Update 2012-2013

New River Community Health Digest

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Virginia Tech MPH Program

Table of Contents

Access to Care

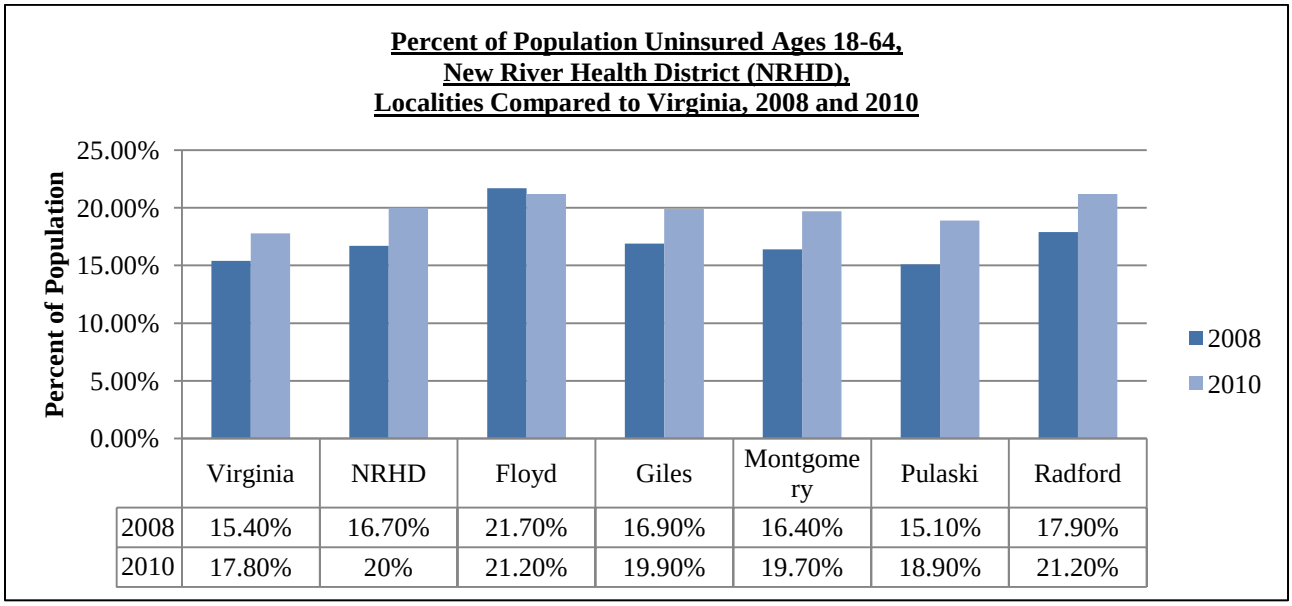
Hospitals and Licensed Beds in the New River Valley

Hospital	Licensed Beds
Lewis Gale Hospital-Montgomery (Montgomery Regional)	146
Carilion New River Valley Medical Center	146
Lewis-Gale Hospital-Pulaski	135
Carilion Giles Community Hospital	25
	Total: 452

Source: Virginia Health Information

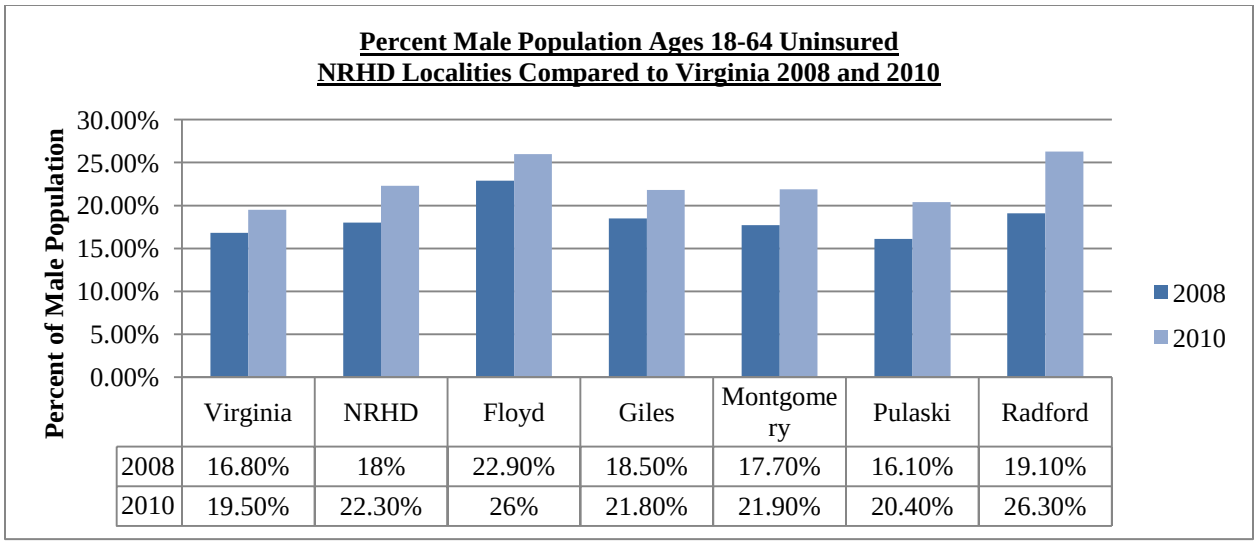
- There are three Free Clinics located in Pulaski, Giles, and Montgomery counties; and a Federally Qualified Health Center located in Floyd county.

Insurance Status



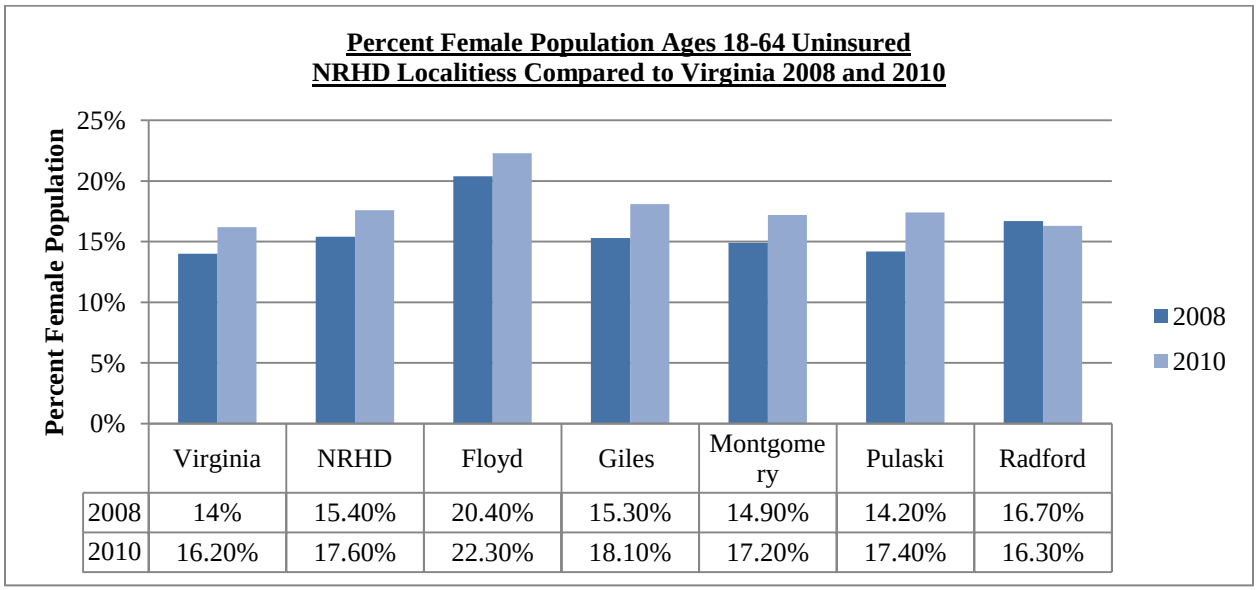
	Virginia	NRHD	Floyd	Giles	Montgomery	Pulaski	Radford
2008	15.40%	16.70%	21.70%	16.90%	16.40%	15.10%	17.90%
2010	17.80%	20%	21.20%	19.90%	19.70%	18.90%	21.20%

Source: U.S. Census Bureau Small Area Health Insurance Estimates (SAHIE)



	Virginia	NRHD	Floyd	Giles	Montgomery	Pulaski	Radford
2008	16.80%	18%	22.90%	18.50%	17.70%	16.10%	19.10%
2010	19.50%	22.30%	26%	21.80%	21.90%	20.40%	26.30%

Source: U.S. Census Bureau Small Area Health Insurance Estimates (SAHIE)



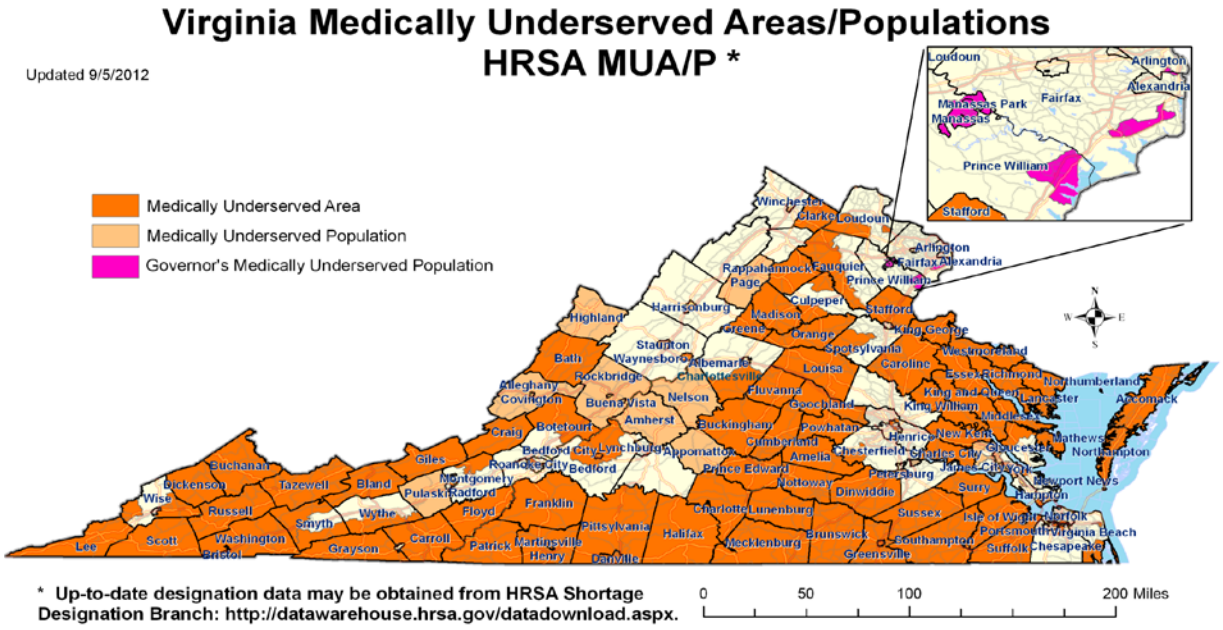
	Virginia	NRHD	Floyd	Giles	Montgomery	Pulaski	Radford
2008	14%	15.40%	20.40%	15.30%	14.90%	14.20%	16.70%
2010	16.20%	17.60%	22.30%	18.10%	17.20%	17.40%	16.30%

Source: U.S. Census Bureau Small Area Health Insurance Estimates (SAHIE)

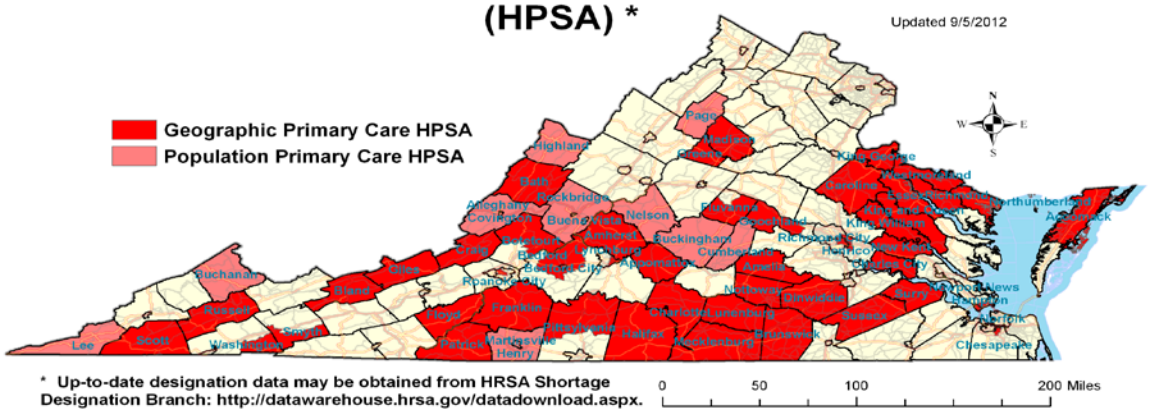
Medically Underserved Areas/Populations and Health Professional Shortage Areas in the New River Valley

	Medically Underserved Area/Population	Primary Care Health Professional Shortage Area	Dental Health Professional Shortage Area	Mental Health Professional Shortage Area
Floyd	Yes	Yes	Yes	Yes
Giles	Yes	Yes	Yes	Yes
Montgomery	Yes	No	Yes	Yes
Pulaski	Yes	No	Yes	Yes
Radford	Yes	No	Yes	Yes

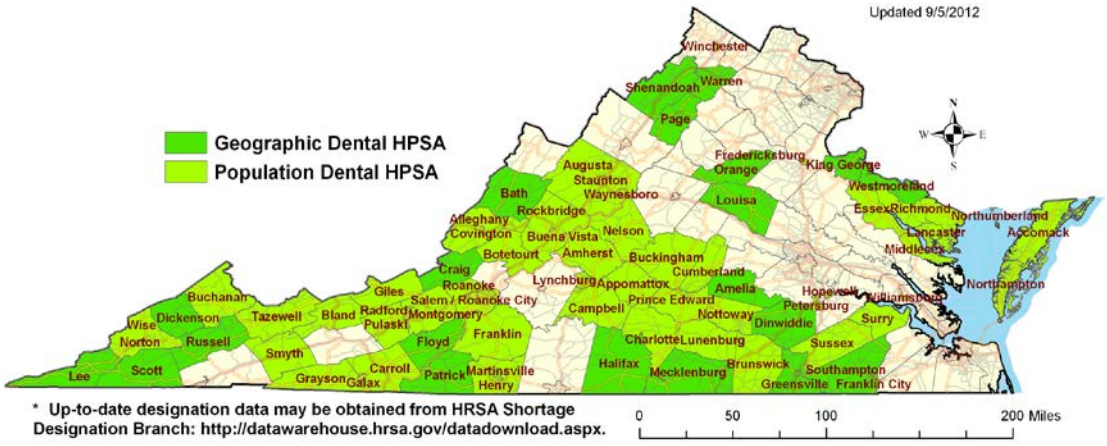
Source: U.S. Department of Health and Human Services Shortage Designation



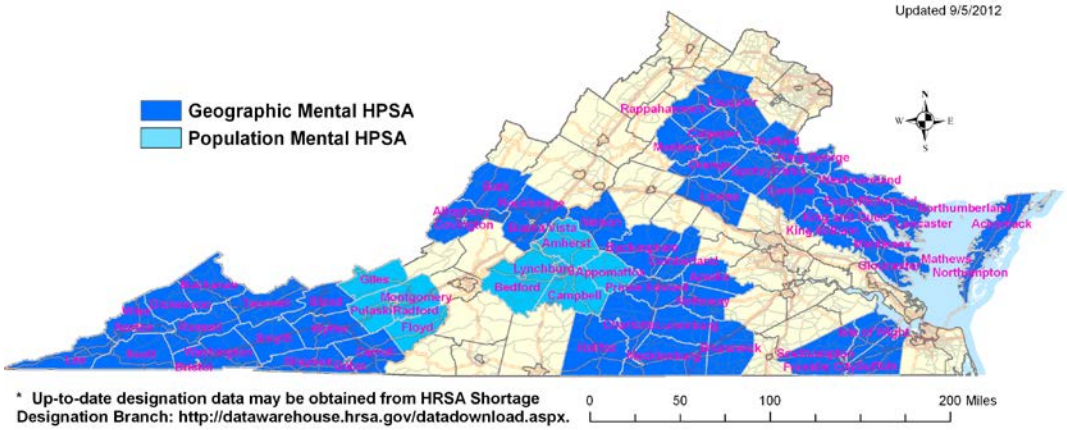
Virginia Primary Care Health Professional Shortage Areas (HPSA) *



Virginia Dental Health Professional Shortage Areas (HPSA)



Virginia Mental Health Professional Shortage Areas (HPSA) *

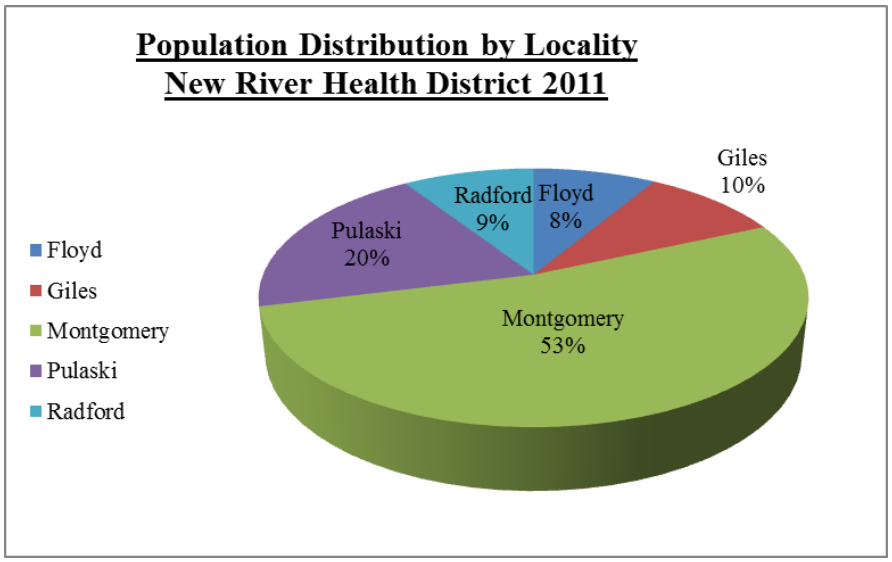


Population

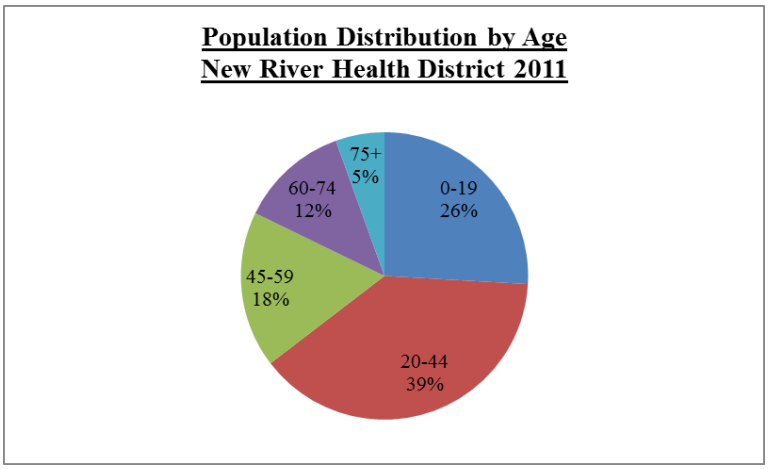
Population Trends and Characteristics

	1990 Population	2000 Population	Net Change 1990-2000	2010 Population	Net Change 2000-2010	2011 Population	Population Density	2012 Population Estimate
Floyd	12,005	13,874	15.60%	15,279	10.10%	15,156	39.8	15,542
Giles	16,366	16,657	1.80%	17,286	3.80%	17,197	48.3	17,486
Montgomery	73,913	83,629	13.10%	94,392	12.90%	93,379	241.3	95,626
Pulaski	34,496	35,127	1.80%	34,872	-0.70%	34,900	109	34,599
Radford	15,940	15,859	-0.50%	16,468	3.70%	16,374	1,659	16,714
New River	152,940	165,146	7.90%	178,237	7.90%	177,006	121.8	179,967

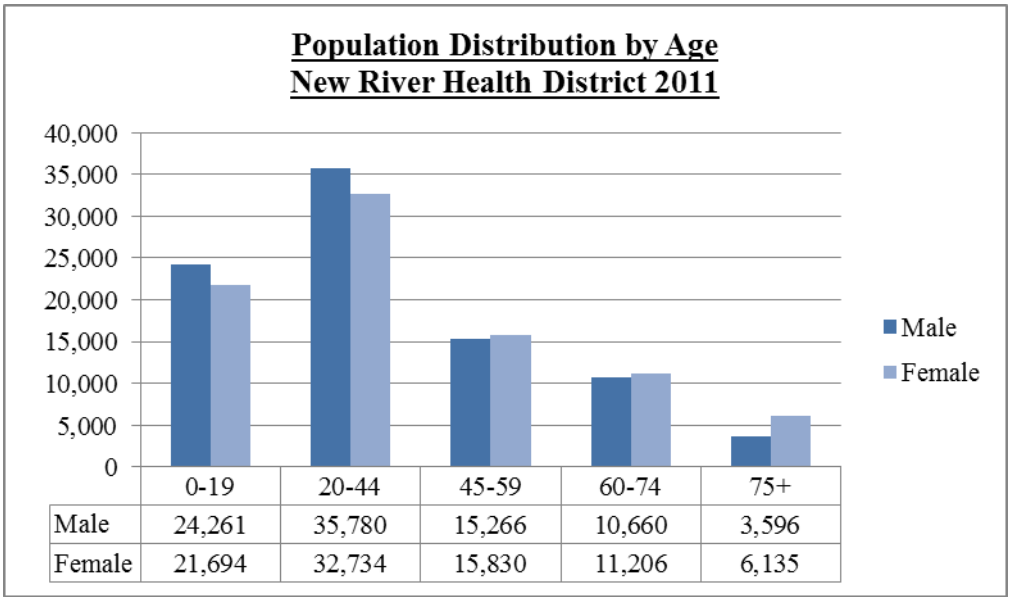
Sources: U.S. Census Bureau, American Community Survey 2011 5-year Estimates
U.S. Census Bureau 2010 Quickfacts
Weldon Cooper Center for Public Service



Source: U.S. Census Bureau, American Community Survey 2011 5-year Estimates



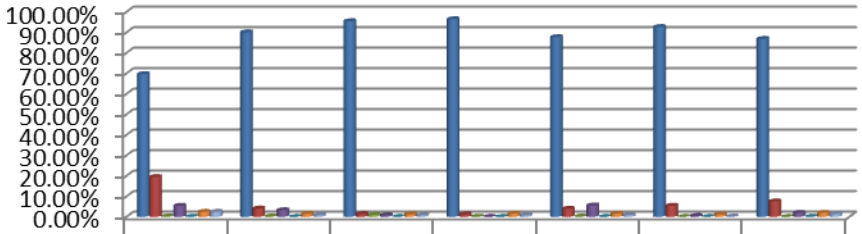
Source: U.S. Census Bureau, American Community Survey 2011 5-year Estimates



	0-19	20-44	45-59	60-74	75+
Male	24,261	35,780	15,266	10,660	3,596
Female	21,694	32,734	15,830	11,206	6,135

Source: U.S. Census Bureau. American Community Survey 2011 5-year Estimates

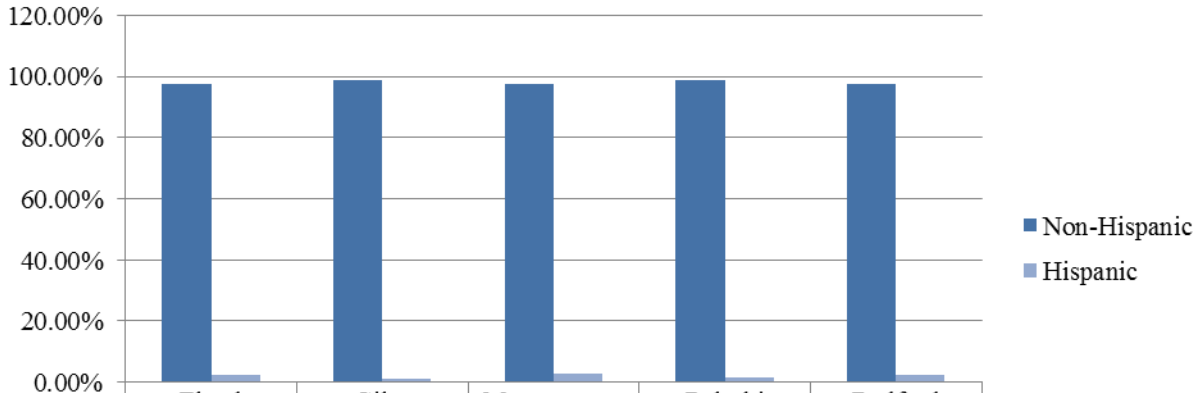
Population Distribution by Race
NRHD Localities Compared to Virginia
2011



	Virginia	NRHD	Floyd	Giles	Montgomery	Pulaski	Radford
White	69.70%	90.10%	95.50%	96.50%	87.70%	92.70%	86.90%
African-American	19.50%	4.10%	1.40%	1.30%	4.00%	5.40%	7.60%
American Indian	0.30%	0.20%	1.00%	0.10%	0.20%	0.00%	0.00%
Asian	5.40%	3.30%	0.80%	0.00%	5.60%	0.50%	2.00%
Native Hawaiian	0.10%	0.00%	0.00%	0.00%	0.00%	0.00%	0.10%
Two or more races	2.50%	1.50%	1.30%	1.60%	1.60%	1.20%	2.00%
Other	2.50%	0.80%	0.80%	0.80%	0.90%	0.20%	1.40%

Source: U.S. Census Bureau, American Community Survey 2011 5-year Estimates

Population Distribution by Ethnicity
NRHD Localities 2011



	Floyd	Giles	Montgomery	Pulaski	Radford
Non-Hispanic	97.60%	98.90%	97.30%	98.60%	97.60%
Hispanic	2.40%	1.10%	2.70%	1.40%	2.40%

Source: U.S. Census Bureau, American Community Survey 2011 5-year Estimates

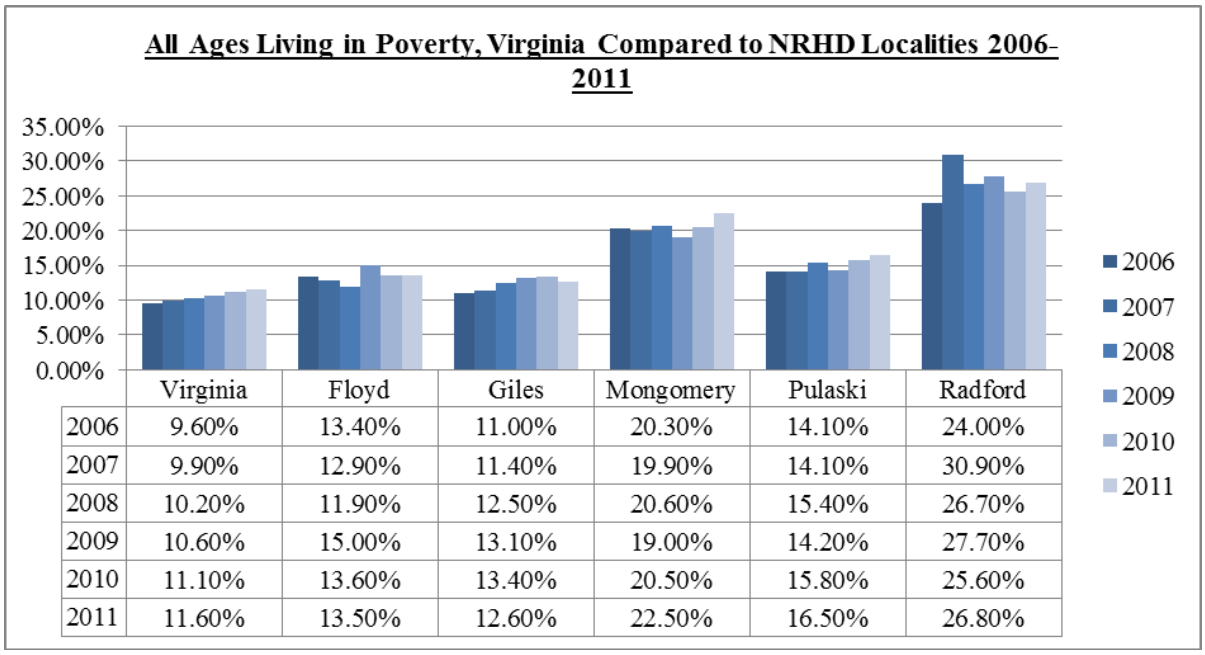
Population Indicators

Education

Educational Attainment: Virginia and NRHD Localities 2011							
	% Population age 25+ less with less than 9th grade education	% Population age 25+ with 9th-12th grade education (No Diploma)	% Population age 25+ High School Graduate or equivalent	% Population age 25+ Some College (No Degree)	% Population age 25+ with an Associates Degree	% Population age 25+ with Bachelors Degree	% Population age 25+ with Graduate or Professional Advanced Degree
Virginia	5.40%	8.00%	25.60%	19.90%	6.70%	20.20%	14.20%
Floyd	7.70%	13.10%	33.80%	20.10%	6.00%	14.30%	5.00%
Giles	7.80%	11.60%	37.00%	19.90%	7.10%	10.80%	5.80%
Montgomery	1.80%	5.80%	20.70%	17.40%	7.40%	25.20%	22.30%
Pulaski	7.00%	11.30%	32.30%	21.60%	12.20%	11.10%	4.50%
Radford	3.90%	7.80%	23.20%	18.30%	10.70%	20.70%	15.30%

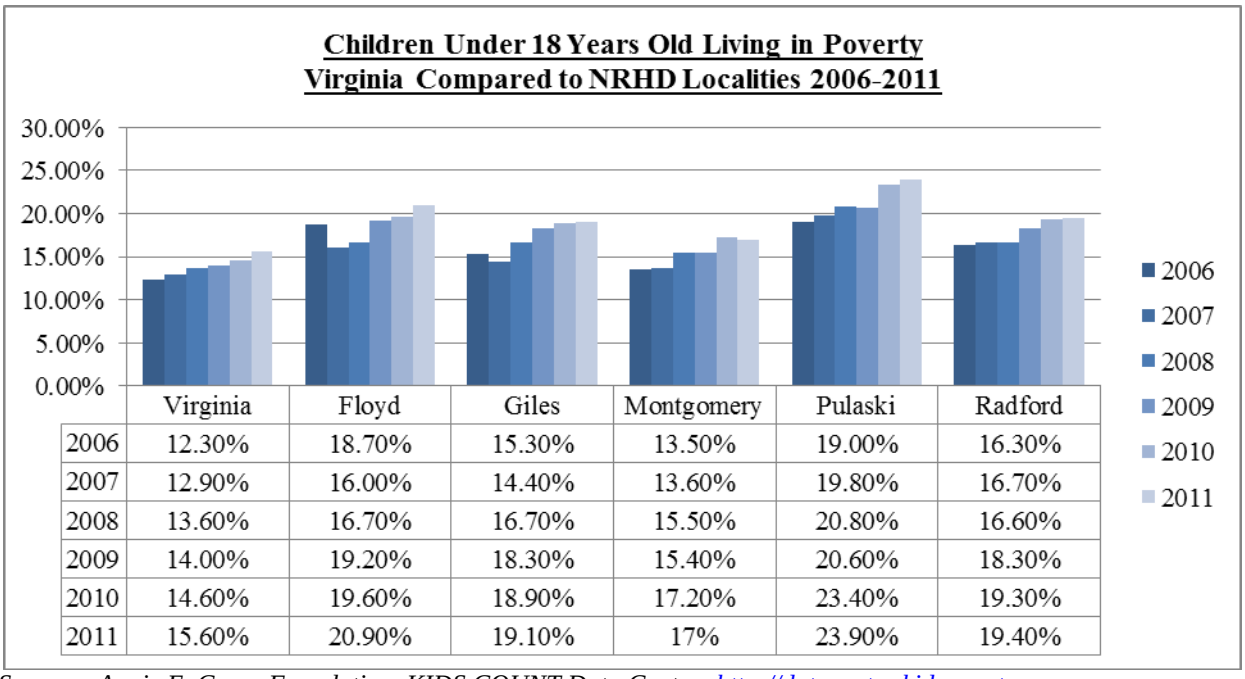
Source: U.S. Census Bureau, American Community Survey 2011 5-year Estimates

Poverty



	Virginia	Floyd	Giles	Mongomery	Pulaski	Radford
2006	9.60%	13.40%	11.00%	20.30%	14.10%	24.00%
2007	9.90%	12.90%	11.40%	19.90%	14.10%	30.90%
2008	10.20%	11.90%	12.50%	20.60%	15.40%	26.70%
2009	10.60%	15.00%	13.10%	19.00%	14.20%	27.70%
2010	11.10%	13.60%	13.40%	20.50%	15.80%	25.60%
2011	11.60%	13.50%	12.60%	22.50%	16.50%	26.80%

Sources: Annie E. Casey Foundation, KIDS COUNT Data Center: http://datacenter.kidscount.org
U.S. Census Bureau, Small Area Income and Poverty Estimates



	Virginia	Floyd	Giles	Montgomery	Pulaski	Radford
2006	12.30%	18.70%	15.30%	13.50%	19.00%	16.30%
2007	12.90%	16.00%	14.40%	13.60%	19.80%	16.70%
2008	13.60%	16.70%	16.70%	15.50%	20.80%	16.60%
2009	14.00%	19.20%	18.30%	15.40%	20.60%	18.30%
2010	14.60%	19.60%	18.90%	17.20%	23.40%	19.30%
2011	15.60%	20.90%	19.10%	17%	23.90%	19.40%

Sources: Annie E. Casey Foundation, KIDS COUNT Data Center: http://datacenter.kidscount.org
U.S. Census Bureau, Small Area Income and Poverty Estimates

Public Assistance Income or Food Stamp/SNAP in the Past 12 Months (2011) for Households		
	Total Households	**% Households Receiving Public Assistance Income or Food Stamps/SNAP**
Floyd	6,148	13.00%
Giles	7,054	13.40%
Montgomery	33,946	6.40%
Pulaski	14,910	15.70%
Radford	5,644	13.90%
Virginia	2,990,650	10.20%

Source: U.S. Census Bureau, American Community Survey 2011 5-year Estimates

Students Approved for Free or Reduced Price Lunch 2006-2012						
	2006-2007	**2007-2008**	**2008-2009**	**2009-2010**	**2010-2011**	**2011-2012**
Floyd	37.40%	36.70%	38.80%	41.90%	44.20%	44.80%
Giles	36.00%	36.90%	40.40%	43.40%	42.20%	43.50%
Montgomery	36.40%	36.80%	35.10%	36.30%	36.20%	38.20%
Pulaski	40.50%	42.60%	42.40%	49.60%	50.80%	49.60%
Radford	30.70%	34.80%	33.70%	37.10%	39.60%	39.00%
Virginia	33.30%	33.00%	34.50%	37.00%	38.10%	39.70%

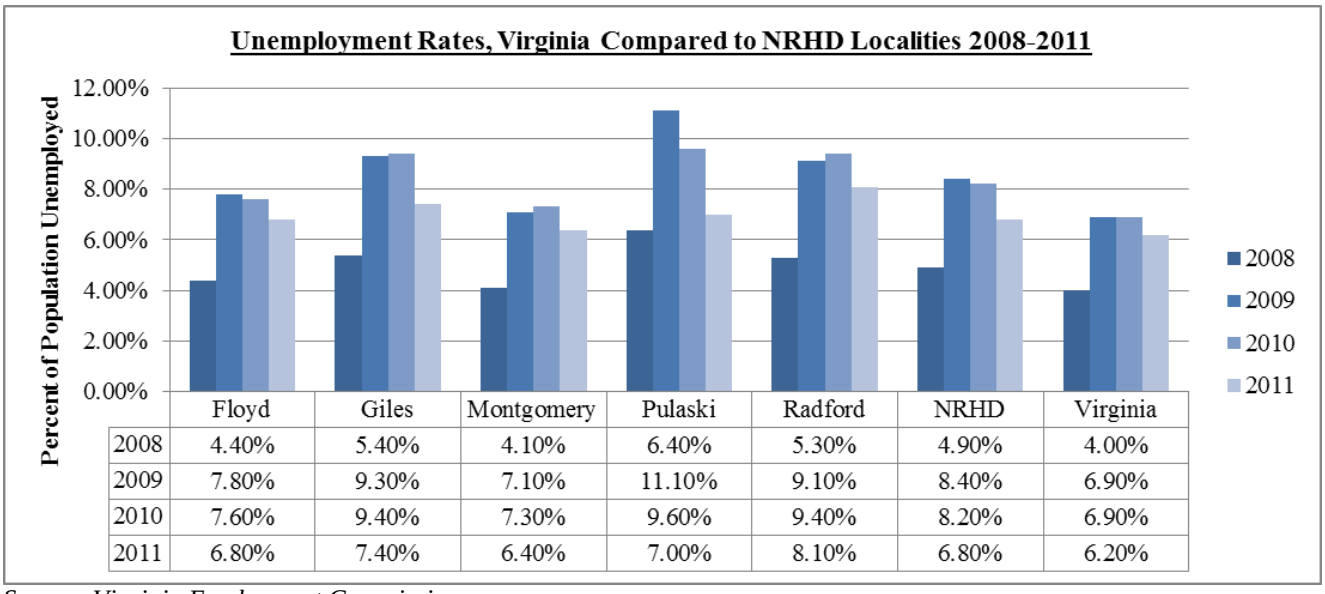
Sources: Annie E. Casey Foundation, KIDS COUNT Data Center: http://datacenter.kidscount.org
Virginia Department of Education

Median Family Income

Median Family Income: Virginia and NRHD Localities 2000, 2005 2008 2010 and 2011					
	2000	2005	2008	2010	2011
Floyd	$33,498	$37,659	$41,514	$44,188	$39,997
Giles	$35,830	$37,582	$43,322	$40,773	$43,139
Montgomery	$34,402	$36,853	$43,176	$42,827	$44,086
Pulaski	$35,206	$35,014	$40,426	$41,184	$39,054
Radford	$27,695	$28,201	$35,516	$34,009	$33,848
Virginia	$46,789	$54,207	$61,201	$60,665	$61,877

Source: U.S. Census Bureau, Small Area Income and Poverty Estimates

Unemployment



	Floyd	Giles	Montgomery	Pulaski	Radford	NRHD	Virginia
2008	4.40%	5.40%	4.10%	6.40%	5.30%	4.90%	4.00%
2009	7.80%	9.30%	7.10%	11.10%	9.10%	8.40%	6.90%
2010	7.60%	9.40%	7.30%	9.60%	9.40%	8.20%	6.90%
2011	6.80%	7.40%	6.40%	7.00%	8.10%	6.80%	6.20%

Source: Virginia Employment Commission

Unemployment January-November 2012: Virginia Compared to NRHD Localities											
	January	February	March	April	May	June	July	August	September	October	November
Floyd	6.70%	6.60%	5.80%	5.40%	5.60%	6.30%	6.20%	6.20%	5.70%	5.00%	5.20%
Giles	8.80%	6.90%	6.20%	5.80%	5.90%	7.10%	7.30%	6.50%	5.90%	5.60%	5.40%
Montgomery	5.40%	5.90%	5.70%	5.20%	6.00%	6.70%	6.90%	6.00%	5.60%	5.40%	5.20%
Pulaski	6.40%	6.20%	5.90%	5.60%	6.40%	6.80%	7.20%	6.70%	6.20%	5.80%	5.50%
Radford	7.10%	6.80%	6.60%	6.20%	8.00%	8.60%	8.90%	8.30%	7.10%	6.90%	6.50%
NRHD	6.20%	6.20%	5.90%	5.50%	6.20%	6.90%	7.10%	6.40%	5.90%	5.60%	5.40%
Virginia	6.00%	6.10%	5.70%	5.40%	5.50%	6.00%	6.10%	5.80%	5.60%	5.40%	5.30%

Source: Virginia Employment Commission

Causes of Death

Leading Causes of Death

Leading Causes of Death: Virginia Compared to NRHD Localities 2010 and 2011 (Age-Adjusted Rate per 100,000 Population)				
	Virginia		NRHD	
	2010	2011	2010	2011
Cancer	170.9	169.5	171	167.7
Heart Disease	167.6	161.3	200.1*	197.2*
Stroke	41.7	41.4	33.9	48.6
Chronic Low Respiratory	37.9	38.4	36.8	52.7*
Unintentional Injury	32.2	33.4	44.7*	50.5*
Alzheimers	24.2	23	17.8	10.7
Kidney Disease	20.1	17.6	23	25.8
Diabetes	18.7	19.4	28.3*	16.7
Septicemia	17.2	16.8	12.3	13.2
Pneumonia/Influenza	15.3	17.4	17.2	22.4
Suicide	11.9	12.5	17	15.6
Chronic Liver Disease	7.8	8.1	10.7	12.8
Primary Hypertension and Renal Disease	7.5	6.9	2.7	4.4
Deaths From All Causes	739.2	735.8	795.6*	832.1*
*Statistically Significant Higher than State Rate				
Statistically Significant Lower than State Rate				

Source: Virginia Department of Health, Division of Health Statistics

Leading Causes of Death: NRHD Localities 2011					
	Age-Adjusted Rate per 100,000 Population				
	Floyd	Giles	Montgomery	Pulaski	Radford
Cancer	129.8	194.4	163	175.9	180.4
Heart Disease	153.8	265.7	162.3	233.4	214.3
Stroke	40	59.3	44.4	52.8	51.9
Chronic Low Respiratory	51.9	72.8	57.4	27.4	42.8
Unintentional Injury	60.5	26.8	53.3	64.9	31.4
Alzheimers	21.5	19.6	7.6	6.8	9.4
Kidney Disease	14.2	20.3	25.4	37.5	9.4
Diabetes	18.9	7	10	28.8	33.2
Septicemia	32.1	11.8	10.3	13.8	8.1
Pneumonia/Influenza	30	22.2	16.2	26.5	34.5
Suicide	5.8	28.1	12.2	23.5	8.1
Chronic Liver Disease	3.6	3.3	13.6	21.6	8.1
Primary Hypertension and Renal Disease	0	14.5	4.7	2.2	0
Deaths from All Causes	725.6	933.7	788.4	906.1	863

Source: Virginia Department of Health, Division of Health Statistics

Sudden and Investigative Deaths

Deaths (Rate per 100,000 and number) from Fentanyl, Hydrocodone, Methadone, and Oxycodone (FHMO) 2010		
	Rate per 100,000	Number of Deaths
Floyd	6.5	1
Giles	5.8	1
Montgomery	6.4	6
Pulaski	22.9	8
Radford	12.2	2
Virginia	4.4	350
Higher than state rate		

Source: Office of the Chief Medical Examiner's Annual Report, 2010

Cancer Mortality

Cancer Mortality, 2005-2009, All Sites: NRHD Localities Compared to Virginia	
	Rate per 100,000 Population
Floyd	167.8
Giles	228.9
Montgomery	170.3
Pulaski	200.8
Radford	203.8
NRHD	182.3
Virginia	183.2

Source: Cancer Action Coalition of Virginia Report 2012

Cancer Mortality by Type, 2006-2012: NRHD Compared to Virginia				
	Rate per 100,000 Population			
	Colorectal	Lung/Bronchus	Melanoma	Prostate
Virginia	15.9	50.9	3	24.1
NRHD	18.8	51	4.3	22.2

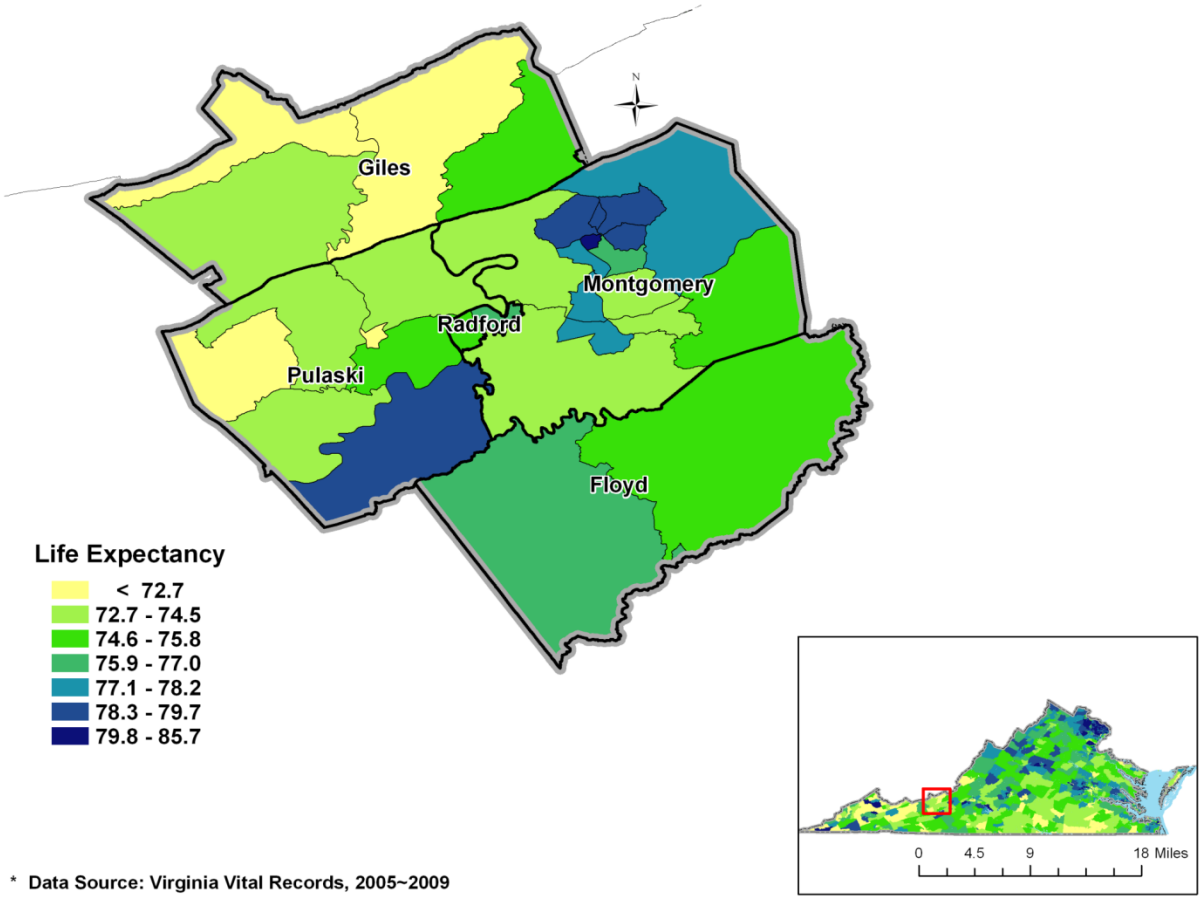
Source: Cancer Action Coalition of Virginia Report 2012

Cancer Mortality (Breast and Cervical), 2006-2010: NRHD Compared to Virginia		
	Rate per 100,000 Population	
	Breast	Cervical
Virginia	23.9	2.1
NRHD	22.5	0

Source: Cancer Action Coalition of Virginia Report 2012

Maternal and Child Health

Life Expectancy in the New River Valley by Census Tract



* Data Source: Virginia Vital Records, 2005~2009

Infant Mortality

Infant Mortality: Number and Rate (per 1,000 Resident Live Births), Virginia and NRHD Localities Compared 2007-2011										
	2007		2008		2009		2010		2011	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Virginia	839	7.7	716	6.7	740	7	695	6.8	685	6.7
NRHD	12	6.6	9	5.3	9	5.6	9	5.4	12	7.3
Floyd	1	6.3	3	18.3	2	13.5	0	0	1	6.9
Giles	2	10.5	2	12.2	1	5.8	1	5.1	2	11.2
Montgomery	6	6.2	1	1.1	4	4.8	3	3.4	6	6.7
Pulaski	2	5.6	3	8.3	2	6.2	4	14.2	0	0
Radford	1	6.7	0	0	0	0	1	7.2	3	22.1
Higher than State Rate										
Lower than State Rate										

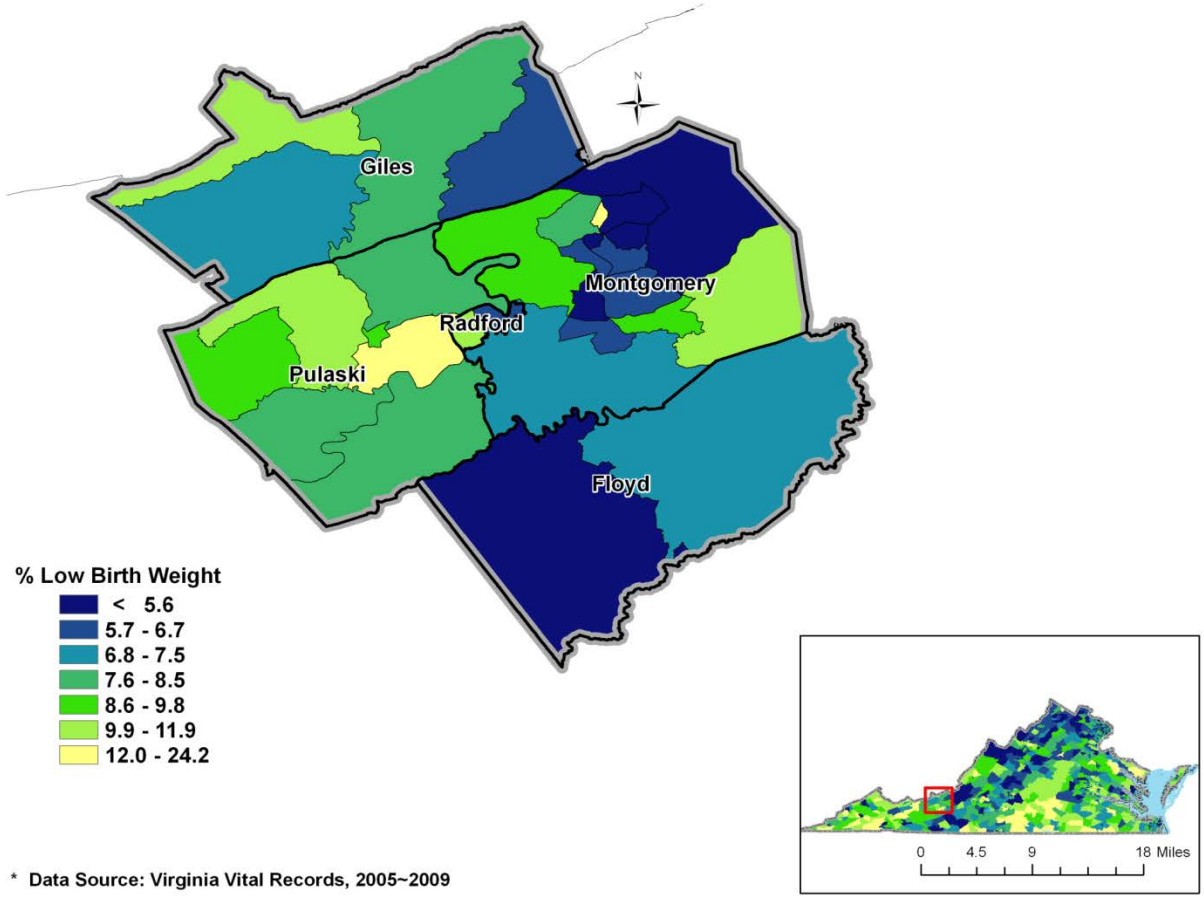
Source: Virginia Department of Health, Division of Health Statistics

Low and Very Low Birth Weight

Low Birth Weight (under 2500 grams or approx. 5.5lbs): Number and Percent of Resident Total Live Births, Virginia Compared to NRHD Localities 2007-2011										
	2007		2008		2009		2010		2011	
	Number	%	Number	%	Number	%	Number	%	Number	%
Virginia	9,344	8.60%	8,996	8.40%	8,800	8.40%	8,487	8.20%	8,204	8%
NRHD	148	8.10%	130	7.60%	127	7.90%	138	8.30%	121	7.40%
Floyd	9	5.70%	14	8.50%	13	8.80%	11	6.30%	9	6.30%
Giles	12	6.30%	18	11%	20	11.60%	17	8.70%	23	12.80%
Montgomery	73	7.50%	60	6.70%	56	6.70%	71	8.10%	62	7%
Pulaski	34	9.50%	28	7.70%	29	9%	28	10%	17	5.90%
Radford	20	13.40%	10	7.90%	9	6.80%	11	7.90%	10	7.40%
Higher than State Rate										
Lower than State Rate										

Source: Virginia Department of Health, Division of Health Statistics

Low Birth Weight as a Percentage of Live Births in the New River Valley by Census Tract



* Data Source: Virginia Vital Records, 2005~2009

Very Low Birth Weight (under 1,500 grams or approx. 3.3lbs): Number and Percent of Resident Total Live Births, Virginia Compared to NRHD Localities 2007-2011										
	2007		2008		2009		2010		2011	
	Number	%	Number	%	Number	%	Number	%	Number	%
Virginia	1,899	1.80%	1,781	1.70%	1,732	1.60%	1,627	1.60%	1,632	1.60%
NRHD	25	1.40%	21	1.20%	18	1.10%	16	1%	25	1.50%
Floyd	1	0.60%	3	1.80%	0	0%	0	0%	2	1.40%
Giles	3	1.60%	5	3%	4	2.30%	1	0.50%	5	2.80%
Montgomery	10	1%	8	0.90%	10	1.20%	8	0.90%	16	1.80%
Pulaski	5	1.40%	4	1.10%	4	1.20%	7	2.50%	1	0.30%
Radford	6	4%	1	0.80%	0	0%	0	0%	1	0.70%
Higher than State Rate										
Lower than State Rate										

Source: Virginia Department of Health, Division of Health Statistics

Teenage Pregnancy and Live Births

Teenage Pregnancy Rates by Age Group 2011 (per 1,000 females)								
	Pregnancy Number and Rate <15		Pregnancy Number and Rate 15-17		Pregnancy Number and Rate 18-19		TOTAL	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Virginia	134	0.5	2,492	16.3	7,004	62.2	9,630	18.6
NRHD	3	0.7	39	15.5	132	22.4	174	13.8
Floyd	0	0	1	3.5	14	99.3	15	16.6
Giles	0	0	6	20.8	17	100	23	23.7
Montgomery	3	1.5	17	14	46	11.7	66	9.3
Pulaski	0	0	9	15.5	31	104	40	21.9
Radford	0	0	6	41.7	24	17.8	30	16.9
Higher than State Rate								
Lower than State Rate								

Source: Virginia Department of Health, Division of Health Statistics

Teenage Live Births by Residence and Age Group 2011 (per 1,000 females)								
	Live Births, Number and Rate <15		Live Births, Number and Rate 15-17		Live Births, Number and Rate 18-19		TOTAL	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Virginia	57	0.2	1,708	11.1	4,807	42.7	6,572	12.7
NRHD	0	0	36	14.3	99	16.8	135	10.7
Floyd	0	0	1	3.5	13	92.2	14	15.5
Giles	0	0	6	20.8	11	64.7	17	17.5
Montgomery	0	0	15	12.3	36	9.2	51	7.2
Pulaski	0	0	8	13.7	28	94	36	19.7
Radford	0	0	6	41.7	11	8.2	17	9.6

Source: Virginia Department of Health, Division of Health Statistics

Percentage Total Live Births Associated with Teenage Pregnancy 2011	
	Percent Total Live Births Associated with Teenage Pregnancy
Virginia	6.40%
NRHD	8.20%
Floyd	9.70%
Giles	9.50%
Montgomery	5.70%
Pulaski	12.50%
Radford	12.50%

Source: Virginia Department of Health, Division of Health Statistics

Total Live Births by Place of Residencen 2007-2011: Virginia and NRHD Localities Compared, Number and Rate per 1,000 Total Projected Population										
	2007		2008		2009		2010		2011	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Virginia	108,471	14.1	106,578	13.7	104,979	13.3	102,934	12.9	102,525	12.7
NRHD	1,823	10.6	1,712	9.9	1,615	9.2	1,667	9.4	1,638	9.2
Floyd	159	10.9	164	11.1	148	9.9	174	11.4	144	9.4
Giles	190	11	164	9.5	173	10	196	11.3	179	10.5
Montgomery	967	10.8	895	9.9	840	9.2	877	9.3	891	9.4
Pulaski	358	10.2	362	10.3	321	9.2	281	8.1	288	8.3
Radford	149	9.2	172	7.9	183	8.2	139	8.5	136	8.3

Source: Virginia Department of Health, Division of Health Statistics

Non-Marital Births

Non-marital Births 2011	
	% of Total Births
Virginia	35.50%
NRHD	32.80%
Floyd	27.10%
Giles	41.30%
Montgomery	27.70%
Pulaski	41.70%
Radford	41.90%

Source: Virginia Department of Health, Division of Health Statistics

Prenatal Care

	Percent Prenatal Care began in 1st Trimester	Percent Prenatal Care began in 2nd Trimester	Percent Prenatal Care began in 3rd Trimester	Percent Receiving No Care
Virginia	81.90%	10.60%	3%	0.90%
NRHD	86.90%	9.20%	1.60%	2.10%
Floyd	90.20%	8.60%	0.60%	0%
Giles	80.10%	14.30%	1.50%	3.60%
Montgomery	88.50%	7.30%	1.70%	2.30%
Pulaski	85.80%	11%	2.50%	0.70%
Radford	84.90%	10.80%	0%	4.30%

Source: Virginia Department of Health, Division of Health Statistics

Lead Exposure

	New River Valley High Risk Lead Zipcodes
Floyd	24072, 24091, 24105 24380
Giles	24086, 24093, 24094, 24124, 24128, 24134, 24147, 24150
Montgomery	24138, 24149
Pulaski	24301, 24347
Radford	24141
<27% of housing built before 1950 and or and increased prevalence of children with elevated blood lead levels per available data	

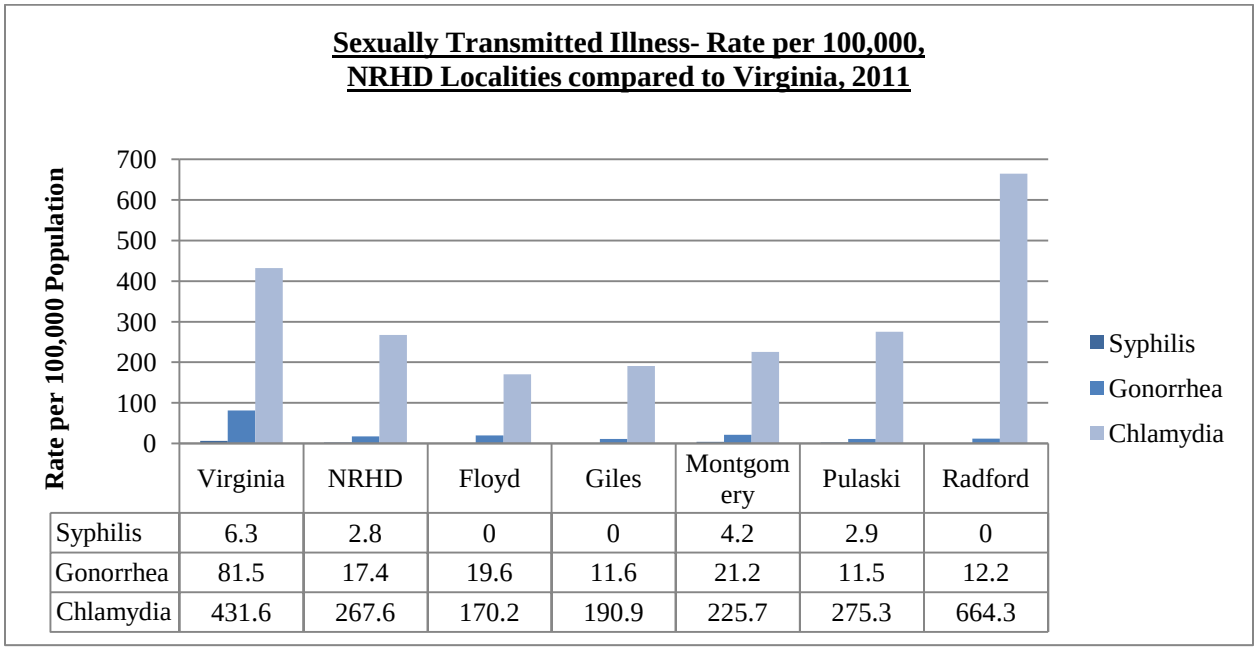
Source: Virginia Department of Health, Lead-Safe Virginia Program

Percent Confirmed Elevated Blood Lead Levels By Age 2011			
	Under 36 Months	**Under 72 Months**	**Rate per 100,000 Age 0-15**
Virginia	0.20%	0.30%	16.7
NRHD	-	-	7.3
Floyd	0	0	0
Giles	0	0	0
Montgomery	0	0	0
Pulaski	0.40%	0.30%	33.9
Radford	0	0	0

Source: Virginia Department of Health, Childhood Lead Poisoning Prevention Program Surveillance Summary Report

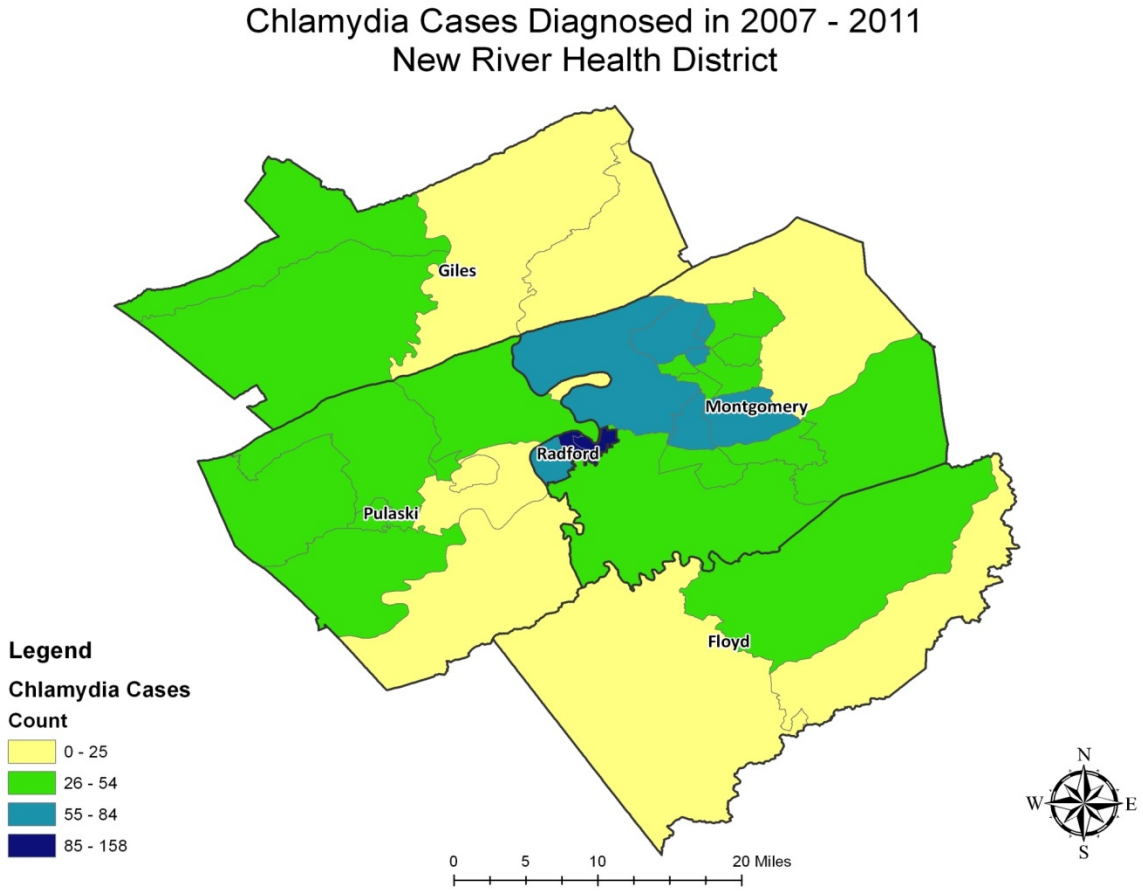
Communicable, Notifiable and Foodbourne Illness

Sexually Transmitted Illness

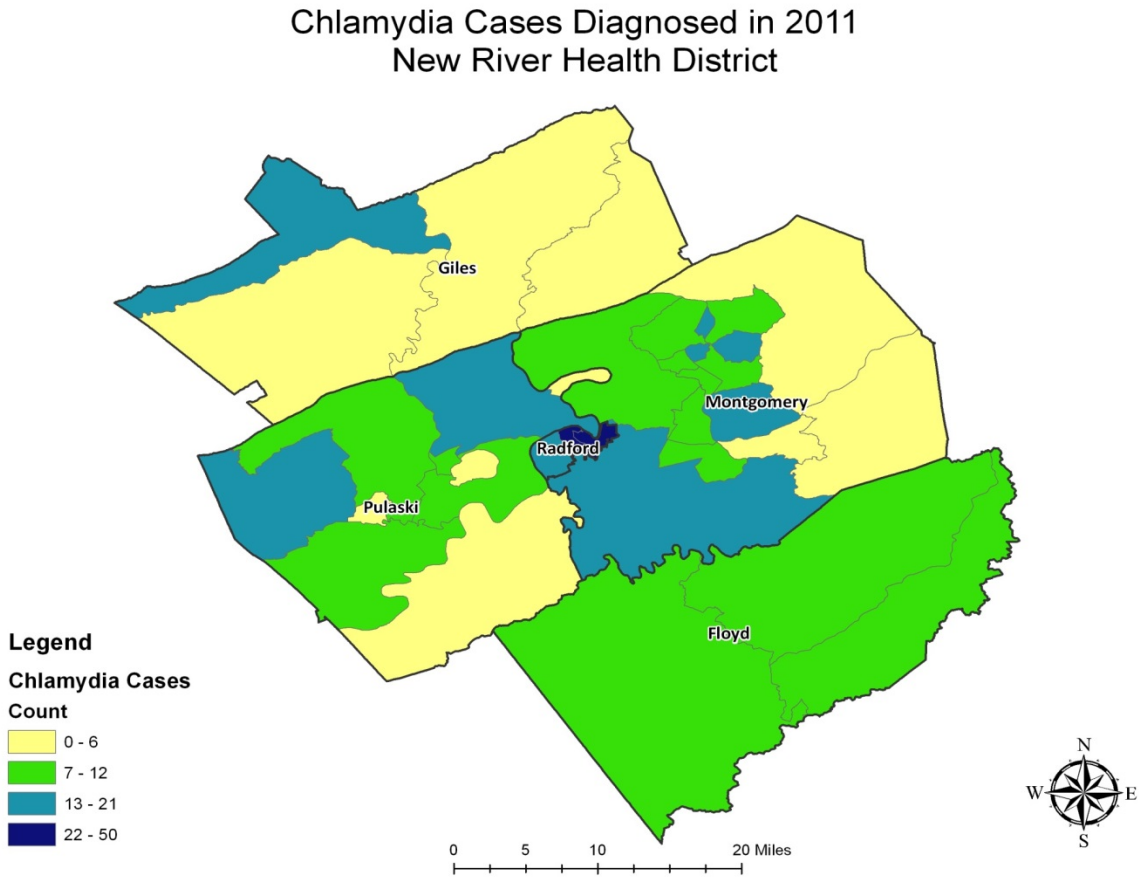


	Virginia	NRHD	Floyd	Giles	Montgomery	Pulaski	Radford
Syphilis	6.3	2.8	0	0	4.2	2.9	0
Gonorrhea	81.5	17.4	19.6	11.6	21.2	11.5	12.2
Chlamydia	431.6	267.6	170.2	190.9	225.7	275.3	664.3

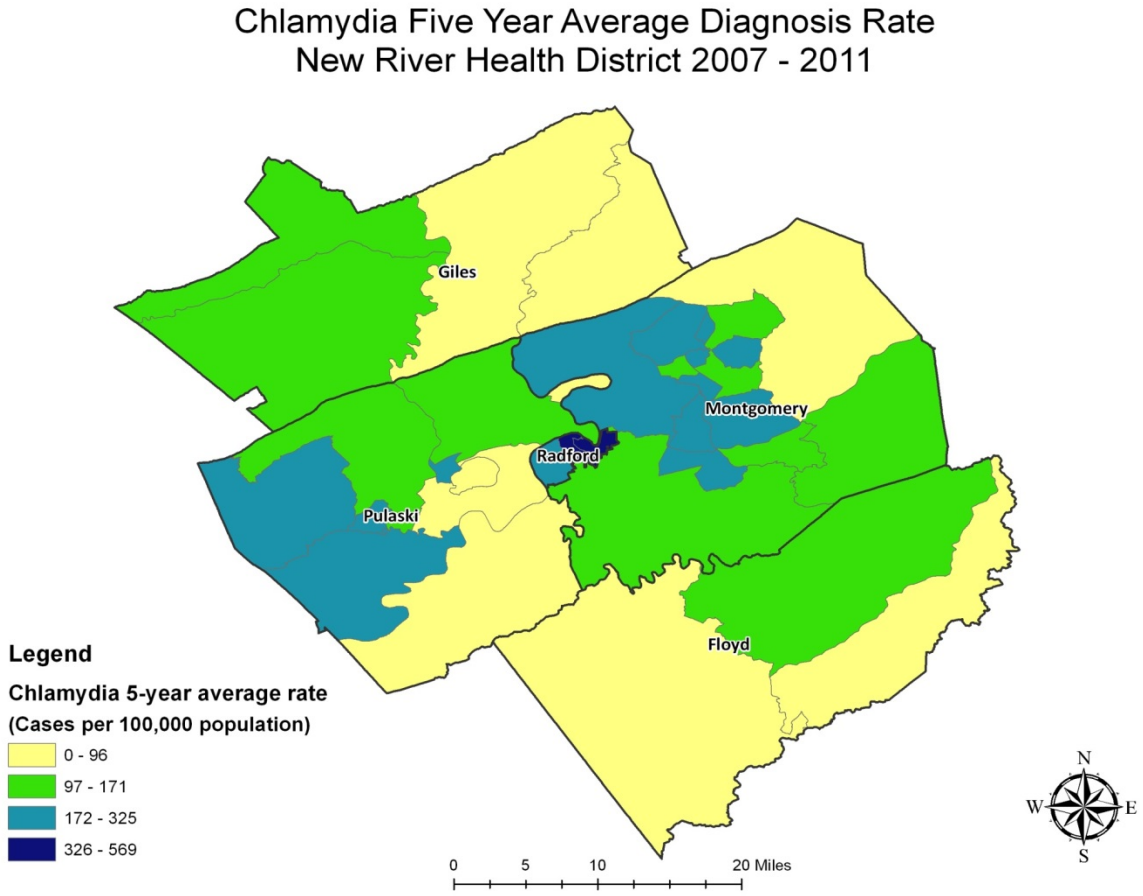
Source: Virginia Department of Health, HIV/AIDS, Sexually Transmitted Disease (STD) and Tuberculosis Data and Statistics



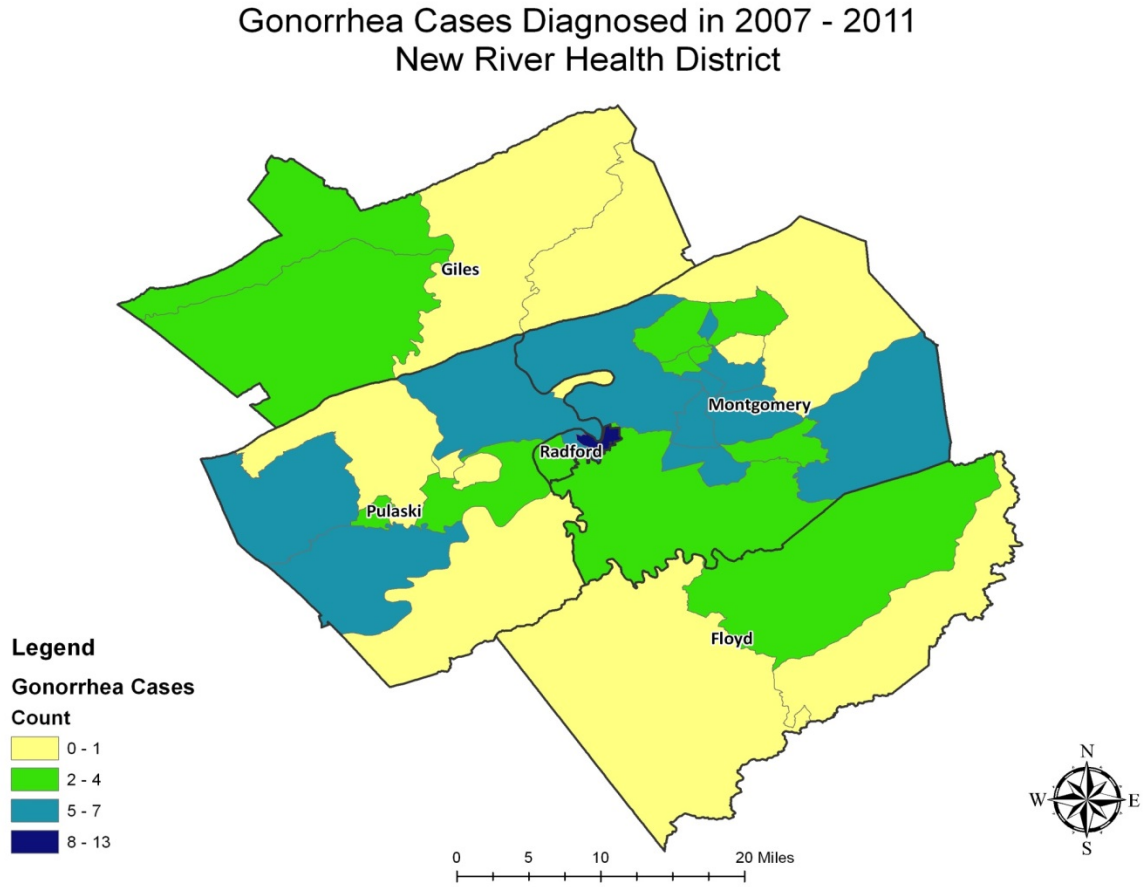
Source: Virginia Department of Health, HIV/AIDS, Sexually Transmitted Disease (STD) and Tuberculosis Data and Statistics



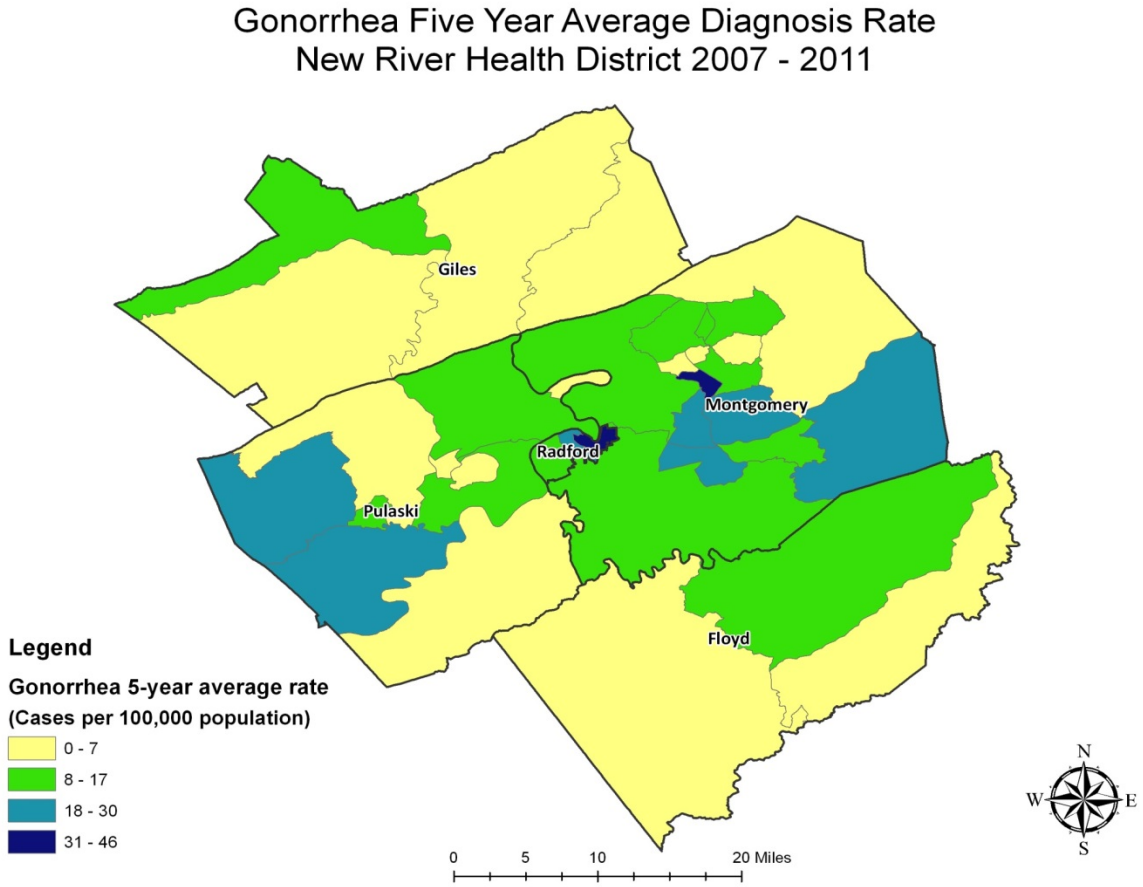
Source: Virginia Department of Health, HIV/AIDS, Sexually Transmitted Disease (STD) and Tuberculosis Data and Statistics



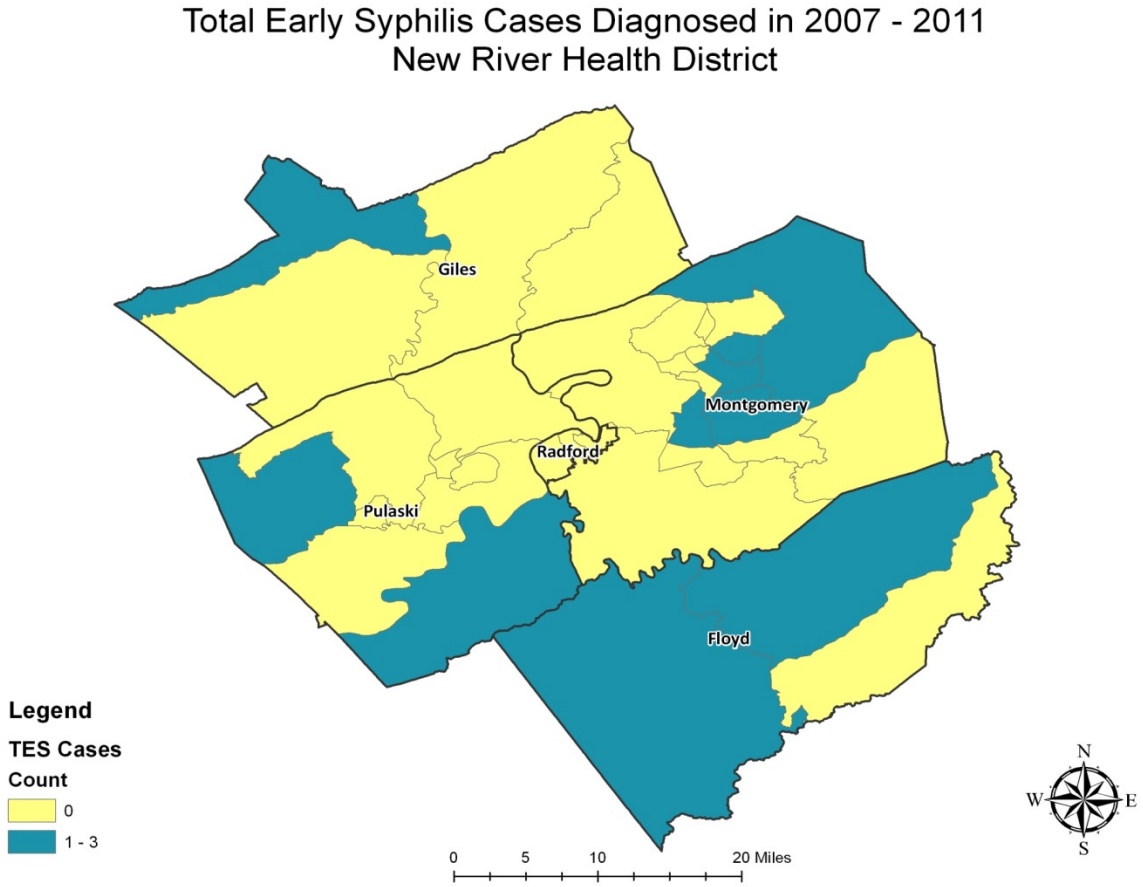
Source: Virginia Department of Health, HIV/AIDS, Sexually Transmitted Disease (STD) and Tuberculosis Data and Statistics



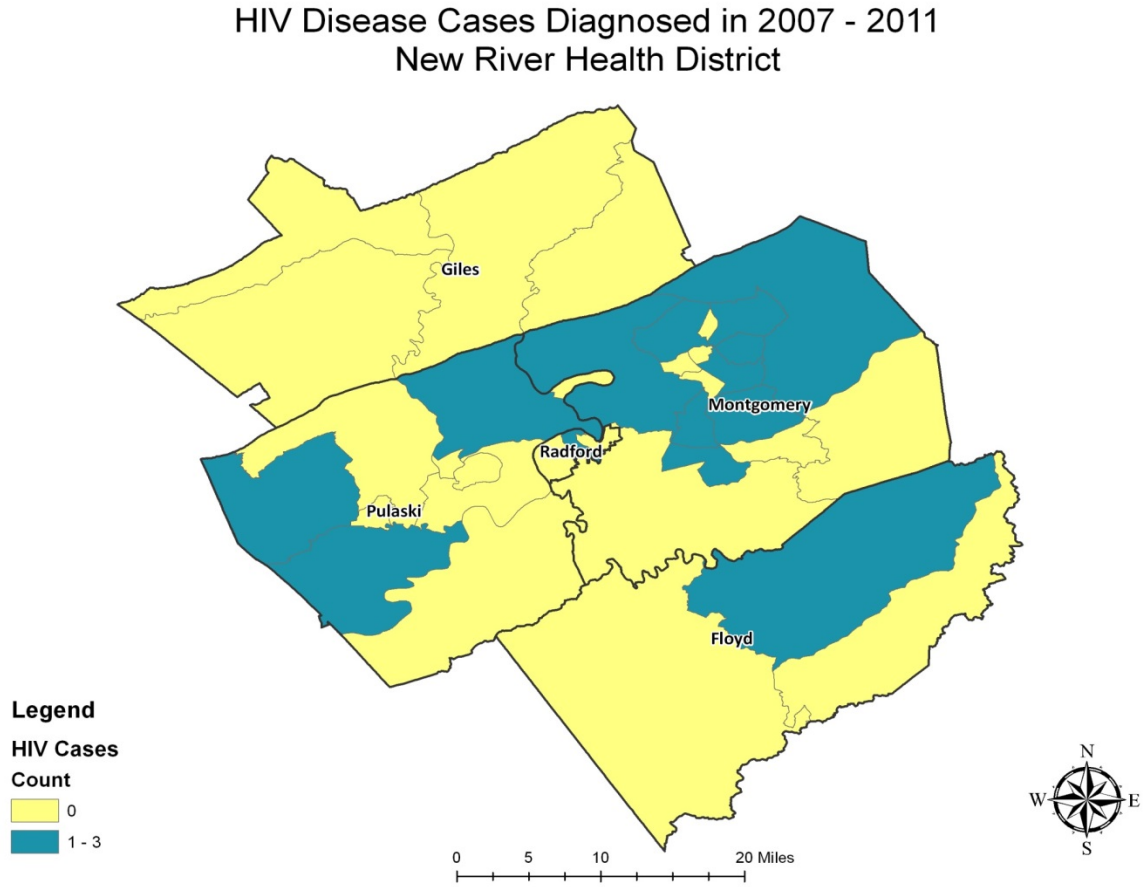
Source: Virginia Department of Health, HIV/AIDS, Sexually Transmitted Disease (STD) and Tuberculosis Data and Statistics



Source: Virginia Department of Health, HIV/AIDS, Sexually Transmitted Disease (STD) and Tuberculosis Data and Statistics

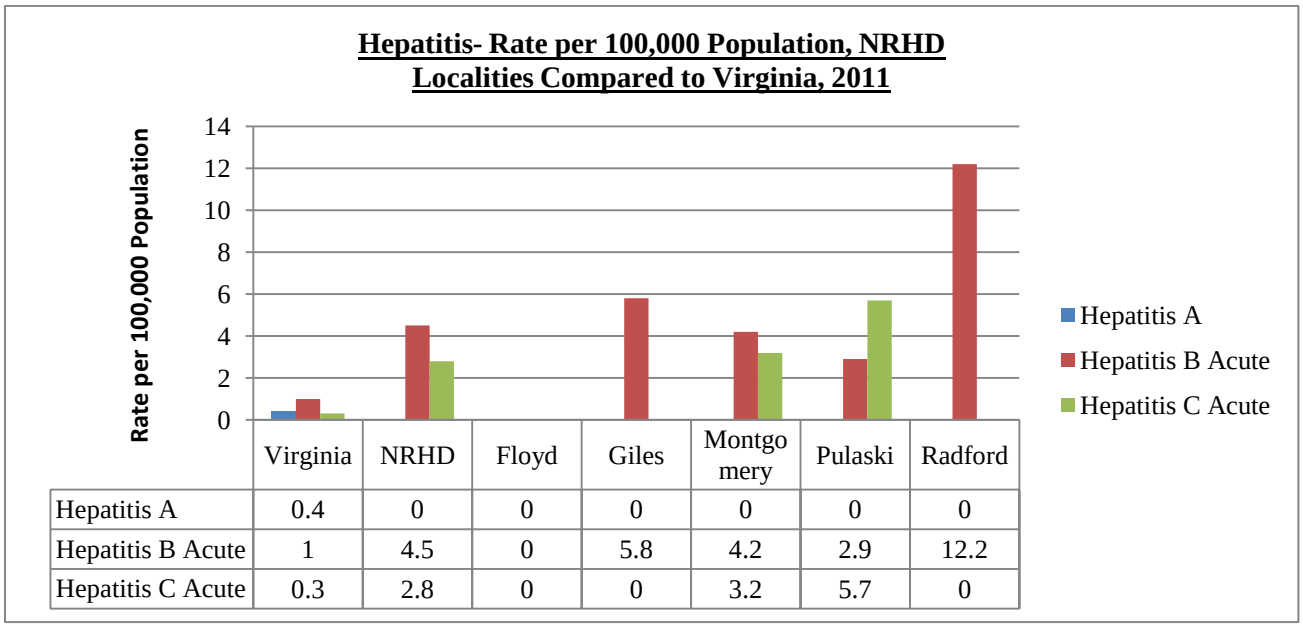


Source: Virginia Department of Health, HIV/AIDS, Sexually Transmitted Disease (STD) and Tuberculosis Data and Statistics



Source: Virginia Department of Health, HIV/AIDS, Sexually Transmitted Disease (STD) and Tuberculosis Data and Statistics

Hepatitis



	Virginia	NRHD	Floyd	Giles	Montgomery	Pulaski	Radford
Hepatitis A	0.4	0	0	0	0	0	0
Hepatitis B Acute	1	4.5	0	5.8	4.2	2.9	12.2
Hepatitis C Acute	0.3	2.8	0	0	3.2	5.7	0

Source: Virginia Department of Health, HIV/AIDS, Sexually Transmitted Disease (STD) and Tuberculosis Data and Statistics

Foodborne Illness

Foodborne Illness: Rate per 100,000 Population- 2011							
	Virginia	**NRHD**	**Floyd**	**Giles**	**Montgomery**	**Pulaski**	**Radford**
Campylobacter	10.1	11.8	13.1	23.1	11.7	5.7	12.2
E.Coli (Shinga Toxin Producir	1.5	0	0	0	0	0	0
Samonella	15.1	13.5	13.1	17.4	7.4	17.2	36.6
Shigella	1.3	0	0	0	0	0	0

Source: Virginia Department of Health, Number of Reportable Cases and Rate per 100,000 Population for Selected Diseases by Locality, District and Region, 2011

Notifiable Diseases

Notifiable Disease Rate per 100,000 Population- 2011							
	Virginia	NRHD	Floyd	Giles	Montgomery	Pulaski	Radford
Amebiosis	0.2	0	0	0	0	0	0
Chicken Pox	6.9	1.7	0	0	2.1	0	6.1
Giordiasis	3.6	2.2	0	0	4.2	0	0
H. Influenza Infection, Invasive	1.3	0	0	0	0	0	0
Influenza	226.9	81.9	65.4	0	45.6	86	384
Legionellosis	1.2	0.6	0	0	1.1	0	0
Listeriosis	0.2	0	0	0	0	0	0
Lyme Disease	12.8	14	52.4	0	13.8	8.6	6.1
Malaria	1	0	0	0	0	0	0
Meningococcal Disease	0.2	0.6	0	0	1.1	0	0
Mumps	0.2	0	0	0	0	0	0
Pertusis	5.2	43.8	451.6	0	3.2	0	36.6
Rabies in Animals	7.7	1.7	1.6	0.6	0.5	0.6	0.3
Spotted Fever Rickettsiosis	2.9	0.6	0	0	0	2.9	0
MRSA	16.3	10.1	13.1	11.6	9.5	11.5	6.1
Streptococcal Disease Group A, Invasive or TSS	2.4	1.1	0	0	1.1	2.9	0
Tuberculosis	2.8	1.7	0	0	2.1	2.9	0

Source: Virginia Department of Health, Number of Reportable Cases and Rate per 100,000 Population for Selected Diseases by Locality, District and Region, 2011

Health Factors

Health Behaviors

	Percent of adults who report smoking >= 100 cigarettes and currently smoking	Percent of adults that report a BMI>=30	Percent of adults ages 20+ reporting no leisure time physical activity	% Binge plus heavy drinking	Motor vehicle crash deaths per 100,000
Virginia	18%	28%	24%	16%	11
Floyd	-	28%	25%	-	25
Giles	22%	29%	29%	7%	16
Montgomery	14%	29%	21%	12%	9
Pulaski	33%	27%	25%	14%	0
Radford	13%	28%	22%	-	-

Source: County Health Rankings by Robert Wood Johnson Foundation, 2013

Clinical Care

	Ratio of population to primary care physicians	Ratio of population to dentists	Hospitalization ratio for ambulatory-care sensitive conditions per 1,000 Medicare enrollees	Medicare enrollees that receive HbA1c screening	Percent of Medicare enrollees that receive mammography screening
Virginia	1,356:1	1,811:1	58	86%	66%
Floyd	5,110:1	7,707:1	56	90%	68%
Giles	1,441:1	3,485:1	75	89%	77%
Montgomery	1,575:1	2,730:1	60	86%	74%
Pulaski	1,740:1	3,973:1	104	89%	68%
Radford	1,028:1	1,910:1	50	91%	80%

Source: County Health Rankings by Robert Wood Johnson Foundation, 2013

Physical Environment

	Daily average measure of fine particulate matter in micrograms per cubic meter (PM 2.5)	Percent of population exposed to water exceeding a violation limit during the last year	Rate of recreational facilities per 100,000 population	Percent of population who are low-income and do not live close to a grocery store	Percent of all resturants that are fast-food establishments
Virginia	12.5	8%	10	4%	50%
Floyd	12.6	0%	7	11%	40%
Giles	12.5	0%	0	4%	57%
Montgomery	12.5	0%	12	2%	48%
Pulaski	12.6	0%	11	6%	67%
Radford	12.6	-	12	7%	44%

Source: County Health Rankings by Robert Wood Johnson Foundation, 2013

HEALTHY PEOPLE 2020 OBJECTIVES AND THE NEW RIVER VALLEY

-Meets or exceeds Healthy People 2020 target -Does not meet Healthy People 2020 target

Access to Health Services

OBJECTIVE: Increase the proportion of persons with medical insurance from 83.2% in 2008 to 100% by 2020

- ✓ Floyd: 78.8%
- ✓ Giles: 80.1%*
- ✓ Montgomery: 80.3%*
- ✓ Pulaski: 81.1%*
- ✓ Radford: 78.8%*
- ✓ Virginia: 82.2%*

*Proportion has decreased since 2008

Cancer

OBJECTIVE: Reduce the overall cancer death rate from 178.4 in 2007 to 160.6 per 100,000 population by 2020

- ✓ Floyd: 129.8
- ✓ Giles: 194.4
- ✓ Montgomery: 163.0
- ✓ Pulaski: 175.9
- ✓ Radford: 180.4
- ✓ Virginia: 170.9

OBJECTIVE: Reduce the lung cancer death rate from 50.6 in 2007 to 45.5 per 100,000 population by 2020

- ✓ New River Valley: 51.0
- ✓ Virginia: 50.9

OBJECTIVE: Reduce the female breast cancer death rate from 22.9 in 2007 to 20.6 per 100,000 population by 2020

- ✓ New River Valley: 22.5
- ✓ Virginia: 23.9

Diabetes

OBJECTIVE: Reduce the diabetes death rate from 73.1 in 2007 to 65.8 per 100,000 population by 2020

- ✓ Floyd: 18.9
- ✓ Giles: 7.0
- ✓ Montgomery: 10.0
- ✓ Pulaski: 28.8
- ✓ Radford: 33.2
- ✓ Virginia: 18.7

Heart Disease and Stroke

OBJECTIVE: Reduce coronary health disease deaths from 126 in 2007 to 100.5 per 100,000 population by 2020

- ✓ Floyd: 183.3
- ✓ Giles: 189.4
- ✓ Montgomery: 172.0
- ✓ Pulaski: 265.9
- ✓ Radford: 179.9
- ✓ Virginia: 167.6

OBJECTIVE: Reduce stroke deaths from 42.2 in 2007 to 32.8 per 100,000 population by 2020

- ✓ Floyd: 41.3
- ✓ Giles: 42.8
- ✓ Montgomery: 29.3
- ✓ Pulaski: 38.2
- ✓ Radford: 17.4
- ✓ Virginia: 41.7

Nurtrition and Weight Status

OBJECTIVE: Reduce the proportion of adults who are obese from 33.9% of persons aged 20 years and older between 2005-2008 to 30.5% by 2020

- ✓ Floyd: 28%
- ✓ Giles: 29%
- ✓ Montgomery: 29%
- ✓ Pulaski: 27%
- ✓ Radford: 28%
- ✓ Virginia: 28%

Physical Activity

OBJECTIVE: Reduce the proportion of adults who engage in no leisure-time physical activity from 36.2% in 2008 to 32.6% by 2020

- ✓ Floyd: 25%
- ✓ Giles: 29%
- ✓ Montgomery: 21%
- ✓ Pulaski: 25%
- ✓ Radford: 22%
- ✓ Virginia: 24%

Substance Abuse

OBJECTIVE: Reduce the proportion of adults 18 years and older reporting they engaged in binge drinking from 27.1% in 2008 to 24.4% by 2020

- ✓ Floyd: 18%
- ✓ Giles: 9%
- ✓ Montgomery: 15%
- ✓ Pulaski: 13%
- ✓ Radford: 10%
- ✓ Virginia: 16%

Tobacco Use

OBJECTIVE: Reduce cigarette smoking by adults 18 years and older from 20.6% who were current smokers in 2008 to 12% by 2020

- ✓ Floyd: N/A
- ✓ Giles: 22%
- ✓ Montgomery: 16%
- ✓ Pulaski: 35%
- ✓ Radford: 13%
- ✓ Virginia: 19%

Injury and Violence Prevention

OBJECTIVE: Reduce unintentional injury deaths from 40 in 2007 to 36.0 per 100,000 population by 2020

- ✓ Floyd: 46.7
- ✓ Giles: 42.3
- ✓ Montgomery: 35.7
- ✓ Pulaski: 79.8
- ✓ Radford: 54.7

- ✓ Virginia: 32.2

OBJECTIVE: Reduce motor vehicle crash-related deaths from 13.8 in 2007 to 12.4 per 100,000 population by 2020

- ✓ Floyd: 33.0
- ✓ Giles: 18.0
- ✓ Montgomery: 11.0
- ✓ Pulaski: 16.0
- ✓ Radford: N/A
- ✓ Virginia: 13.0

OBJECTIVE: Reduce homicides from 6.1 in 2007 to 5.5 per 100,000 population by 2020

- ✓ Floyd: 1.4
- ✓ Giles: 2.8
- ✓ Montgomery: 1.8
- ✓ Pulaski: 0.3
- ✓ Radford: 0.7
- ✓ Virginia: 1.6

Maternal, Infant, and Child Health

OBJECTIVE: Reduce low birth weight from 8.2% of live births in 2007 to 7.8% by 2020

- ✓ Floyd: 6.3%
- ✓ Giles: 12.8%
- ✓ Montgomery: 7.0%
- ✓ Pulaski: 5.9%
- ✓ Radford: 7.4%
- ✓ Virginia: 8.0%

OBJECTIVE: Reduce very low birth weight from 1.5% of live births to 1.4% by 2020

- ✓ Floyd: 1.4%
- ✓ Giles: 2.8%
- ✓ Montgomery: 1.8%
- ✓ Pulaski: 0.3%
- ✓ Radford: 0.7%
- ✓ Virginia: 1.6%

OBJECTIVE: Increase the proportion of pregnant women who receive prenatal care in the 1st trimester from 70.8% in 2007 to 77.9% by 2020

- ✓ Floyd: 90.2%
- ✓ Giles: 80.1%
- ✓ Montgomery: 88.5%
- ✓ Pulaski: 85.8%
- ✓ Radford: 84.9%
- ✓ Virginia: 81.9%

Family Planning

OBJECTIVE: Reduce pregnancies among adolescent females aged 15-17 years from 40.2 in 2005 to 36.2 per 1,000 females aged 15-17 by 2020

- ✓ Floyd: 3.5
- ✓ Giles: 20.8
- ✓ Montgomery: 14.0
- ✓ Pulaski: 15.4
- ✓ Radford: 41.7
- ✓ Virginia: 16.3

OBJECTIVE: Reduce pregnancies among adolescent females aged 18-19 years from 117.7 in 2005 to 105.9 per 1,000 females aged 18-19 years by 2020

- ✓ Floyd: 99.3
- ✓ Giles: 100.0
- ✓ Montgomery: 11.7
- ✓ Pulaski: 104.0
- ✓ Radford: 17.8
- ✓ Virginia: 62.2

Immunization and Infectious Disease

OBJECTIVE: Reduce cases of Hepatitis A virus from 1.0 in 2007 to 0.3 per 100,000 population by 2020

- ✓ Floyd: 0.0
- ✓ Giles: 0.0
- ✓ Montgomery: 0.0
- ✓ Pulaski: 0.0
- ✓ Radford: 0.0
- ✓ Virginia: 0.4

OBJECTIVE: Reduce cases of Tuberculosis from 4.9 in 2005 to 1.0 per 100,000 population by 2020

- ✓ Floyd: 0.0
- ✓ Giles: 0.0
- ✓ Montgomery: 2.1
- ✓ Pulaski: 2.9
- ✓ Radford: 0.0
- ✓ Virginia: 2.8

OBJECTIVE: Reduce cases of Meningococcal disease from 0.34 cases between 2004-2008 to 0.3 per 100,000 by 2020

- ✓ Floyd: 0.0
- ✓ Giles: 0.0
- ✓ Montgomery: 1.1
- ✓ Pulaski: 0.0
- ✓ Radford: 0.0
- ✓ Virginia: 0.2

Food Safety

OBJECTIVE: Reduce infections caused by Camplyobacter species commonly through food from 12.7 cases between 2006-2008 to 8.5 cases per 100,000 population by 2020

- ✓ Floyd: 13.1
- ✓ Giles: 23.1
- ✓ Montgomery: 11.7
- ✓ Pulaski: 5.7
- ✓ Radford: 12.2
- ✓ Virginia: 10.1

OBJECTIVE: Reduce infections caused by Shinga toxin-producing Escherichia coli (STEC) O157 from 1.2 cases between 2006-2008 to 0.6 cases per 100,000 population by 2020

- ✓ Floyd: 0.0
- ✓ Giles: 0.0
- ✓ Montgomery: 0.0
- ✓ Pulaski: 0.0
- ✓ Radford: 0.0
- ✓ Virginia: 1.5

OBJECTIVE: Reduce infections caused by Salmonella species transmitted commonly through food from 15.2 cases between 2006-2008 to 11.4 cases per 100,000 population by 2020

- ✓ Floyd: 13.1
- ✓ Giles: 17.4
- ✓ Montgomery: 7.4
- ✓ Pulaski: 17.2
- ✓ Radford: 36.6
- ✓ Virginia: 15.1

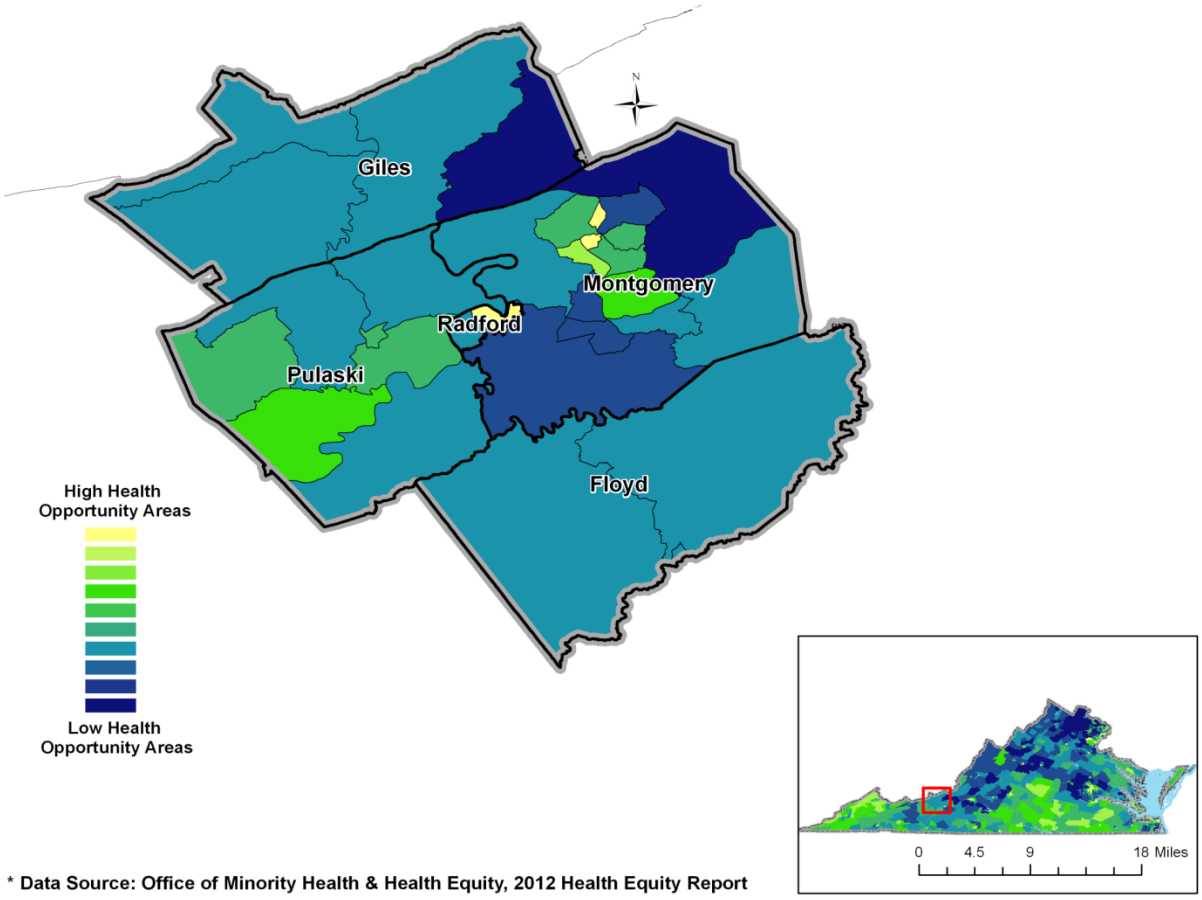
Mental Health and Mental Disorders

OBJECTIVE: Reduce the suicide rate from 11.3 in 2007 to 10.2 per 100,000 population by 2020

- ✓ Floyd: 5.8
- ✓ Giles: 28.1
- ✓ Montgomery: 12.2
- ✓ Pulaski: 23.5
- ✓ Radford: 8.1
- ✓ Virginia: 12.5

Source: U.S. Department of Health, Healthy People 2020

Health Opportunity in the New River Valley by Census Tract

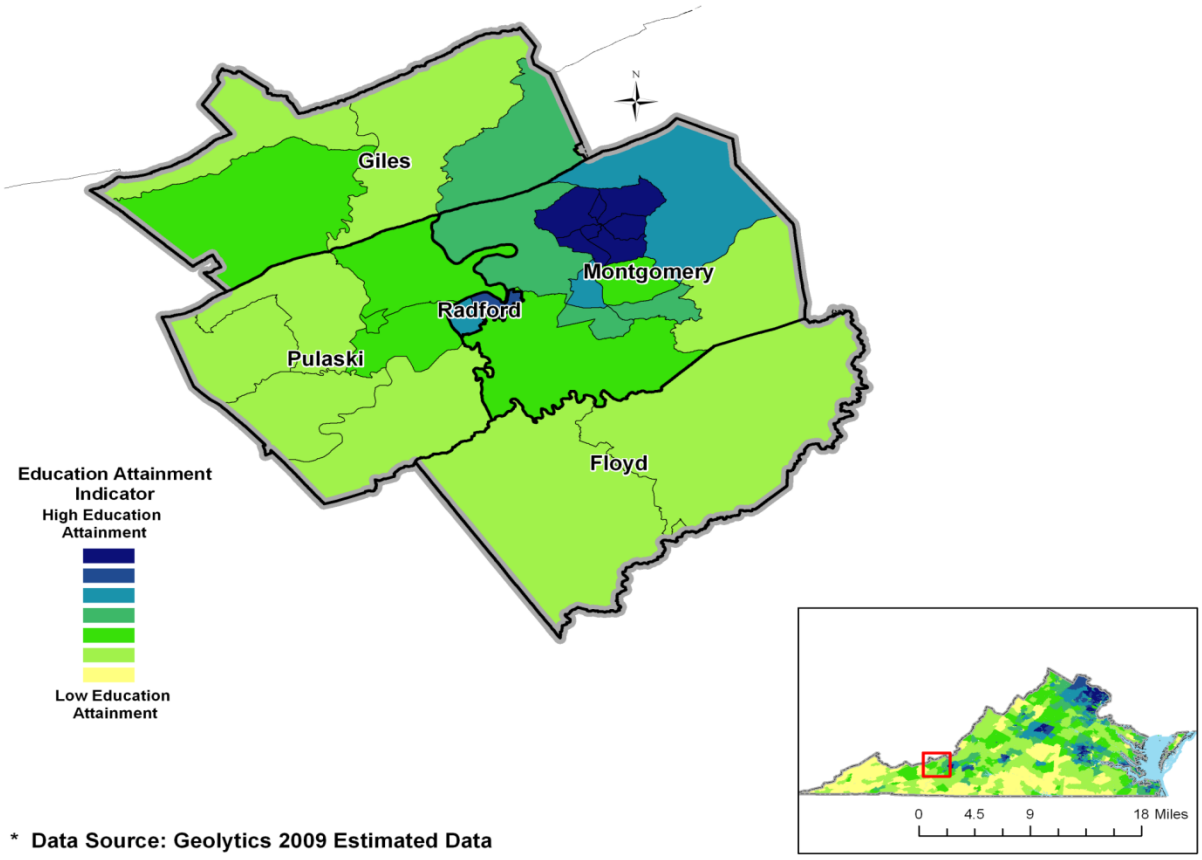


* Data Source: Office of Minority Health & Health Equity, 2012 Health Equity Report

- **The Health Opportunity Index was designed to identify those areas and populations that are most vulnerable to adverse health outcomes. It is composed of ten indicators that reflect a broad array of social determinants of health: (1) Education (2) EPA Environmental Hazards (3) Affordability of transportation and housing, (4) Household Income Diversity, (5) Job Participation, (6) Population Density, (7) Racial Diversity, (8) Population Churning, (9) Material Deprivation, and (10) Local Commuting Patterns.**
- ***For more information on the Health Opportunity Index and the indicators please visit http://www.vdh.virginia.gov/OMHHE/***

  Source: Virginia Department of Health, Virginia Health Equity Report 2012

Educational Attainment Indicator in the New River Valley by Census Tract



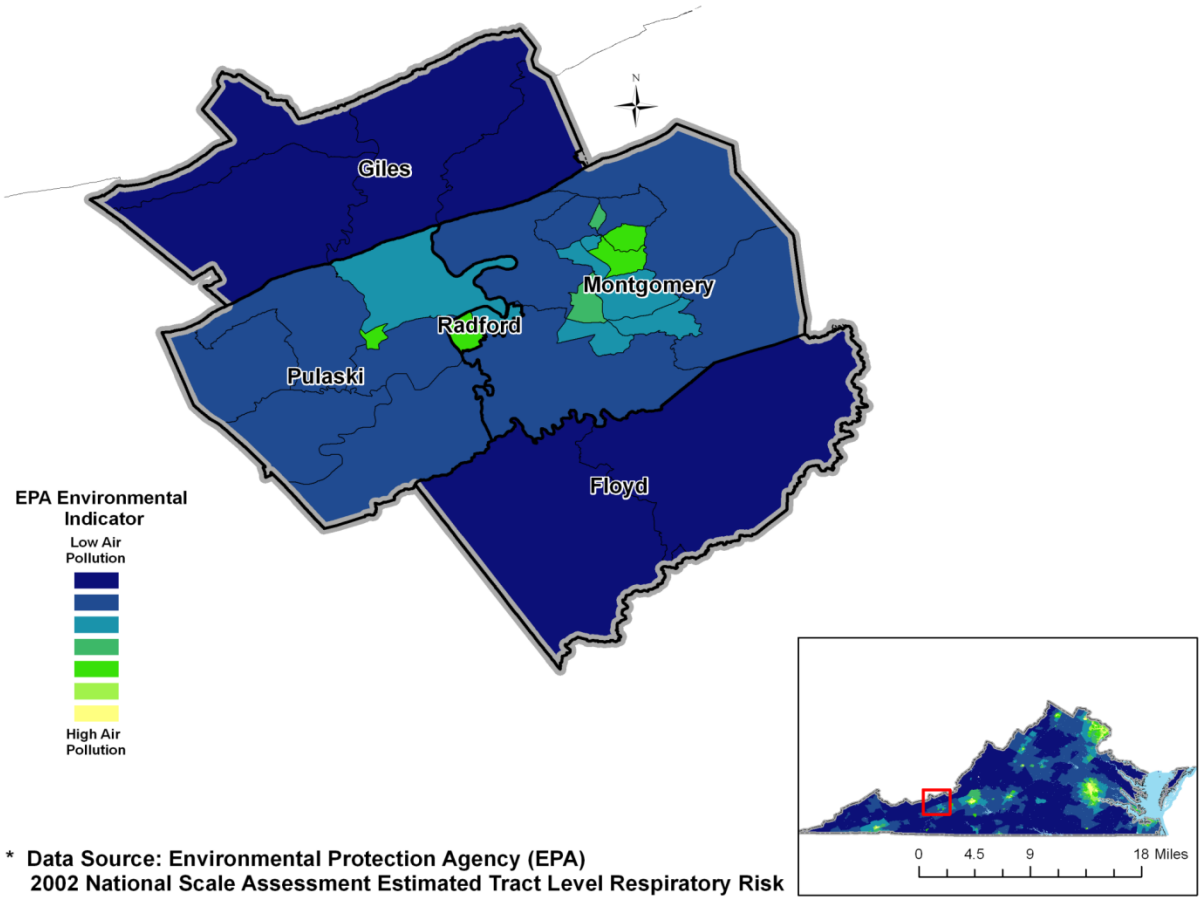
* Data Source: Geolytics 2009 Estimated Data

- Life expectancy in the United States has increased, but this increase has been largely concentrated among individuals with more than 12 years of education. There is strong evidence that limited education not only limits employment opportunities but is also associated with poorer health status. The Educational Attainment Indicator measures the overall level of education achieved by the adult population. It is composed of 2 factors:

  - **Attainment**: calculated by adding the percentage of the population twenty-five and older with at least a high school diploma or equivalent, the percentage with at least a bachelor's degree, and the percentage with an advanced degree. Those who have earned an associate's degree or those who have completed some college without earning a degree are counted in the "at least high school" category.
  - **Enrollment**: calculation that takes into account the total number of students enrolled in school (of any age at any level) divided by the total school-aged population of 3 to 24 year-olds (inclusive).

Source: Virginia Department of Health, Virginia Health Equity Report 2012

EPA Environmental Hazard Indicator in the New River Valley by Census Tract

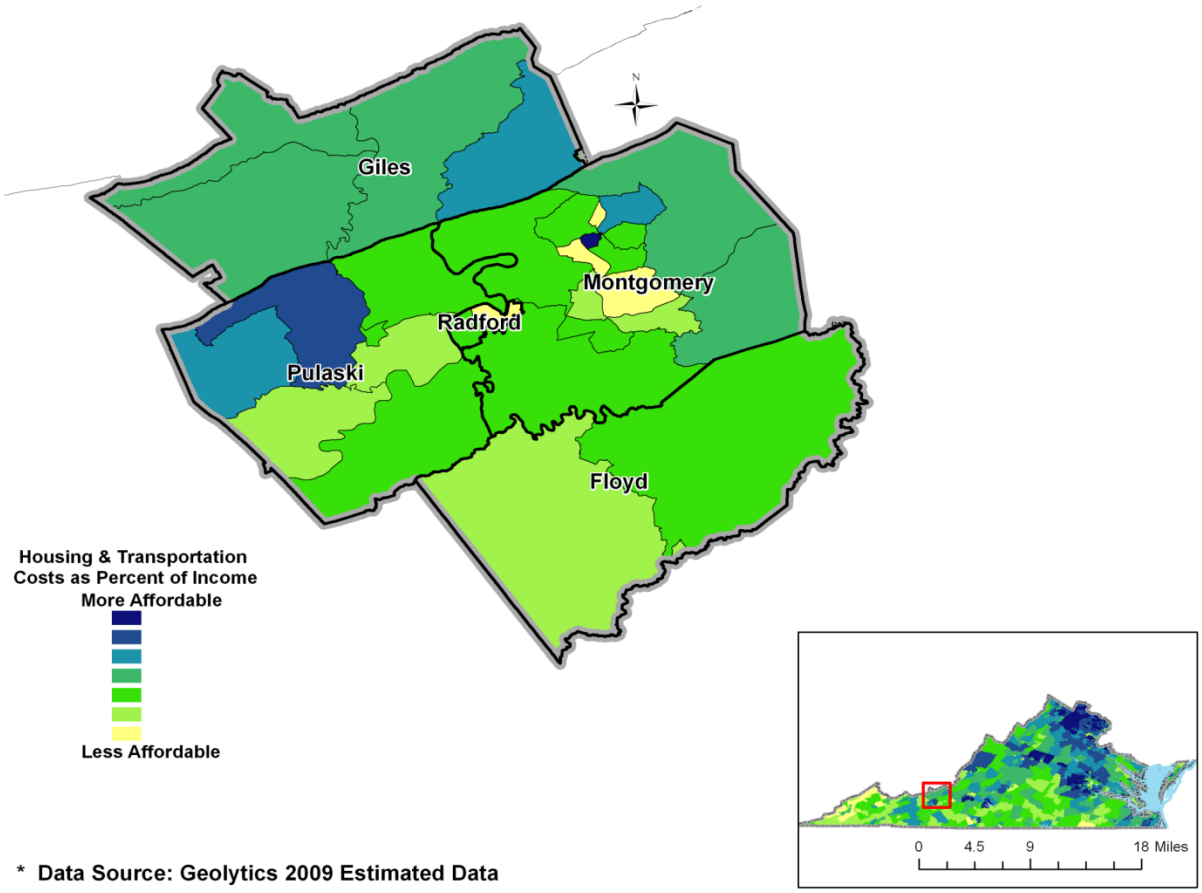


* Data Source: Environmental Protection Agency (EPA)
2002 National Scale Assessment Estimated Tract Level Respiratory Risk

- It has been estimated by the American Lung Association (2011, 6) that approximately half the citizens (50.3%) of the United States live in areas that have unhealthful levels of air born environmental pollutants**.** The environmental indicator was computed using EPA National Air Toxics Assessments (NATA) Environmental Data to evaluate the magnitude of air pollution by Census Tract. This Database contains, three risk variables-- cancer risk, respiratory risk and neurological risk. All these variables were standardized to Z-Scores and summed to construct the hazard quotients of the toxic compounds that adversely affect health outcomes.

Source: Virginia Department of Health, Virginia Health Equity Report 2012

Housing and Transportation Affordability Indicator in the New River Valley by Census Tract

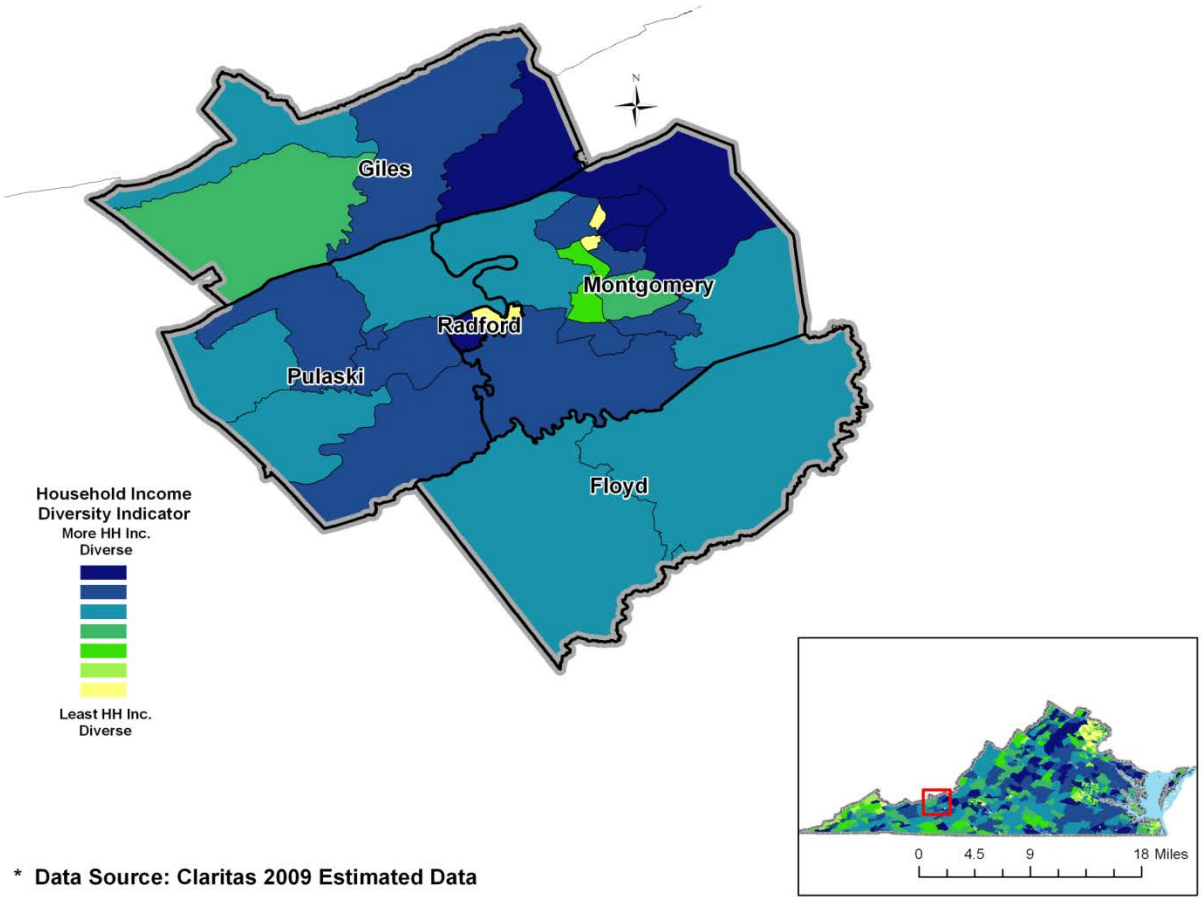


* **Data Source: Geolytics 2009 Estimated Data**

- The poverty measure used by U.S. Census Bureau assumes that the cost-of-living is the same everywhere in the United States. The Affordability Indicator takes into account the significant cost-of-living differentials within the Commonwealth, which poverty estimates overlook. It identifies the most significant expenses families incur (transportation and housing costs) and suggests the impact of such costs on disposable income. The affordability indicator is composed of three variables. (1) housing cost, (2) transportation cost and (3) total income. The indicator measures the proportion of income spent on housing and transportation.

Source: Virginia Department of Health, Virginia Health Equity Report 2012

Household Income Diversity Indicator in the New River Valley by Census Tract

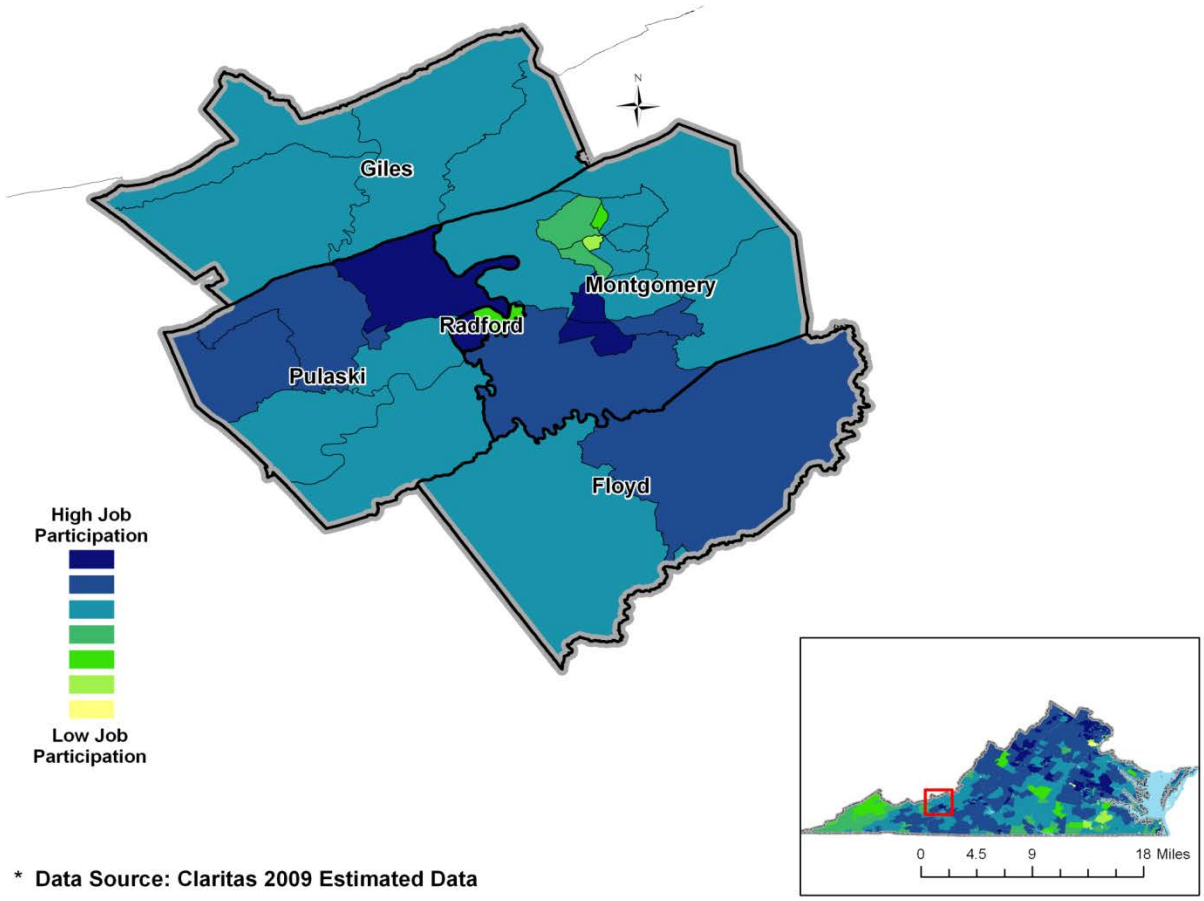


* **Data Source: Claritas 2009 Estimated Data**

- Income inequality is consistently linked to population health in United States, compared to all the industrialized countries in the world. The health impact of household income diversity is most relevant when there is low diversity and the average income is low; this signifies that there is a high concentration of low income individuals. Such concentrations may lead to "poverty traps". Conversely, it is believed that economically integrated communities are likely to provide greater opportunities (including health) for residents across different incomes. Income diversity is a broader concept than poverty in that it is defined over the whole distribution; it is not simply the individuals or households below a certain poverty line. Diversity, therefore, refers to the difference in household income within the same Census Tract. The index was measured by using all 10 census income ranges; namely annual incomes of less than $15,000; $15,000 to $24,999, $25,000 to $34,999, $35,000 to $49,999, $50,000 to $74,999, $75,000 to $99,999, $100,000 to $149,999, $150,000 to $249,999, $250,000 to $499,999, and $500,000 or more.

Source: Virginia Department of Health, Virginia Health Equity Report 2012

Job Participation Indicator in the New River Valley by Census Tract

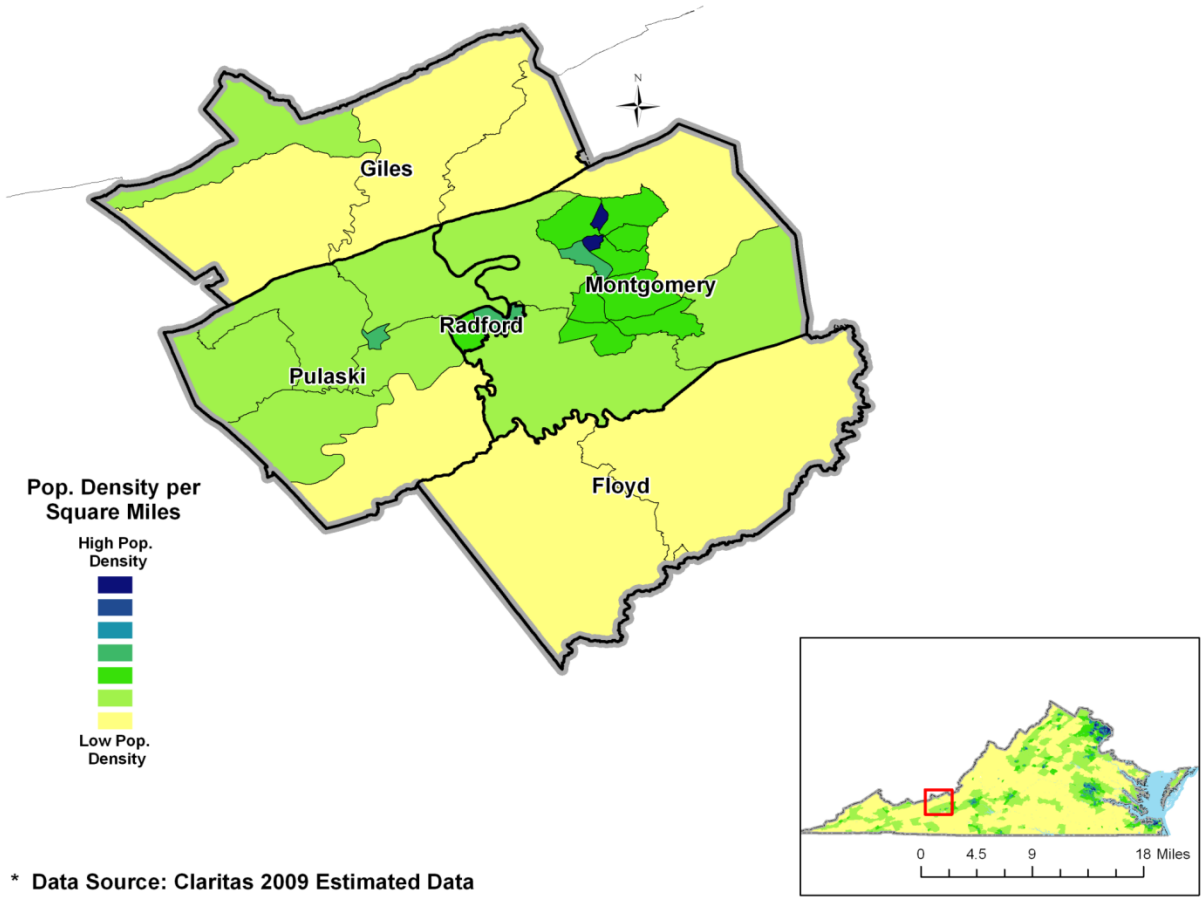


* **Data Source: Claritas 2009 Estimated Data**

- Job participation rates measure the percent of population 16 years of age through 64 who are either employed or unemployed and seeking work. Because job participation rates are sensitive to a number of local community attributes (e.g., educational attainment, disability, household composition, car ownership, job availability), the measure can provide a sensitive indicator to the unique employment profile of a community. Job participation rate is often used by economists as an indicator of economic development and growth. Employment, which affects income, is strongly associated with health status. The indicator is composed of three variables:
  - **Number employed**
  - **Number unemployed**
  - **The civilian non-institutionalized population, between 16 and 64 years.**

Source: Virginia Department of Health, Virginia Health Equity Report 2012

Population Density Indicator in the New River Valley by Census Tract

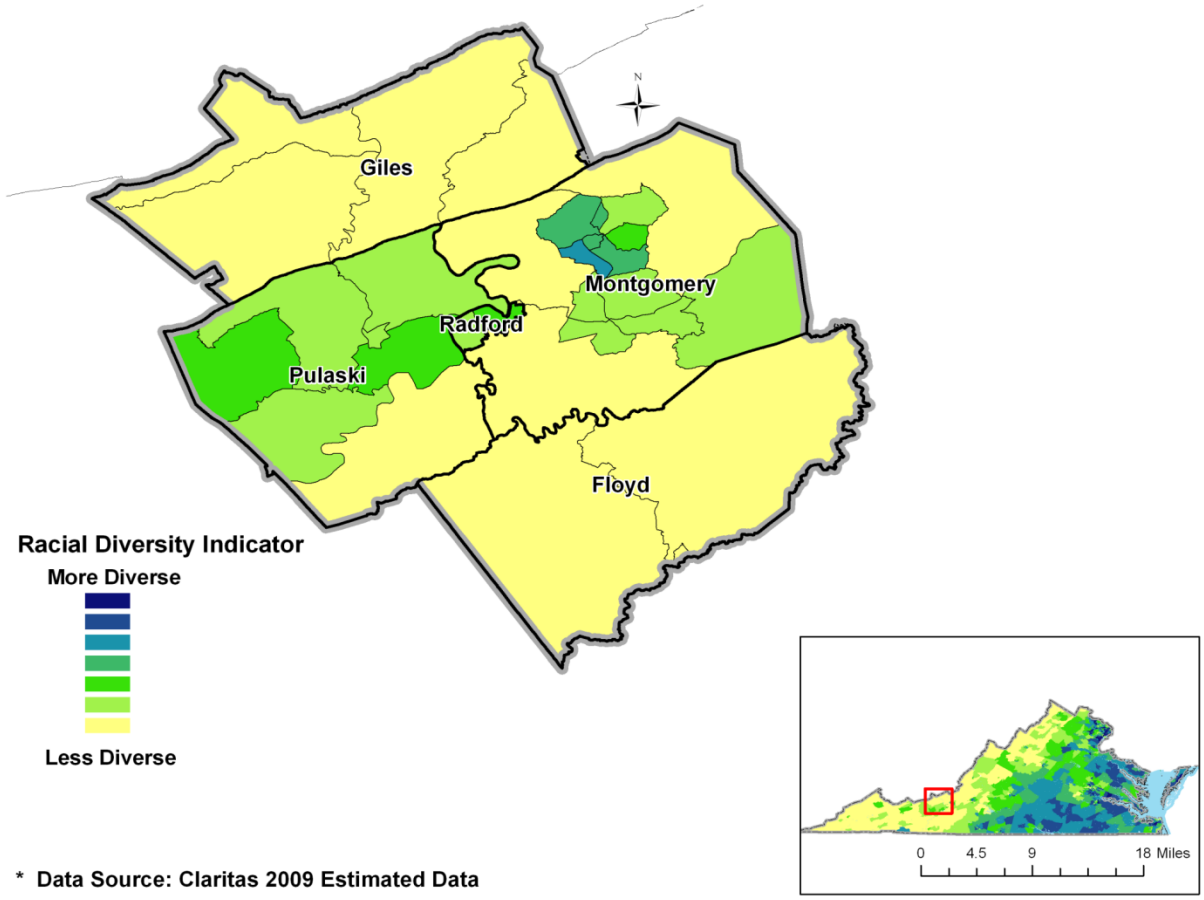


* Data Source: Claritas 2009 Estimated Data

- Population density is often used as an indicator of land use patterns (spatial accumulation, which indicates high or low concentration of population of an area) associated with urban, sub-urban, and rural developments. The index is calculated by dividing the total population by the square miles in the area of interest.

Source: Virginia Department of Health, Virginia Health Equity Report 2012

Racial Diversity Indicator in the New River Valley by Census Tract

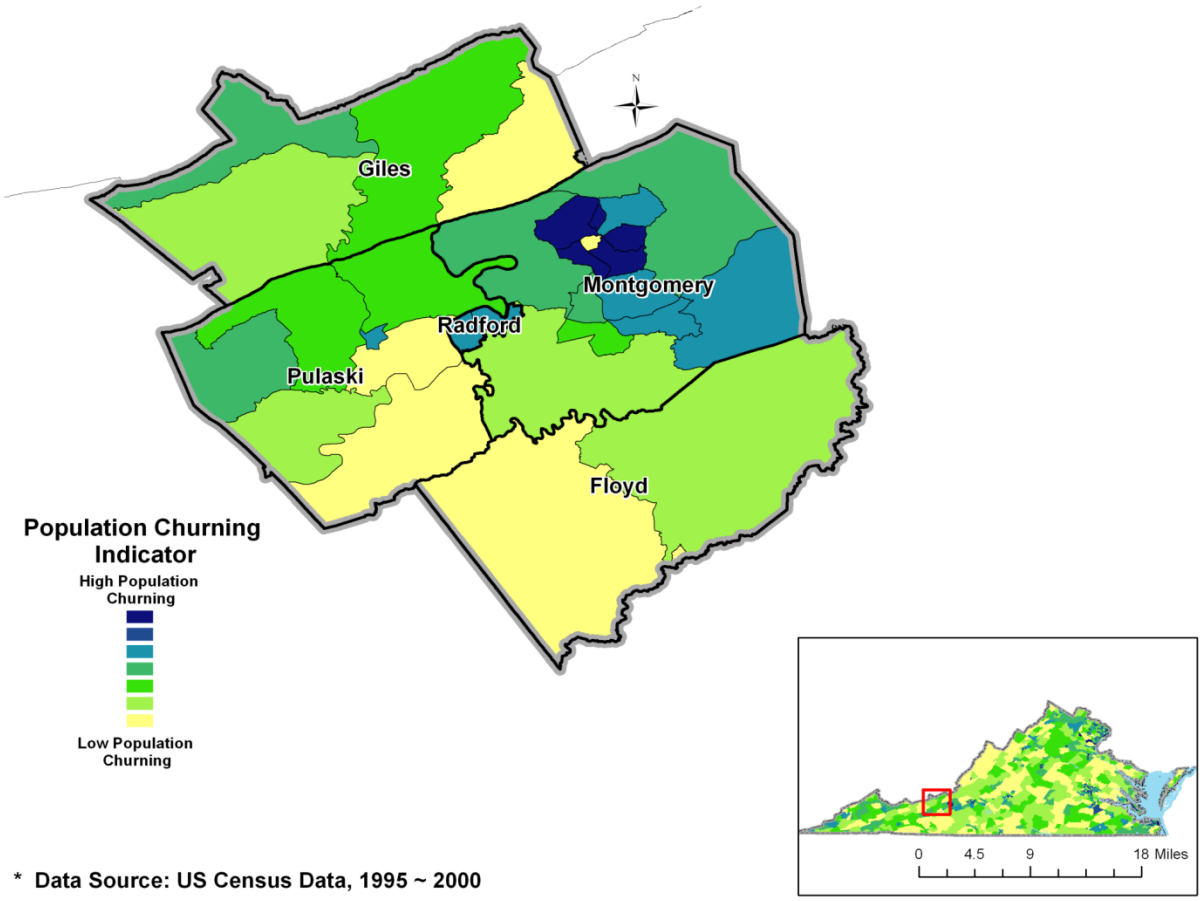


* Data Source: Claritas 2009 Estimated Data

- The Diversity Indicator identifies the probability that two persons, chosen at random from the street will belong to different race or ethnic groups. The calculation of this indicator accommodates up to seven racial groups: six single-race groups (White, Black, American Indian, Asian, Pacific Islander, Some Other Race) and one multiple-race group (two or more races).

Source: Virginia Department of Health, Virginia Health Equity Report 2012

Population Churning Indicator in the New River Valley by Census Tract

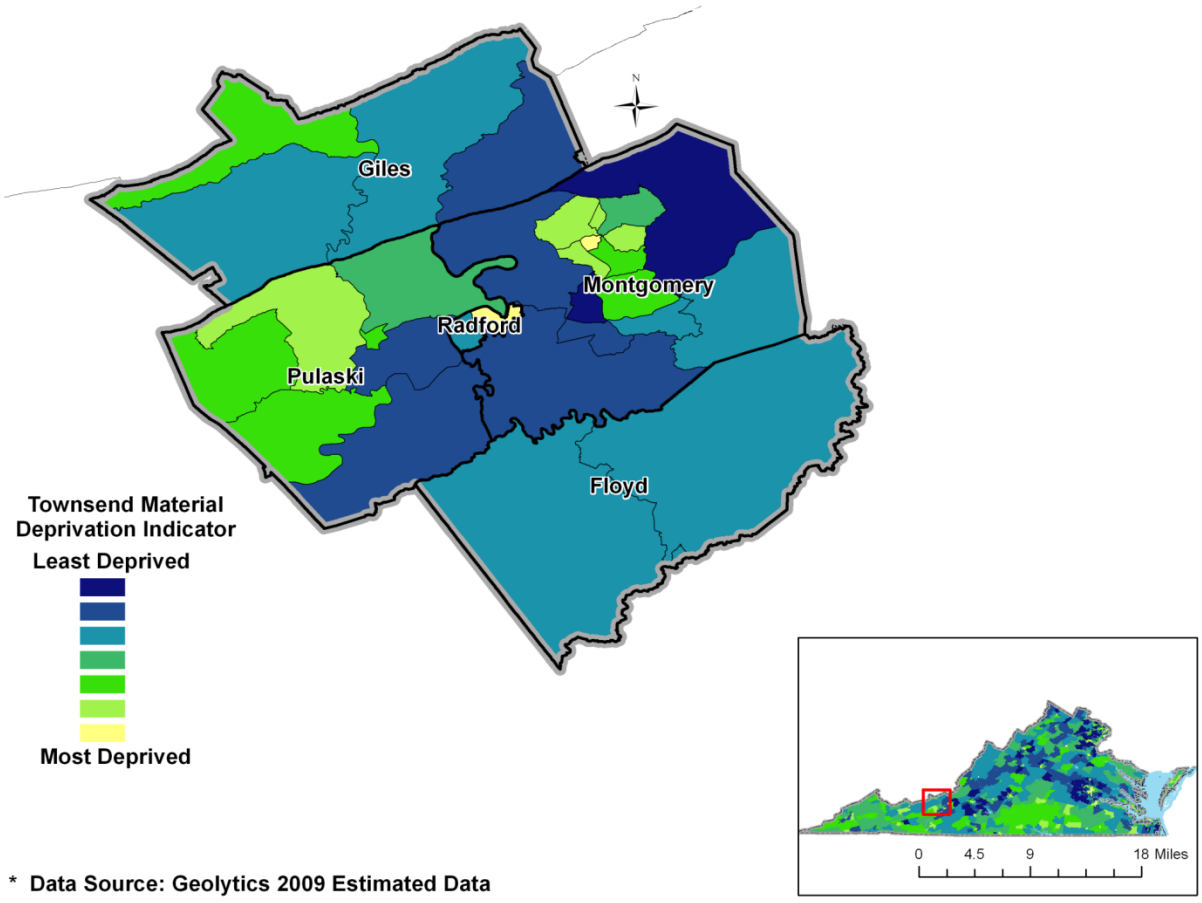


* **Data Source: US Census Data, 1995 ~ 2000**

- Churning is measured by the sum of the number of in- and out-migrants of an area expressed as a ratio of the entire population (in and out/ total population). For the HOI, churning has been estimated on an annual basis for each Census Tract. As researchers have noted, churn may be viewed as both a threat and as an opportunity. Population churning can provide a useful measure of the potential disruption to local services such as health services and education but it can also facilitate the development of social capital by increasing the number of social networks an individual or community may have as new neighbors arrive and by increasing the access to opportunities through social connections. It is also possible that high levels of churning could interfere with the development of social capital if population turnover occurs at a rate to prevent the development of new social networks. Population churning is a measure that takes into account total population movements in relation to the underlying population at risk in a way that net migration does not. Net migration will only indicate the balance of movement (either in or out) in relation to the population; this shows if an area is gaining or losing population, and the relative level of this gain or loss.

Source: Virginia Department of Health, Virginia Health Equity Report 2012

Townsend Material Deprivation Indicator in the New River Valley by Census Tract

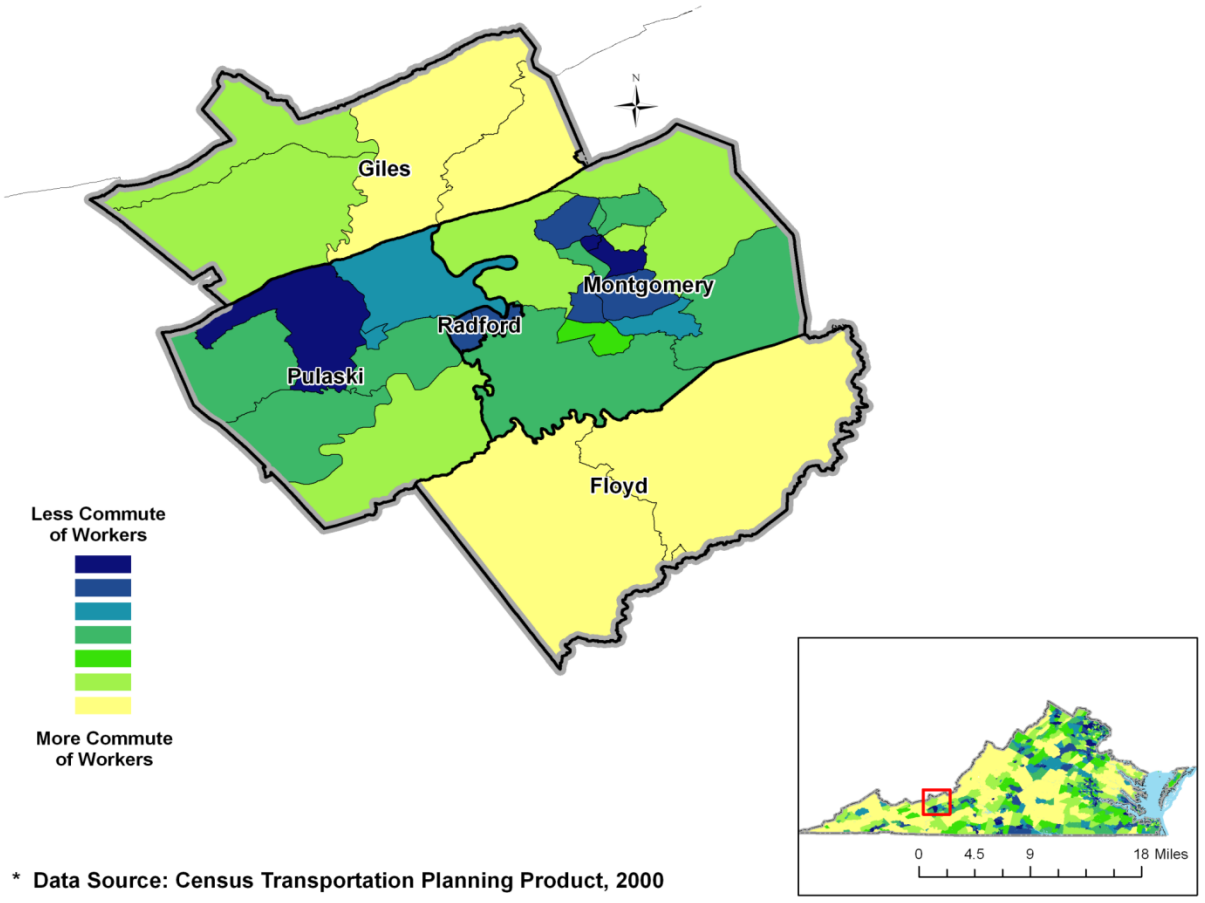


* Data Source: Geolytics 2009 Estimated Data

- The Townsend deprivation indicator measures economic deprivation. According to Townsend, Material deprivation entails the lack of goods, services, resources, amenities and physical environment which are customary, or at least widely approved in the society under consideration. As discussed previously, more general measures of material deprivation (low income, limited education) are strongly associated with poor health outcomes. The Townsend Indicator provides a process whereby low SES may translate into limited opportunity. The indicator is composed of four variables:
  - **Percent economically active residents aged 16-64 who are unemployed**
  - **Percent private households who do not possess a car or van**
  - **Percent private households not owner occupied**
  - **Percent private households overcrowded (more than one person per room).**

Source: Virginia Department of Health, Virginia Health Equity Report 2012

Local Commute of Workers Indicator in the New River Valley by Census Tract



* **Data Source: Census Transportation Planning Product, 2000**

- A spatial job mismatch exists when there are more or less jobs in an area than the number of people with the appropriate training required to fill those jobs. Spatial mismatch can lead, therefore, to job sprawl which may in turn be related to urban sprawl where transportation requirements lead to car or public transportation dependency. It is measured by the inflow of workers to an area compared to the outflow from that same area. When mismatch becomes highly distorted it may lead to the channeling of employees into a position of underemployment, i.e., employment of the overskilled and overeducated into sectors requiring lower training levels or unskilled workers unable to access jobs that are located a distance from where they live. Spatial job mismatch can also cause individuals with the means to move to locations with more desirable job opportunities to leave an area. Limited access to jobs for which someone is qualified is associated with unemployment and low income and the resulting challenges, which are strongly associated with poor health outcomes. Commuting pattern based on Census Transportation Planning Package (CTP) data can be used to indicate in flow and outflow of workers of an area. This is the ratio of inflow plus outflow divided by total resident work force in the area in question. This is an indicator of the mismatch between the labor force and employment opportunity inside an area and outside an area. This mismatch between labor force and employment can increase commuting cost for individuals.

Source: Virginia Department of Health, Virginia Health Equity Report 2012

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