Roanoke Regional Housing Network
Bi-Annual Symposium

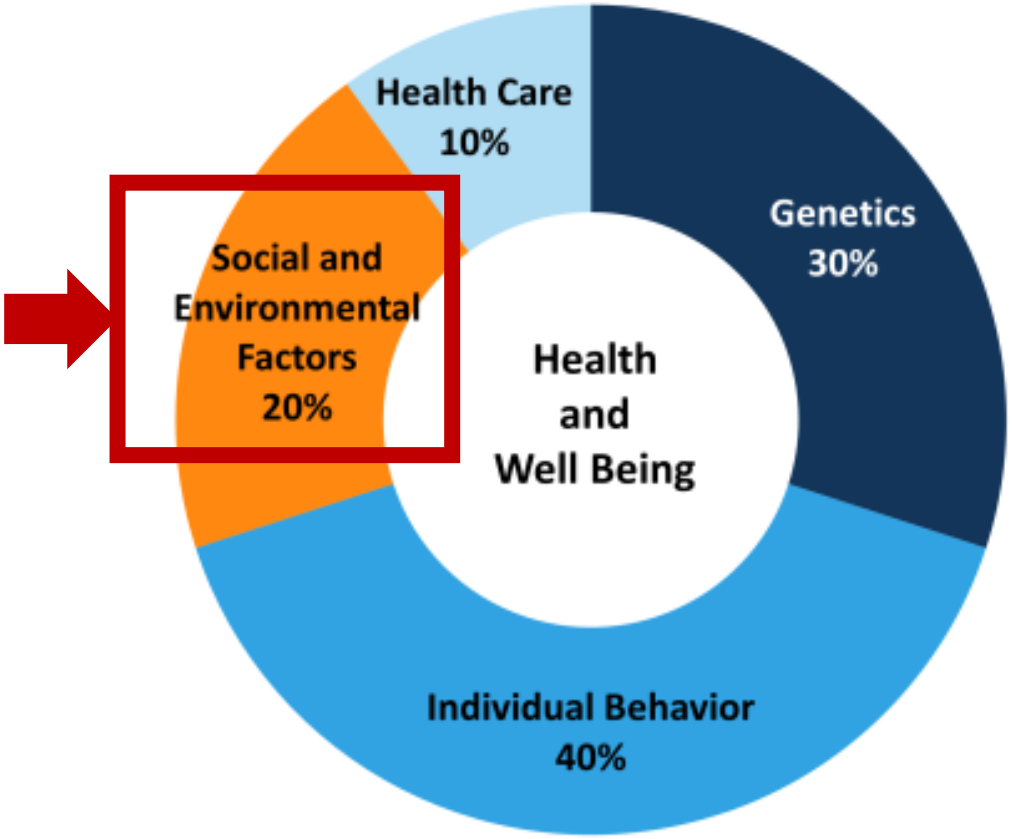
Connecting Housing & Health

HOUSING VIRGINIA

INFORM | CONNECT | UNLOCK

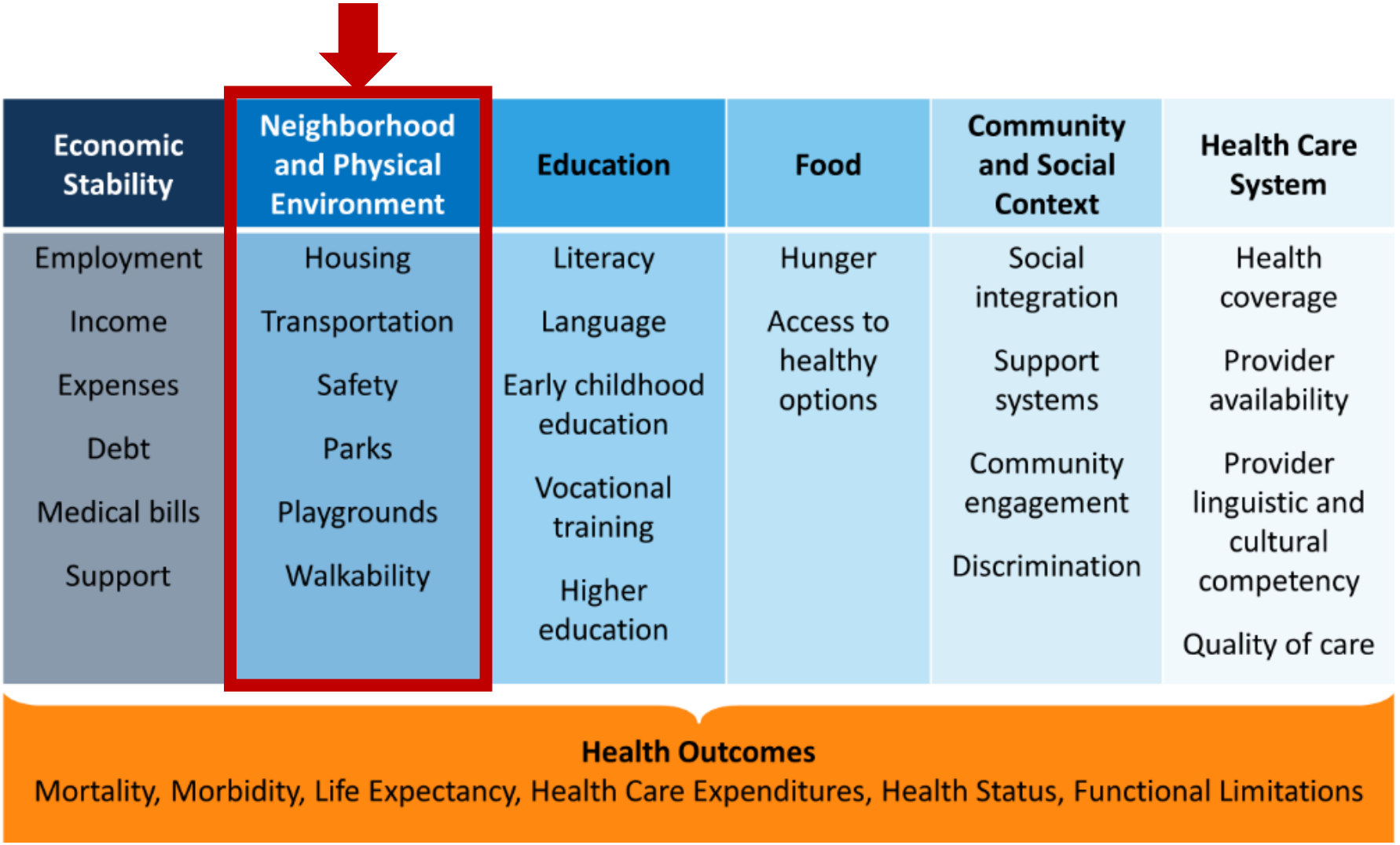
www.housingvirginia.org

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



How do housing and health connect?

1

Physical condition of home

2

Quality of community

3

Housing affordability

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)

ENVIRONMENTAL CONDITIONS

- 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)

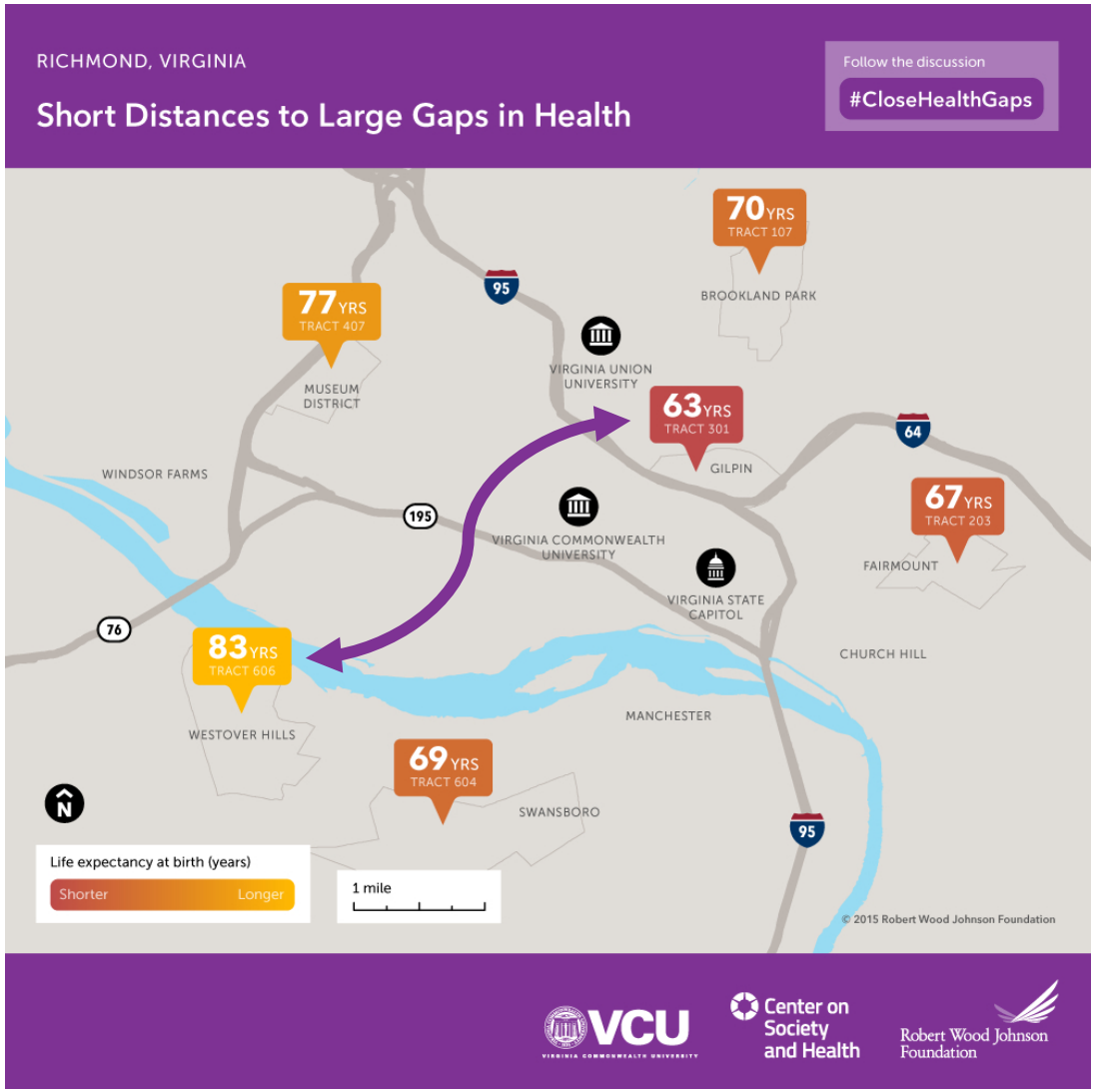
ENVIRONMENTAL CONDITIONS

- 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)

Mapping Life Expectancy

Richmond, VA

VCU Center on Society and Health



3 Housing affordability

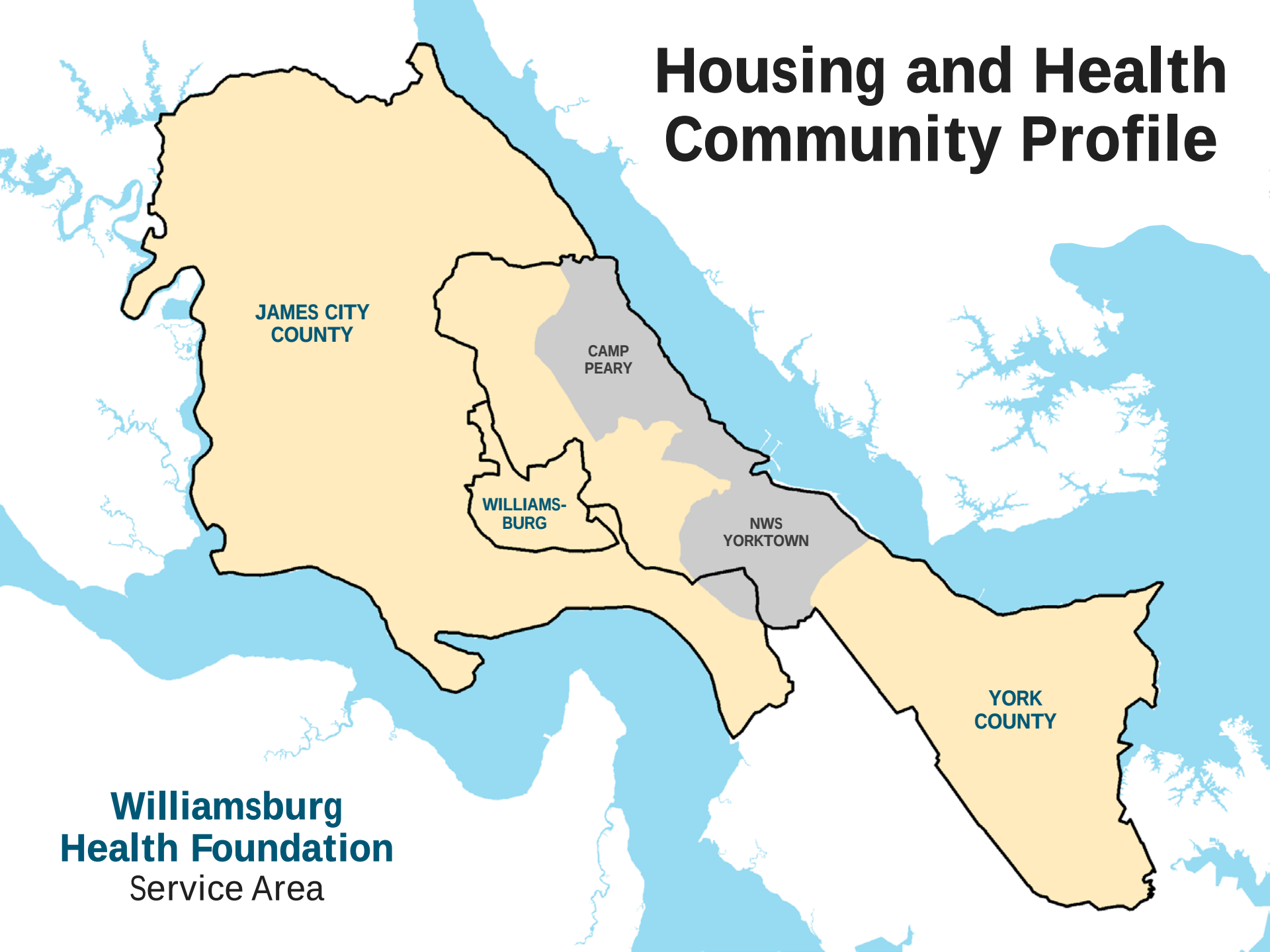
HOUSING COST BURDEN

- 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



Williamsburg Health Foundation
Service Area

1 Demographic trends

POPULATION GROWTH

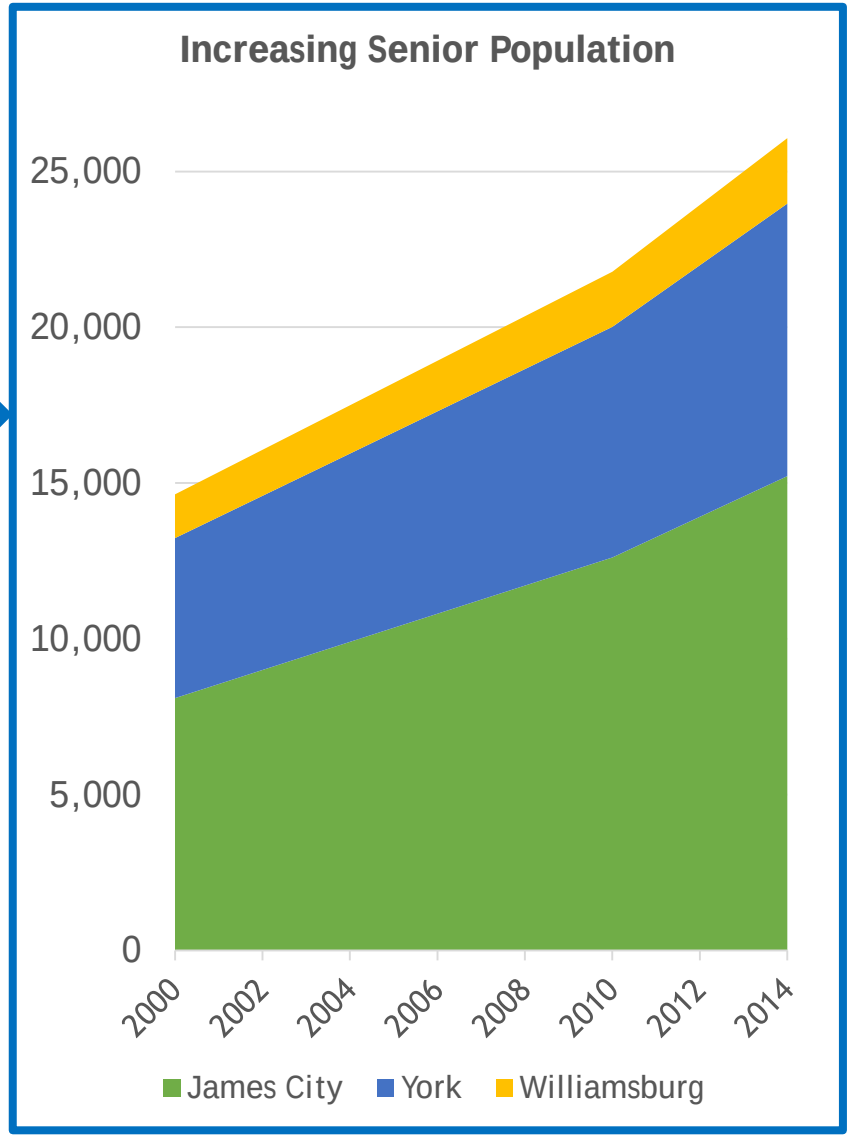
- Total region grew 29% to **150,041** people since 2000

BABY BOOMERS "GREYING"

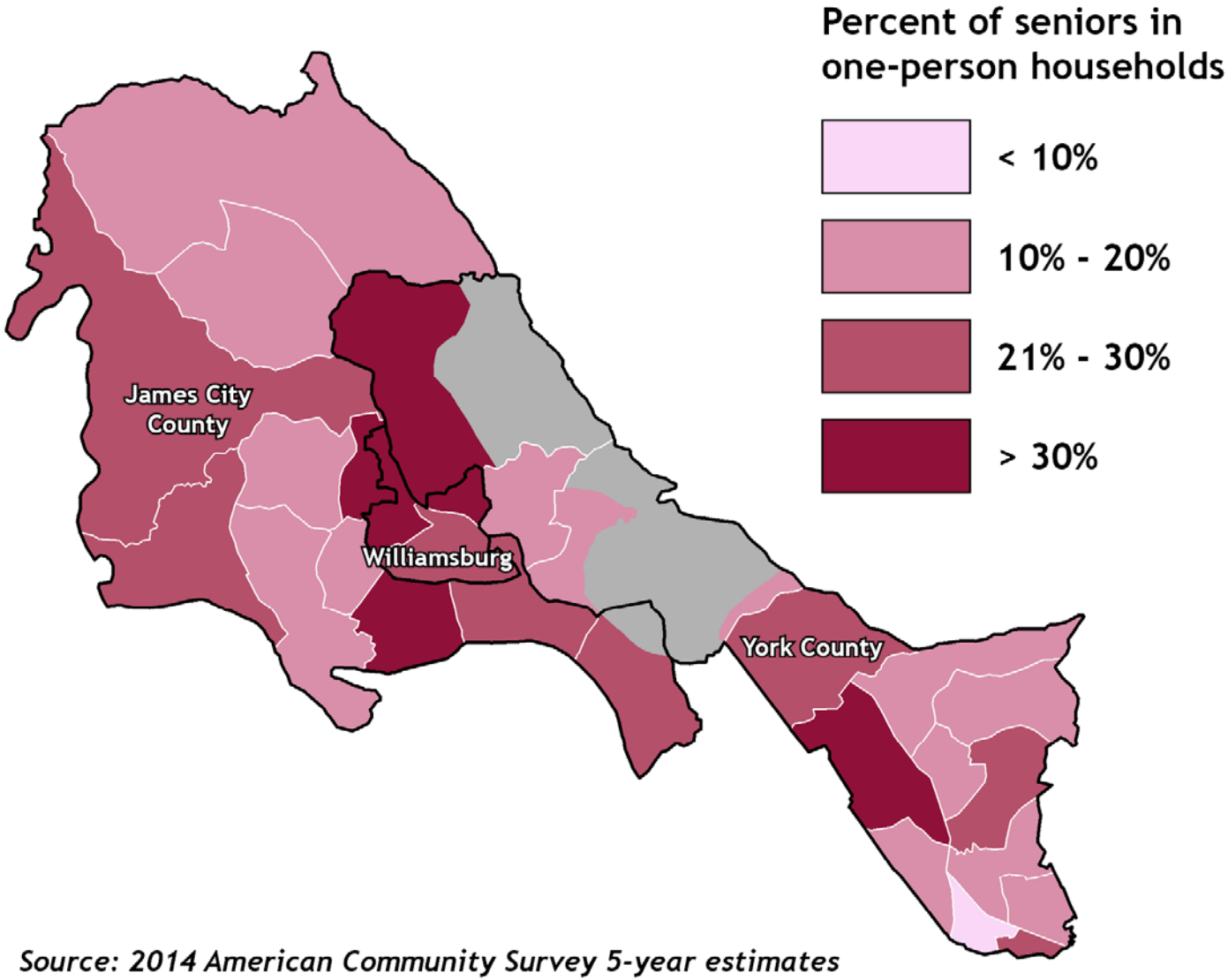
- **17%** of population over 65 (26,000 seniors)
- Up from **12%** in 2000

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

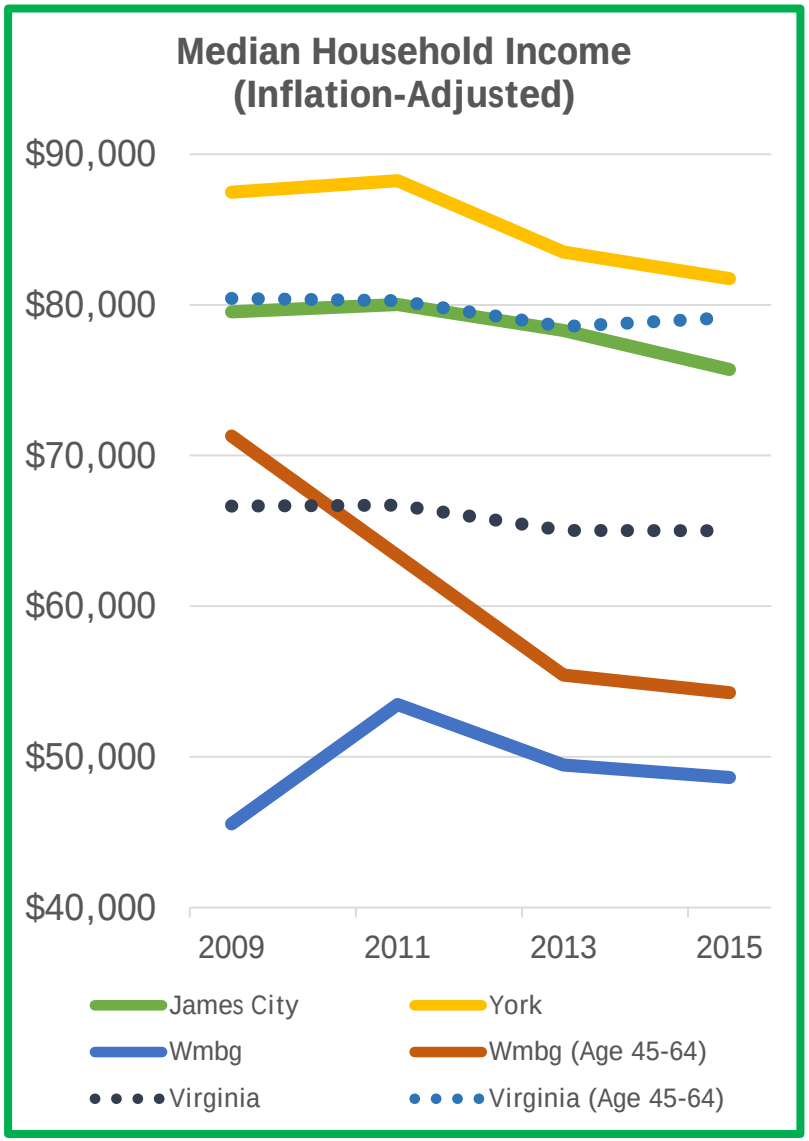
- **8.3%** poverty rate
  Poverty threshold for family of 4: $24,250

LOW-INCOME HOUSEHOLDS

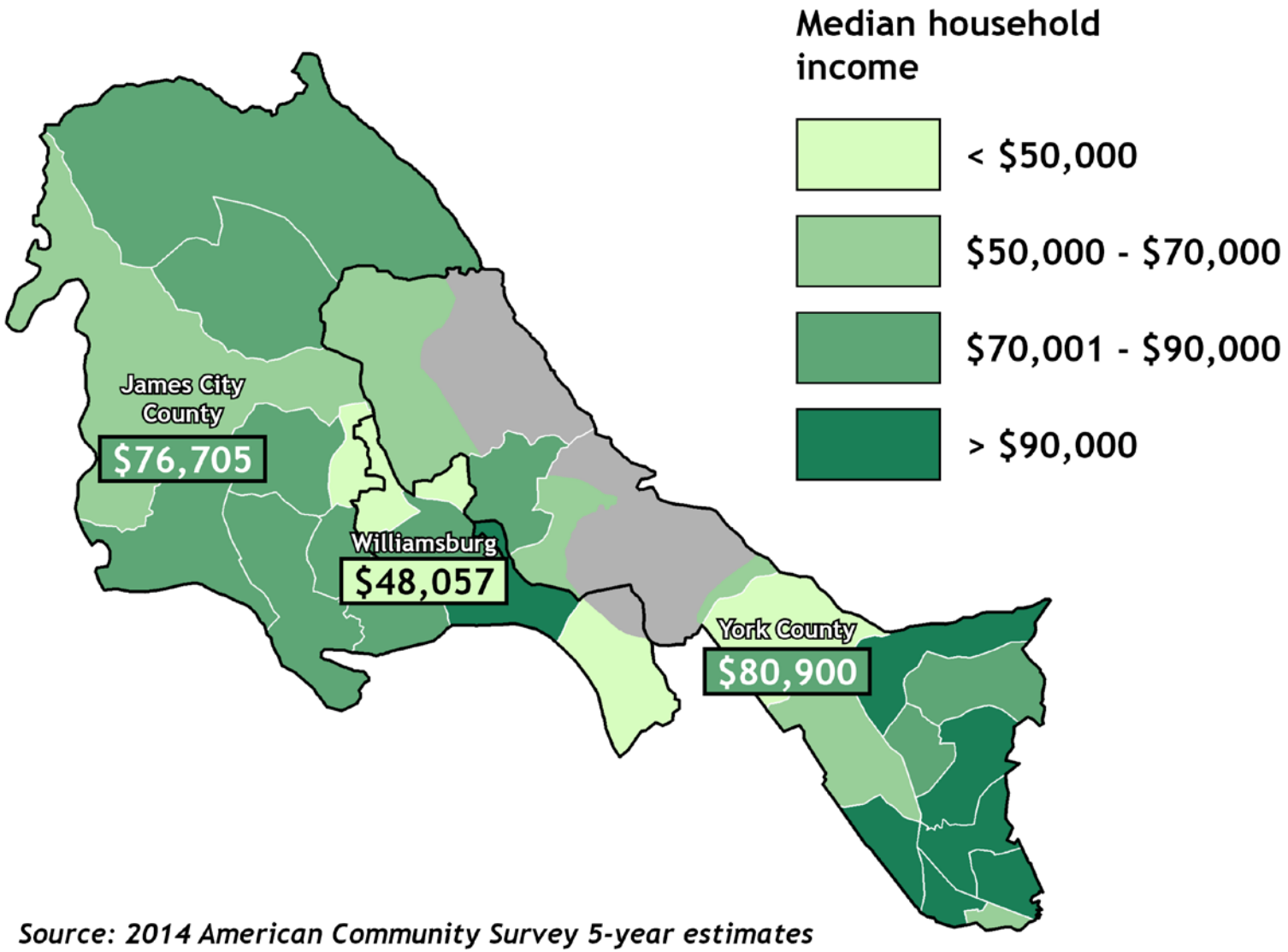
- One in five households earn **less than $35,000**

EMPLOYMENT + COMMUTING PATTERNS

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

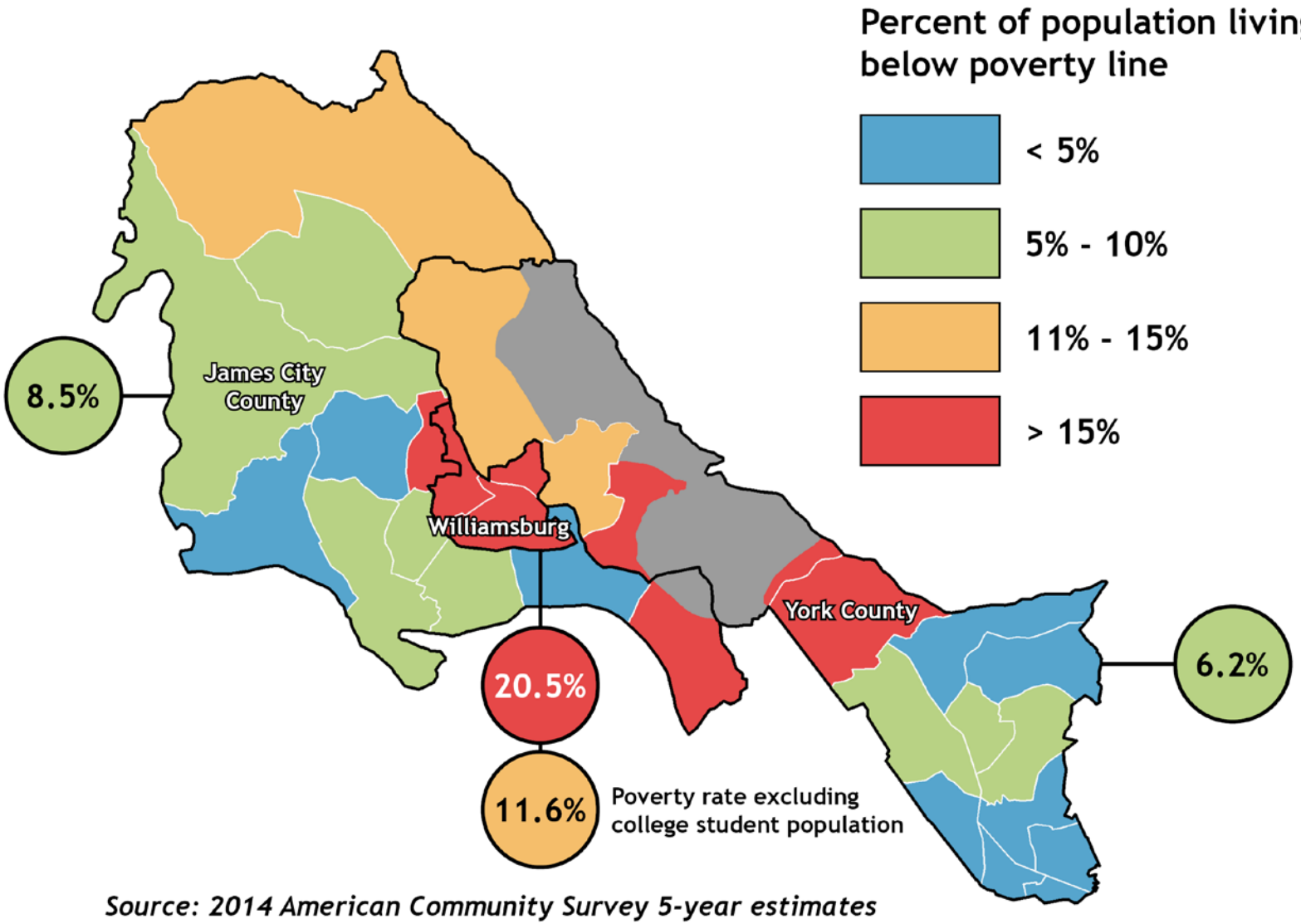


Household Income



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

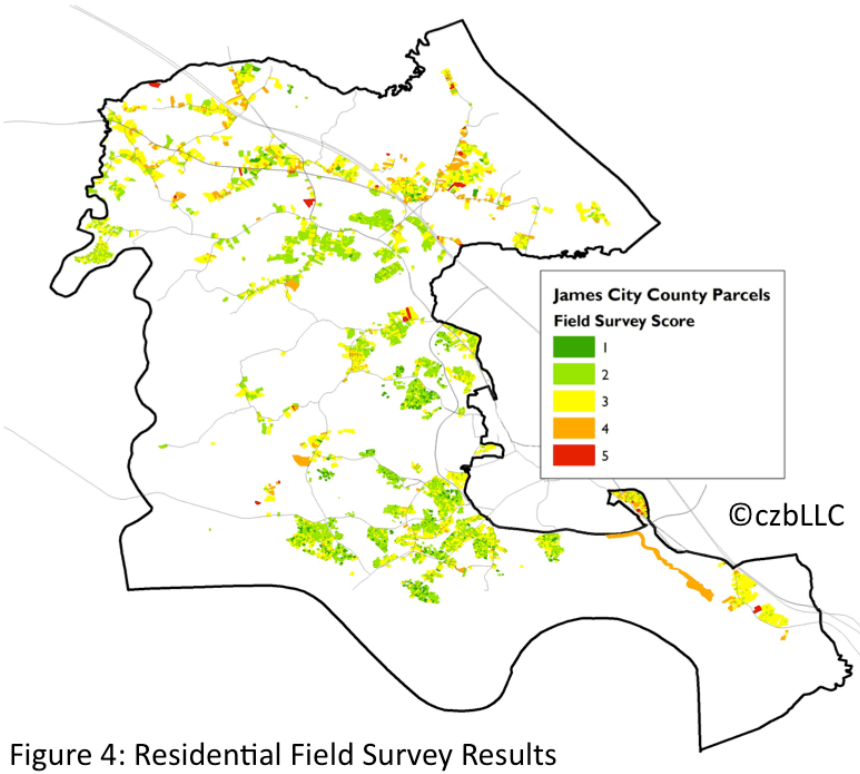


Figure 4: Residential Field Survey Results

James City County Housing Conditions Study

Example of housing needs assessment

3 Housing assessment

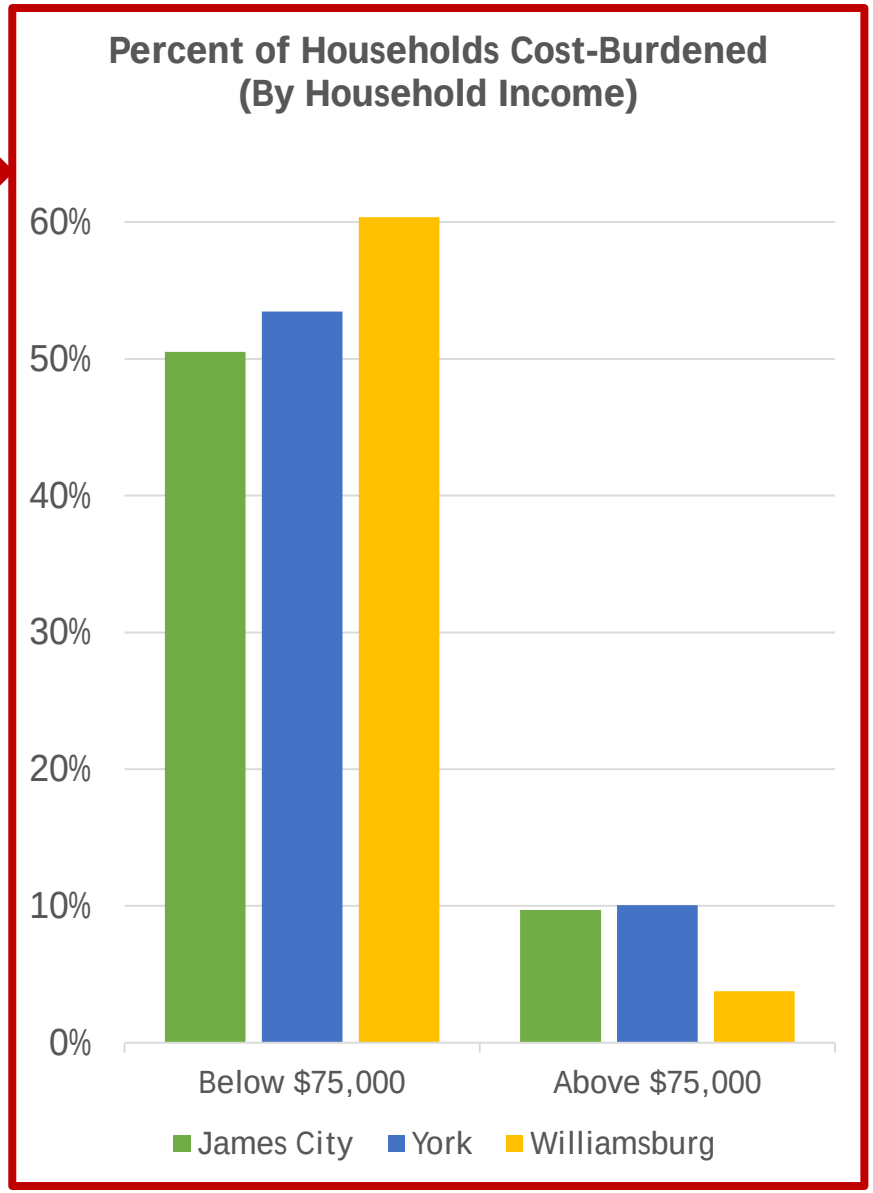
AFFORDABILITY

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

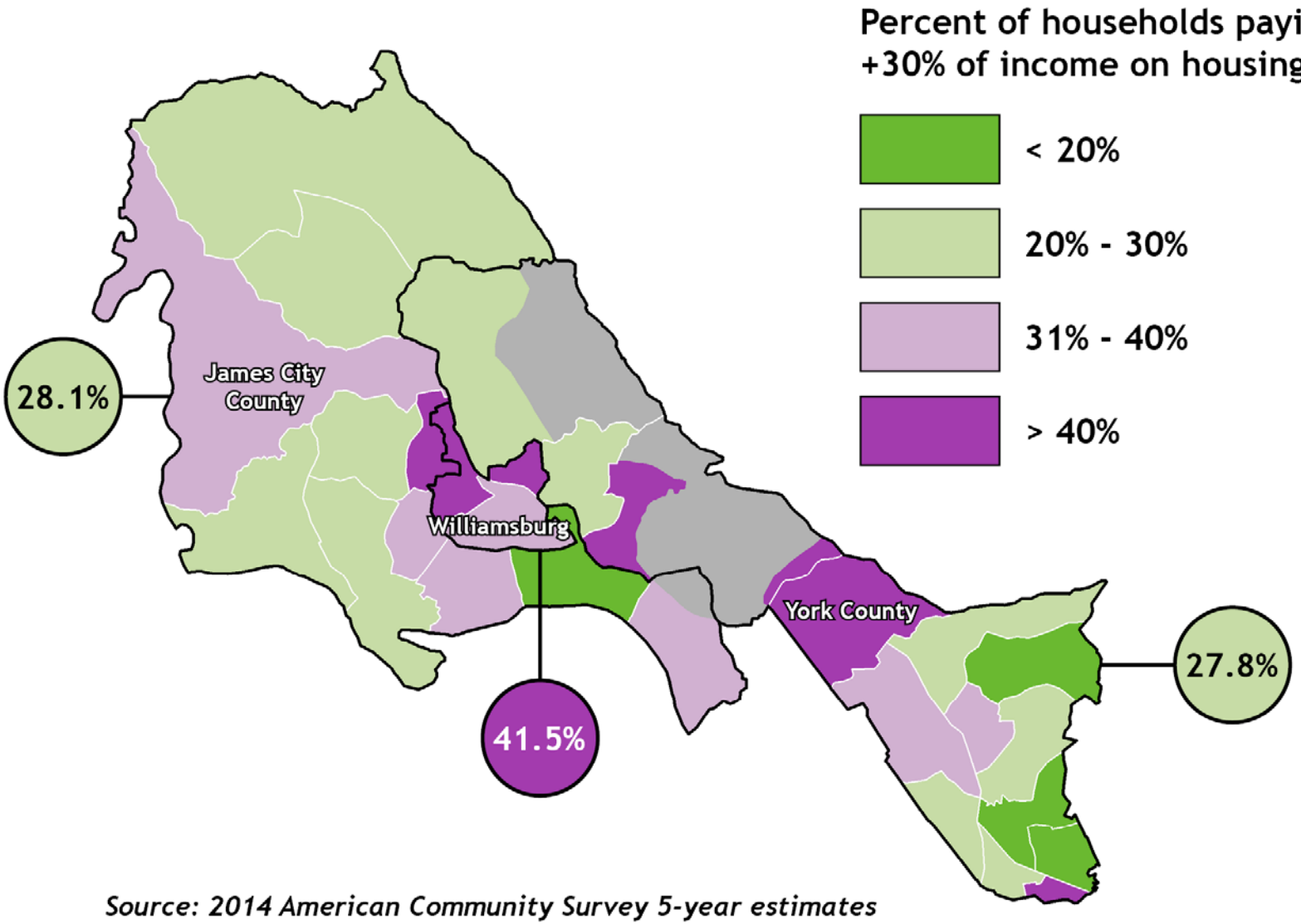
VACANCY

- **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



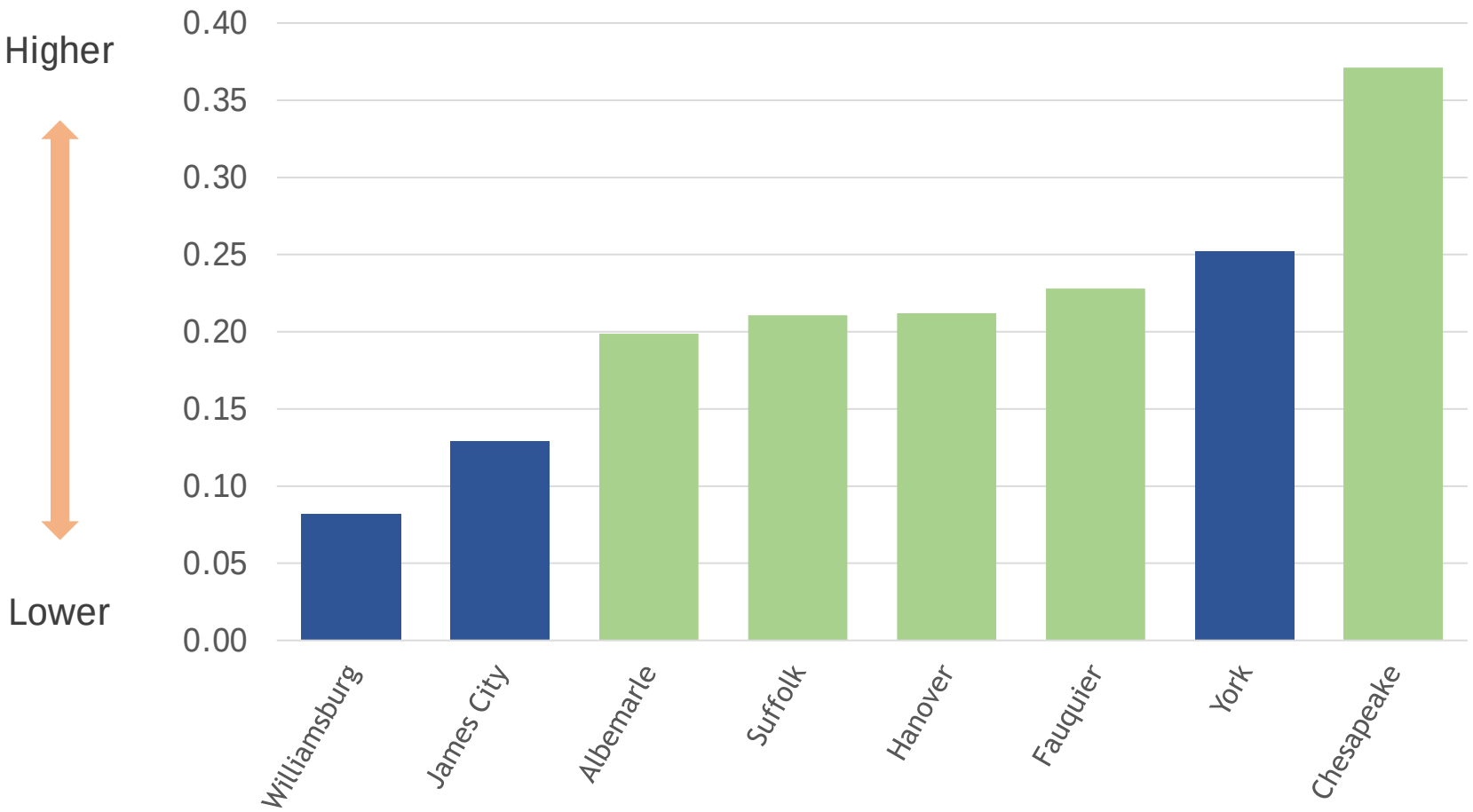
Housing Cost Burden



Source: 2014 American Community Survey 5-year estimates

Measuring housing support and demand

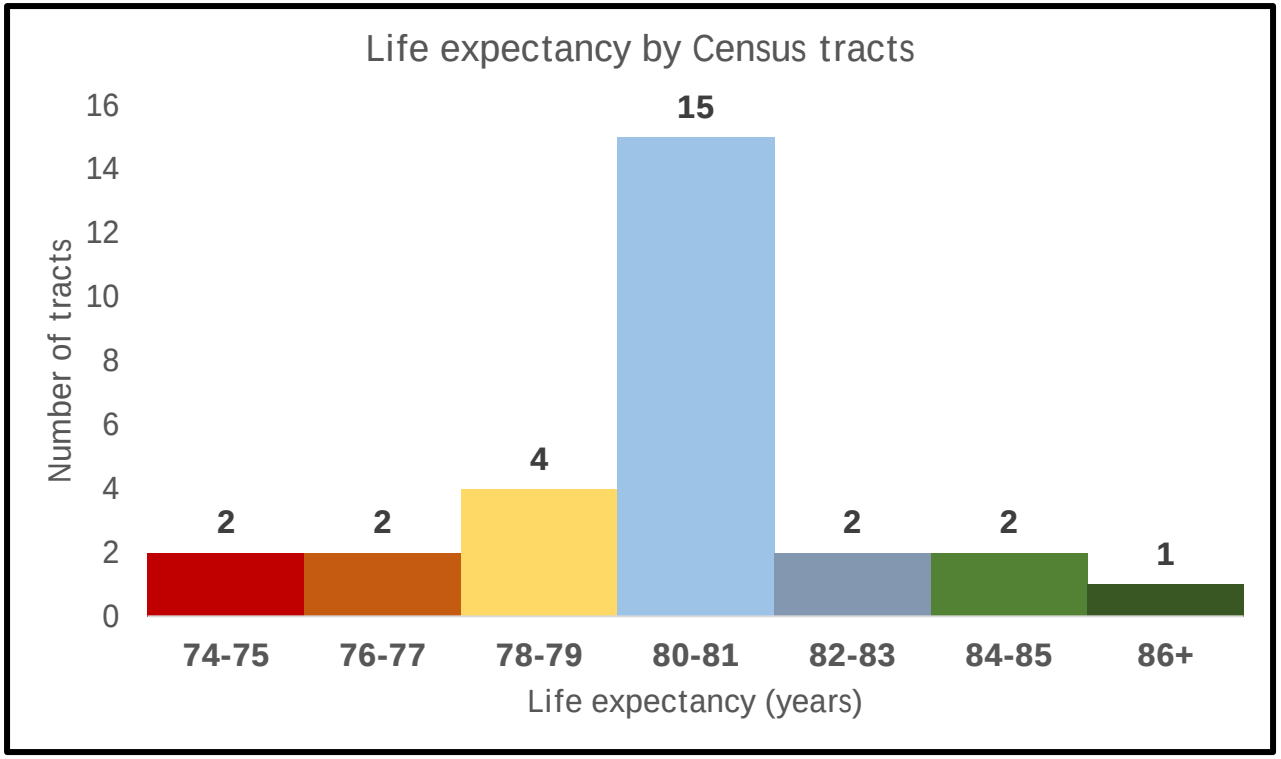
Housing support index = **# subsidized housing units** (vouchers, LIHTC, public housing) / **# cost-burdened renter households with income < $35,000**



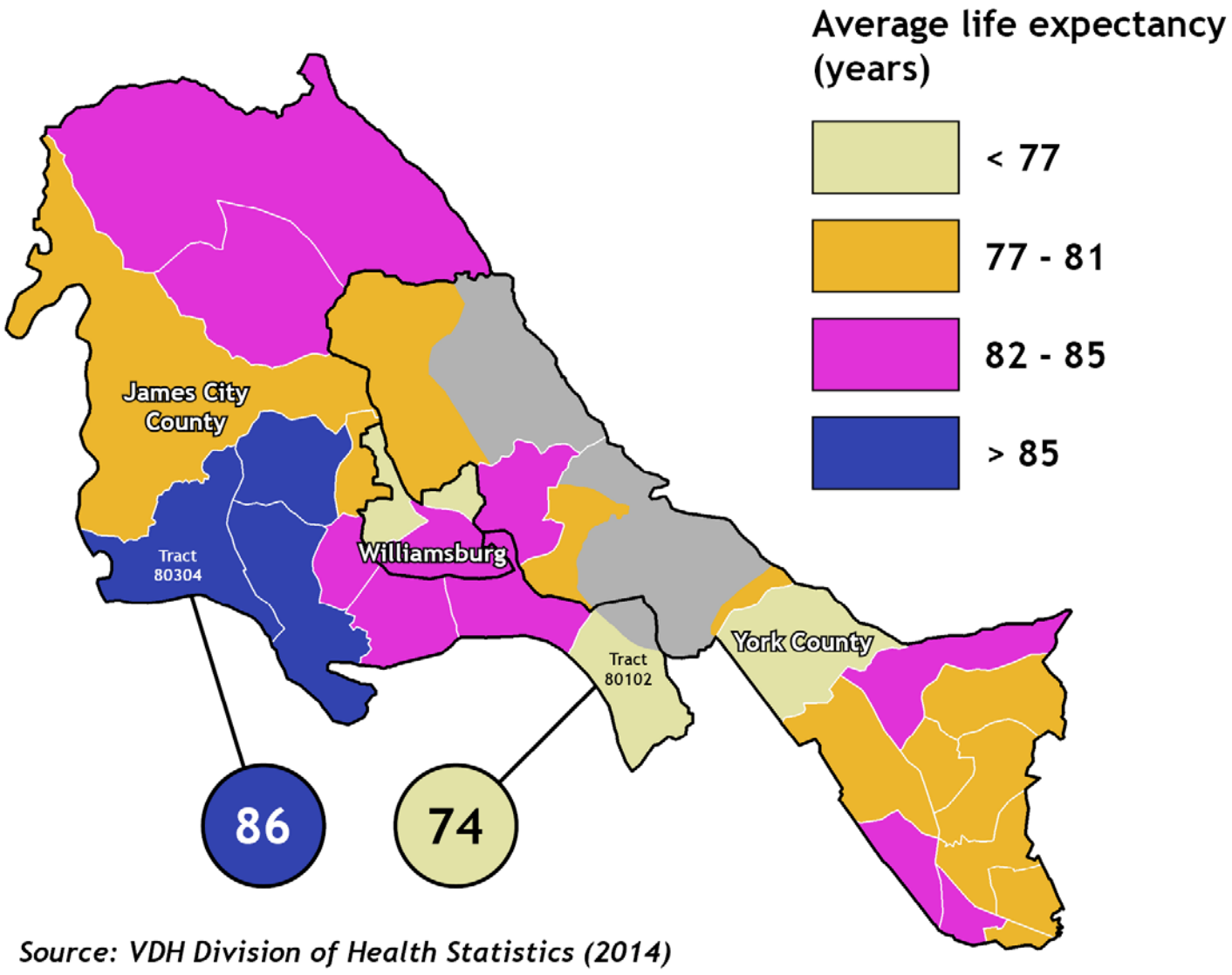
4 Health outcomes

LIFE EXPECTANCY

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

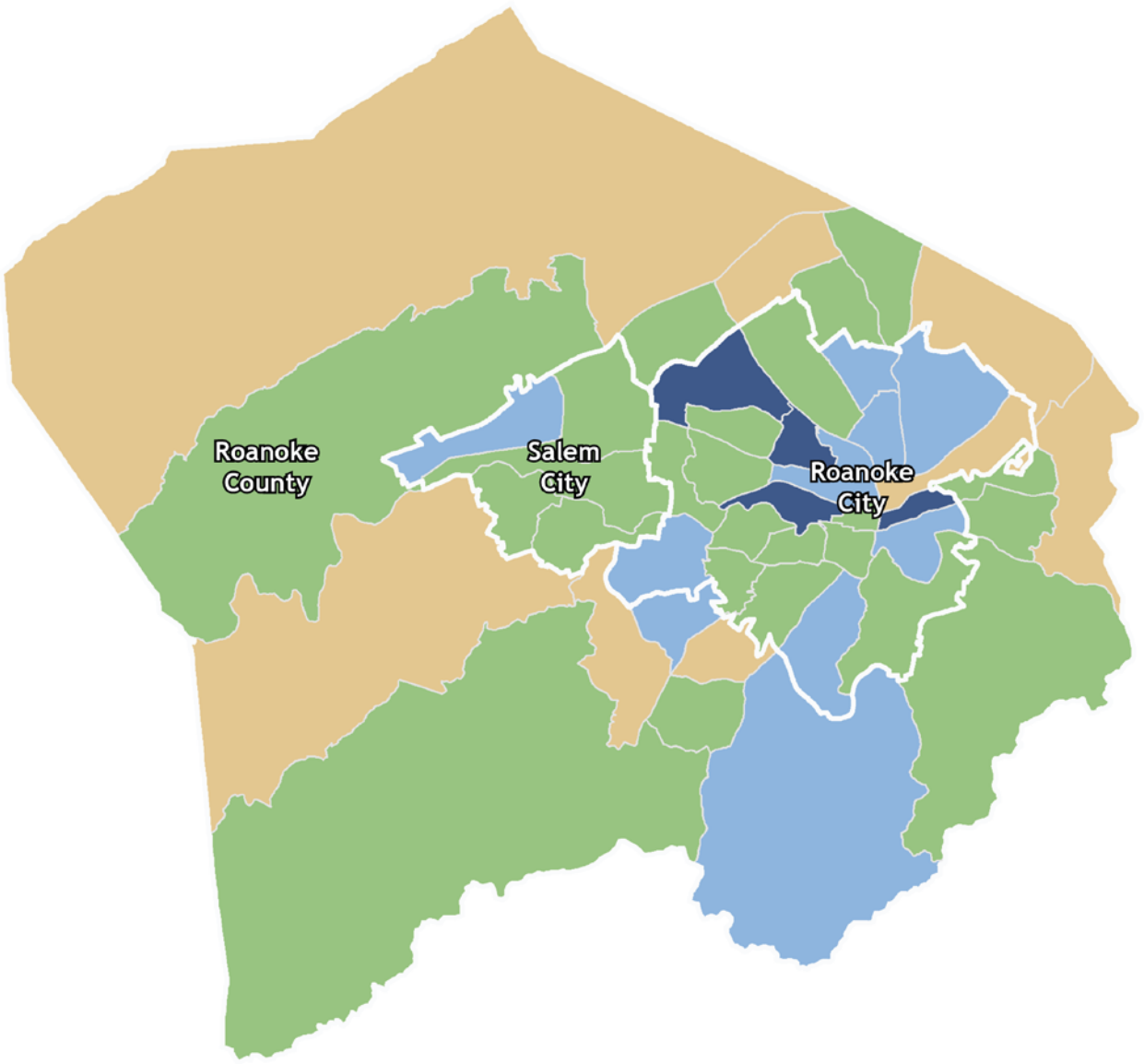


Life Expectancy



Source: VDH Division of Health Statistics (2014)

Housing Cost Burden

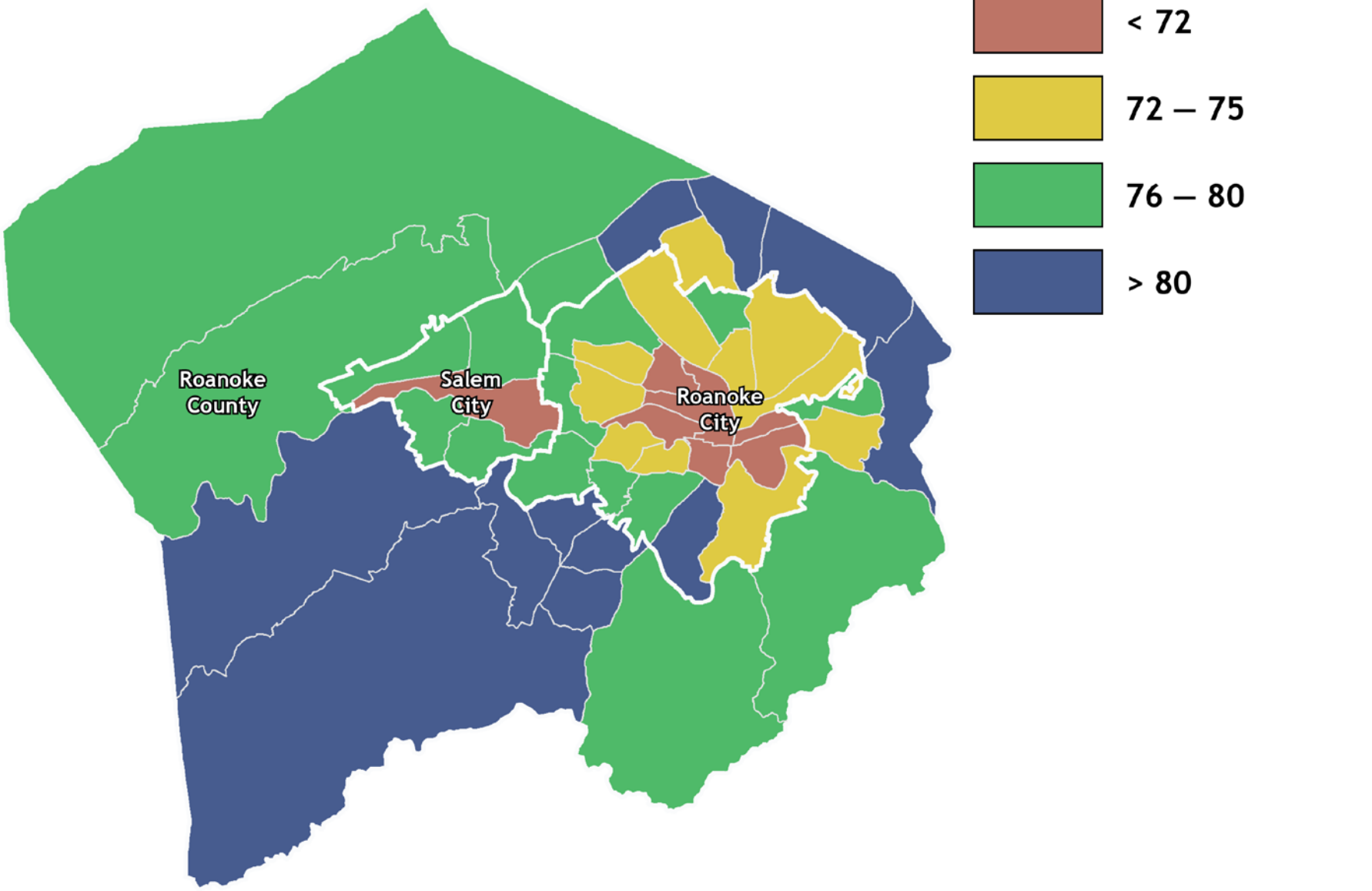


Percent of households paying +30% of income on housing

- < 30%
- 30% – 40%
- 41% – 50%
- > 50%

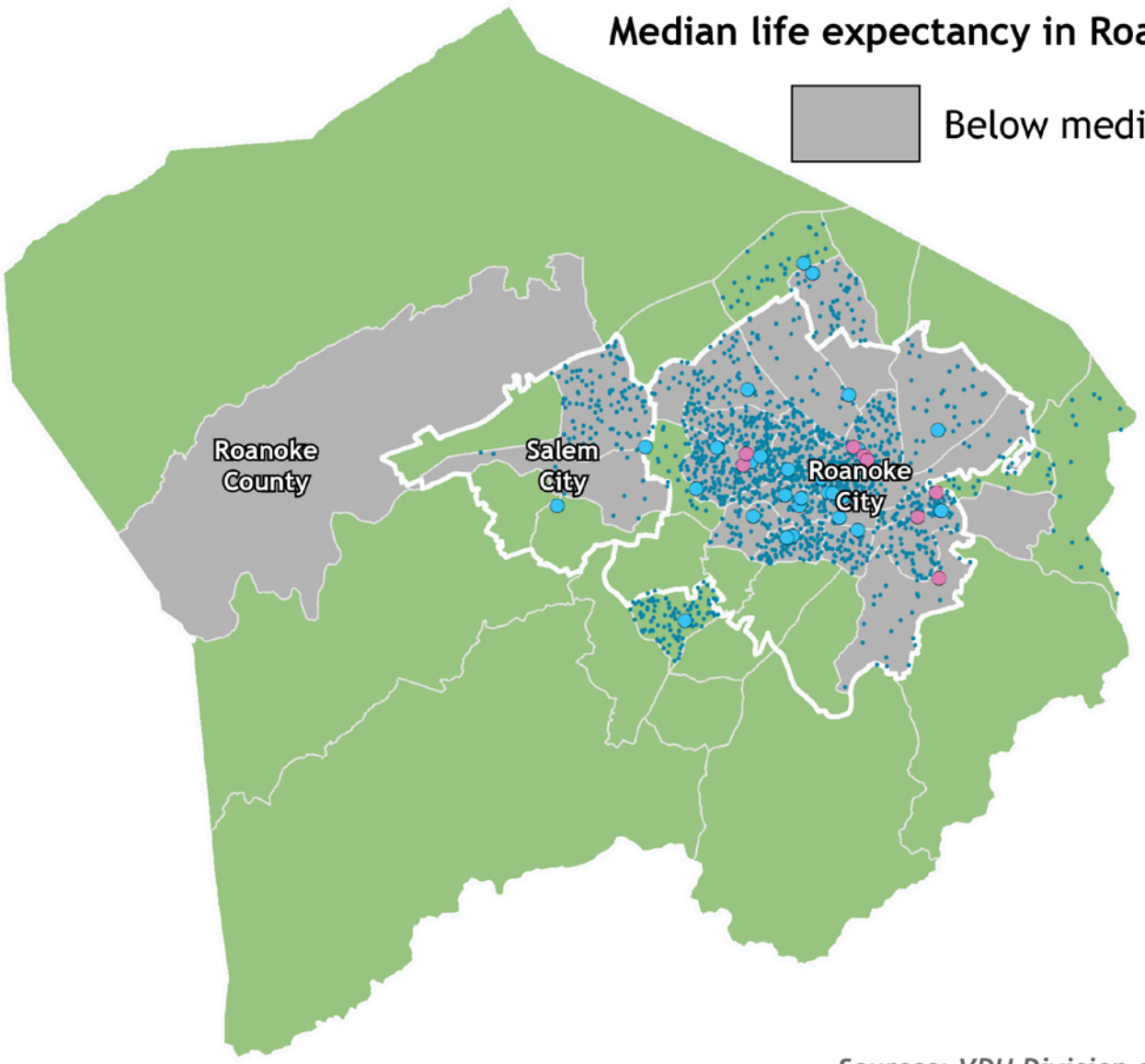
Source: 2014 American Community Survey 5-year estimates

Life Expectancy



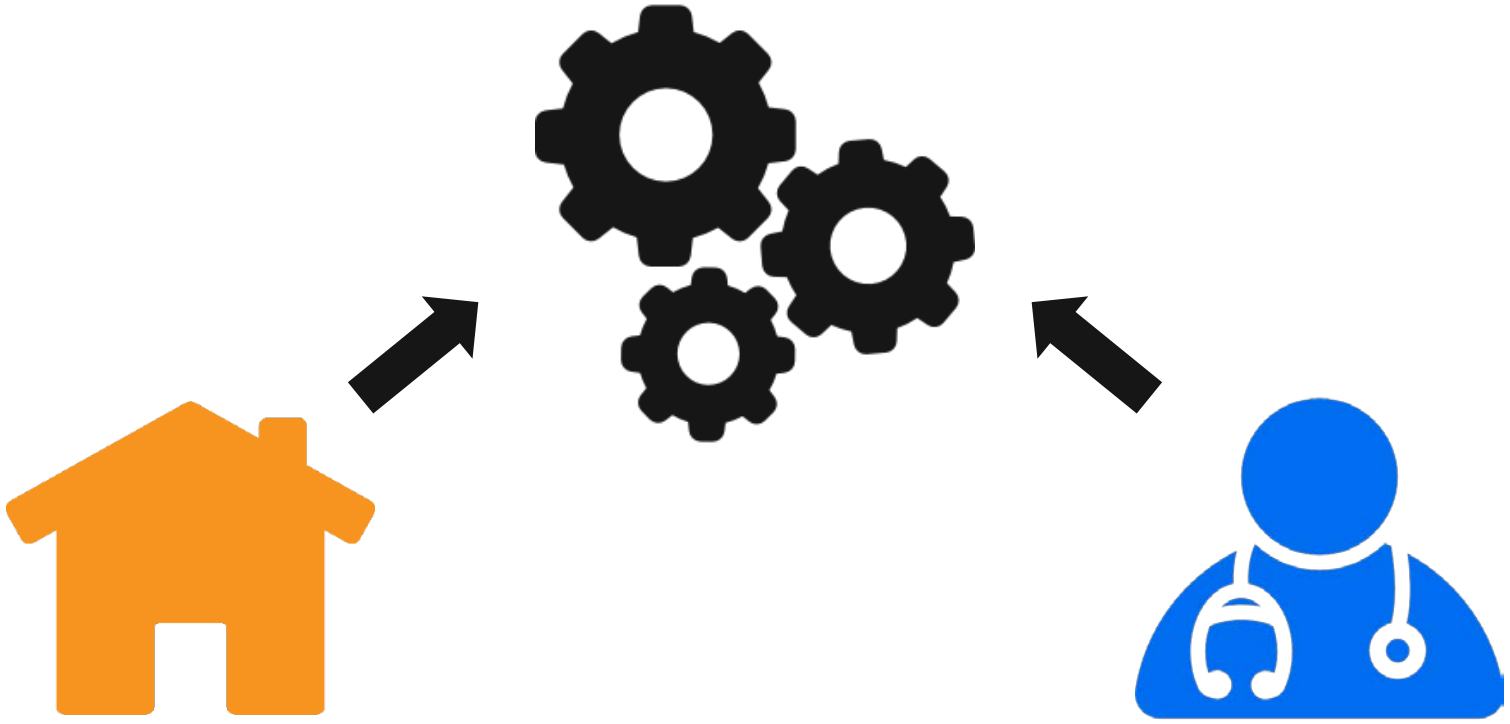
Source: Virginia Department of Health, Division of Health Statistics (2014)

Life Expectancy + Affordable Housing



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

Housing and Health Action Areas

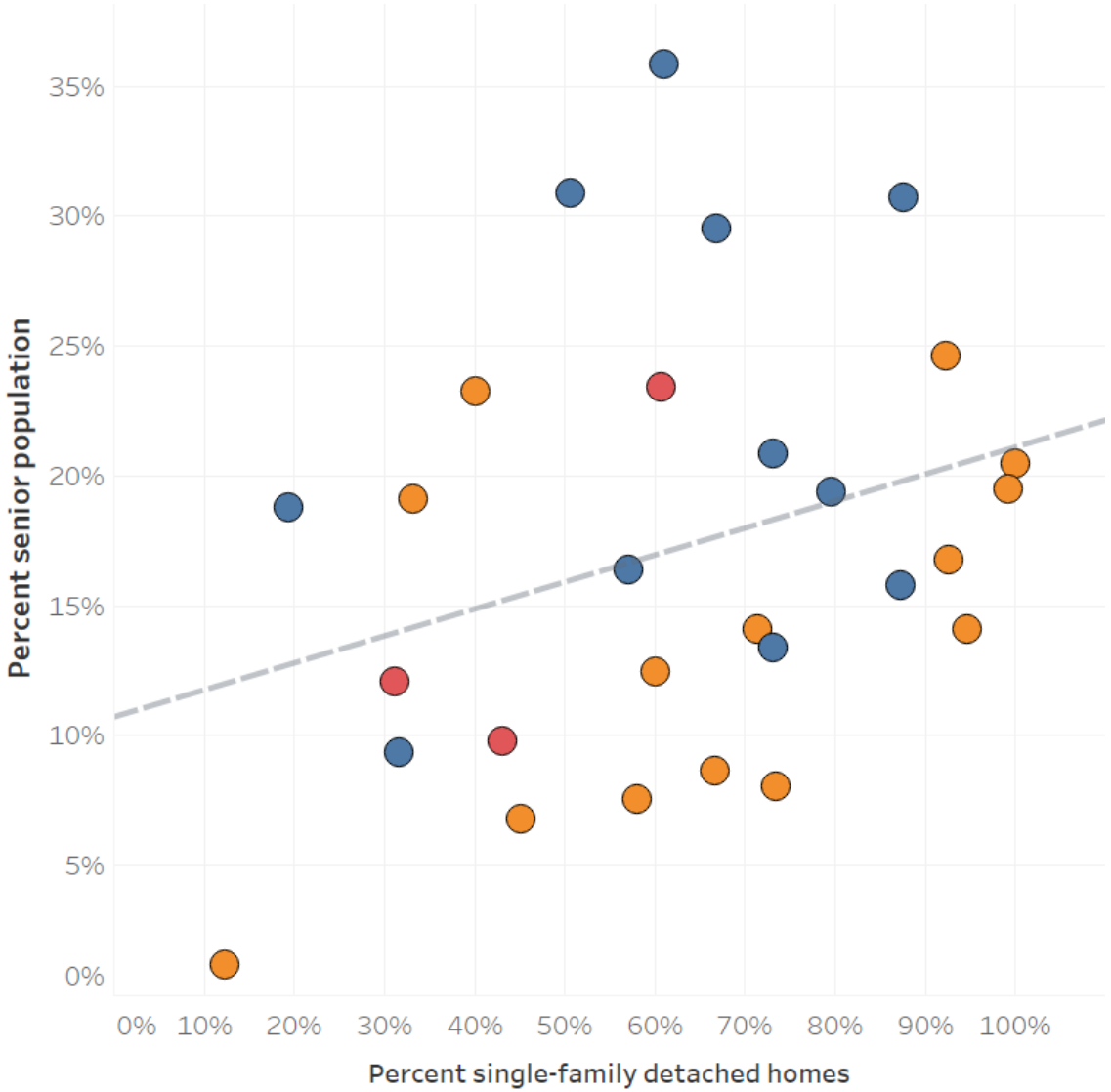


1 Physical condition of home

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)

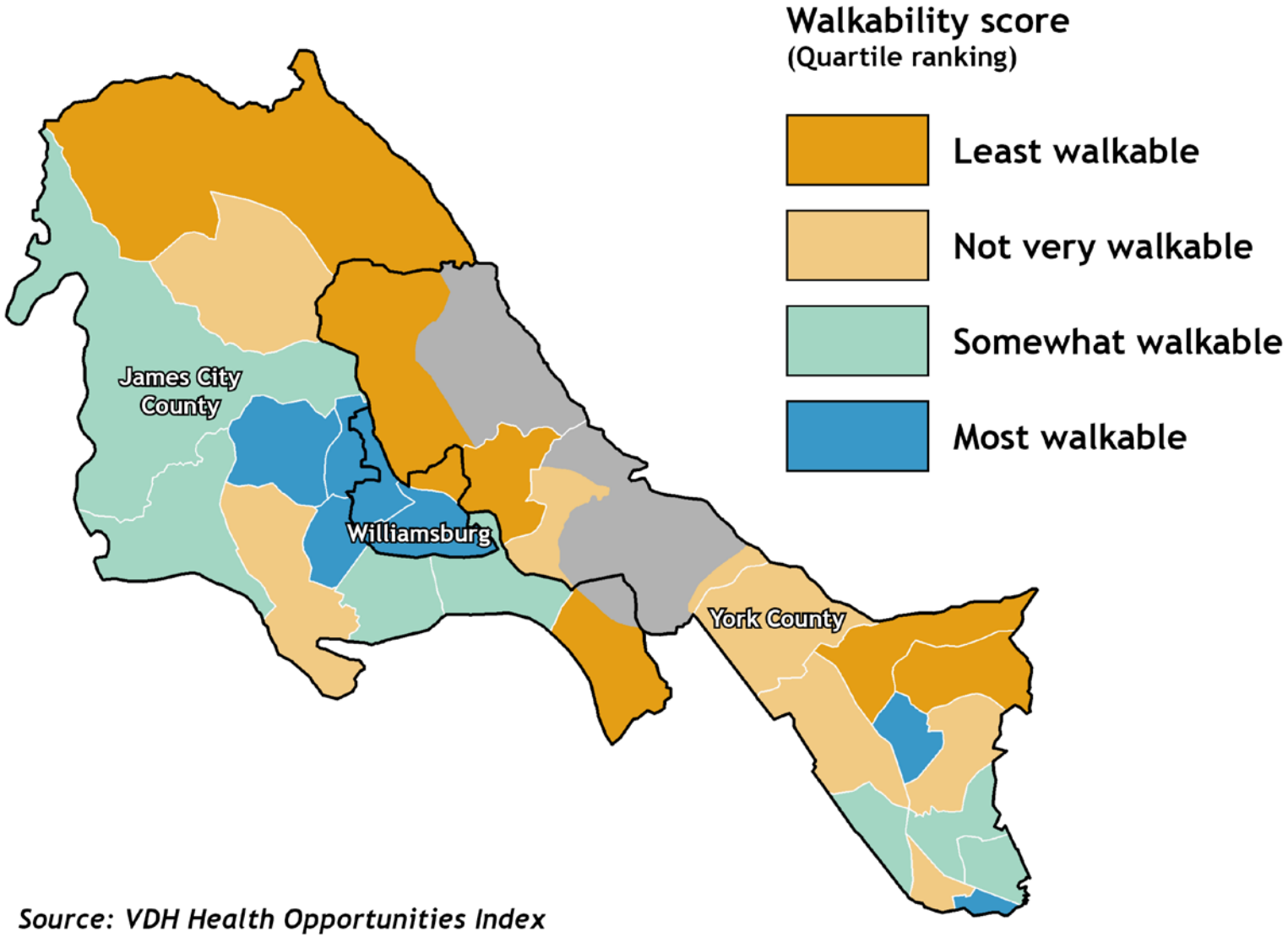
SAFE SPACES FOR PHYSICAL ACTIVITY

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

CONNECTIVITY + WALKABILITY

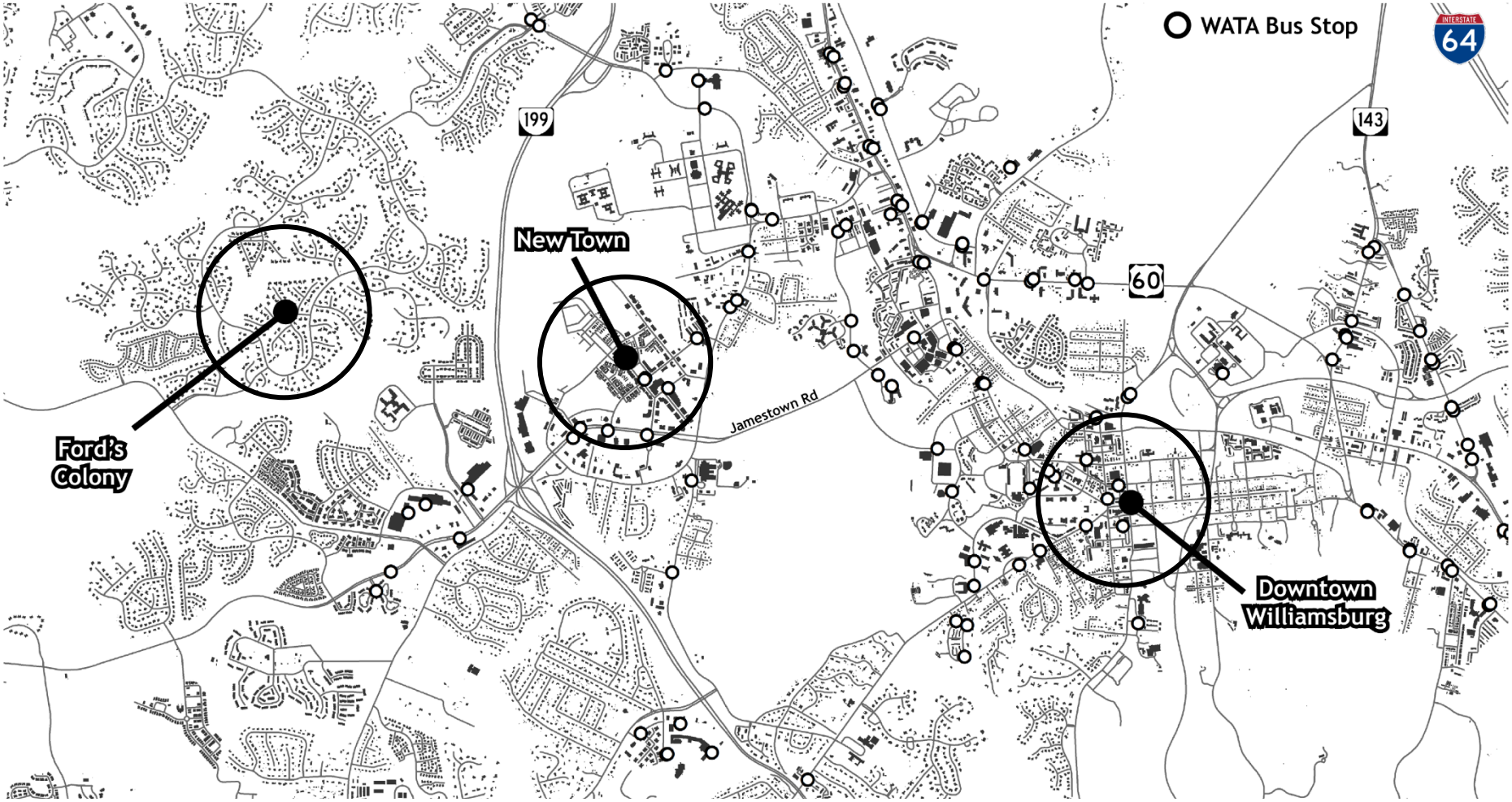
- While some neighborhoods are walkable, many households cannot complete regular daily trips without using a car

Walkable Neighborhoods



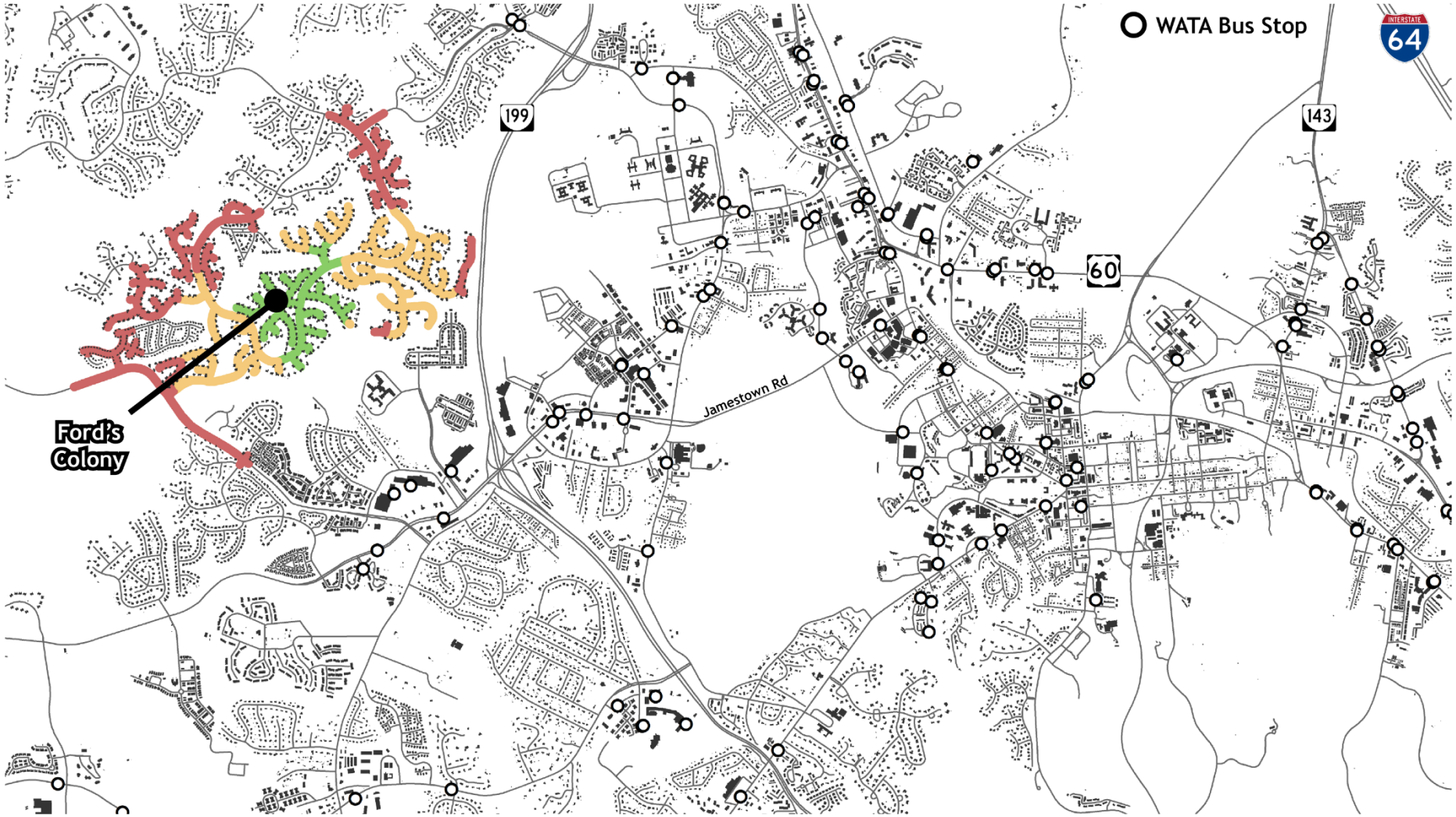
Source: VDH Health Opportunities Index

Walkability in the Williamsburg Region



How does neighborhood design impact travel methods?

1: Ford's Colony (Suburban subdivision)



0-10 min | 10-20 min | 20-30 min

Walking distance

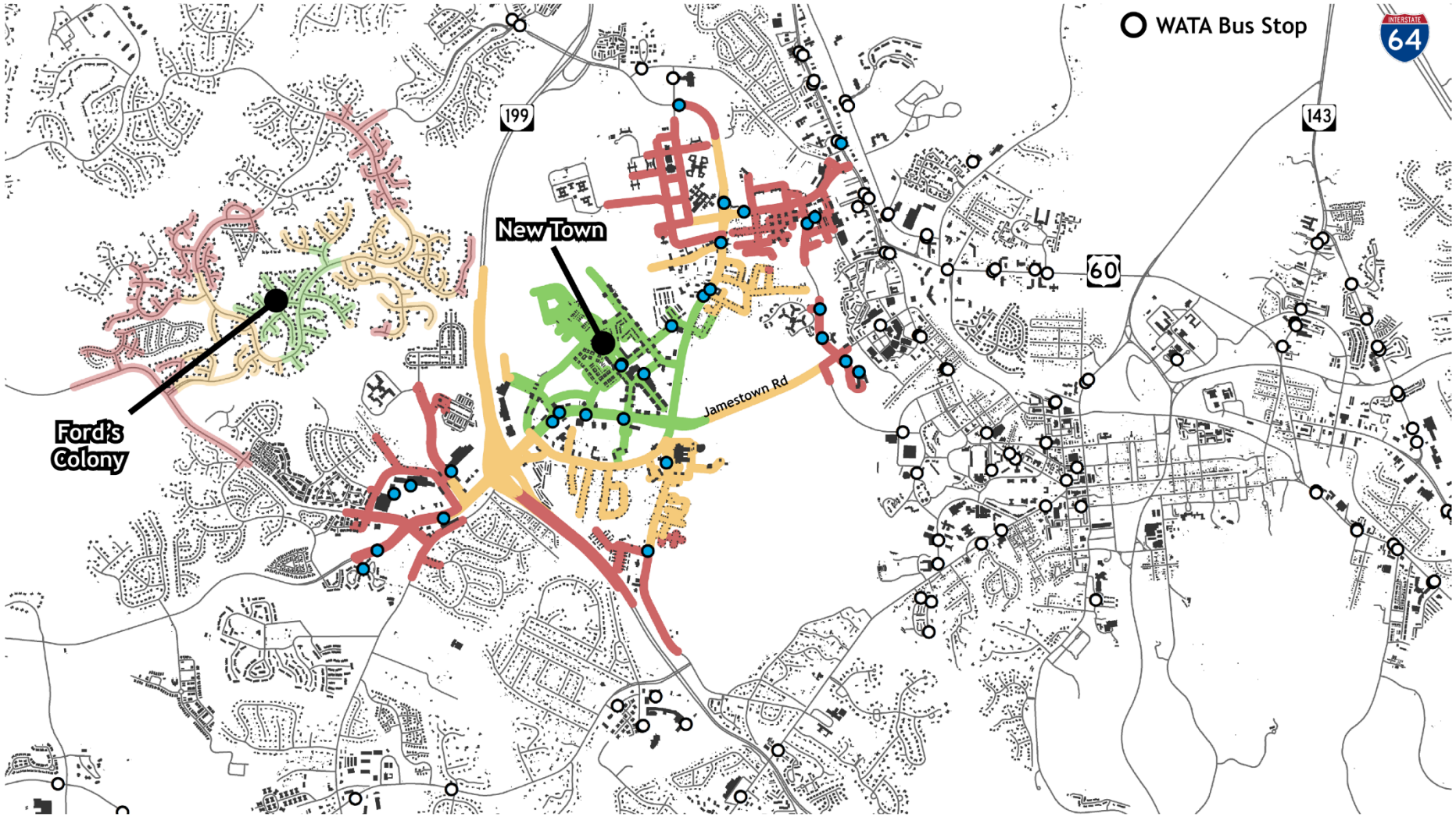
13.9 total miles covered

Zero bus stops

Walk Score 0

Walk Score®

2: New Town ("New Urbanism" mixed-use community)



0-10 min | 10-20 min | 20-30 min

Walking distance

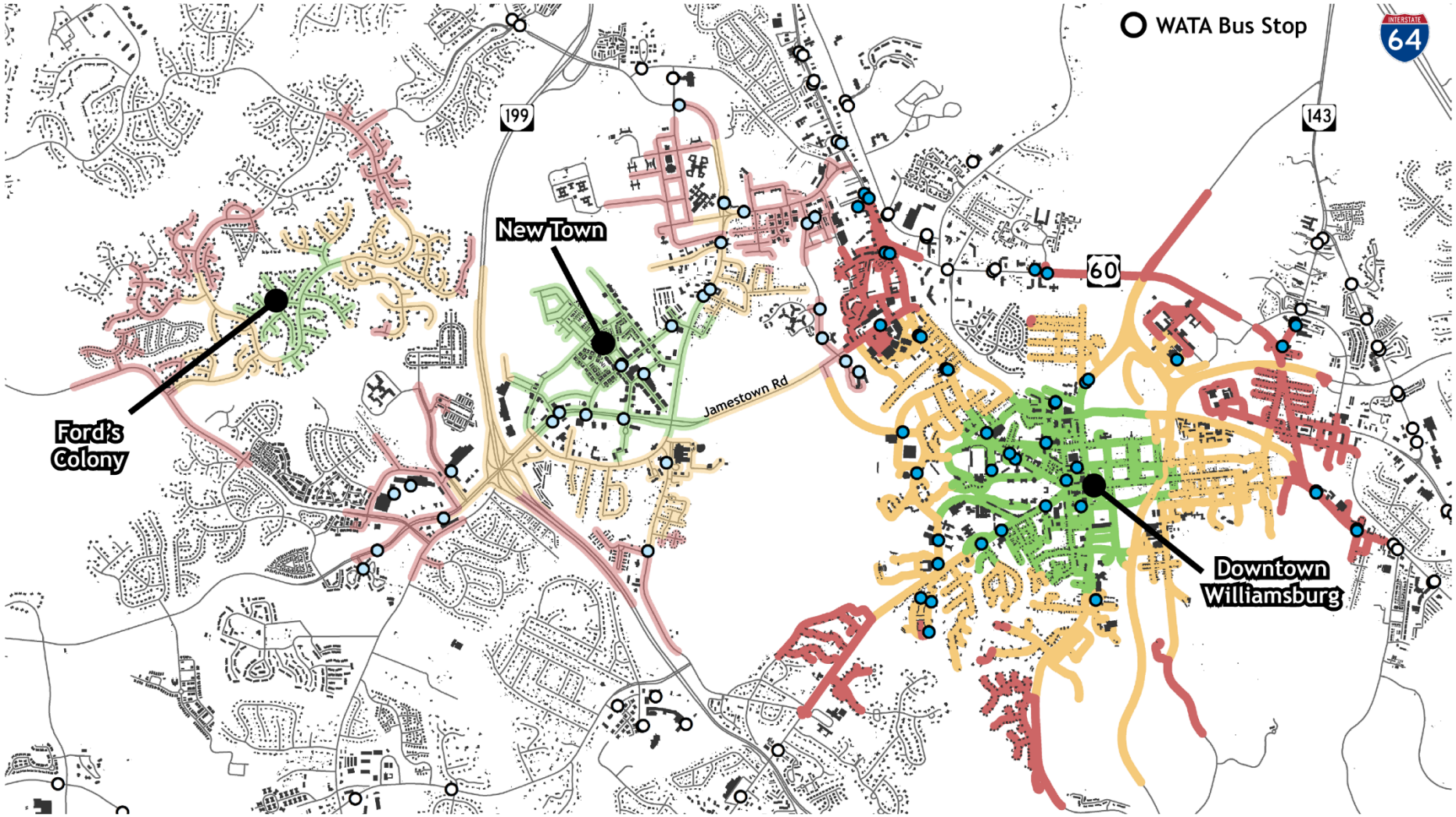
30.8 total miles covered

30 bus stops

Walk Score 54

Walk Score®

3: Downtown Williamsburg (Traditional grid pattern)



0-10 min | 10-20 min | 20-30 min

Walking distance

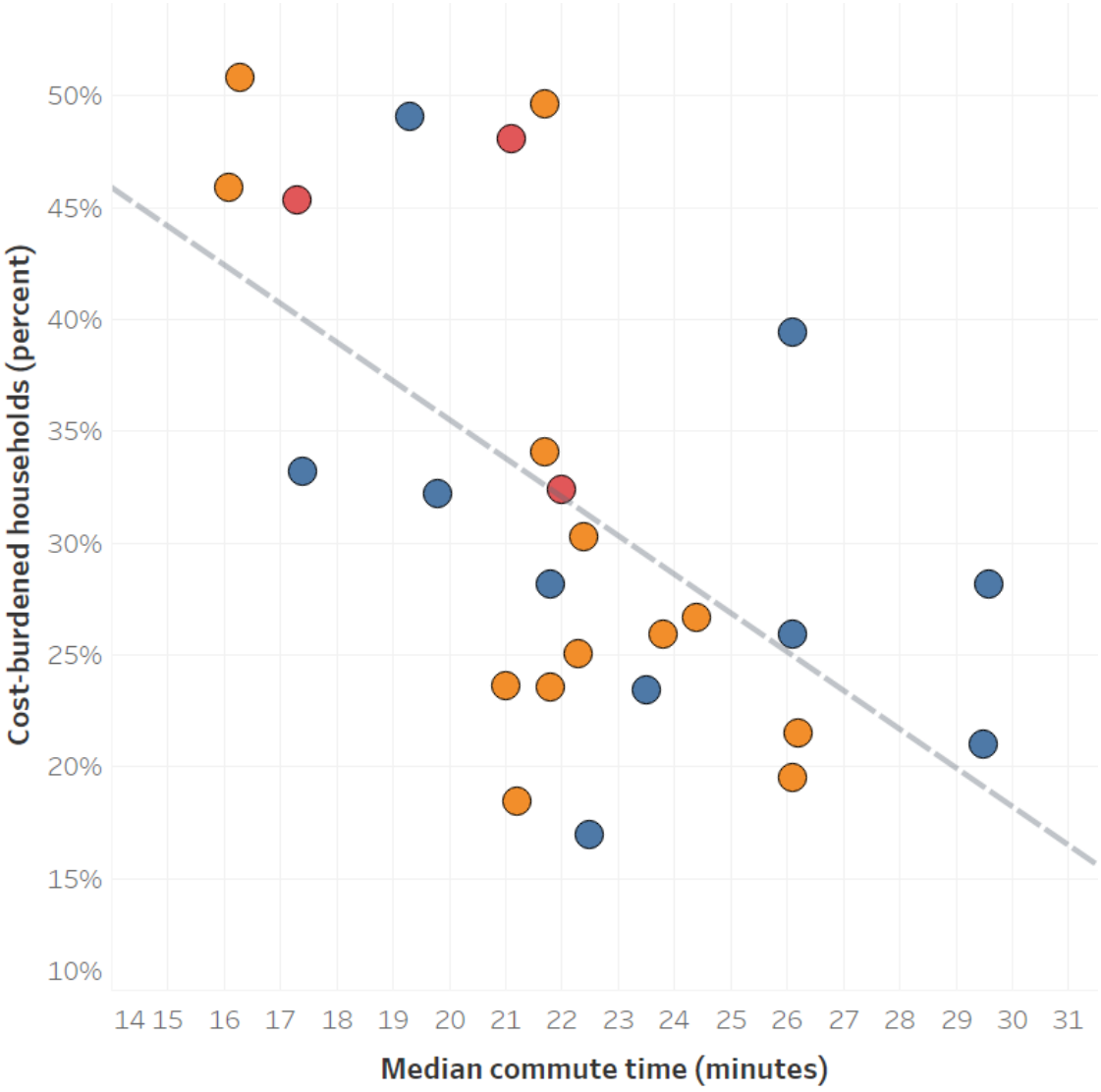
58.8 total miles covered

45 bus stops

Walk Score 86

Walk Score®

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

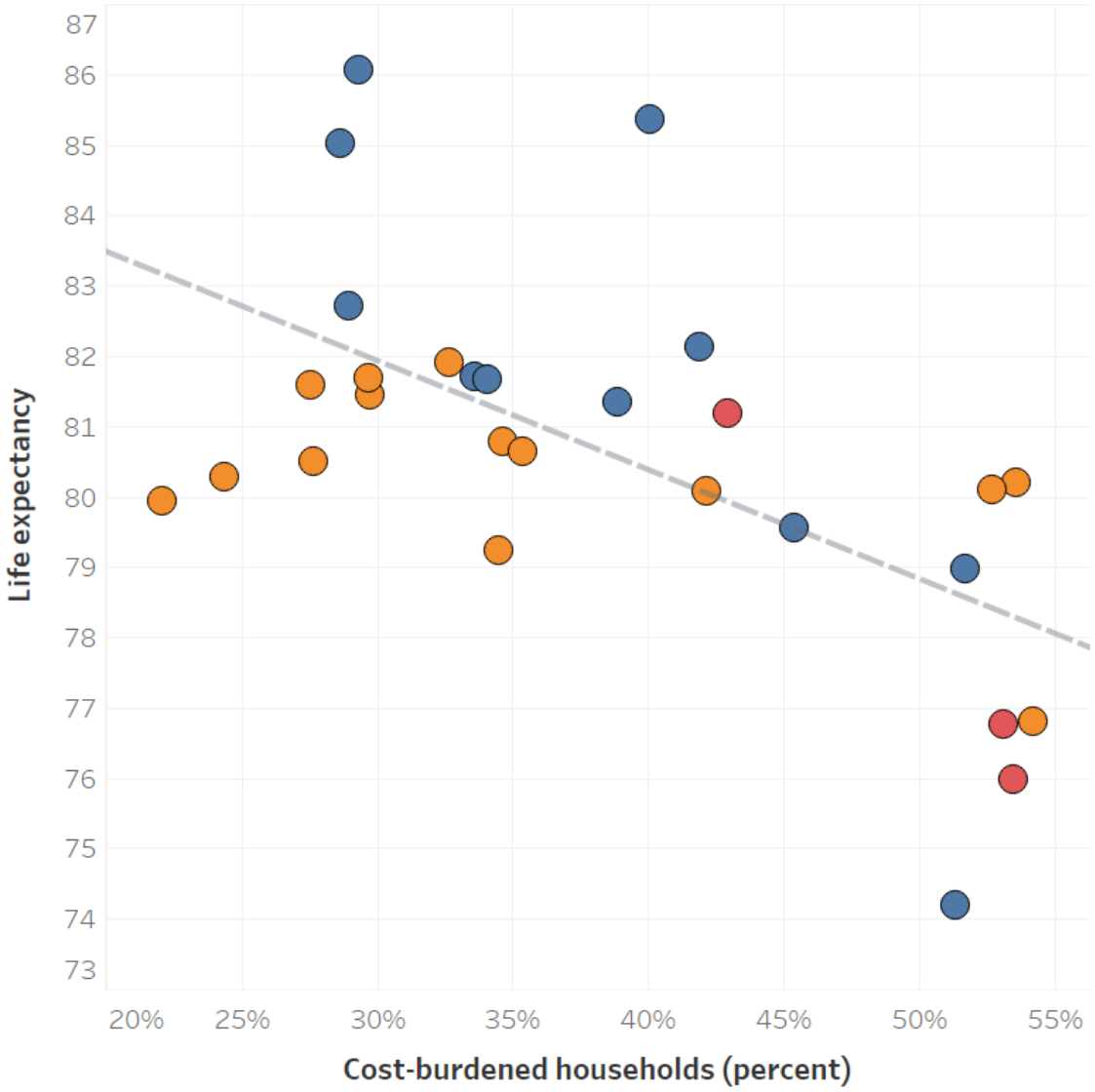
IMPACT OF COST BURDEN

- **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



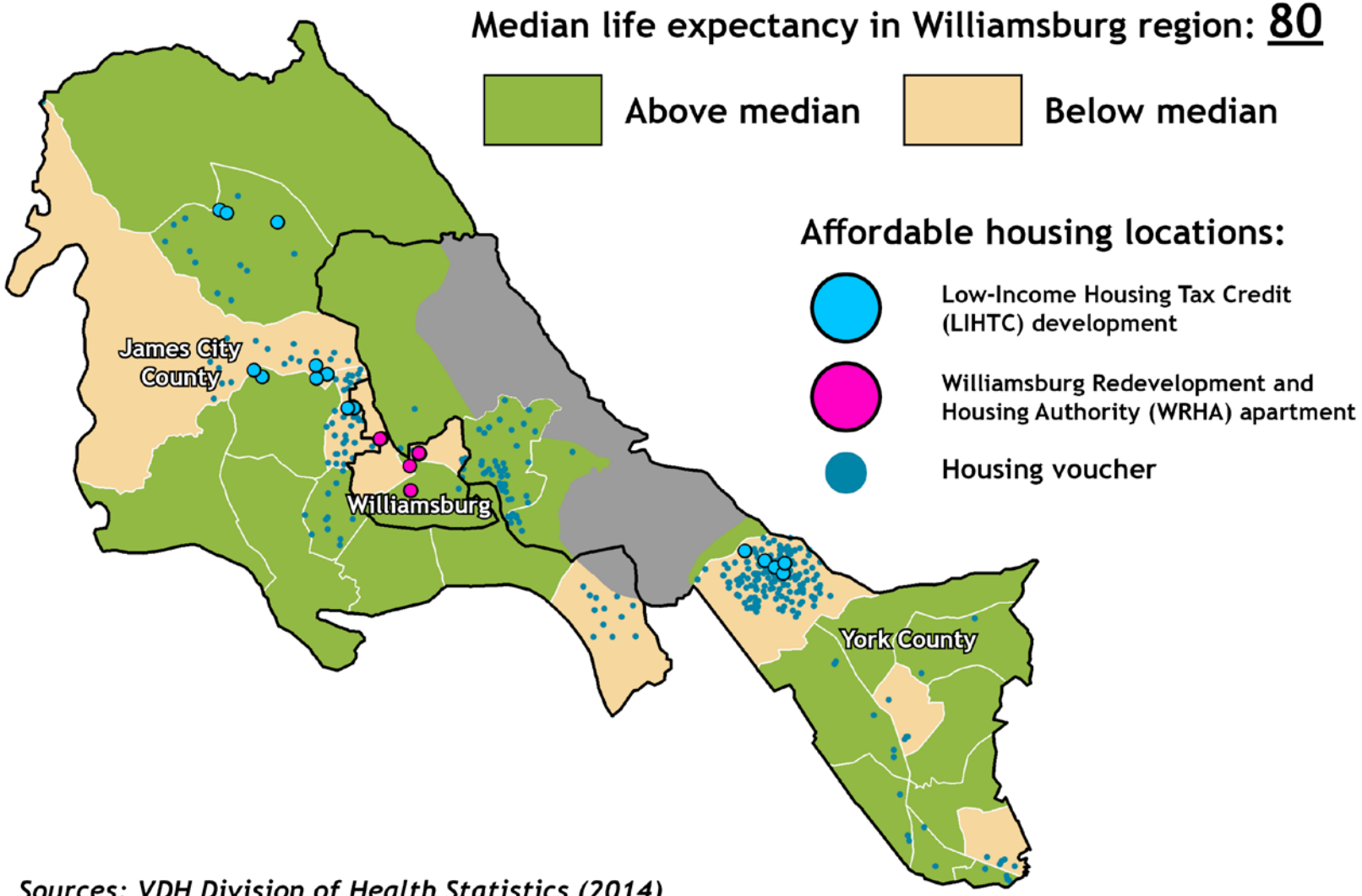
Communities where many households pay 30% or more of their income on housing experience lower life expectancy.

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

One dot = Census tract

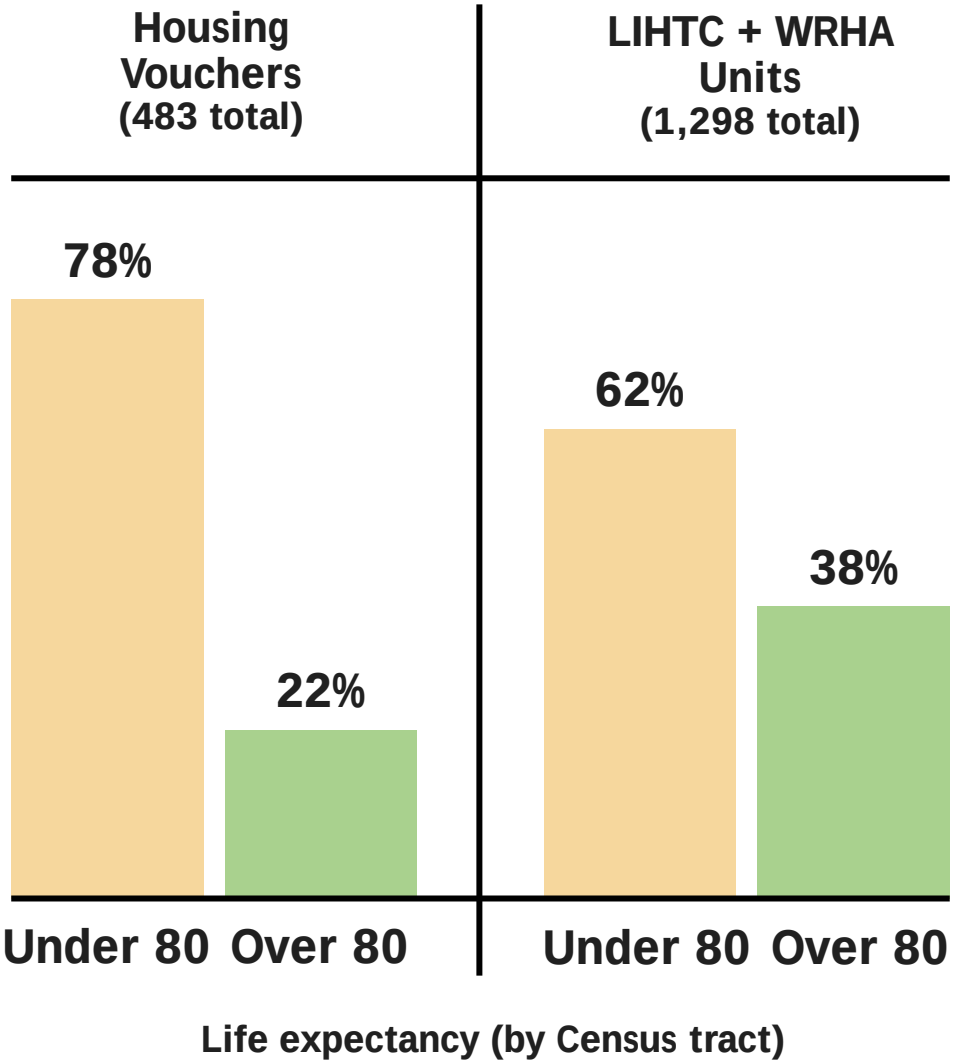
Williamsburg City
James City County
York County

Affordable Housing / Life Expectancy



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.

Health care access vs. Median rent

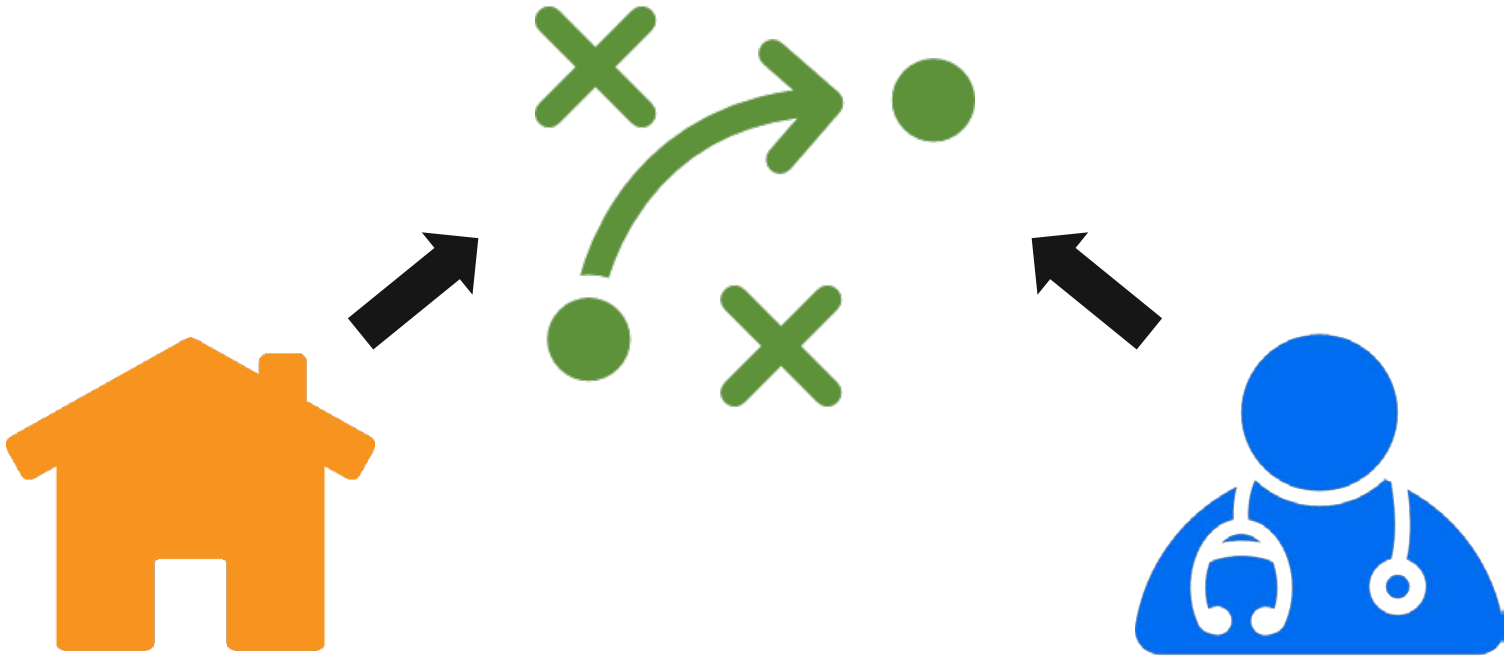
More affordable housing units are more common in neighborhoods with lower access to healthcare.

"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

	Low Impact	High Impact
High Cost		• Lead abatement • Pediatric asthma intervention • In-home services • Accessibility improvements • Weatherization
Low Cost	• Home safety assessments • Landlord-tenant enforcement • Community education	• Code enforcement • Lead testing • Noise mitigation • Smoke-free housing • Promote stair use

2 Healthy communities

	Low Impact	High Impact
High Cost		• Public transit expansion • Retrofitting neighborhoods • Sidewalks and greenways • Accessory dwelling units • Solar retrofits
Low Cost	• Traffic calming • Safe routes to school • Walkability scores for home sales	• Farmers markets • Ride-sharing services • Community design standards • Improved access to recreation

3 Affordable housing

	Low Impact	High Impact
High Cost		• Inclusionary housing policy • Housing vouchers • Housing trust fund • FHLB Affordable Housing Program • Supportive housing • Weatherization
Low Cost	• Mortgage assistance • Affordable housing education • Property tax abatement • Energy/fuel assistance	• HOME/CDBG funds • Homelessness prevention

Best Practices

- **Green and Healthy Homes Initiative**
  - Integration of:
    - Lead abatement
    - Healthy homes
    - Energy efficiency upgrades
    - Weatherization

Green & Healthy Homes Initiative®

www.greenandhealthyhomes.org

- **Health impact assessment (HIA)**
  - Allows for positive and negative health effects of public land use and transportation developments to be considered in decision-making process

Best Practices

www.ahipva.org

- **Safe at Home Campaign**
  - Albemarle Housing Improvement Program (AHIP)
  - Two main programs:
    1. Emergency Home Repair (leaks, electrical hazards, etc.)
    2. Housing Rehab (roof upgrades, HVAC installation, etc.)

- **Senior "Village" Model**
  - Member-based organization that provides direct services (paid or volunteer) to senior households
  - Funded by annual dues, not fees for service

Best Practices

- **Healthy Corners program** (Washington, DC)
  - Improves access to fresh and healthy foods in smaller corner markets

www.dchunger.org

- **Home-Delivered Groceries** (San Francisco)
  - Volunteers deliver groceries to seniors
  - Reduces hunger and social isolation

SF·MARIN FOOD BANK

www.sfmfoodbank.org

- **Produce Pop-Ups** (San Francisco)
  - Food bank hosts pop-up markets with fresh food at high-traffic locations (health clinics, schools, libraries)