

# Housing and Health in the Williamsburg Region



HOUSING VIRGINIA

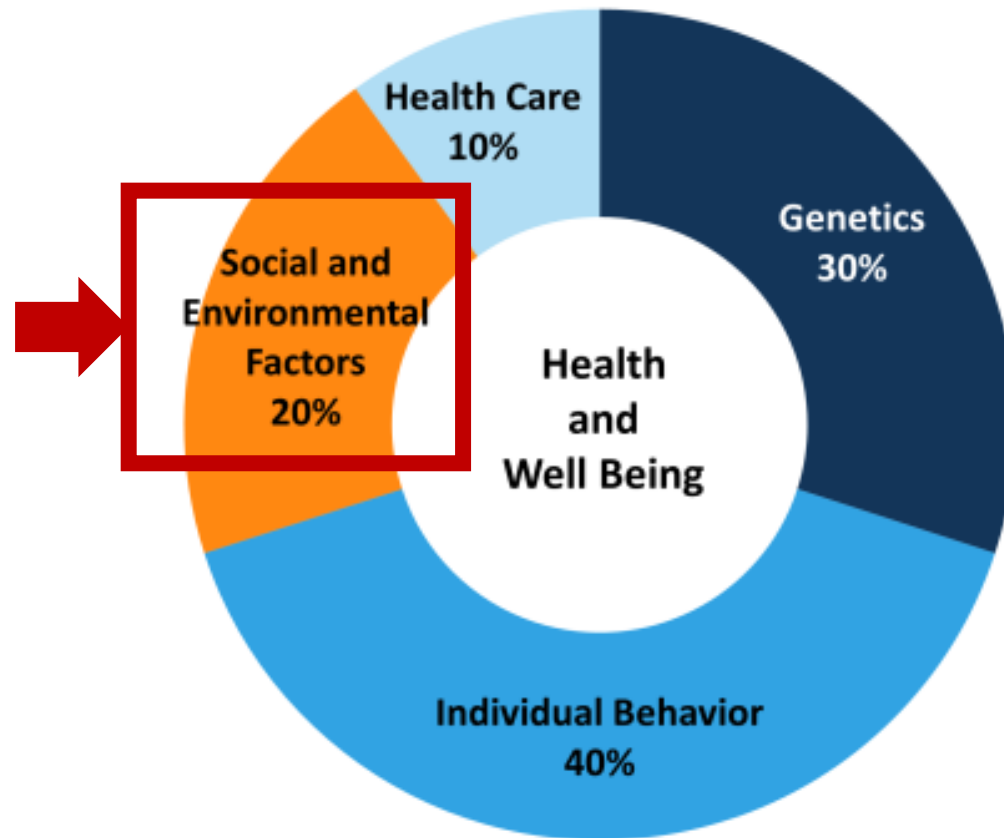
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INFORM | CONNECT | UNLOCK

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[www.housingvirginia.org](http://www.housingvirginia.org)

# Contributors to health and well-being



*Schroeder, SA (2007). We Can Do Better - Improving the Health of the American People. NEJM. 357:1221-8.*

# Social Determinants of Health



Economic Stability	Neighborhood and Physical Environment	Education	Food	Community and Social Context	Health Care System
Employment	Housing	Literacy	Hunger	Social integration	Health coverage
Income	Transportation	Language	Access to healthy options	Support systems	Provider availability
Expenses	Safety	Early childhood education		Community engagement	Provider linguistic and cultural competency
Debt	Parks	Vocational training		Discrimination	Quality of care
Medical bills	Playgrounds	Higher education			
Support	Walkability				

## Health Outcomes

Mortality, Morbidity, Life Expectancy, Health Care Expenditures, Health Status, Functional Limitations

# How do housing and health connect?



*Adapted from Robert Wood Johnson Foundation:  
“Exploring the Social Determinants of Health” (2011)*

# 1 Physical condition of home



## HOME SAFETY

- Home accidents are responsible for 18,000 deaths and 12 million injuries per year (Runyan et al. 2005)
- House fire injuries most common in low income neighborhoods with older homes (Shai 2006)

## RESIDENT HEALTH

- Children in older homes are at risk for lead poisoning from paint and plumbing
- Water leaks and poor home ventilation contribute to mold and other indoor allergens
- Residential exposures account for 40% of asthma cases in children (Lamphear, Kahn, Berger, et al. 2001)

## 2 Quality of community



### NEIGHBORHOOD DESIGN

- High-density, walkable communities promote physical activity and reduce obesity (Frank 2004)
- “Mixed-use” neighborhoods reduce dependency on automobiles
- Low-income neighborhoods often have reduced access to grocery stores and healthy food options (Shaffer 2002)

### ENVIRONMENTAL CONDITIONS

- Hazardous waste sites disproportionately affect low-income, minority communities (Chavis, Goldman, and Lee 1987)
- Exposure to air pollution and harmful contaminants increases with proximity to highways and industrial sites (California Air Resources Board, 2005)

# 3 Housing affordability



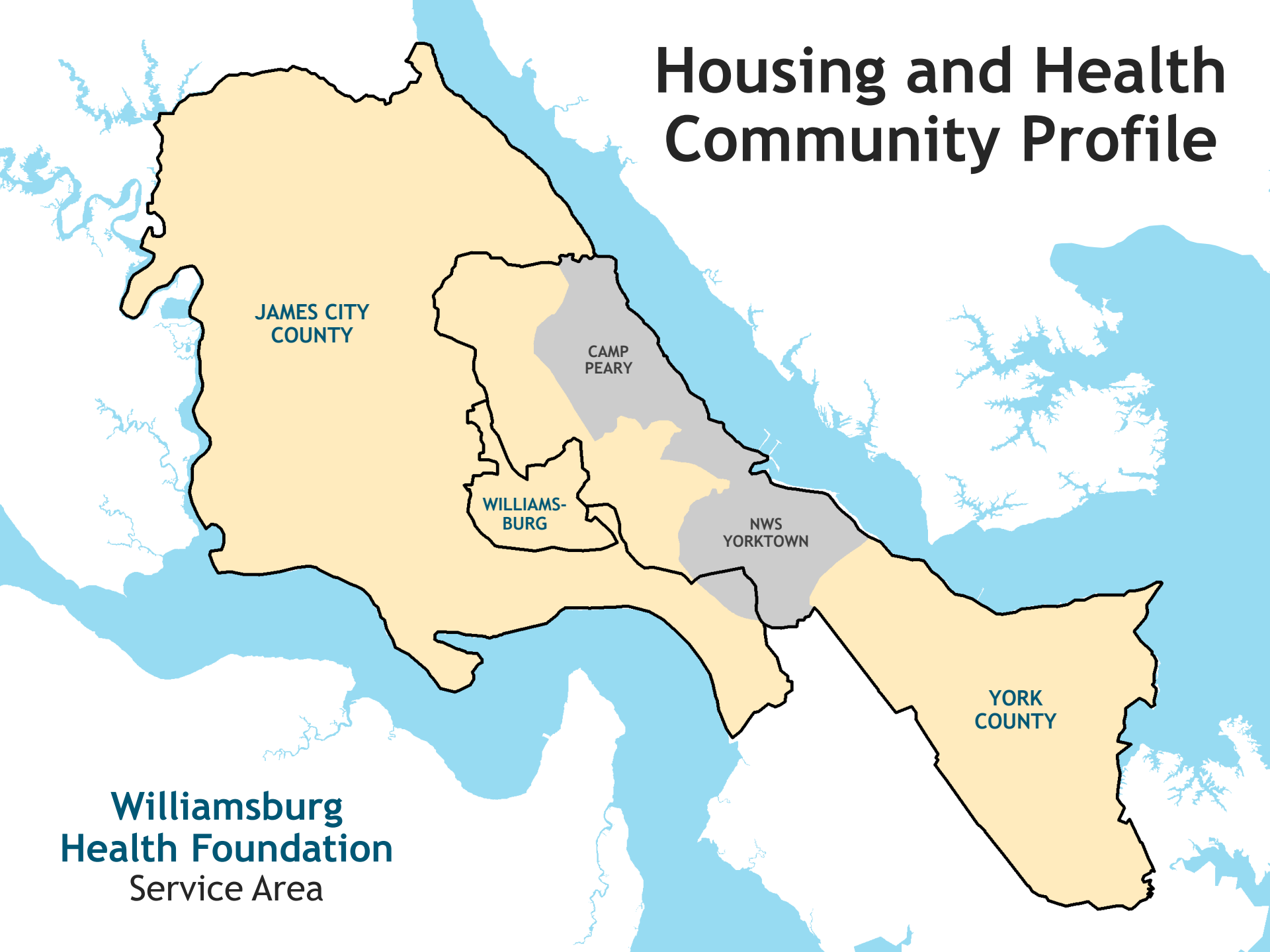
## HOUSING COST BURDEN

- Residents struggling with housing costs rate their health poorer, suffer from hypertension, and delay necessary health treatments (Pollack et al. 2010)
- Housing subsidies are proven to increase access to healthy food for children in low-income families (March et al. 2009)

## HOUSING INSTABILITY

- Frequent moving and evictions result in elevated stress levels, depression, and hopelessness (Burgard, Seefeldt, and Zelner 2012)
- Persons without permanent housing often face additional physical and mental health challenges, and are frequent users of social support networks (Corporation for Supportive Housing 2014)

# Housing and Health Community Profile



JAMES CITY  
COUNTY

CAMP  
PEARY

WILLIAMS-  
BURG

NWS  
YORKTOWN

YORK  
COUNTY

**Williamsburg  
Health Foundation**  
Service Area



# 1 Demographic trends

## POPULATION GROWTH

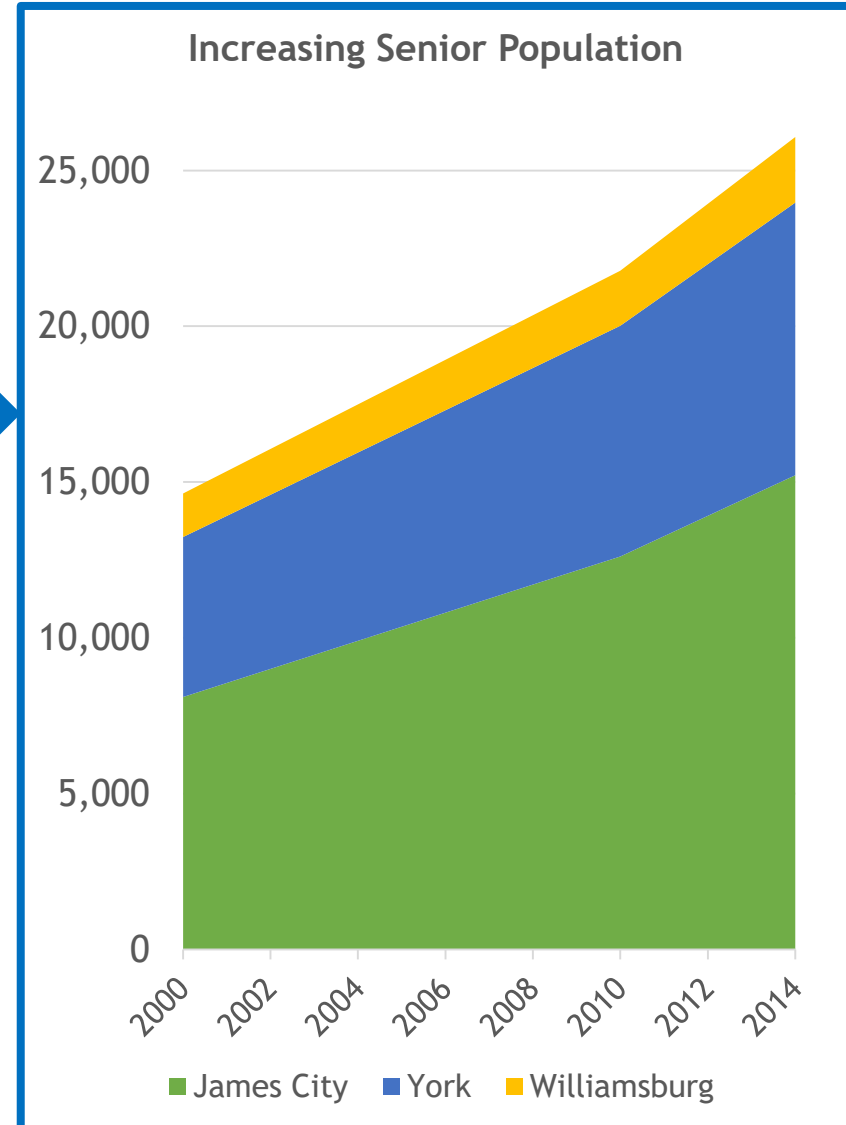
- Total region grew 29% to 150,041 people since 2000

## BABY BOOMERS “GREYING”

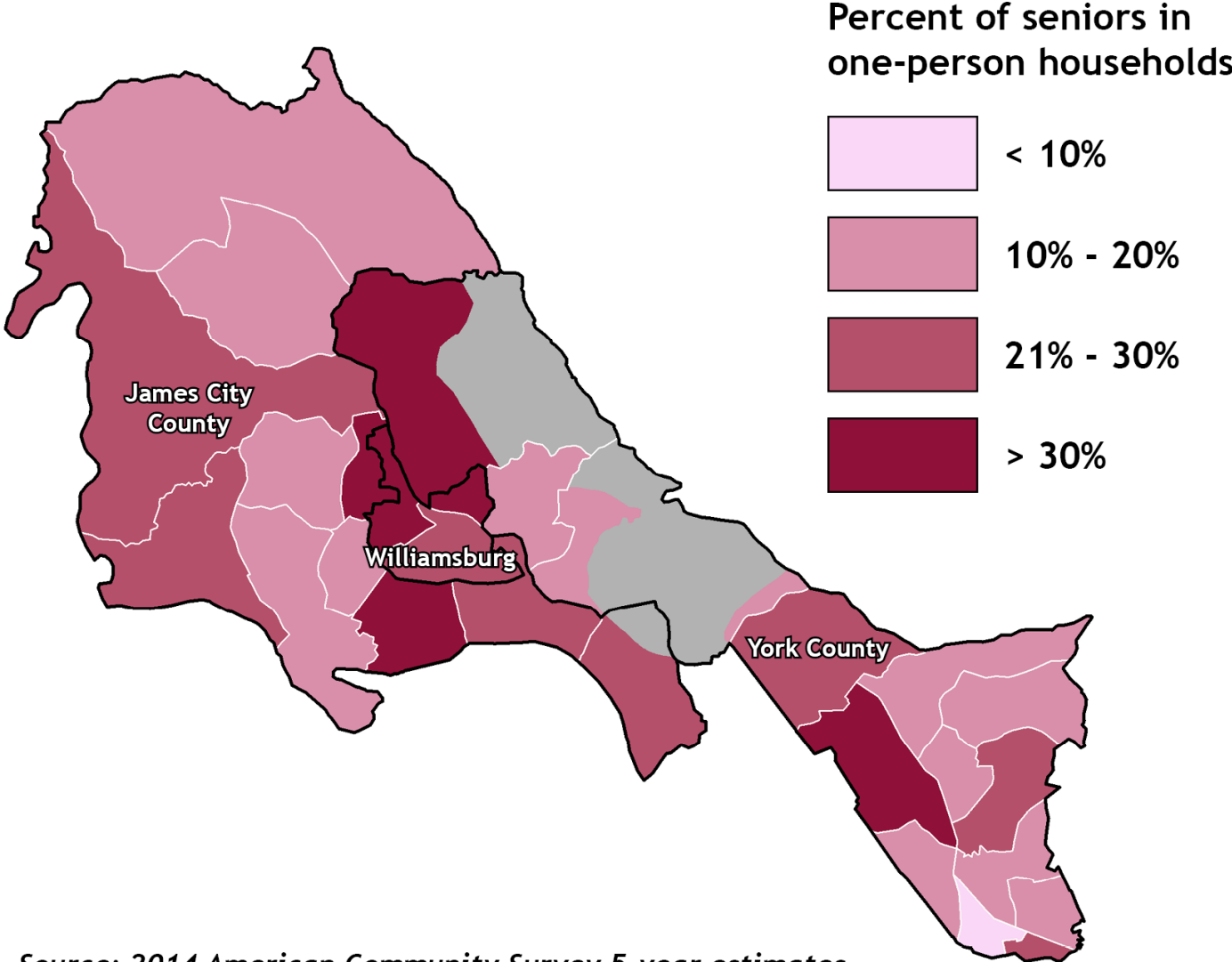
- 17% of population over 65 (26,000 seniors)
- Up from 12% in 2000

## ELDERLY RESIDENTS LIVING ALONE

- One in five seniors live alone
- 58% are over the age of 75



# Senior Population Living Alone



Source: 2014 American Community Survey 5-year estimates

## 2 Socioeconomic trends

### POPULATION IN POVERTY

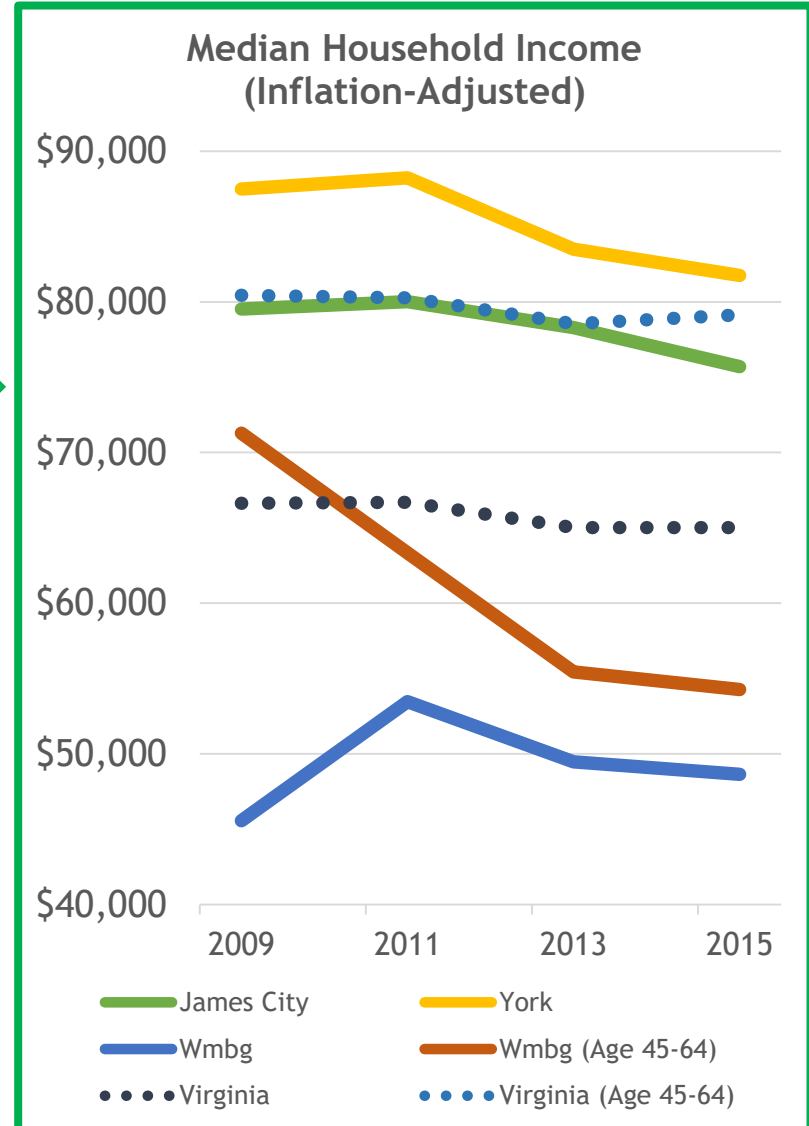
- **8.3% poverty rate**  
*Poverty threshold for family of 4: \$24,250*

### LOW-INCOME HOUSEHOLDS

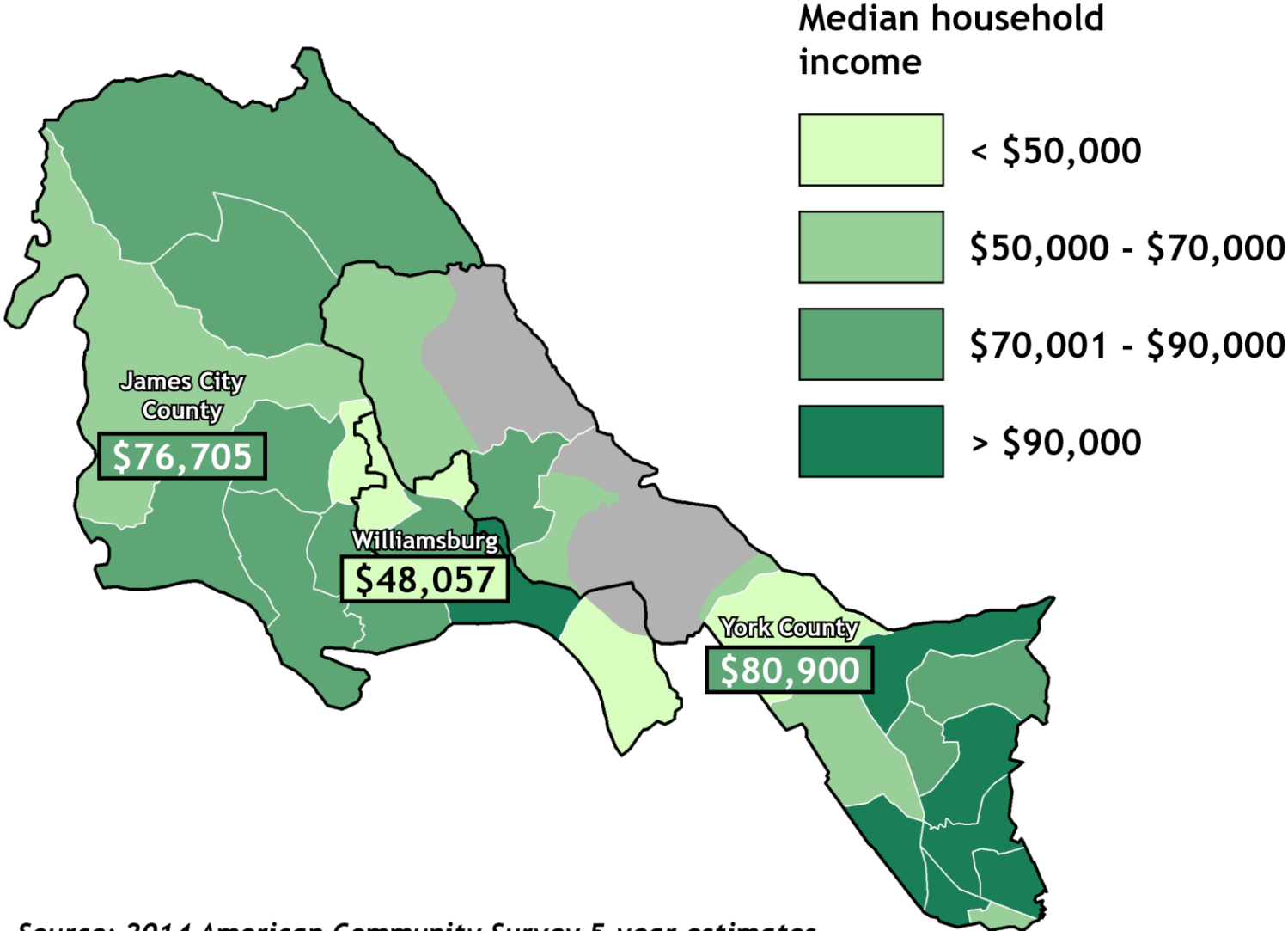
- One in five households earn less than \$35,000

### EMPLOYMENT + COMMUTING PATTERNS

- Transition to **part-time, lower-wage jobs**
- **3.7%** of workers walk or use public transit to commute

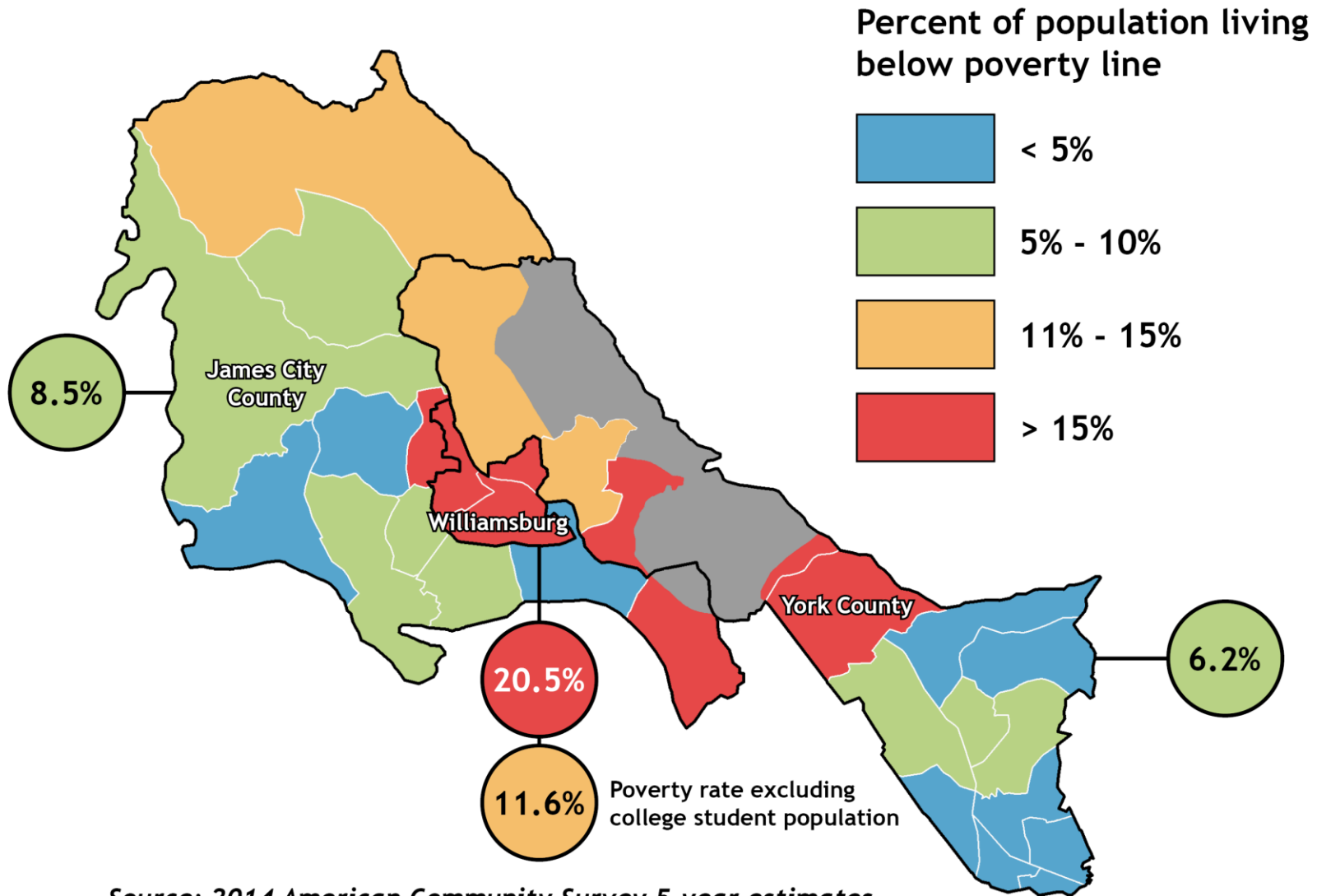


# Household Income



Source: 2014 American Community Survey 5-year estimates

# Poverty Rate



Source: 2014 American Community Survey 5-year estimates

# 3 Housing assessment

## HOUSING TENURE

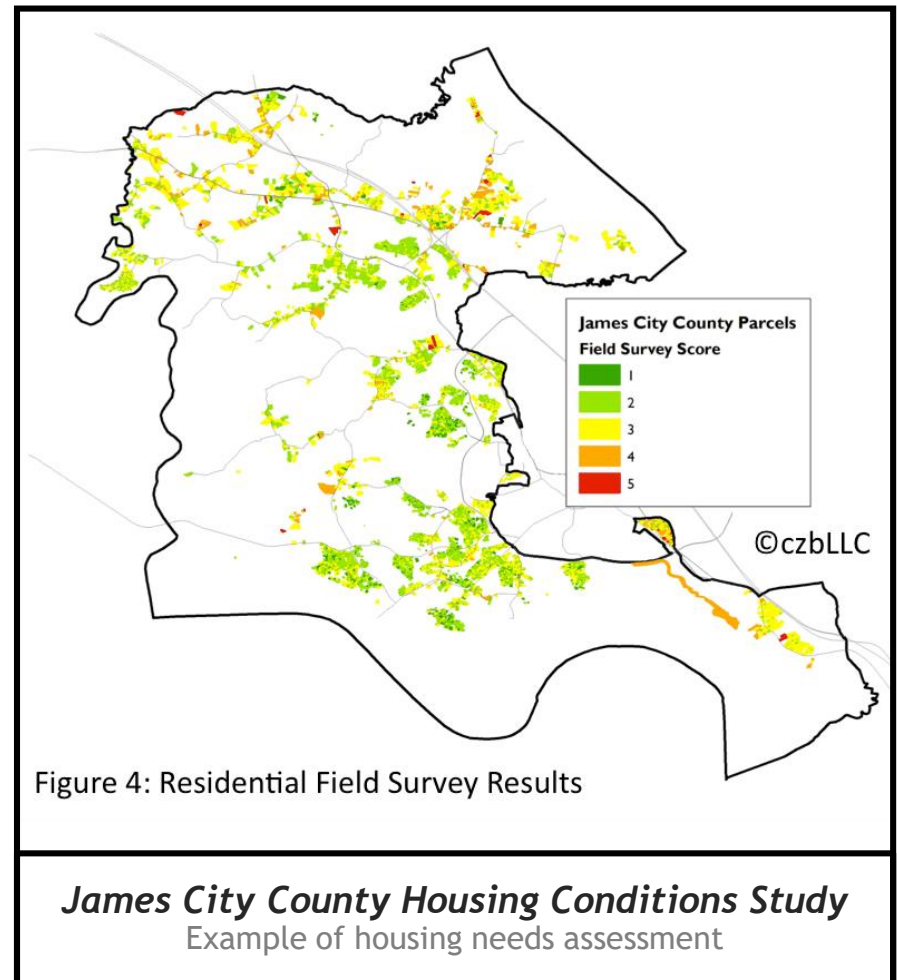
- 72% homeownership rate

## TYPE + AGE OF STOCK

- 64% single-family detached
- Over 17,700 units built before 1980 (28%)

## HOUSING BY AGE GROUP

- 83% of seniors live in single-family detached homes



# 3 Housing assessment

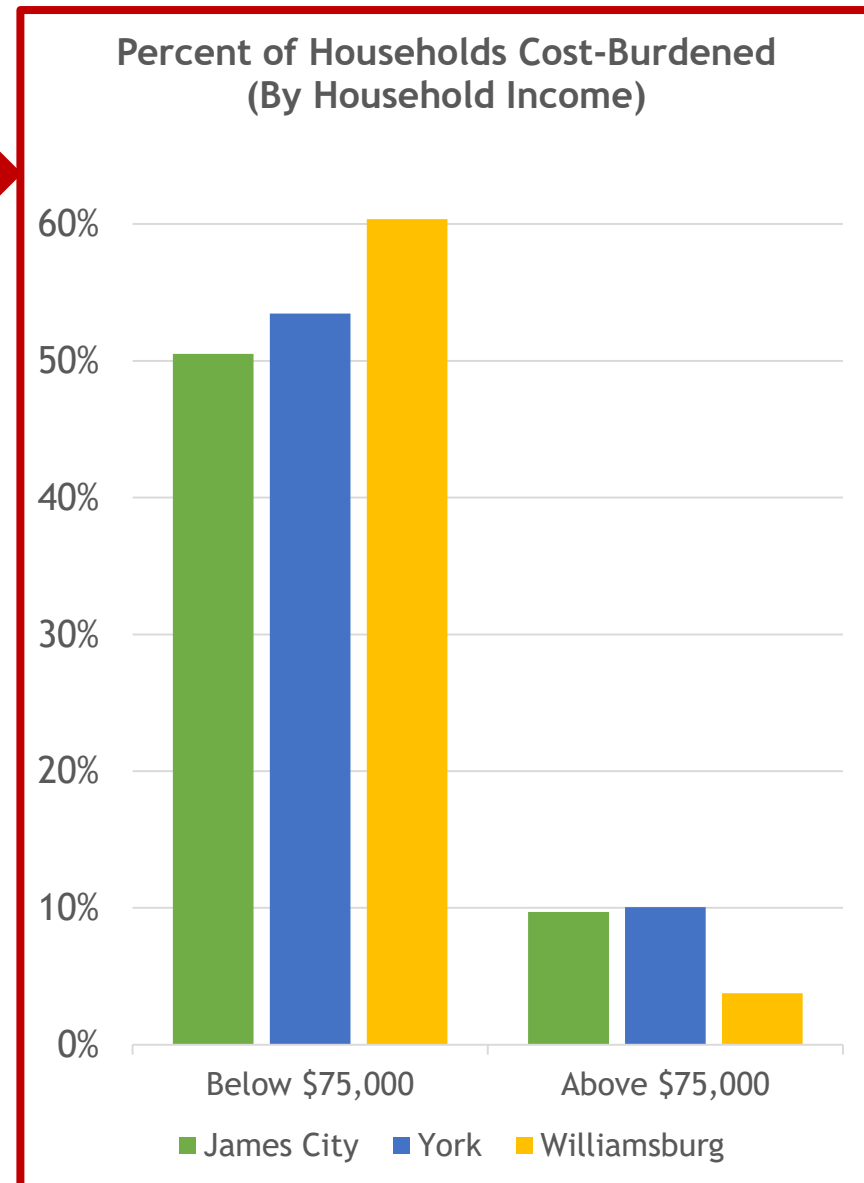
## AFFORDABILITY

- Over **16,400** cost-burdened\* households (30% of total)
- **56%** of senior renters are cost-burdened

## VACANCY

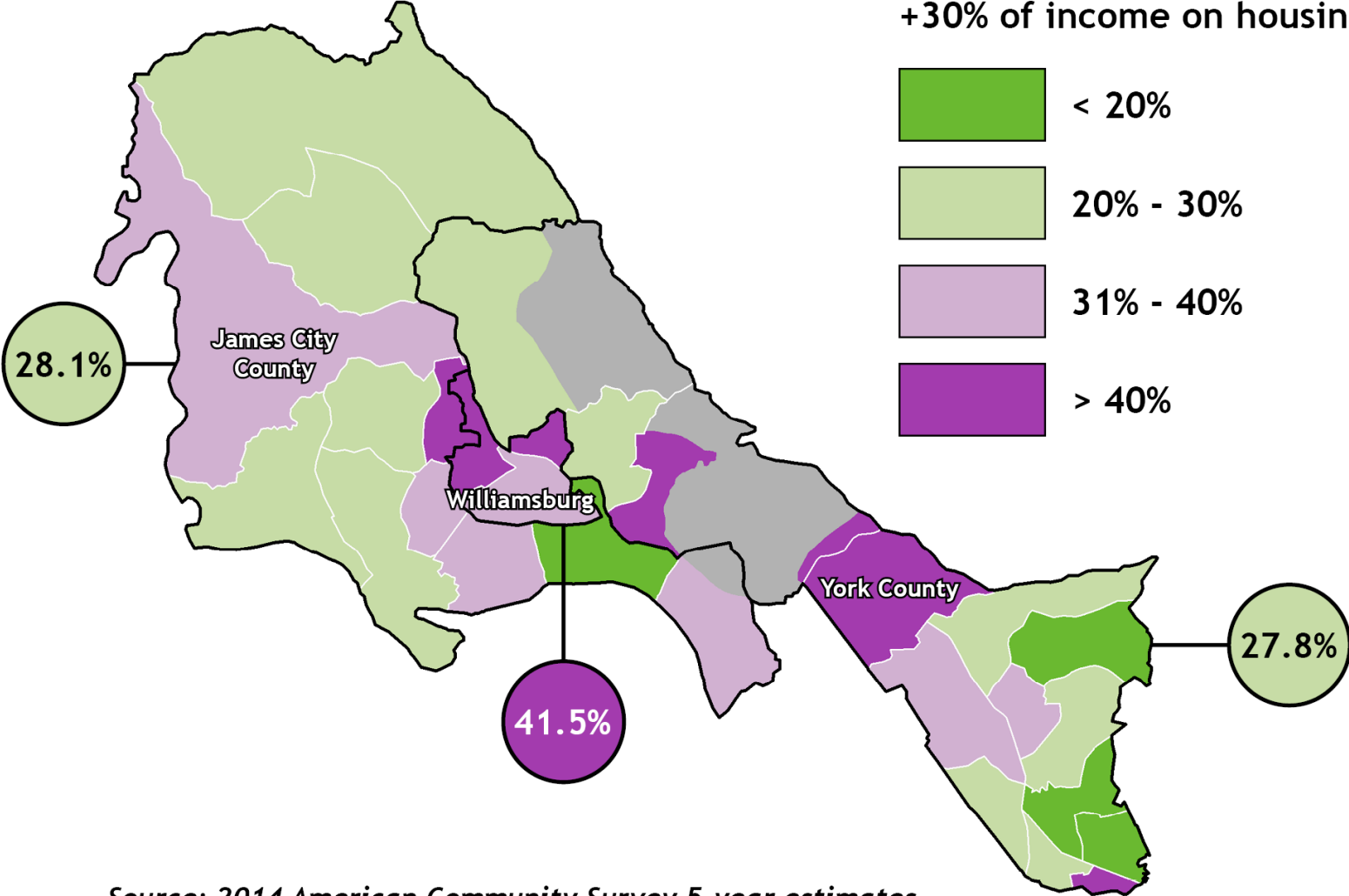
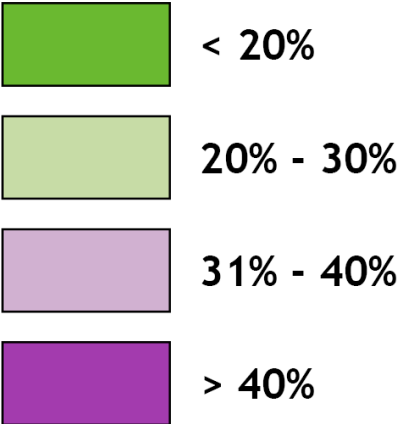
- **5.5%** market vacancy rate
- **1,400** “other” vacant housing units

\* Households that pay more than 30% of their gross income on housing are cost-burdened



# Housing Cost Burden

Percent of households paying +30% of income on housing

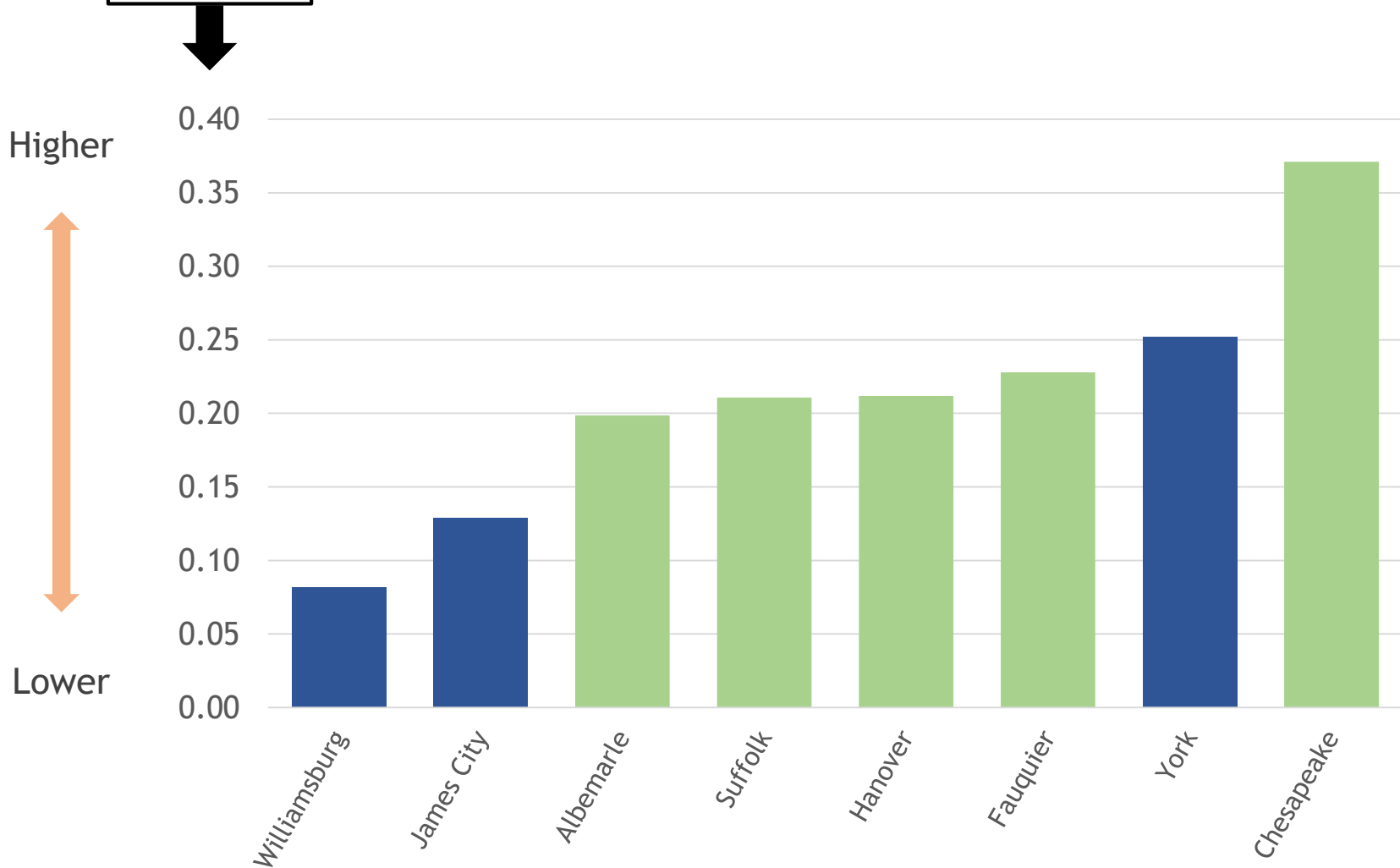


Source: 2014 American Community Survey 5-year estimates



# Measuring housing support and demand

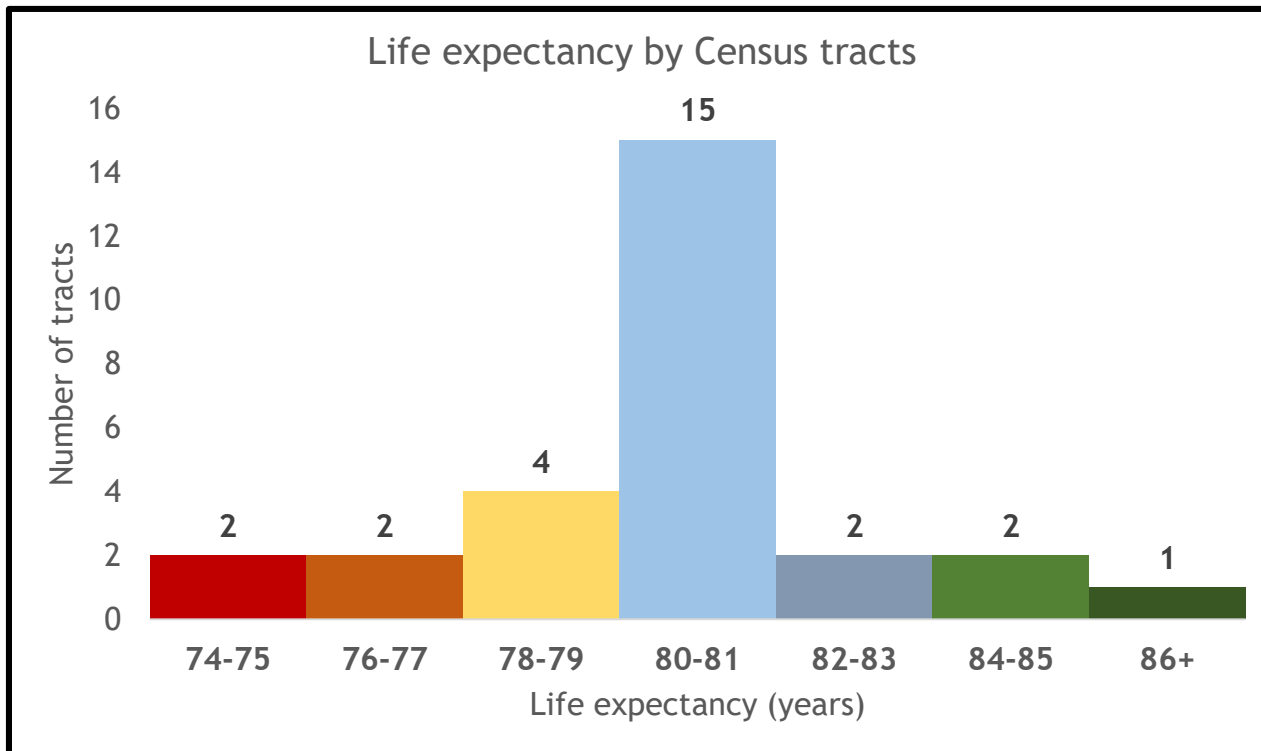
$$\text{Housing support index} = \frac{\# \text{ subsidized housing units (vouchers, LIHTC, public housing)}}{\# \text{ cost-burdened renter households with income} < \$35,000}$$



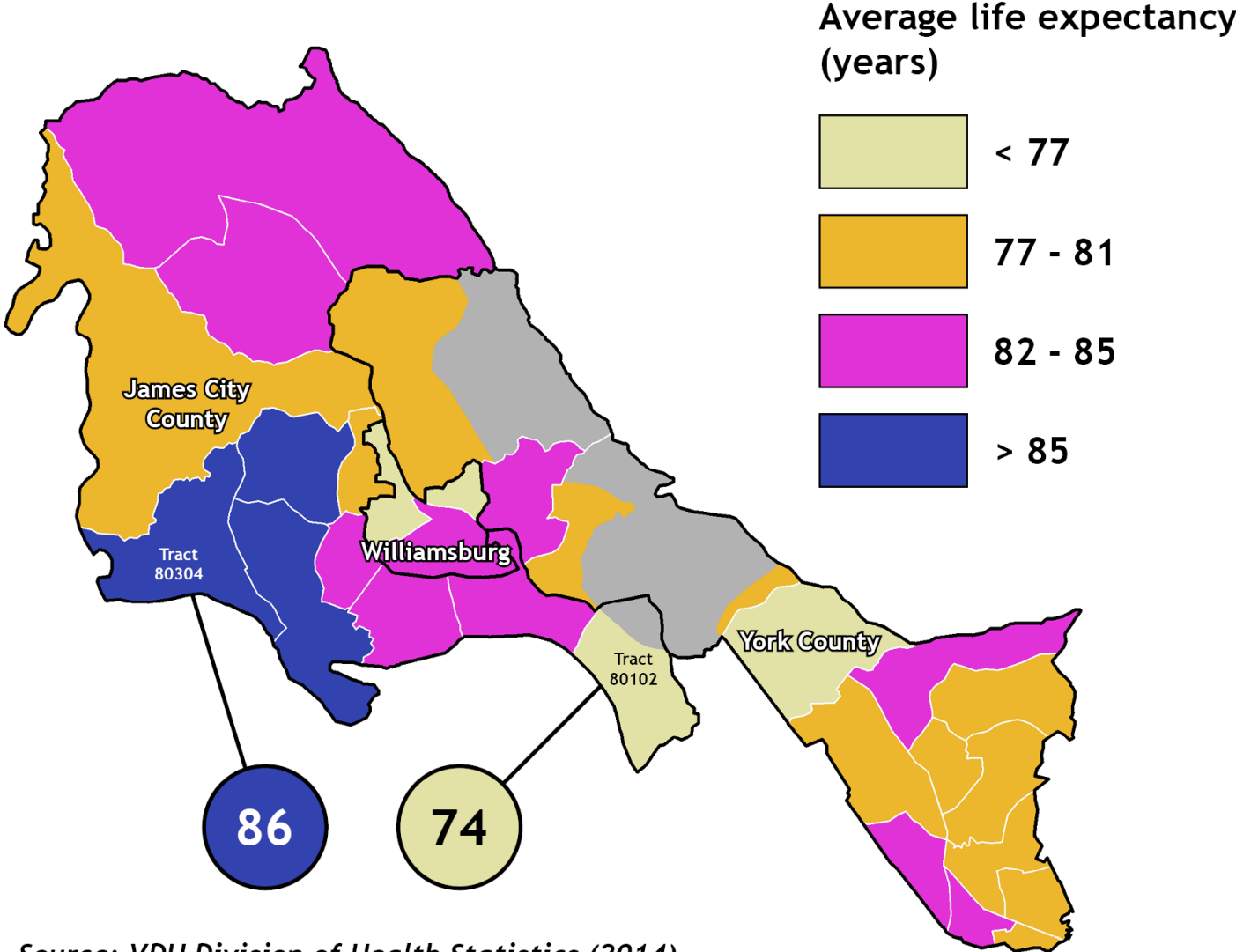
# 4 Health outcomes

## LIFE EXPECTANCY

- Avg. life expectancy: **80.6 years**
- Ranges from **74** to **86** by Census tract

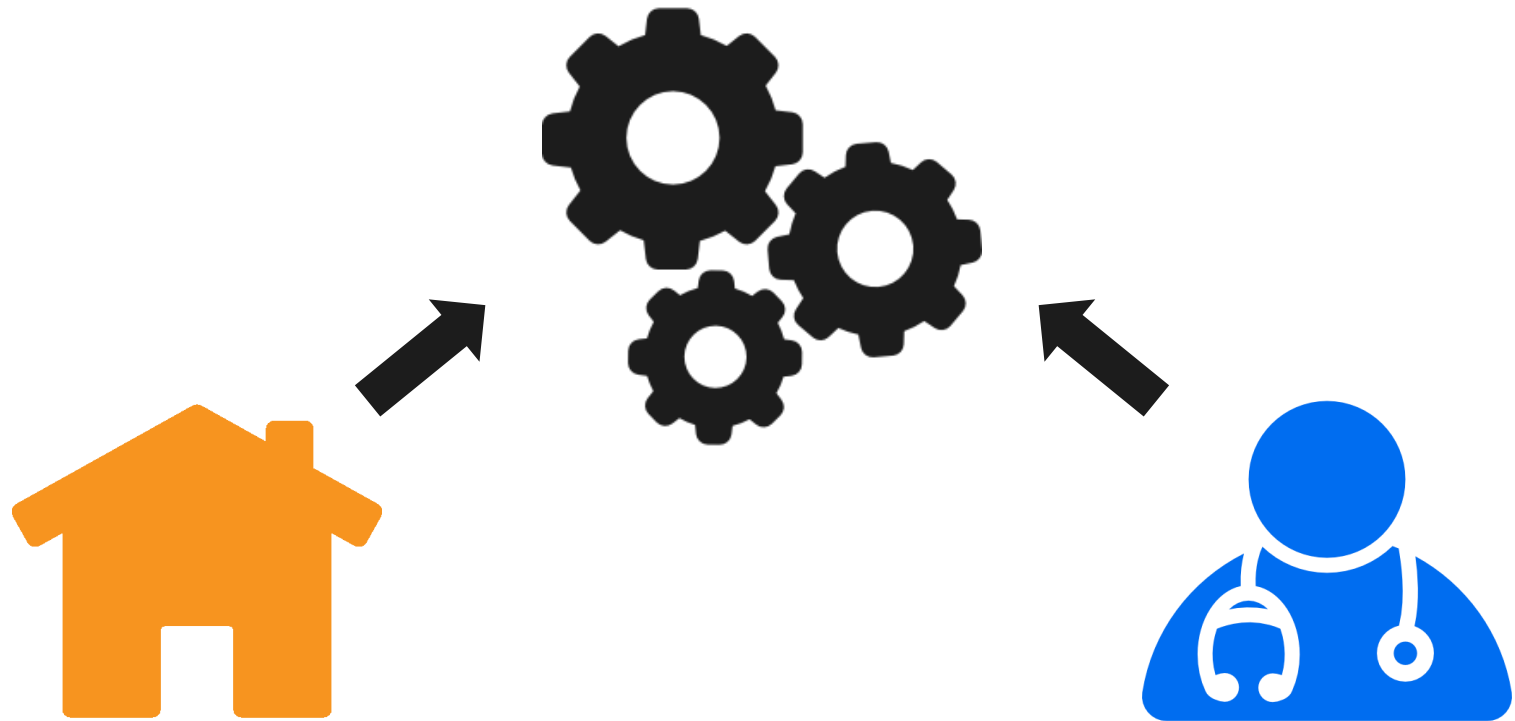


# Life Expectancy



Source: VDH Division of Health Statistics (2014)

# Housing and Health Action Areas

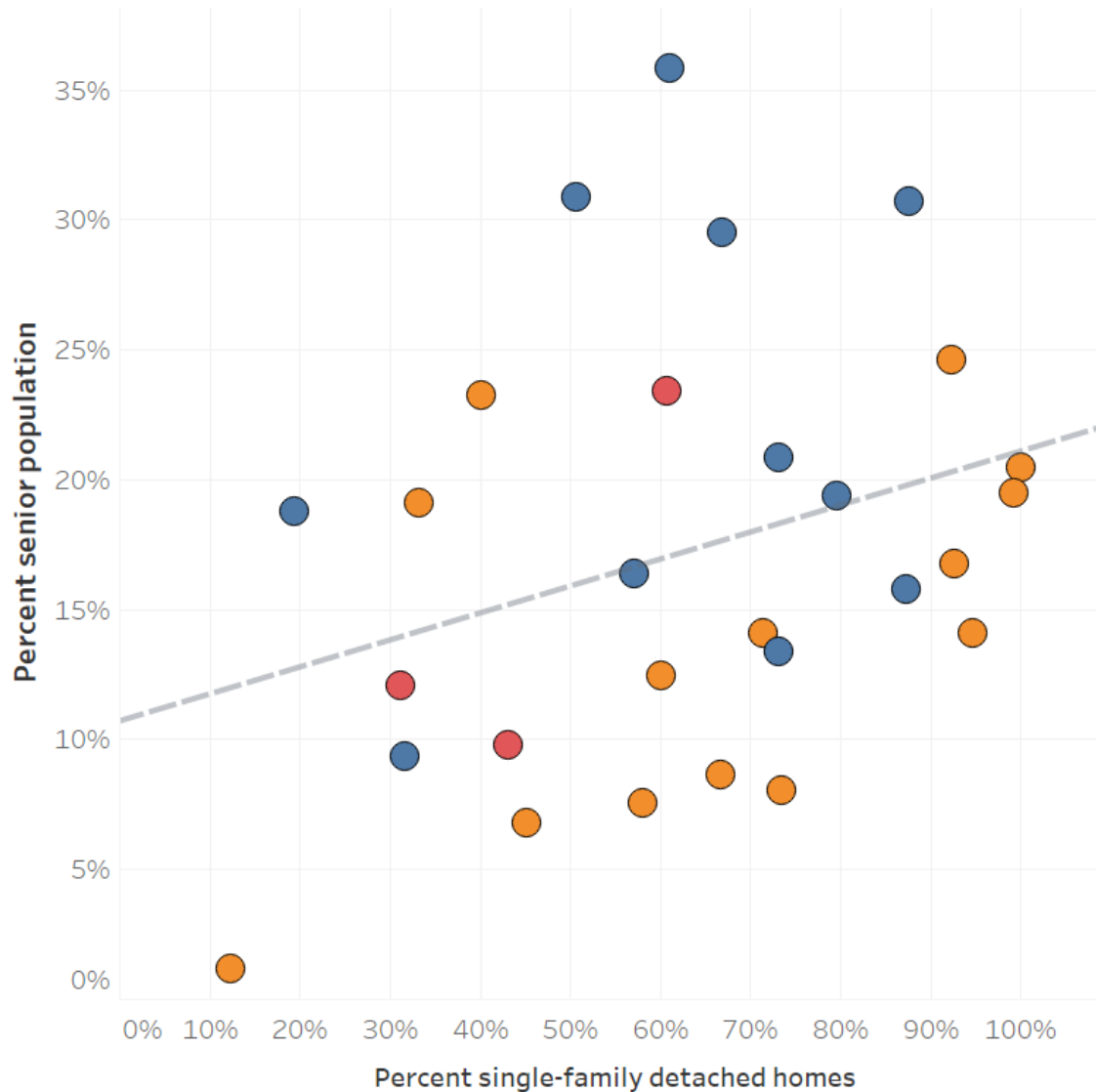


# 1 Physical condition of home

## IMPROVING HOME SAFETY AND ACCESSIBILITY

- About **450** homes in the region use wood heating fuel, increasing home fire risks
- Over half of the Williamsburg region's housing stock consists of single-family homes
- Over a quarter are more than 30 years old
- These old, single-family homes were rarely designed to accommodate aging seniors and persons with ambulatory difficulties

# Senior population vs. Single-family detached homes



Seniors are **19%** more likely to live in single-family detached homes than average.

Aging-in-place in these homes often requires additional accessibility upgrades.

*One dot = Census tract*

**Williamsburg City**  
**James City County**  
**York County**

## 2 Quality of community

### EQUITABLE ACCESS TO RETAIL AND SERVICES

- Over **9,700** residents live in low-income, low-access Census tracts (“Food Deserts”)  
(USDA Food Access Research Atlas, 2016)

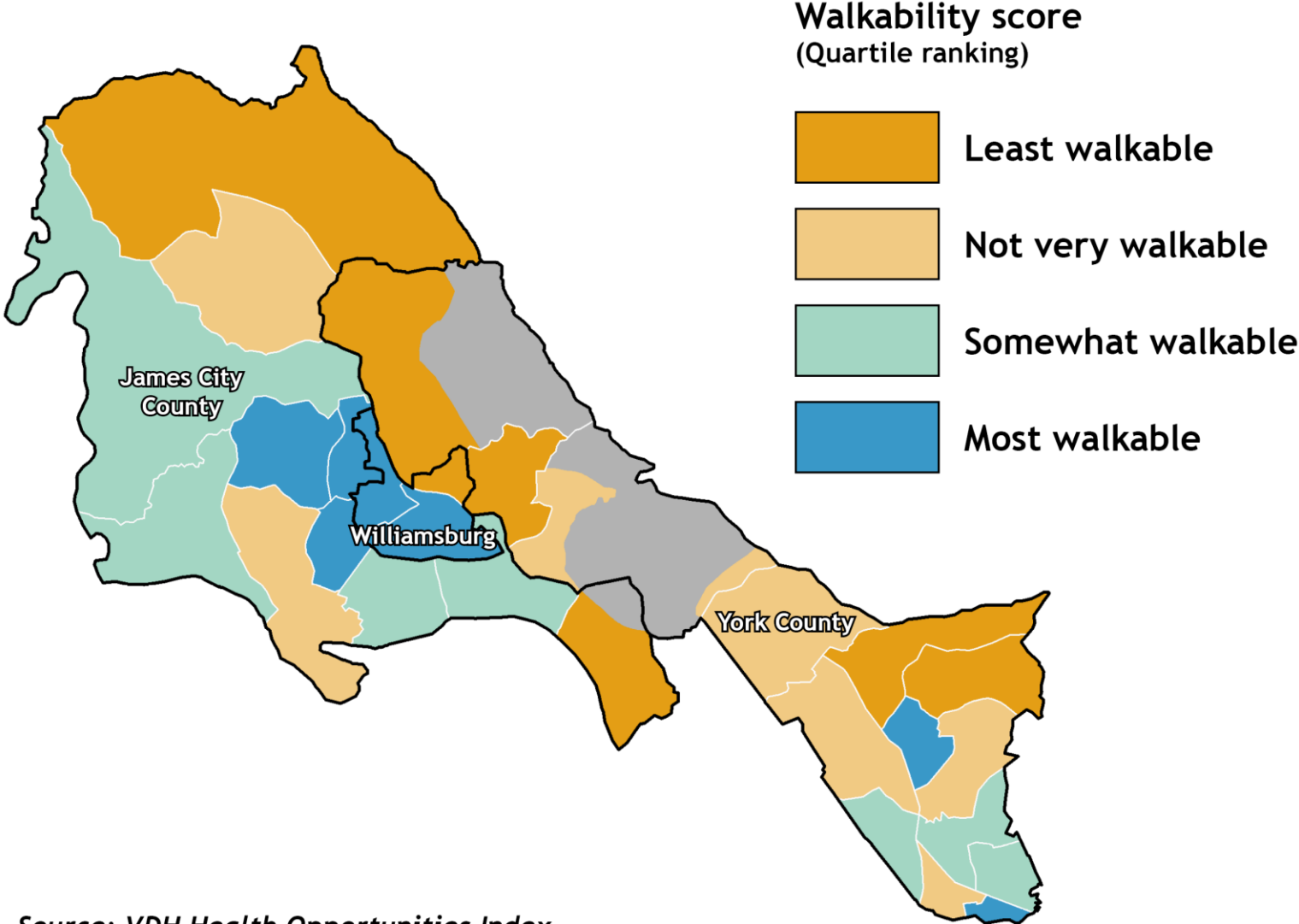
### SAFE SPACES FOR PHYSICAL ACTIVITY

- Children, adults, and seniors all need safe and easily accessible places to exercise and recreate

### CONNECTIVITY + WALKABILITY

- While some neighborhoods are walkable, many households cannot complete regular daily trips without using a car

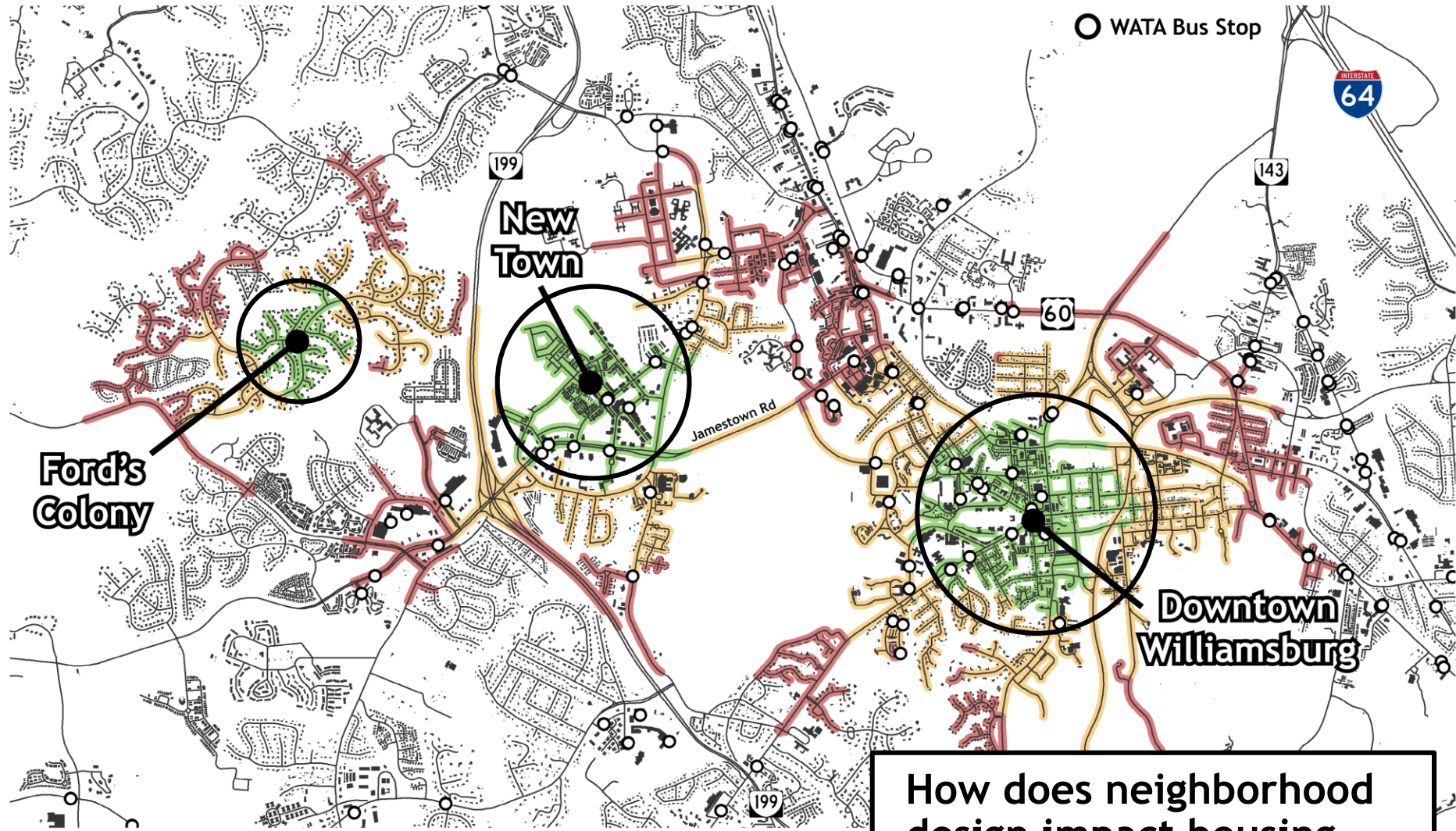
# Walkable Neighborhoods



Source: VDH Health Opportunities Index



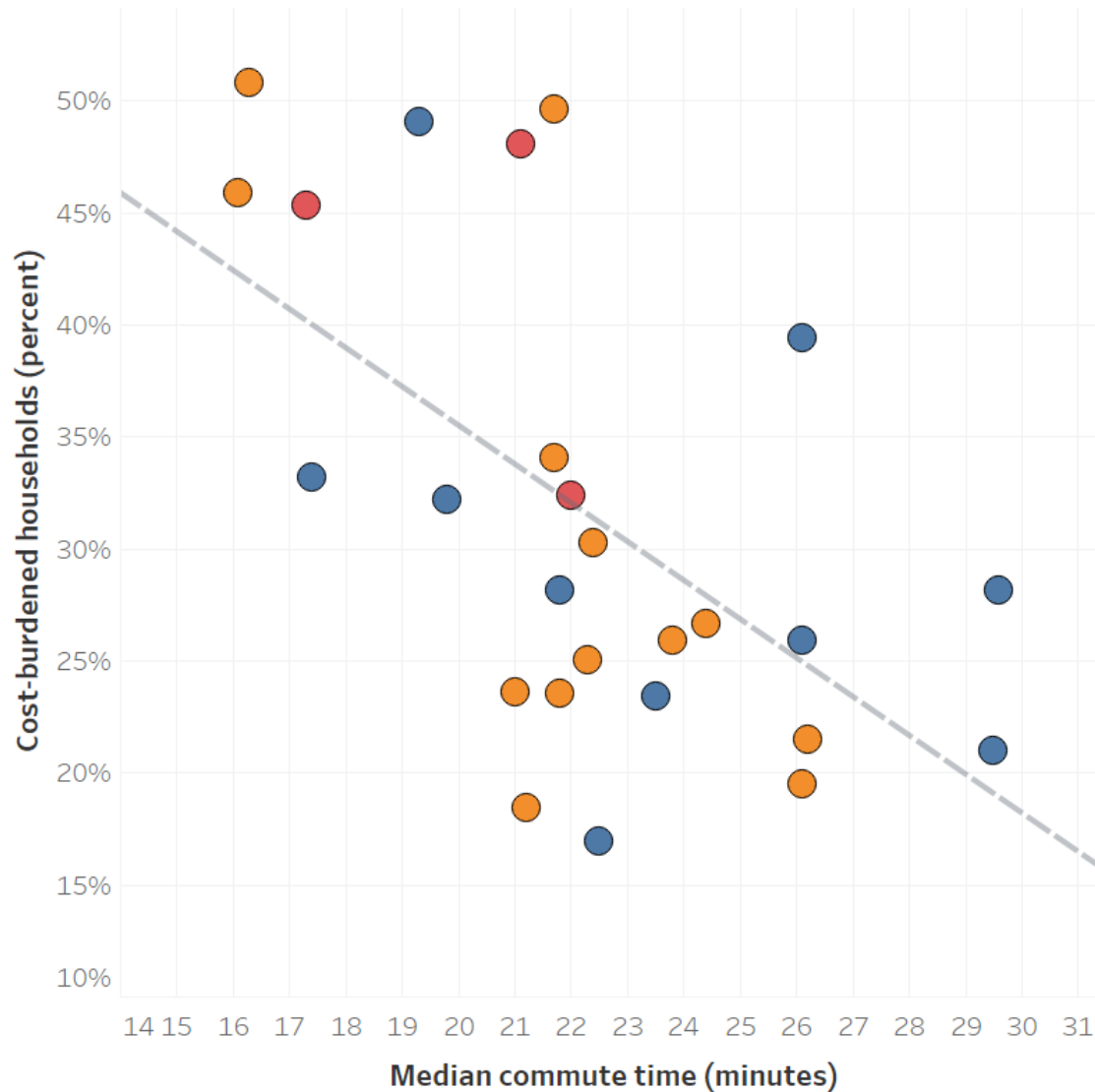
# Walkability in the Williamsburg Region



Walking distance: 0-10 min 10-20 min 20-30 min

How does neighborhood design impact housing affordability and health outcomes?

# Housing cost burden vs. Commute time



Affordable housing is less likely to be located near areas with lots of jobs.

Many workers are forced to commute longer distances to find housing their families can afford.

*One dot = Census tract*

Williamsburg City  
James City County  
York County

# 3 Housing affordability

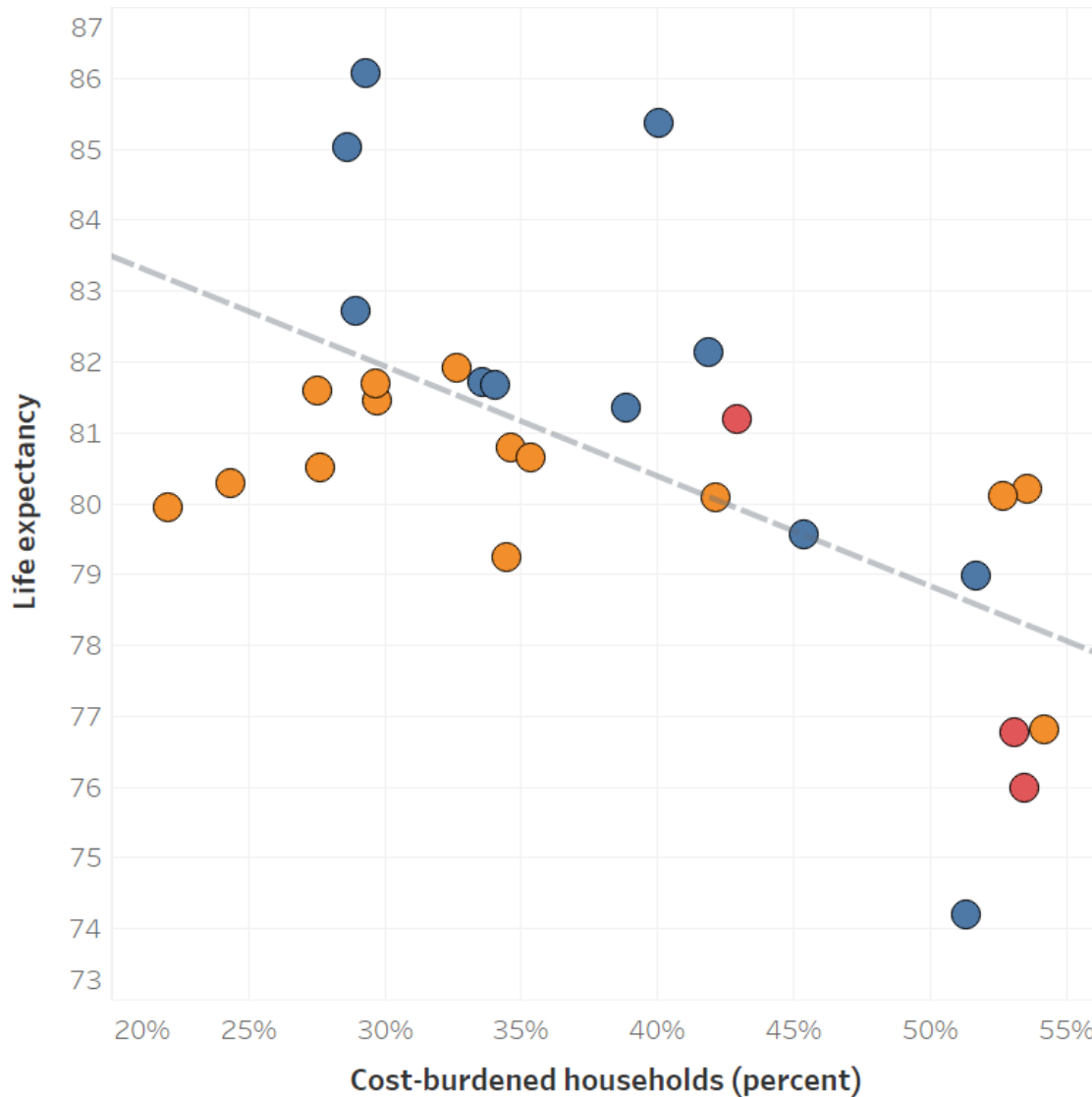
## IMPACT OF COST BURDEN

- **6,440** households pay over half of their income on housing, leaving few funds for healthcare and healthy food options
- Over **11,250** adults could not see doctor due to cost  
(Virginia Atlas of Community Health, 2013)

## AFFORDABLE HOUSING DISTRIBUTION

- Most affordable units are in car-dependent areas with low access to healthcare

# Life expectancy vs. Housing cost burden



Communities where many households pay 30% or more of their income on housing experience lower life expectancy.

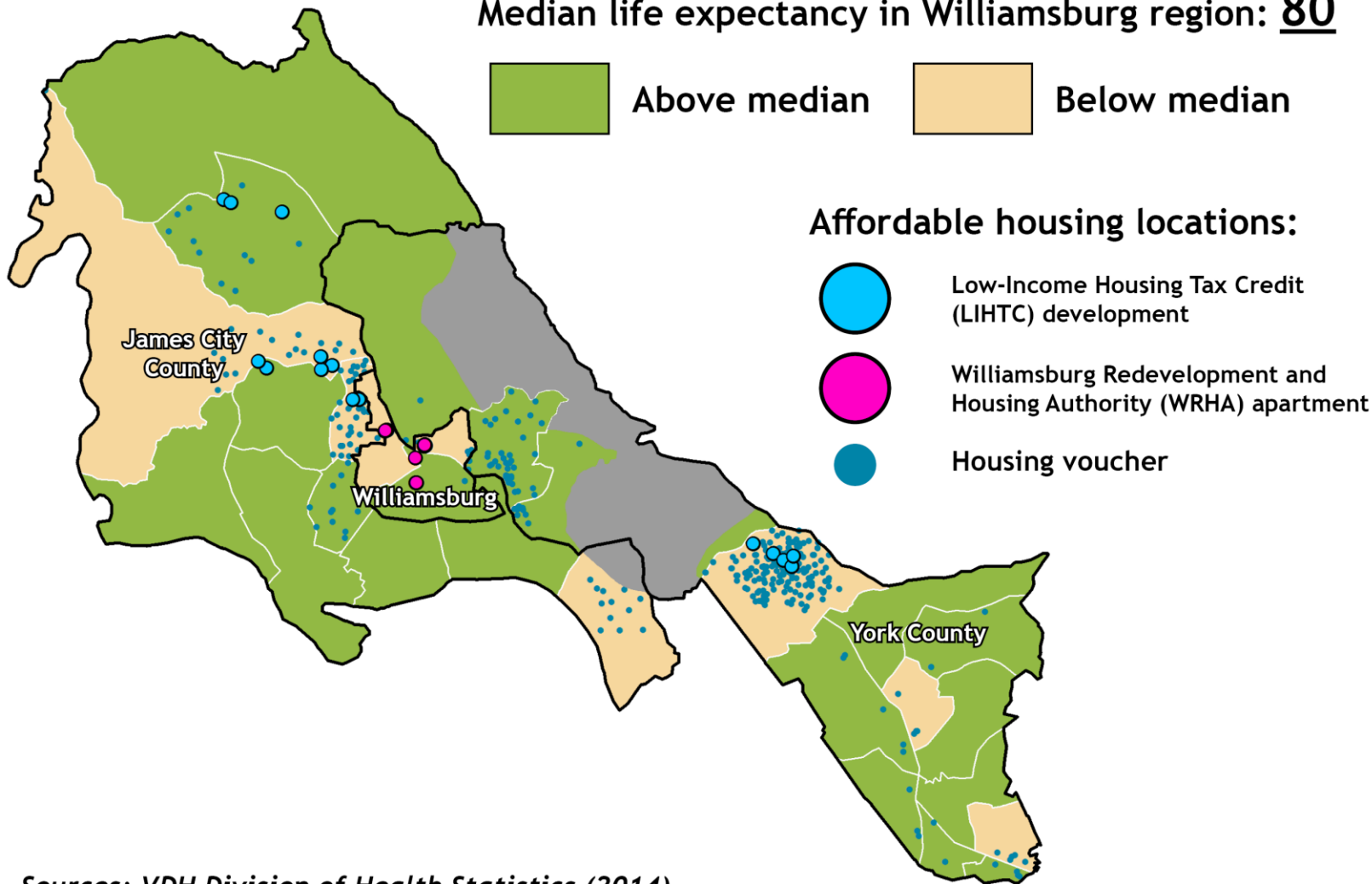
The life expectancy for the poorest 5% of Americans has not increased significantly since 2001.  
(Chetty et al., 2016)

*One dot = Census tract*

**Williamsburg City**  
**James City County**  
**York County**

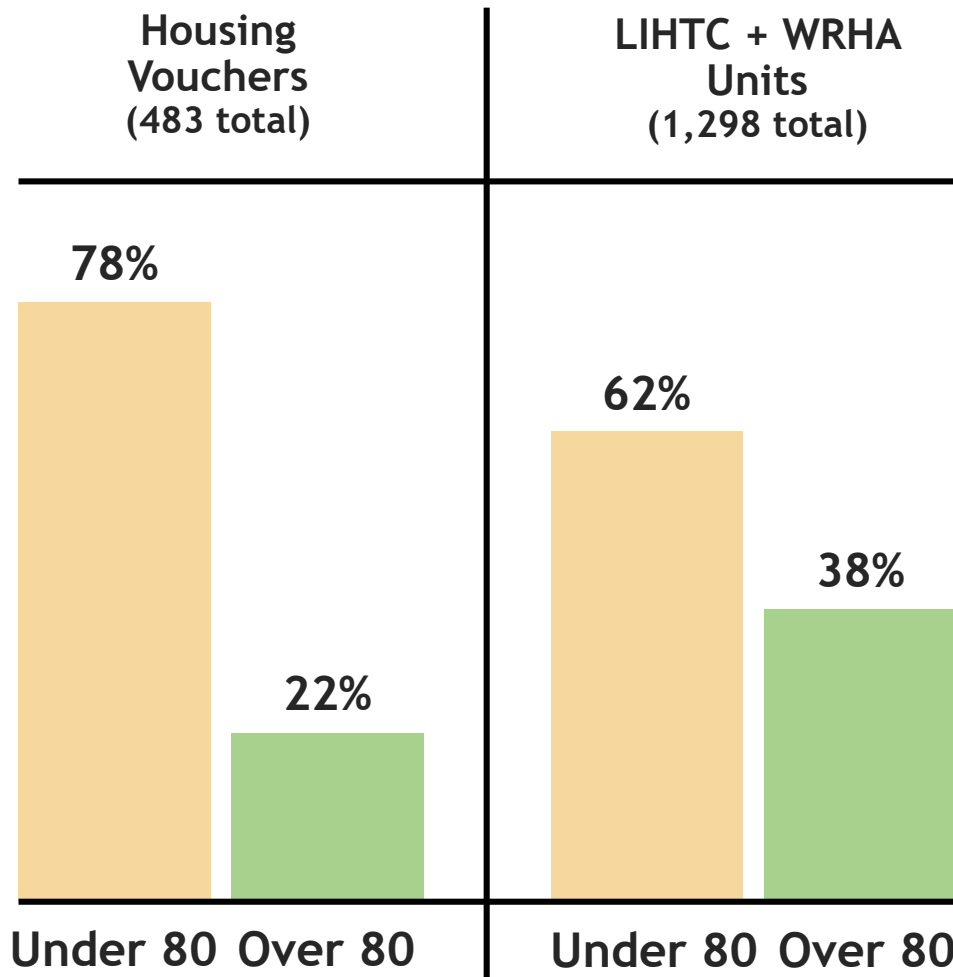
# Affordable Housing / Life Expectancy

Median life expectancy in Williamsburg region: 80



Sources: VDH Division of Health Statistics (2014),  
VHDA, HUD

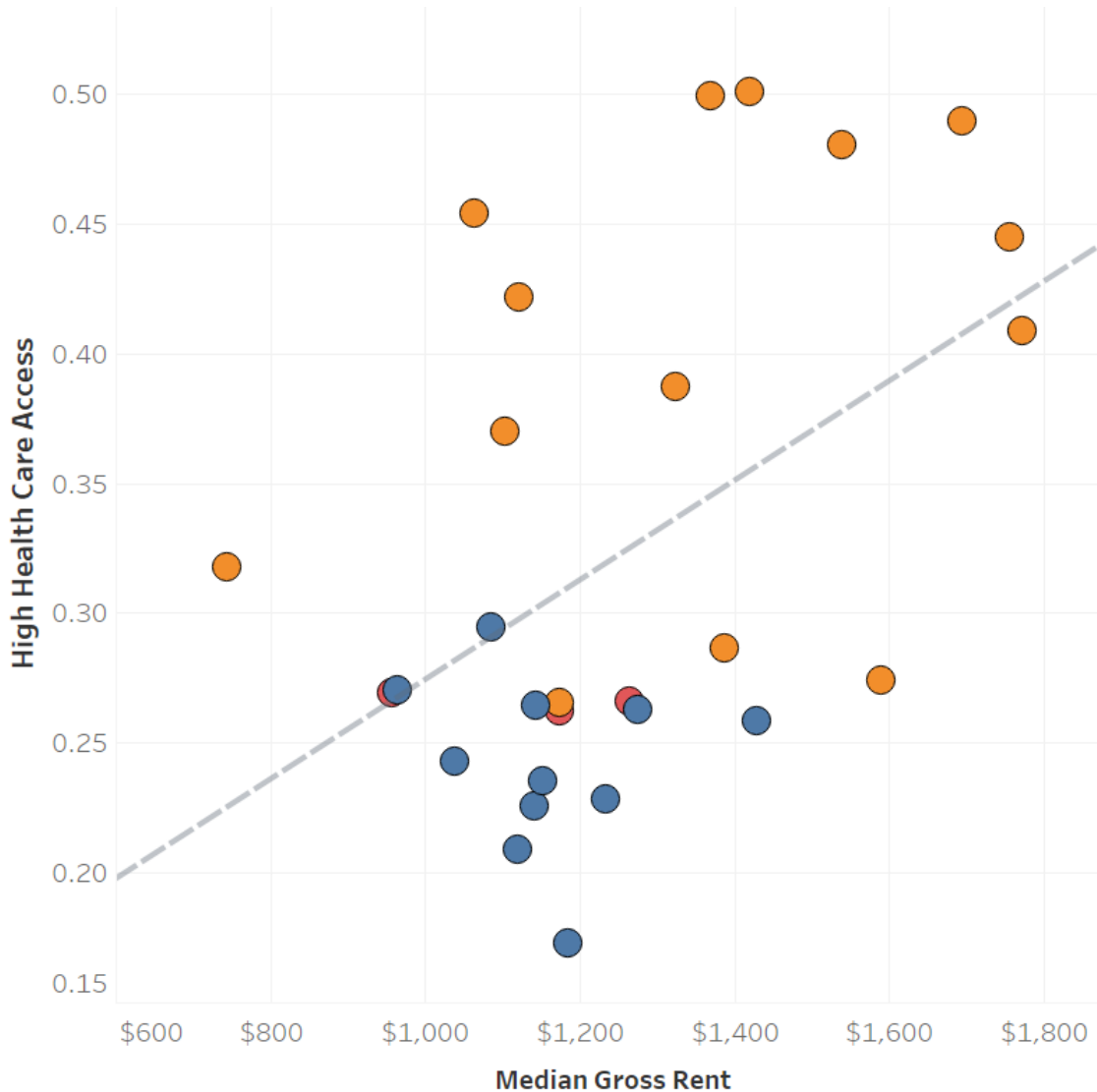
# Affordable housing in healthy communities?



The majority of affordable rental housing units in the greater Williamsburg area are in neighborhoods with life expectancies **below** the regional median.

Life expectancy (by Census tract)

# Health care access vs. Median rent



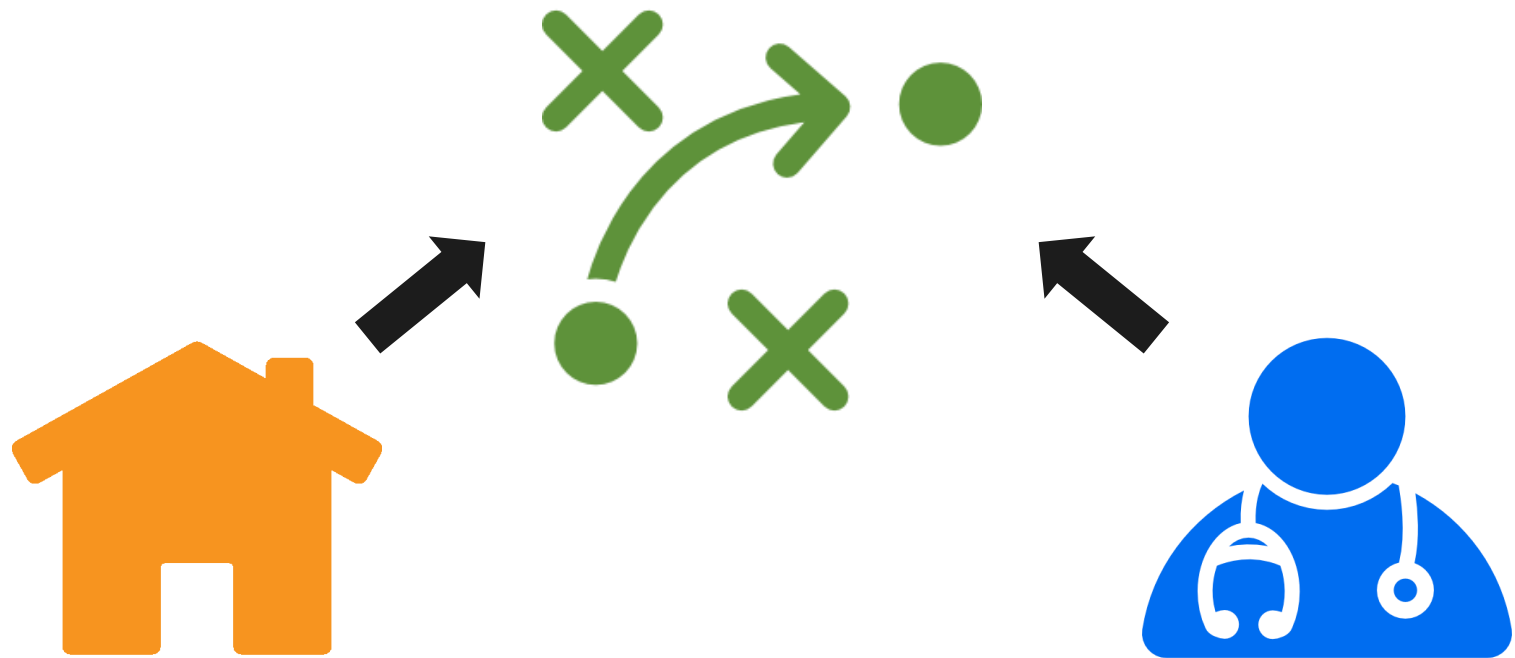
More affordable housing units are more common in neighborhoods with lower access to healthcare.

*“High Health Care Access”  
from VDH Health  
Opportunities Index*

*One dot = Census tract*

**Williamsburg City**  
**James City County**  
**York County**

# Strategies to Improve Housing and Health





# 1

## Healthy homes

Programs are placed in the matrix as examples.  
Accurate placement requires analysis of local circumstances.




	Low Impact	High Impact
High Cost		<ul style="list-style-type: none"> <li>*Lead abatement</li> <li>*Pediatric asthma intervention</li> <li>*In-home services</li> <li>*Accessibility improvements</li> <li>*Weatherization</li> </ul> <div data-bbox="1097 829 1746 943"> <p><b>“Safe at home campaign”</b></p> </div>
Low Cost	<ul style="list-style-type: none"> <li>*Landlord-tenant enforcement</li> <li>*Home safety assessments</li> <li>*Community education</li> </ul>	<ul style="list-style-type: none"> <li>*Code enforcement</li> <li>*Noise mitigation</li> <li>*Smoke-free housing</li> <li>*Lead testing</li> <li>*Promote stair use</li> </ul> <div data-bbox="917 1205 1562 1348"> <p><b>Green and Healthy Homes Initiative</b></p> </div>

# 2

## Healthy communities

Programs are placed in the matrix as examples.  
 Accurate placement requires analysis of local circumstances.



	Low Impact	High Impact
High Cost		<ul style="list-style-type: none"> <li>*Accessory dwelling units</li> <li>*Retrofitting neighborhoods</li> <li>*Public transit expansion</li> <li>*Sidewalks and greenways</li> </ul> <div style="border: 1px solid black; padding: 5px; display: inline-block;"> <b>Senior “Village” Models</b> </div>
Low Cost	<ul style="list-style-type: none"> <li>*Traffic calming</li> <li>*Safe routes to school</li> <li>*Walkability scores for home listings</li> </ul> <div style="border: 1px solid black; padding: 5px; display: inline-block;"> <b>Health impact assessments</b> </div>	<ul style="list-style-type: none"> <li>*Ride-sharing service</li> <li>*Improved access to recreation</li> <li>*Community design standards</li> <li>*Farmer’s markets</li> </ul> <div style="border: 1px solid black; padding: 5px; display: inline-block;">  <b>Home-Delivered Groceries</b>  <b>Produce Pop-Ups</b> </div>

# 3

## Affordable housing

Programs are placed in the matrix as examples.

Accurate placement requires analysis of local circumstances.



	Low Impact	High Impact
High Cost		<ul style="list-style-type: none"><li>*Supportive housing</li><li>*Solar retrofits</li><li>*Housing trust fund</li><li>*Inclusionary housing policy</li><li>*Housing vouchers</li><li>*FHLB housing program</li></ul>
Low Cost	<ul style="list-style-type: none"><li>*Property tax abatement</li><li>*Mortgage assistance</li><li>*Energy/fuel assistance</li><li>*Affordable housing education</li></ul>	<ul style="list-style-type: none"><li>*HOME/CDBG funds for housing</li><li>*Homelessness prevention</li><li>*Weatherization</li></ul>