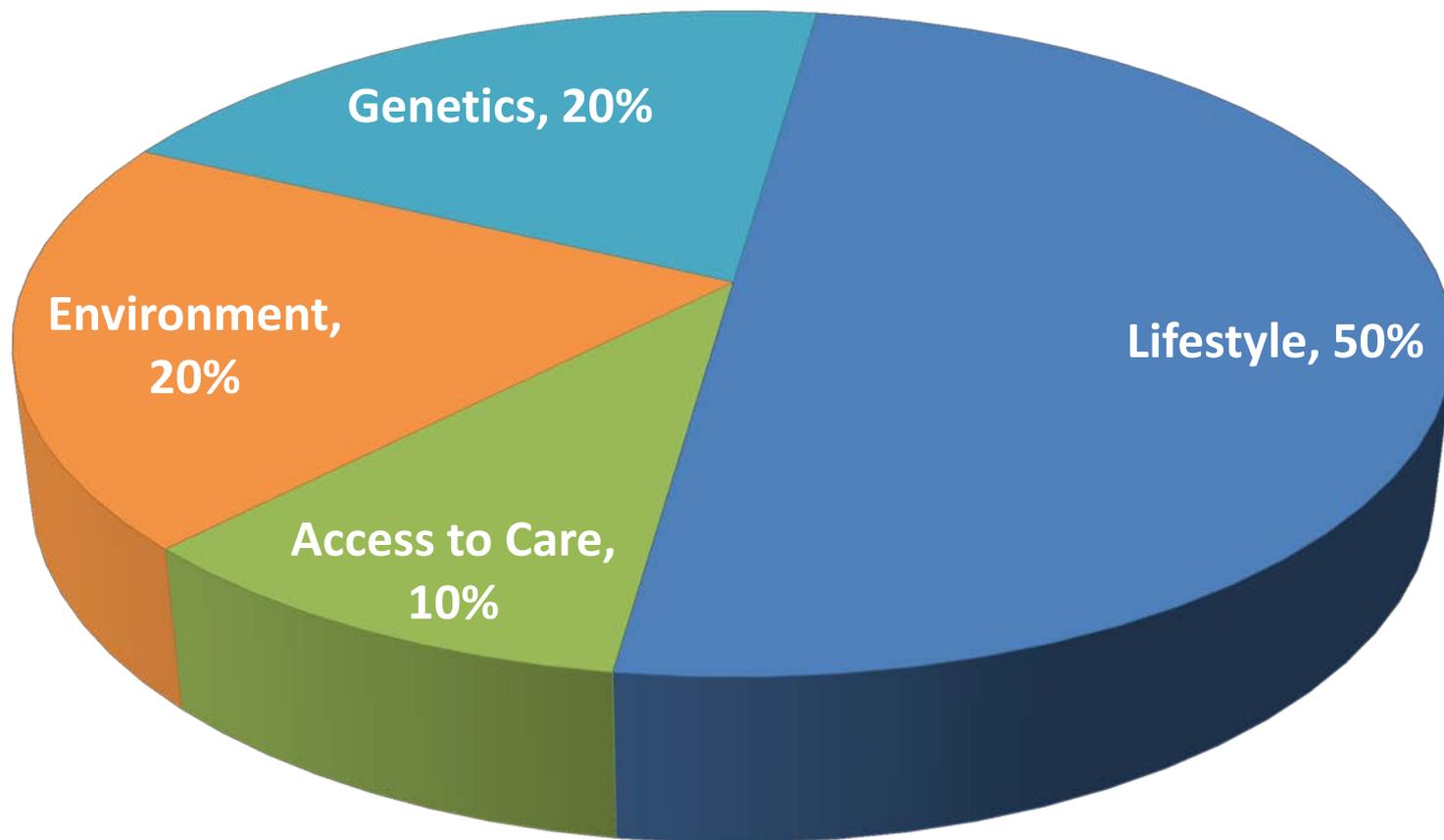
Community Health Issues	Utilization
Hypertension, HBP	Cardiology, Neurology
Diabetes	Endocrinology
Aging	Orthopedics
Smoking	Oncology, Pulmonary
Obesity	Bariatrics, Gastroenterology
Teen Pregnancy	OB, Neonatal

Top ER Visits
Abdominal Pain
Urinary tract infections
Otitis Media
Bronchitis
Upper respiratory infections

## Twin County Utilization

Pulmonary
Behavioral Medicine
Medicine
Obstetrics
Gastroenterology
Cardiology
Neurology
Critical Care
Gynecology
General Surgery
Nephrology
Neonatal

# Major Impacts on Healthiness



# A SENSE of HEALTH

*Changes in Fitness and Fatness on the Development or Cardiovascular Risk, Journal of American College of Cardiology, Feb 14, 2012*

*Risk factor burden in middle age predicts lifetime risk of Cardiovascular Death, New England Journal of Medicine, Jan 26, 2012*

# Assets and Opportunities

- Diversity of businesses and environment– you live, work & play here
- The Twin County area population is declining and has a much older population than Virginia and the US
- The older population generates high demand for healthcare
- Generally, below average health in VA
  - Carroll County ranks 67 out of 133 counties for health in VA
  - Grayson County ranks 84 out of 133 counties for health in VA
  - Galax City ranks 79 out of 133 counties for health in VA
- Strengths: Carroll County's improving trend, fewer low birthweight babies, physical environment, high school graduation, primary care access
- Opportunities: economic issues, obesity, uninsured, smoking, post-secondary education, teen birth rate, youth alcohol use

# Mission Statement

## **Mission:**

To promote, preserve, and restore the health of our community.

# Creating a Sense of Health



“If there is hope in the future, there is power in the present”

John Maxwell

# Exercise Instructions

Lee Ann Lambdin

# Exercise 1

- Please write down your top three health concerns from your own personal perspective, but in context to the whole community on the Sticky Notes provided. One concern per sticky note.
- Once you have written down your Top 3, please come up and stick them on the Board

# Break

15 Minutes

# Exercise 2

- You will be working with your table.
- On your table is a worksheet. We need three volunteers:
  1. Scribe – official record keeper
  2. Reporter – will report the group's discussion
  3. Facilitator – keep the group on track and on time

# Sample

- Sample Goal – Decrease the % of population with diabetes to 10% by 2017.
  - Program Action 1: Require all K-12 Schools to mandate physical education 45 minutes per day.
  - Program Action 2: For all “At Risk” individuals in hospitals or physician offices, enroll into “CD” Twin County Diabetes Personal Health Risk Assessment Program.
  - Responsible: Health Department, Hospital, Schools

# 9 Core Topics

- Obesity
- Diabetes
- Chronic Diseases – heart disease, pulmonary, high blood pressure, cancer
- Economic issues
- Substance abuse and mental health
- Lifestyle behavior and education
- Access and Aging
- Family/Responsibility and Teen Pregnancy
- Smoking/Tobacco Use

# Thank you

- Next Steps
  - Community Health Reports

# Community Health Needs Assessment



**TWIN COUNTY**  
Regional Healthcare

Duke LifePoint Healthcare

**Stratason**