



ETSU/NORC RURAL HEALTH
RESEARCH CENTER

CHARTBOOK

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Examining Rural Population Characteristics and Access to Care in 2022:

A Study of Health Professional
Shortage Areas (HPSAs) and
Medically Underserved Areas (MUAs)

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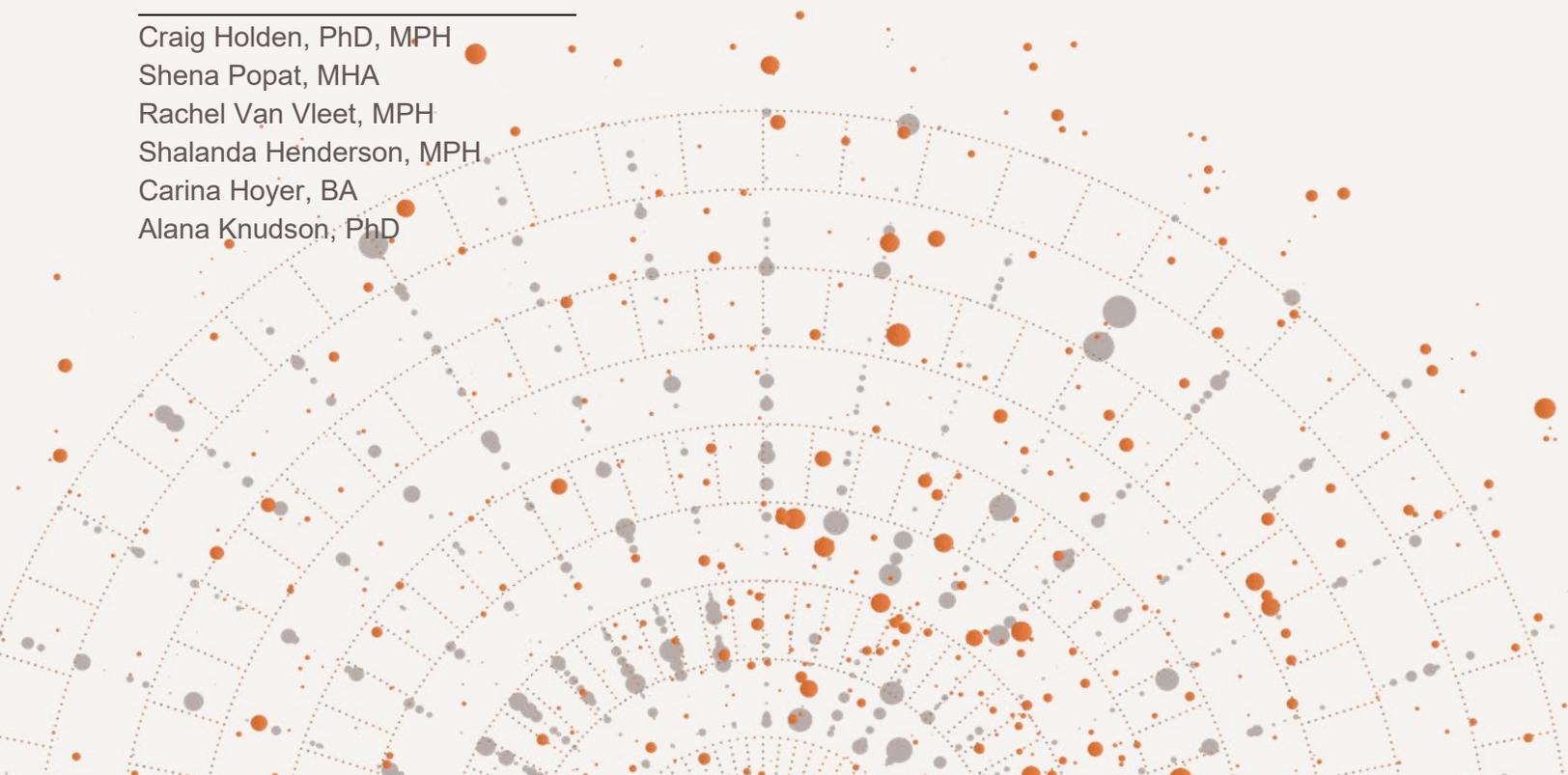


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Key Findings

This chartbook describes Health Professional Shortage Areas (HPSAs) and Medically Underserved Areas (MUAs), comparing the population characteristics of designated and non-designated census tracts by rurality. The analysis focuses on geographic shortage designations reports findings at the national level and by the U.S. Department of Health and Human Services (HHS) region for Primary Care HPSAs, Mental Health HPSAs, Dental Health HPSAs, and MUAs. Comparisons are made across small rural, large rural, and urban areas.



Primary Care HPSAs. Primary care shortages were more common in rural than urban areas across all regions. Small rural areas had higher shares of residents under 150 percent of the federal poverty level and lower levels of educational attainment than urban areas. These areas also revealed lower rates of college graduates and higher uninsured rates compared to designated urban tracts.



Mental Health HPSAs. Mental health provider shortages were evident across rural and urban settings, including small rural census tracts. HHS regions with a high proportion of designated HPSAs had higher unemployment and lower educational attainment compared with regions with fewer designated HPSAs. The proportion of individuals with disabilities was consistently higher in mental health HPSA tracts



Dental Health HPSAs. The analysis of dental HPSAs showed that rural communities had higher poverty and more residents without health insurance. These areas also had larger shares of residents living in mobile homes and in overcrowded housing, which compounded access issues.



Medically Underserved Areas. Census tracts designated as MUAs faced consistent socioeconomic challenges across small rural, large rural, and urban areas. Compared to non-designated tracts, MUAs had higher poverty, unemployment, and uninsurance rates, along with lower educational attainment. These tracts also reported more residents with disabilities, greater household crowding, and increased reliance on group quarters for housing. Differences were most pronounced in urban MUA tracts, with the largest gaps in educational attainment, internet access, and housing quality compared with non-MUA tracts.

Introduction and Chartbook Purpose

This chartbook examines health care access across rural and urban areas of the United States by analyzing Health Professional Shortage Areas (HPSAs) and Medically Underserved Areas (MUAs) and the characteristics of populations living in areas with limited health services. The findings offer insights to inform policies and interventions aimed at improving rural health care access.

Overview of Health Professional Shortage Area (HPSAs) and Medically Underserved Area (MUAs)

The landscape of health care access in rural areas in the United States reflects a complex set of geographic, structural, and demographic challenges. While strides have been made in understanding areas with limited access to care through the development of HPSAs and MUAs, gaps remain in existing knowledge, particularly regarding the dynamic nature of these designations and the intersection of demographic characteristics.

Access to health services varies greatly across the United States and often becomes more limited as population density decreases from urban to rural areas. Health provider shortages limit access to health services, which can result in worse health outcomes for these communities.¹ Previous research found improved access to primary care resources and other positive social determinants (e.g., stable housing and food security) can mitigate variations in health outcomes by demographic, socio-economic, and other factors.^{2,3}

Congress created the HPSA designation to understand, highlight, and address persistent gaps in access to health care services. The HPSA designation dates to 1978 and was developed under Section 332 of the Public Health Service Act, 42 U.S.C. 254e, by the Department of Health and Human Services and intended for use by the National Health Service Corps⁴ to identify areas in need of physicians and other health care providers.⁵ Areas designated as HPSAs are assigned a score that reflect the severity of provider shortages, which is used to prioritize funding and workforce resources. State Primary Care Offices (PCOs) propose rational service areas and submit the needed data for HPSA designation requests, and the HRSA BHW is responsible for reviewing and determining the official HPSA score.⁶ There are several HPSA designations based on provider type (e.g., primary care, mental health, dental health) and multiple levels to which they may be applied (i.e., geographic area, population group, or facility) – described below. All HPSA designations are intended to describe low population-to-provider ratios and are updated periodically.

The MUA designation was authorized in 1973 as a part of the Health Maintenance Organization (HMO) Act (Public Law 93-222).⁷ MUAs are determined using a composite measure that includes primary care physician supply and population health needs.⁶ Unlike HPSA, the MUA designation has a greater focus on population health needs. Updates are not required for MUAs, but states or other interested entities may choose to submit updated information to revise their score.⁶ Some MUAs have not been updated since the 1970s.⁸

HPSA and MUA designations are administered by the Health Resources and Services Administration (HRSA) Bureau of Health Workforce (BHW). The HPSA and MUA designations identify areas of low population-to-provider ratios and facilitates prioritization of health care resources for people residing in these places. HPSA designations are used by more than 30 federal programs to allocate resources or provide benefits to communities.⁵ For example, HPSAs are used in the National Health Service Corps, Nurse Corps, Indian Health Service Loan Repayment Program, and J-1 Visa Waiver program, among others. The MUA designation is used by several federal programs, including the Health Center Program, CMS Rural Health Clinic Program, and J-1 Visa Waiver program.⁹ Many geographic areas and health care facilities depend on the benefits associated with HPSA and MUA designations to support provider recruitment and retention and secure additional funding.⁹

HPSA Scoring and Designation

There are three types of HPSA designations by provider type: **primary care**, **mental health**, and **dental health**. Within each provider type, there are three types of HPSA designations:

- **Geographic HPSAs**, the focus of this chartbook, reflect the shortage of providers for the total population within a defined geographic area. These areas may include whole counties, county subdivisions, Census tracts, or groups of Census-based areas, provided the boundaries reflect a rational service area for care delivery.⁹
- **Population HPSAs** reflect shortages affecting a specific group of people within a geographic area (e.g., population with low-income).⁹
- **Facility HPSAs** are designated for certain types of health facilities (e.g., public/non-profit private medical facilities, Federally Qualified Health Centers, Rural Health Clinics, or Indian Health Service/Tribal/Urban Indian health programs) that meet Federal criteria related to service availability and patient access.⁹

To prioritize funding and workforce placement, HRSA Bureau of Health Workforce assigns a **HPSA score** to each designated area or facility. Scores vary by provider type and are calculated based on several weighted criteria. These scores help HRSA prioritize support such as National Health Service Corps placements and funding allocations to areas with the greatest need.

Primary Care HPSAs

Primary care HPSAs receive a score from **0 to 25**, based on the following weighted factors:¹⁰

- **Population-to-provider ratio** (up to 5 points, double-weighted for a maximum contribution of 10 points)
- **Percent of population below Federal Poverty Level** (up to 5 points)
- **Infant Health Index** (i.e., infant mortality rate or low birth weight; up to 5 points)
- **Travel time or distance** to nearest source of care outside the HPSA designation area (up to 5 points)

Primary care providers included in the calculation are non-federal physicians^a providing direct patient care in one of four specialties:¹¹

- General or family practice
- General internal medicine
- Pediatrics
- Obstetrics and gynecology

Mental Health HPSAs

Mental Health HPSAs receive a score from **0 to 25**, which incorporates provider supply and mental health needs. Factors include:¹⁰

- **Population-to-provider ratio** (up to 7 points)
- **Percent of population below 100 percent FPL** (up to 5 points)
- **Percent of population age 65 years and older** (up to 3 points)
- **Percent of population under 18 years of age** (up to 3 points)
- **Alcohol abuse prevalence** (up to 1 point)
- **Substance abuse prevalence** (up to 1 point)
- **Travel time or distance** to nearest source of care outside the HPSA designation area (up to 5 points)

^a Federal physicians excluded from the HPSA score calculation include physicians employed by the federal government, including those employed by U.S. military, Veterans Health Administration, or Public Health Service, as well as providers obligated by the National Health Service Corps, and foreign medical graduates practicing under the J-1 Visa Waiver program.⁶

Mental health providers included in the calculation are all non-federal core mental health professionals (i.e., psychiatrists, clinical psychologists, clinical social workers, psychiatric nurse specialists, and marriage and family therapists) providing mental health patient care (direct or other, including consultation and supervision) in ambulatory or other short-term care settings. The population-to-provider ratio used in scoring may be a population-to-core-professional ratio, population-to-core-mental-health-professional ratio, and/or population-to-psychiatrist ratio.¹² Many Mental Health HPSA designations are based solely on the population-to-psychiatrist ratio.¹³



Dental Health HPSA

Dental health HPSAs are scored on a scale from **0 to 26**, based on four indicators:¹⁰

- **Population-to-provider ratio** (up to 10 points)
- **Percent of population below 100 percent FPL** (up to 10 points)
- **Water fluoridation status** (up to 1 point)
- **Travel time or distance** to nearest source of care outside the HPSA designation area (up to 5 points)

Dental health providers included in the calculation are all non-federal dentists^b providing patient care, except in those areas where it is shown that specialists (those dentists not in general practice or pedodontics) are serving a larger area and are not addressing the general dental care needs of the area under consideration.¹⁴



MUA Scoring and Designation

Geographic areas designated as MUAs are identified as having limited access to primary care services. These areas may include a whole county, a group of neighboring counties, a set of urban census tracts, or a set of county or civil divisions that form a contiguous and rational service area.⁹ The Bureau of Health Workforce at HRSA uses the Index of Medical Underservice (IMU) to determine eligibility for MUA designation. The IMU is a composite score derived from four indicators of health care access and need: provider-to-population ratio (up to 28.7 points), percent of population at 100 percent of the Federal Poverty Level (up to 25.1 points), percent of population age 65 and older (up to 20.2 points), and infant mortality rate (up to 26.0 points). Scores range from 0 to 100, with lower scores indicating greater medical underservice. Areas with an IMU of 62.0 or below are eligible for designation as MUAs.¹⁰

IMU Scoring Summary

(Lower scores reflect greater underservice; scores ≤ 62 qualify for MUA designation)

IMU Score Range: 0 (completely underserved) to 100 (least underserved)

Scoring Components:

- **Primary care physician-to-population ratio** (per 1,000 residents)
- **Percent of population with income below 100 percent of the federal poverty level (FPL)**
- **Percent of population aged 65 years and older**
- **Infant mortality rate**

Each component is assigned a point value using a standardized conversion table, and the four scores are summed to produce the final IMU. The score reflects both supply-side constraints and population health need.

^b Federal physicians excluded from the HPSA score calculation include physicians employed by the federal government, including those employed by U.S. military, Veterans Health Administration, or Public Health Service, as well as providers obligated by the National Health Service Corps, and foreign medical graduates practicing under the J-1 Visa Waiver program.⁶

This scoring method allows HRSA to consistently compare access challenges across communities and prioritize support for primary care capacity development.

Overview of this Chartbook

This chartbook compares population characteristics between Census tracts designated as HPSAs or MUAs and those without these designations, with all comparisons stratified by rurality. Analyses are presented nationally and by HHS Region, and include separate breakouts for Primary Care HPSAs, Mental Health HPSAs, Dental Health HPSAs, and MUAs.

Each table compares Census tracts with and without a specific designation by rurality level. For example, as shown below, unemployment rate in small rural tracts designated as HPSAs was 5.6 percent, compared 4.9 percent in small rural tracts without designation. The first row of each table reports the estimated population residing within the include tracts (e.g., approximately 6.5 million individuals live in small rural tracts designated as HPSAs).

Designations were applied at the Census tract level if any part of the tract intersected with a HPSA or MUSA boundary. This approach captures partially designated tracts, acknowledging that services and population characteristics often extend beyond strict geographic lines.

Figure 1. Example of Chartbook Table Organization

Primary Care HPSAs: National Census Tract Level, 2022

Variable Category	Variable Name	Small Rural Non-Area %	Small Rural Area %	p-value	Large Rural Non-Area %	Large Rural Area %	p-value	Urban Non-Area %	Urban Area %	p-value
Population	N(est.)	16,414,386	6,508,289	-	23,857,188	4,358,400	-	265,907,679	14,051,651	
Socio-economic Status	Unemployed	4.9%	5.6%	0.000	5.1%	6.1%	0.000	5.3%	6.7%	0.000

The chartbook examines population characteristics that reflect the social, economic, and structural conditions influencing access to care across designated and non-designated Census tracts. These indicators are grouped into three domains – Socio-economic Status, Household Characteristics, and Housing Type & Transportation – and are consistently applied across all comparisons by designation type and rurality.

While many of the measures align conceptually with those used in HPSA and MUA scoring, some variables differ slightly to better capture the broader context of health care access. For example, this analysis uses the proportion of the population below **150 percent of the Federal Poverty Level (FPL)** to reflect a wider range of low-income residents who may face barriers to care. This threshold is commonly used in population health research and eligibility for certain federal programs, providing a more inclusive view of financial vulnerability than the 100 percent FPL threshold used in HPSA/MUA scoring formulas.

The variables included in the chartbook are:

Socio-economic Status	Household Characteristics	Housing Type & Transportation
<ul style="list-style-type: none"> Below 150 percent poverty 	<ul style="list-style-type: none"> Male 	<ul style="list-style-type: none"> Mobile homes

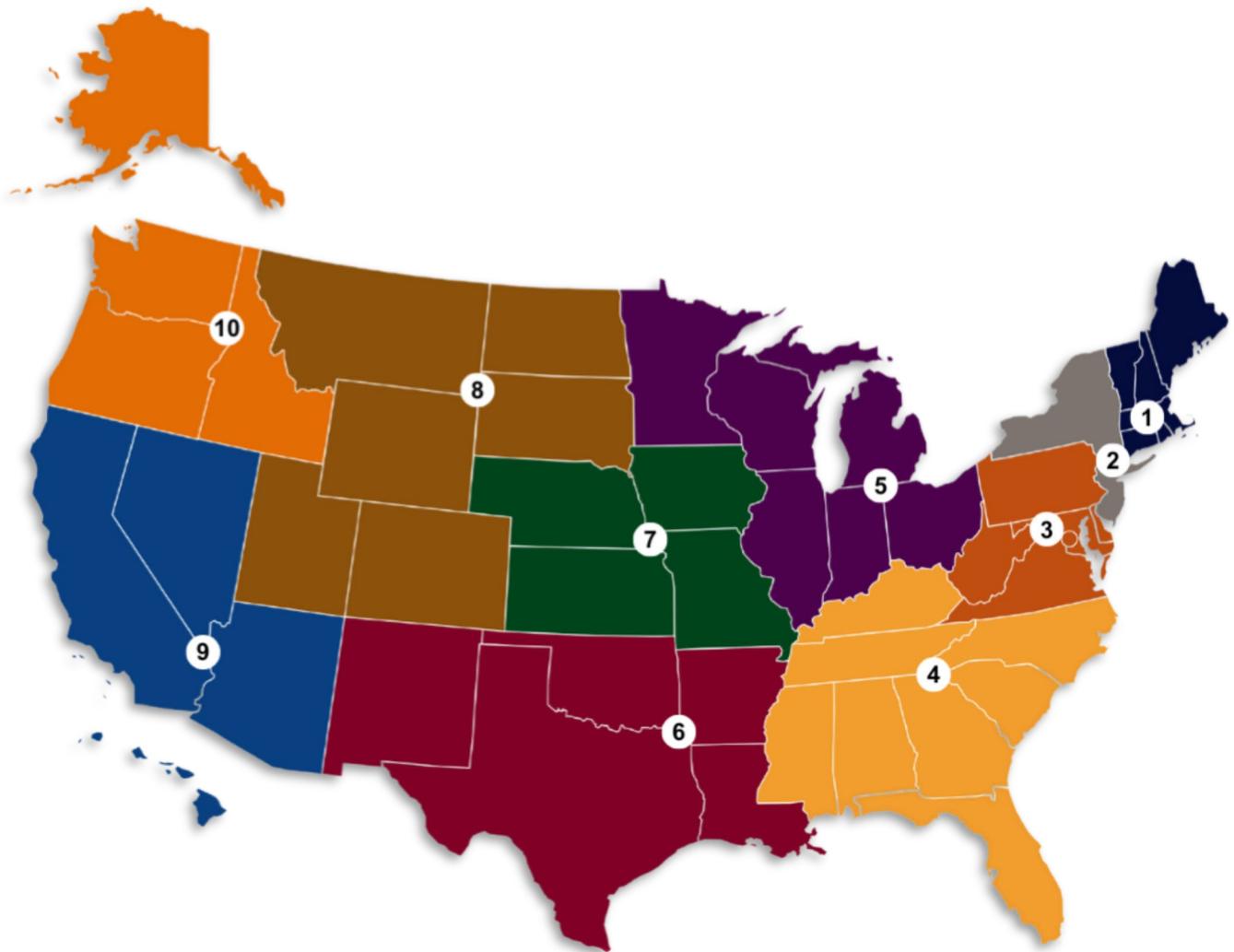
Socio-economic Status	Household Characteristics	Housing Type & Transportation
<ul style="list-style-type: none"> • Unemployed • Housing burden • No High School Diploma • High School Diploma • Some College • College graduate • Uninsured 	<ul style="list-style-type: none"> • Female • Aged ≤ 17 years • Aged 18-64 years • Aged ≥ 65 years • Disability proportion • Single-parent households • Limited English in persons >5 years old 	<ul style="list-style-type: none"> • Crowding • No vehicle • No internet • Group quarters • Multi-unit structures

All variables were derived from the U.S. Census Bureau’s 2017-2021 American Community Survey 5-year estimates. Definitions were applied consistently across tracts and designation types.

The chartbook is organized by designation type, followed by region in the following order:

- **National Census Tract Level**
- **Region 1** - Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont
- **Region 2** - New Jersey and New York
- **Region 3** - Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, and West Virginia
- **Region 4** - Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee
- **Region 5** - Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin
- **Region 6** - Arkansas, Louisiana, New Mexico, Oklahoma, and Texas
- **Region 7** - Iowa, Kansas, Missouri, and Nebraska
- **Region 8** - Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming
- **Region 9** - Arizona, California, Hawaii, and Nevada
- **Region 10** - Alaska, Idaho, Oregon, and Washington

Figure 2. HHS Regional Map



Chartbook Data Sources and Methods

The primary data source for this study is the Health Resources and Services Administration (HRSA) Data Warehouse, a comprehensive federal database containing information on HPSAs and MUAs.¹⁵ The dataset constructed for this analysis included primary care, mental health, and dental health HPSA designations, as well as MUA designations, all mapped to geographic census tracts.

Designation data were merged with tract-level population characteristics and geographic indicators, including rurality and HHS Regional Office Boundaries. Rurality classifications were assigned using the 2010 Rural-Urban Commuting Area (RUCA) codes, cross walked to 2020 Census tract boundaries. Tracts were categorized into four mutually exclusive groups: Urban, Large Rural, and Small Rural. This approach follows widely accepted federal definitions and enables consistent stratification of results

across rural-urban gradients. We focused our research on HPSA or MUA designated areas as of December 2022.

Alongside HPSA and MUA information, the research also incorporated data from the U.S. Census Bureau’s American Community Survey (ACS), 2018–2022 five-year estimates, which provided additional context, and estimated proportions for the included characteristic variables, as well other relevant factors. Appropriate weights were used to estimate the number of persons included in the analysis at the national and HHS region levels.

To guide the selection of characteristic variables, we drew on a broad set of community indicators, including socioeconomic status, household composition, and housing and transportation. Key variables included in the analysis were socioeconomic status, housing characteristics, housing type, and transportation. Table 1 provides a detailed overview of these variables.

Table 1. Population Characteristics, American Community Survey (2018-2022)

Domain	Measure	Definition
Socio-economic Status	Below 150 percent poverty	Persons below 150 percent poverty
	Unemployed	Civilian (age 16+) unemployed
	Housing burden	Housing cost-burdened occupied housing units with annual income less than \$75,000 (30 percent+ of income spent on housing costs)
	No High School Diploma	Persons (age 25+) with no high school diploma
	High School Diploma	Persons (age 25+) with only a high school diploma
	Some College	Some college credit, no degree
	College graduate	Bachelor’s degree or higher
	Uninsured	Uninsured in the total civilian noninstitutionalized population
Household Characteristics	Male	Male biological sex
	Female	Female biological sex
	Aged ≤ 17	Persons aged 17 and younger
	Aged 18-64	Persons aged 18 to 64
	Aged ≥ 65	Persons aged 65 and older
	Disability proportion	Civilian noninstitutionalized population with a disability ^c
	Single-parent households	Single-parent household with children under 18

^c Disability status is based on the proportion of the civilian noninstitutionalized population reporting serious difficulty in at least one of six areas: hearing, vision, cognition, ambulation, self-care, or independent living, as defined by the American Community Survey.

Domain	Measure	Definition
	Limited English >5 years old	Persons (age over 5) who speak English "less than well"
Housing Type & Transportation	Mobile homes	Mobile homes
	Crowding	At household level (occupied housing units), more people than rooms
	No vehicle	Households with no vehicle available
	No internet	Households without an internet subscription
	Group quarters ^d	Persons in group quarters
	Multi-unit structures	Housing in structures with 10 or more units

Census tracts were categorized as **small rural**, **large rural**, or **urban** using the 2010 Rural-Urban Commuting Area (RUCA) codes developed by the U.S. Department of Agriculture.¹⁶ Because updated RUCA codes based on 2020 Census tract boundaries were not available at the time of this analysis, we constructed a crosswalk to assign 2010 RUCA classifications to 2020 Census tracts.

To do this, geographic centroids were generated for each 2010 Census tract and assigned their corresponding 2010 RUCA code. These centroids were then spatially joined to 2020 Census tract boundaries. In cases where a centroid that did not fall within a 2020 tract due to changes in boundaries, it was assigned to the nearest 2020 tract based on spatial proximity. Each 2020 tract was then assigned the RUCA code of its matched 2010 centroid.

For this analysis, RUCA codes were grouped into three rurality categories as follows:

- **Urban:** RUCA codes 1.0-3.0
- **Large Rural:** RUCA codes 4.0-6.0
- **Small Rural:** RUCA codes 7.0 and higher

These categories allow for consistent and interpretable stratification of Census tracts based on their degree of rurality and commuting patterns. The use of RUCA-based groupings reflects standard practice in rural health research and supports clear comparisons across geographic contexts.

^d Group quarters include such places as college residence halls, residential treatment centers, skilled nursing facilities, group homes, military barracks, correctional facilities, and workers' dormitories. These services may include custodial or medical care as well as other types of assistance, and residency is commonly restricted to those receiving these services. People living in group quarters are usually not related to each other.

Primary Care HPSAs, 2022

Primary Care HPSAs, National Census Tract Level, 2022

Key Takeaways

- **Small rural HPSAs showed widespread socioeconomic and infrastructure-related liabilities.**
- **Large rural HPSAs reflect parallel but somewhat less acute challenges than small rural tracts.**
- **Urban HPSAs experienced socioeconomic and healthcare access challenges that were concentrated within densely populated communities.**

Small Rural Tracts. HPSA-designated tracts in small rural areas had higher levels of poverty (27.7 percent vs. 24.5 percent; $p < 0.001$), unemployment (5.6 percent vs. 4.9 percent; $p < 0.001$), and uninsurance (10.8 percent vs. 9.0 percent; $p < 0.001$). These tracts also had a lower share of college graduates (27.8 percent vs. 31.7 percent; $p < 0.001$), more residents without a high school diploma (14.7 percent vs. 11.5 percent; $p < 0.001$), and more households with crowding (3.1 percent vs. 2.1 percent; $p < 0.001$). In addition, a higher proportion of residents did not have internet access (44.6 percent vs. 34.7 percent; $p < 0.001$).

Large Rural Tracts. In large rural tracts, HPSA areas showed higher poverty (26.8 percent vs. 25.1 percent; $p < 0.001$), unemployment (6.1 percent vs. 5.1 percent; $p < 0.001$), and uninsurance (10.1 percent vs. 8.9 percent; $p < 0.001$). Educational attainment was lower, with fewer college graduates (29.5 percent vs. 33.3 percent; $p < 0.001$) and more residents lacking a high school diploma (15.1 percent vs. 11.5 percent; $p < 0.001$). More residents did not have internet access (35.9 percent vs. 30.9 percent; $p < 0.001$), and crowding was more common (4.1 percent vs. 2.2 percent; $p < 0.001$).

Urban Tracts. Urban HPSA tracts followed similar patterns, with higher poverty (26.6 percent vs. 19.2 percent; $p < 0.001$), unemployment (6.7 percent vs. 5.3 percent; $p < 0.001$), and uninsurance (10.0 percent vs. 8.3 percent; $p < 0.001$). They had more residents without a high school diploma (15.4 percent vs. 10.4 percent; $p < 0.001$) and fewer with college degrees (30.6 percent vs. 45.9 percent; $p < 0.001$). Children made up a larger share of the population (24.2 percent vs. 22.1 percent; $p < 0.001$), and more households crowding (4.2 percent vs. 3.5 percent; $p < 0.001$). Mobile home residence and lack of internet access were also more common in designated tracts than in non-designated tracts ($p < 0.001$).

Primary Care HPSAs and non-HPSAs: National Census Tract Level, 2022

Variable Category	Variable Name	Small Rural Non-Area %	Small Rural Area %	p-value	Large Rural Non-Area %	Large Rural Area %	p-value	Urban Non-Area %	Urban Area %	p-value
Population and Tracts	N(est.)	16,414,386	6,508,289	-	23,857,188	4,358,400	-	265,907,679	14,051,651	-
	Number of tracts	5,506	2,283	-	6,534	1,234	-	65,006	3,851	-
Socio-economic Status	Below 150% poverty	24.5%	27.7%	0.000	25.1%	26.8%	0.000	19.2%	26.6%	0.000
	Unemployed	4.9%	5.6%	0.000	5.1%	6.1%	0.000	5.3%	6.7%	0.000
	Housing burden	22.1%	21.4%	0.000	24.4%	24.5%	0.731	26.7%	27.2%	0.047
	No High School Diploma	11.5%	14.7%	0.000	11.5%	15.1%	0.000	10.4%	15.4%	0.000
	High School Diploma	12.9%	12.9%	0.750	13.0%	13.0%	0.749	9.7%	12.3%	0.000
	Some College	20.9%	21.5%	0.000	21.2%	22.1%	0.000	19.3%	22.4%	0.000
	College graduate	31.7%	27.8%	0.000	33.3%	29.5%	0.000	45.9%	30.6%	0.000
Household Characteristics	Uninsured	9.0%	10.8%	0.000	8.9%	10.1%	0.000	8.3%	10.0%	0.000
	Male	50.7%	50.9%	0.198	50.0%	50.7%	0.000	49.4%	50.1%	0.000
	Female	49.3%	49.1%	0.198	50.0%	49.3%	0.000	50.6%	49.9%	0.000
	Aged <=17	21.1%	22.4%	0.000	21.7%	23.3%	0.000	22.1%	24.2%	0.000
	Aged 18-64	57.4%	57.3%	0.620	59.5%	59.1%	0.044	61.9%	60.4%	0.000
	Aged >=65	21.5%	20.3%	0.000	18.8%	17.6%	0.000	16.0%	15.4%	0.000
	Disability proportion	16.6%	16.6%	0.853	15.9%	15.1%	0.000	11.9%	14.5%	0.000
Housing Type & Transportation	Single-parent households	5.2%	6.0%	0.000	6.3%	6.7%	0.015	6.2%	7.8%	0.000
	Limited English >5 years old	5.5%	6.5%	0.001	5.9%	8.3%	0.000	6.8%	7.1%	0.103
	Multi-unit structures	3.3%	2.7%	0.000	6.0%	5.2%	0.004	16.7%	7.4%	0.000
	Mobile homes	15.9%	20.6%	0.000	13.4%	14.9%	0.005	4.4%	12.8%	0.000
	Crowding	2.1%	3.1%	0.000	2.2%	4.1%	0.000	3.5%	4.2%	0.000
	No vehicle	5.9%	7.2%	0.000	6.3%	6.2%	0.369	8.7%	8.6%	0.684
Housing Type & Transportation	No internet	34.7%	44.6%	0.000	30.9%	35.9%	0.000	20.4%	33.6%	0.000
	Group quarters	4.1%	4.3%	0.387	4.0%	4.0%	0.991	2.1%	2.4%	0.073

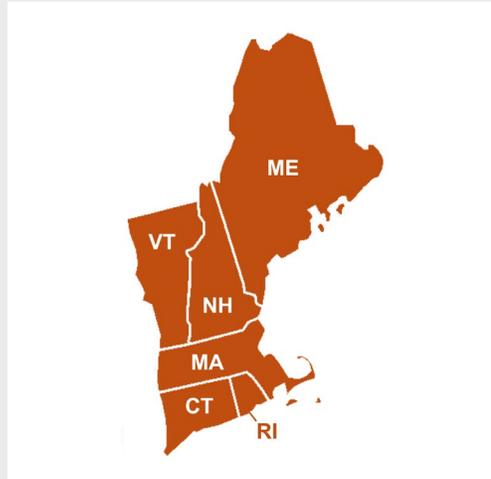
Data: HRSA Data Warehouse. Rurality assigned using 2010 RUCA codes: Urban - 1.0-3.0, Large Rural - 4.0-6.0, Small Rural - 7.0 and higher

Primary Care HHS Region 1: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont

Small Rural Tracts. Primary Care HPSA tracts in small rural areas had lower poverty rates (15.4 percent vs. 19.2 percent, $p < 0.01$) and fewer residents without a high school diploma (5.3 percent vs. 6.9 percent, $p < 0.05$) than non-designated tracts. These areas also had higher rates of college graduates (48.6 percent vs. 43.5 percent, $p < 0.05$) and a slightly higher share of male residents (51.3 percent vs. 49.8 percent, $p < 0.05$). Fewer households lacked vehicle access (4.5 percent vs. 6.1 percent, $p < 0.05$) and lack of internet access (22.8 percent vs. 27.1 percent, $p < 0.05$) were lower in designated tracts.

Large Rural Tracts. In large rural areas, designated tracts had higher unemployment (6.4 percent vs. 4.1 percent, $p < 0.05$), but lower levels of mobile home residence (3.0 percent vs. 8.0 percent, $p < 0.01$) and fewer multi-unit structures (2.4 percent vs. 7.0 percent, $p < 0.001$). Designated tracts also had a lower proportion of residence in group quarters (1.3 percent vs. 4.3 percent, $p < 0.001$) as compared to non-designated tracts.

Urban Tracts. Urban Primary Care designated tracts had lower educational attainment, with fewer college graduates (42.5 percent vs. 51.3 percent, $p < 0.01$) and more adults with only a high school diploma (12.5 percent vs. 8.4 percent, $p < 0.001$). They had higher proportions of residents with some college but no degree (19.3 percent vs. 15.8 percent, $p < 0.01$), and a greater share of older adults (≥ 65 : 19.5 percent vs. 17.2 percent, $p < 0.05$). Urban MUA tracts had higher disability rates (13.5 percent vs. 11.9 percent, $p < 0.01$), more mobile home residence (5.1 percent vs. 1.5 percent, $p < 0.01$), and a lower proportion of households without a vehicle (3.2 percent vs. 9.6 percent, $p < 0.001$) compared with urban non-MUA tracts. Designated areas also had lower rates of limited English proficiency (1.0 percent vs. 7.4 percent, $p < 0.001$).



Key Takeaways

- Small rural HPSAs had higher education levels and less poverty than non-HPSAs, suggesting designations in these areas are driven by provider availability, not social risk.
- Large rural HPSAs showed signs of economic distress (e.g., higher unemployment) but fewer signs of housing instability.
- Urban HPSAs face higher disability, older populations, and lower educational attainment—highlighting access challenges despite overall greater proximity to health systems.

Primary Care HPSAs and non-HPSAs: HHS Region 1

Variable Category	Variable Name	Small Rural Non-Area %	Small Rural Area %	p-value	Large Rural Non-Area %	Large Rural Area %	p-value	Urban Non-Area %	Urban Area %	p-value
Population and Tracts	N(est.)	956,031	112,781	-	773,984	56,552	-	13,119,890	60,909	-
	Number of tracts	327	48	-	220	16	-	3,072	20	-
Socio-economic Status	Below 150% poverty	19.2%	15.4%	0.002	18.3%	15.6%	0.179	15.8%	15.1%	0.595
	Unemployed	4.2%	4.7%	0.297	4.1%	6.4%	0.015	5.4%	4.9%	0.376
	Housing burden	26.0%	24.5%	0.115	27.4%	27.2%	0.932	26.4%	24.1%	0.098
	No High School Diploma	6.9%	5.3%	0.010	7.0%	7.1%	0.885	8.7%	6.3%	0.003
	High School Diploma	10.0%	9.5%	0.473	10.7%	11.9%	0.324	8.4%	12.5%	0.000
	Some College	17.8%	18.4%	0.337	17.7%	18.4%	0.423	15.8%	19.3%	0.001
	College graduate	43.5%	48.6%	0.023	44.5%	41.4%	0.301	51.3%	42.5%	0.001
Household Characteristics	Uninsured	6.3%	7.2%	0.163	5.7%	4.4%	0.091	3.8%	4.6%	0.245
	Male	49.8%	51.3%	0.024	49.5%	48.8%	0.360	49.0%	50.4%	0.096
	Female	50.2%	48.7%	0.024	50.5%	51.2%	0.360	51.0%	49.6%	0.096
	Aged <=17	17.3%	17.7%	0.561	18.2%	18.4%	0.852	19.8%	18.5%	0.085
	Aged 18-64	58.0%	56.7%	0.156	60.8%	60.3%	0.663	63.0%	62.0%	0.186
	Aged >=65	24.6%	25.5%	0.461	21.1%	21.4%	0.743	17.2%	19.5%	0.047
	Disability proportion	16.3%	14.6%	0.061	15.3%	14.6%	0.570	11.9%	13.5%	0.005
	Single-parent households	4.3%	3.6%	0.176	5.0%	4.8%	0.804	5.9%	3.8%	0.003
Housing Type & Transportation	Limited English >5 years old	3.8%	3.1%	0.305	5.2%	3.3%	0.107	7.4%	1.0%	0.000
	Multi-unit structures	3.7%	2.4%	0.133	7.0%	2.4%	0.000	13.6%	1.4%	0.000
	Mobile homes	10.9%	8.2%	0.073	8.0%	3.0%	0.001	1.5%	5.1%	0.009
	Crowding	1.3%	1.6%	0.346	1.5%	1.1%	0.131	2.0%	1.1%	0.001
	No vehicle	6.1%	4.5%	0.011	7.0%	6.2%	0.544	9.6%	3.2%	0.000
	No internet	27.1%	22.8%	0.044	20.6%	19.3%	0.704	16.7%	21.1%	0.058
	Group quarters	3.3%	2.4%	0.100	4.3%	1.3%	0.000	3.2%	0.8%	0.000

Data: HRSA Data Warehouse. Rurality assigned using 2010 RUCA codes: Urban - 1.0-3.0, Large Rural - 4.0-6.0, Small Rural - 7.0 and higher

Primary Care HHS Region 2: New Jersey and New York

Small Rural Tracts. In small rural areas, HPSA-designated tracts had a higher share of residents without a high school diploma (13.9 percent vs. 10.7 percent, $p < 0.01$), more crowding (21.7 percent vs. 13.8 percent, $p < 0.01$), and lower rates of college graduates (31.9 percent vs. 38.5 percent, $p < 0.001$) compared to non-designated tracts. Limited English proficiency among individuals over age five was lower (4.7 percent vs. 8.9 percent, $p < 0.05$), and multi-unit structures were similar across both groups. Housing burden was lower in HPSA tracts (20.8 percent vs. 24.2 percent, $p < 0.05$). No other differences were statistically significant.

Large Rural Tracts. In large rural areas, HPSA tracts had a lower rate of multi-unit structure residence (3.4 percent vs. 5.9 percent, $p < 0.05$), as well as crowding (0.7 percent vs. 1.6 percent, $p < 0.01$). No other statistically significant differences were observed between designated and non-designated tracts.

Urban Tracts. Urban HPSAs had higher poverty rates (37.1 percent vs. 18.9 percent, $p < 0.001$), lower college attainment (38.3 percent vs. 48.2 percent, $p < 0.001$), and higher rates of individuals without a high school diploma (13.5 percent vs. 11.8 percent, $p < 0.05$). Disability prevalence was higher (16.4 percent vs. 11.0 percent, $p < 0.001$), and single-parent households were more common (9.3 percent vs. 6.1 percent, $p < 0.001$). Urban HPSAs also had a greater proportion of residents without internet access (27.6 percent vs. 24.1 percent, $p < 0.05$) and fewer residents with limited English proficiency (6.8 percent vs. 9.4 percent, $p < 0.05$).



Key Takeaways

- Higher mobile home residence and lower educational attainment were significant factors in small rural HPSAs.
- Large rural HPSAs had lower share of multi-unit structures and crowding.
- Urban HPSAs showed more pronounced socio-economic and housing differences, especially related to poverty, education, and disability.

Primary Care HPSAs and non-HPSAs: HHS Region 2

Variable Category	Variable Name	Small Rural Non-Area %	Small Rural Area %	p-value	Large Rural Non-Area %	Large Rural Area %	p-value	Urban Non-Area %	Urban Area %	p-value
Population and Tracts	N(est.)	772,011	61,954	-	934,033	28,941	-	27,113,082	333,421	-
	Number of tracts	304	21	-	280	10	-	6,864	113	-
Socio-economic Status	Below 150% poverty	23.6%	22.9%	0.643	23.6%	22.1%	0.498	18.9%	37.1%	0.000
	Unemployed	5.7%	5.7%	0.971	5.6%	4.8%	0.384	6.4%	7.1%	0.150
	Housing burden	24.2%	20.8%	0.011	25.7%	24.9%	0.721	29.3%	33.2%	0.000
	No High School Diploma	10.7%	13.9%	0.002	11.1%	15.9%	0.206	11.8%	13.5%	0.035
	High School Diploma	12.4%	13.6%	0.057	13.0%	12.4%	0.568	8.2%	12.1%	0.000
	Some College	16.6%	16.0%	0.445	17.6%	16.1%	0.204	15.1%	19.6%	0.000
	College graduate	38.5%	31.9%	0.000	37.6%	35.4%	0.418	48.2%	38.3%	0.000
Household Characteristics	Uninsured	5.7%	8.9%	0.105	4.7%	7.5%	0.131	5.9%	4.1%	0.000
	Male	51.3%	50.4%	0.360	50.7%	51.7%	0.740	48.9%	48.2%	0.208
	Female	48.7%	49.6%	0.360	49.3%	48.3%	0.740	51.1%	51.8%	0.208
	Aged <=17	18.9%	20.6%	0.089	20.2%	19.7%	0.829	21.1%	22.1%	0.208
	Aged 18-64	60.1%	57.9%	0.050	61.1%	60.1%	0.726	62.2%	64.0%	0.028
	Aged >=65	21.0%	21.5%	0.635	18.7%	20.1%	0.298	16.7%	13.9%	0.000
	Disability proportion	15.2%	15.6%	0.712	15.1%	16.9%	0.311	11.0%	16.4%	0.000
	Single-parent households	4.4%	4.2%	0.629	6.0%	4.2%	0.064	6.1%	9.3%	0.000
Housing Type & Transportation	Limited English >5 years old	8.9%	4.7%	0.013	7.7%	7.3%	0.937	9.4%	6.8%	0.013
	Multi-unit structures	3.2%	3.0%	0.877	5.9%	3.4%	0.047	24.8%	10.2%	0.000
	Mobile homes	13.8%	21.7%	0.013	8.6%	13.3%	0.261	1.2%	2.0%	0.364
	Crowding	1.7%	1.9%	0.742	1.6%	0.7%	0.002	5.4%	2.2%	0.000
	No vehicle	8.5%	10.4%	0.208	9.9%	8.0%	0.409	23.3%	22.0%	0.295
	No internet	32.0%	42.5%	0.065	26.5%	34.8%	0.109	24.1%	27.6%	0.034
	Group quarters	7.5%	3.9%	0.030	6.0%	6.3%	0.955	2.4%	3.1%	0.477

Data: HRSA Data Warehouse. Rurality assigned using 2010 RUCA codes: Urban - 1.0-3.0, Large Rural - 4.0-6.0, Small Rural - 7.0 and higher

Primary Care HHS Region 3: Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, and West Virginia

Small Rural Tracts. In small rural areas, HPSA-designated tracts had higher rates of poverty (27.2 percent vs. 24.4 percent, $p < 0.01$), greater housing cost burden (23.7 percent vs. 20.6 percent, $p < 0.001$), and a higher rate of residents without a high school diploma (16.0 percent vs. 11.6 percent, $p < 0.001$). A larger share help only a high school diploma (13.6 percent vs. 12.0 percent, $p < 0.01$) or some college (19.4 percent vs. 16.2 percent, $p < 0.001$), while college graduation rates were similar. Disability prevalence was higher in in HPSAs (18.7 percent vs. 17.3 percent, $p < 0.05$), as was a lower proportion with internet access (43.6 percent vs. 36.2 percent, $p < 0.001$).

Large Rural Tracts. HPSA tracts in large rural areas had a higher percentage of adults without a high school diploma (14.0 percent vs. 10.1 percent, $p < 0.001$), more residents with only a high school diploma (14.0 percent vs. 11.4 percent, $p < 0.01$), and a greater share with some college (21.0 percent vs. 17.1 percent, $p < 0.001$). A lower rate of residents in designated HPSAs held college degrees (28.8 percent vs. 32.3 percent, $p < 0.01$). Uninsured rates were also higher in HPSAs (7.7 percent vs. 6.4 percent, $p < 0.05$) as was the share of children under age 18 (20.8 percent vs. 19.1 percent, $p < 0.05$). Vehicle access was more common in HPSAs (4.8 percent without internet vs. 7.8 percent in non-HPSAs, $p < 0.001$).

Urban Tracts. Urban HPSA tracts had higher rates of poverty (21.7 percent vs. 17.2 percent, $p < 0.001$), greater housing cost burden (25.6 percent vs. 23.9 percent, $p < 0.01$), and lower educational attainment at multiple levels compared with urban non-HPSA tracts. Fewer residents had college degrees (31.4 percent vs. 47.8 percent, $p < 0.001$) and more had no high school diploma (11.4 percent vs. 8.5 percent, $p < 0.001$). Rates of disability (15.8 percent vs. 12.2 percent, $p < 0.001$), and lack of internet access (36.1 percent vs. 20.2 percent, $p < 0.001$) were also higher in designated as compared to non-designated tracts.



Key Takeaways

- HPSAs in Region 3 consistently had higher proportions of residents with lower educational attainment and greater housing cost burden.
- Large rural and urban HPSAs had fewer college graduates and more uninsured individuals.
- Urban HPSAs had notably lower rates of internet access and higher rates of disability.

Primary Care HPSAs and non-HPSAs: HHS Region 3

Variable Category	Variable Name	Small Rural Non-Area %	Small Rural Area %	p-value	Large Rural Non-Area %	Large Rural Area %	p-value	Urban Non-Area %	Urban Area %	p-value
Population and Tracts	N(est.)	1,124,768	513,973	-	1,713,894	162,604	-	26,529,393	1,187,983	-
	Number of tracts	354	173	-	516	46	-	6,720	324	-
Socio-economic Status	Below 150% poverty	24.4%	27.2%	0.005	23.1%	20.5%	0.078	17.2%	21.7%	0.000
	Unemployed	5.3%	4.9%	0.263	5.4%	4.9%	0.349	5.2%	5.9%	0.012
	Housing burden	20.6%	23.7%	0.000	22.5%	21.9%	0.565	23.9%	25.6%	0.012
	No High School Diploma	11.6%	16.0%	0.000	10.1%	14.0%	0.000	8.5%	11.4%	0.000
	High School Diploma	12.0%	13.6%	0.001	11.4%	14.0%	0.001	9.1%	12.8%	0.000
	Some College	16.2%	19.4%	0.000	17.1%	21.0%	0.000	16.9%	21.8%	0.000
	College graduate	28.3%	27.9%	0.673	32.3%	28.8%	0.004	47.8%	31.4%	0.000
Household Characteristics	Uninsured	6.9%	7.6%	0.072	6.4%	7.7%	0.039	6.0%	6.7%	0.000
	Male	50.6%	50.1%	0.444	49.8%	50.2%	0.529	49.1%	49.2%	0.828
	Female	49.4%	49.9%	0.444	50.2%	49.8%	0.529	50.9%	50.8%	0.828
	Aged <=17	19.5%	18.9%	0.190	19.1%	20.8%	0.043	21.4%	20.6%	0.013
	Aged 18-64	58.3%	57.5%	0.252	58.6%	58.1%	0.585	61.9%	61.3%	0.105
	Aged >=65	22.1%	23.6%	0.018	22.4%	21.1%	0.229	16.8%	18.1%	0.000
	Disability proportion	17.3%	18.7%	0.025	16.9%	17.2%	0.752	12.2%	15.8%	0.000
	Single-parent households	4.9%	5.6%	0.045	5.5%	5.3%	0.836	6.2%	6.9%	0.076
Housing Type & Transportation	Limited English >5 years old	5.3%	6.8%	0.253	5.3%	4.1%	0.275	5.4%	3.3%	0.000
	Multi-unit structures	2.8%	2.2%	0.121	4.8%	3.6%	0.198	12.8%	8.3%	0.000
	Mobile homes	16.9%	19.7%	0.060	11.9%	14.6%	0.235	2.9%	10.3%	0.000
	Crowding	1.2%	1.5%	0.144	1.3%	1.9%	0.015	2.0%	2.2%	0.304
	No vehicle	7.6%	6.9%	0.145	7.8%	4.8%	0.000	8.9%	10.3%	0.053
	No internet	36.2%	43.6%	0.000	31.2%	36.8%	0.064	20.2%	36.1%	0.000
Group quarters	4.4%	5.6%	0.372	4.5%	2.7%	0.061	2.6%	2.1%	0.152	

Data: HRSA Data Warehouse. Rurality assigned using 2010 RUCA codes: Urban - 1.0-3.0, Large Rural - 4.0-6.0, Small Rural - 7.0 and higher

Primary Care HHS Region 4: Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee

Small Rural Tracts. In small rural areas, Primary Care HPSAs had higher rates of poverty (35.5 percent vs. 30.4 percent, $p < 0.001$), unemployed (7.1 percent vs. 5.8 percent, $p < 0.001$), and residents without a high school diploma (19.2 percent vs. 15.6 percent, $p < 0.001$) than non-designated tracts. Fewer residents held college degrees (22.7 percent vs. 27.2 percent, $p < 0.001$). HPSA-designated small rural tracts had slightly higher shares of female residents (49.4 percent vs. 50.1 percent, $p < 0.05$), children under 18 (21.6 percent vs. 20.8 percent, $p < 0.05$), and individuals with disabilities (19.7 percent vs. 18.9 percent, $p < 0.05$). Lack of internet access (51.6 percent vs. 41.9 percent, $p < 0.001$), mobile home residence (31.0 percent vs. 27.3 percent, $p < 0.001$), and lack of vehicle access (8.5 percent vs. 6.3 percent, $p < 0.001$) were also more common in HPSA-designated tracts.

Large Rural Tracts. HPSA-designated tracts in large rural areas had higher poverty rates (33.9 percent vs. 29.1 percent, $p < 0.001$), unemployment (6.6 percent vs. 5.6 percent, $p < 0.01$), and a greater share of residents without a high school diploma (17.9 percent vs. 14.1 percent, $p < 0.001$). These tracts had a lower share of college graduates (23.6 percent vs. 31.2 percent, $p < 0.001$) and more residents with disabilities (18.4 percent vs. 16.8 percent, $p < 0.001$). Lack of internet access (49.3 percent vs. 38.3 percent, $p < 0.001$) and mobile home residence (29.4 percent vs. 20.2 percent, $p < 0.001$) were also more prevalent in designated tracts.

Urban Tracts. Urban HPSA tracts showed higher poverty (28.4 percent vs. 21.6 percent, $p < 0.001$), unemployment (6.1 percent vs. 5.1 percent, $p < 0.001$), and disability rates (17.0 percent vs. 13.0 percent, $p < 0.001$), along with fewer college graduates (28.3 percent vs. 43.6 percent, $p < 0.001$). These tracts also had higher levels of mobile home residence (27.2 percent vs. 8.5 percent, $p < 0.001$), lack of internet access (39.9 percent vs. 23.4 percent, $p < 0.001$), and households without vehicle access (6.9 percent vs. 5.4 percent, $p < 0.001$) as compared to non-designated tracts.



Key Takeaways

- **Poverty, unemployment, and lack of educational attainment were more common in HPSA-designated tracts across all geographies.**
- **Housing challenges – such as mobile home residence, internet access, and lack of vehicle access – were consistently more prevalent in HPSA areas.**
- **Urban HPSAs showed the greatest differences from non-HPSAs in terms of social and housing conditions.**

Primary Care HPSAs and non-HPSAs: HHS Region 4

Variable Category	Variable Name	Small Rural Non-Area %	Small Rural Area %	p-value	Large Rural Non-Area %	Large Rural Area %	p-value	Urban Non-Area %	Urban Area %	p-value
Population and Tracts	N(est.)	3,131,509	1,351,142	-	6,551,712	740,601	-	53,584,140	2,024,359	-
	Number of tracts	1,082	464	-	1,823	234	-	13,065	605	-
Socio-economic Status	Below 150% poverty	30.4%	35.5%	0.000	29.1%	33.9%	0.000	21.6%	28.4%	0.000
	Unemployed	5.8%	7.1%	0.000	5.6%	6.6%	0.005	5.1%	6.1%	0.000
	Housing burden	22.8%	23.0%	0.552	24.5%	22.4%	0.000	27.5%	24.6%	0.000
	No High School Diploma	15.6%	19.2%	0.000	14.1%	17.9%	0.000	10.2%	14.2%	0.000
	High School Diploma	14.0%	13.8%	0.439	13.2%	13.5%	0.373	10.5%	13.2%	0.000
	Some College	20.1%	19.4%	0.019	20.8%	19.3%	0.000	19.9%	21.5%	0.000
	College graduate	27.2%	22.7%	0.000	31.2%	23.6%	0.000	43.6%	28.3%	0.000
Household Characteristics	Uninsured	10.9%	10.9%	0.913	10.7%	12.2%	0.001	10.9%	11.1%	0.302
	Male	49.9%	50.6%	0.048	49.1%	50.4%	0.005	48.9%	50.6%	0.000
	Female	50.1%	49.4%	0.048	50.9%	49.6%	0.005	51.1%	49.4%	0.000
	Aged <=17	20.8%	21.6%	0.012	22.0%	22.1%	0.724	21.4%	22.2%	0.002
	Aged 18-64	58.4%	59.4%	0.009	59.5%	59.5%	0.915	61.0%	61.1%	0.720
	Aged >=65	20.8%	19.0%	0.000	18.5%	18.4%	0.833	17.6%	16.6%	0.001
	Disability proportion	18.9%	19.7%	0.018	16.8%	18.4%	0.000	13.0%	17.0%	0.000
	Single-parent households	6.3%	7.8%	0.000	7.5%	7.4%	0.779	6.8%	7.4%	0.024
Housing Type & Transportation	Limited English >5 years old	5.2%	6.9%	0.010	4.8%	6.2%	0.066	5.9%	5.2%	0.223
	Multi-unit structures	2.3%	1.6%	0.002	4.0%	1.7%	0.000	12.7%	4.2%	0.000
	Mobile homes	27.3%	31.0%	0.000	20.2%	29.4%	0.000	8.5%	27.2%	0.000
	Crowding	2.2%	2.2%	0.848	2.3%	2.7%	0.068	2.6%	2.2%	0.001
	No vehicle	6.3%	8.5%	0.000	6.0%	7.2%	0.003	5.4%	6.9%	0.000
	No internet	41.9%	51.6%	0.000	38.3%	49.3%	0.000	23.4%	39.9%	0.000
	Group quarters	3.8%	5.6%	0.008	3.3%	4.4%	0.121	2.1%	4.1%	0.000

Data: HRSA Data Warehouse. Rurality assigned using 2010 RUCA codes: Urban - 1.0-3.0, Large Rural - 4.0-6.0, Small Rural - 7.0 and higher

Primary Care HHS Region 5: Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin

Small Rural Tracts. In small rural areas, Primary Care tracts had a higher proportion of residents without a high school diploma (11.2 percent vs. 9.4 percent, $p < 0.01$) and higher uninsured rates (9.7 percent vs. 6.9 percent, $p < 0.001$) than non-HPSA tracts. These areas also had a larger share of children under 18 (22.9 percent vs. 21.3 percent, $p < 0.001$), a slightly lower rate of college graduates (30.4 percent vs. 31.6 percent, $p < 0.05$), and more households without vehicle access (7.3 percent vs. 5.8 percent, $p < 0.01$). Mobile home residence (9.7 percent vs. 11.1 percent, $p < 0.05$) and disability rates (14.8 percent vs. 15.4 percent, $p < 0.05$) were also lower in HPSA tracts, while lack of internet access was more common in HPSAs as compared to non-HPSAs (38.5 percent vs. 32.5 percent).

Large Rural Tracts. In large rural areas, HPSA tracts had lower rates of poverty (20.4 percent vs. 22.9 percent, $p < 0.001$) and lower housing burden (20.5 percent vs. 22.2 percent, $p < 0.01$) than non-HPSA tracts. They also had lower disability rates (13.9 percent vs. 15.2 percent, $p < 0.01$) and a smaller share of single-parent households (5.0 percent vs. 5.7 percent, $p < 0.01$).

Urban Tracts. Urban HPSA tracts showed the largest differences. Poverty rate (31.7 percent vs. 18.4 percent, $p < 0.001$), unemployment (9.4 percent vs. 5.1 percent, $p < 0.001$), and uninsured rates (7.8 percent vs. 5.8 percent, $p < 0.001$) were all higher. A lower proportion of residents held college degrees (27.9 percent vs. 45.8 percent, $p < 0.001$), and vehicle access was less common (13.9 percent vs. 7.3 percent, $p < 0.001$). Rates of mobile home residence (4.4 percent vs. 2.6 percent, $p < 0.001$) and lack of internet access (35.1 percent vs. 19.2 percent, $p < 0.001$) were also higher in HPSA tracts as compared to non-designated tracts.



Key Takeaways

- In small rural areas, differences in educational attainment, insurance coverage, and vehicle access differentiated HPSAs from non-HPSAs.
- Large rural HPSAs had modest differences, primarily in poverty, housing burden, and household composition.
- Urban HPSA tracts had less favorable outcomes across most socioeconomic and housing measures compared with urban non-HPSA tracts.

Primary Care HPSAs and non-HPSAs: HHS Region 5

Variable Category	Variable Name	Small Rural Non-Area %	Small Rural Area %	p-value	Large Rural Non-Area %	Large Rural Area %	p-value	Urban Non-Area %	Urban Area %	p-value
Population and Tracts	N(est.)	3,475,122	1,407,561	-	4,768,072	759,623	-	39,665,936	2,875,747	-
	Number of tracts	1,107	447	-	1,281	199	-	10,198	961	-
Socio-economic Status	Below 150% poverty	21.1%	20.3%	0.073	22.9%	20.4%	0.001	18.4%	31.7%	0.000
	Unemployed	4.4%	4.1%	0.105	4.8%	4.4%	0.143	5.1%	9.4%	0.000
	Housing burden	20.7%	19.4%	0.000	22.2%	20.5%	0.002	23.9%	30.8%	0.000
	No High School Diploma	9.4%	11.2%	0.001	9.0%	9.4%	0.400	8.2%	14.0%	0.000
	High School Diploma	12.8%	12.8%	0.960	12.7%	12.4%	0.336	10.1%	12.8%	0.000
	Some College	21.3%	21.0%	0.314	21.1%	20.4%	0.029	20.0%	22.6%	0.000
	College graduate	31.6%	30.4%	0.014	32.9%	32.9%	0.980	45.8%	27.9%	0.000
Household Characteristics	Uninsured	6.9%	9.7%	0.000	6.2%	6.2%	0.993	5.8%	7.8%	0.000
	Male	50.8%	50.6%	0.273	50.3%	50.5%	0.594	49.5%	48.7%	0.000
	Female	49.2%	49.4%	0.273	49.7%	49.5%	0.594	50.5%	51.3%	0.000
	Aged <=17	21.3%	22.9%	0.000	21.0%	21.3%	0.524	22.2%	24.3%	0.000
	Aged 18-64	57.0%	56.3%	0.012	59.9%	59.5%	0.475	61.6%	60.1%	0.000
	Aged >=65	21.7%	20.8%	0.009	19.1%	19.2%	0.782	16.3%	15.6%	0.002
	Disability proportion	15.4%	14.8%	0.022	15.2%	13.9%	0.001	11.9%	15.8%	0.000
	Single-parent households	4.8%	4.8%	0.966	5.7%	5.0%	0.005	6.1%	10.4%	0.000
Housing Type & Transportation	Limited English >5 years old	3.8%	3.4%	0.260	5.1%	5.5%	0.685	4.4%	4.0%	0.111
	Multi-unit structures	3.7%	4.2%	0.086	6.5%	6.4%	0.843	12.2%	8.1%	0.000
	Mobile homes	11.1%	9.7%	0.026	7.8%	8.5%	0.280	2.6%	4.4%	0.000
	Crowding	1.6%	1.9%	0.010	1.5%	1.9%	0.023	2.0%	2.6%	0.000
	No vehicle	5.8%	7.3%	0.001	6.3%	6.0%	0.400	7.3%	13.9%	0.000
	No internet	32.5%	38.5%	0.003	28.0%	26.7%	0.232	19.2%	35.1%	0.000
	Group quarters	3.1%	2.5%	0.123	4.2%	4.3%	0.875	2.1%	1.8%	0.159

Data: HRSA Data Warehouse. Rurality assigned using 2010 RUCA codes: Urban - 1.0-3.0, Large Rural - 4.0-6.0, Small Rural - 7.0 and higher

Primary Care HHS Region 6: Arkansas, Louisiana, New Mexico, Oklahoma, and Texas

Small Rural Tracts. In small rural areas, Primary Care HPSA tracts had higher rates of poverty (32.8 percent vs. 29.1 percent, $p<0.001$) and a larger share of adults without a high school diploma (18.1 percent vs. 15.3 percent, $p<0.001$). College attainments was lower (22.8 percent vs. 25.9 percent, $p<0.001$), and crowding was more common (27.5 percent vs. 19.3 percent, $p<0.001$). These tracts also had a higher rate of residents without internet access (53.7 percent vs. 43.6 percent, $p<0.001$), a slightly higher proportion of children under 18 (23.4 percent vs. 22.3 percent, $p<0.01$), and a greater share of households without vehicle access (7.1 percent vs. 6.0 percent, $p<0.01$).

Large Rural Tracts. HPSA tracts in large rural areas had higher poverty (33.1 percent vs. 29.3 percent, $p<0.001$), a greater share of the population without a high school diploma (21.3 percent vs. 14.2 percent, $p<0.001$), and fewer college graduates (24.8 percent vs. 29.3 percent, $p<0.001$). Uninsurance was more common (16.8 percent vs. 13.4 percent, $p<0.001$), and the population under age 18 was larger (25.9 percent vs. 23.1 percent, $p<0.001$). These tracts had higher rates of limited English proficiency (12.5 percent vs. 6.9 percent; $p<0.001$), more residents without internet access (52.5 percent vs. 37.5 percent; $p<0.001$), and a higher rate of crowding (5.5 percent vs. 3.3 percent; $p<0.001$). Disability rates were lower (14.8 percent vs. 17.1 percent; $p<0.001$).

Urban Tracts. Urban HPSA tracts had higher poverty (26.7 percent vs. 23.2 percent, $p<0.001$), more household crowding (22.1 percent vs. 6.7 percent, $p<0.001$), and fewer college graduates (27.7 percent vs. 40.9 percent, $p<0.001$) compared with urban non-HPSA tracts. A larger share of residents lacked a high school diploma (18.6 percent vs. 13.7 percent, $p<0.001$), were uninsured (17.1 percent vs. 15.0 percent, $p<0.001$) or lacked internet access (41.2 percent vs. 25.6 percent, $p<0.001$).



Key Takeaways

- HPSA tracts in small rural areas had higher poverty, more mobile home residence, and lower educational attainment than non-designated tracts.
- Large rural HPSAs faced challenges in education, insurance coverage, and household transportation access.
- Urban HPSA tracts had less favorable outcomes in education, housing, and insurance measures compared with urban non-HPSA tracts.

Primary Care HPSAs and non-HPSAs: HHS Region 6

Variable Category	Variable Name	Small Rural Non-Area %	Small Rural Area %	p-value	Large Rural Non-Area %	Large Rural Area %	p-value	Urban Non-Area %	Urban Area %	p-value
Population and Tracts	N(est.)	1,926,991	1,232,215	-	3,252,605	928,270	-	32,904,454	2,740,982	-
	Number of tracts	641	450	-	898	271	-	7,959	705	-
Socio-economic Status	Below 150% poverty	29.1%	32.8%	0.000	29.3%	33.1%	0.000	23.2%	26.7%	0.000
	Unemployed	5.6%	6.0%	0.135	5.6%	6.4%	0.013	5.4%	5.7%	0.089
	Housing burden	21.3%	21.4%	0.838	24.8%	23.7%	0.108	27.0%	22.8%	0.000
	No High School Diploma	15.3%	18.1%	0.000	14.2%	21.3%	0.000	13.7%	18.6%	0.000
	High School Diploma	14.1%	13.6%	0.146	13.9%	13.9%	0.943	10.5%	12.8%	0.000
	Some College	22.0%	22.0%	0.957	22.2%	21.7%	0.296	20.9%	22.4%	0.000
	College graduate	25.9%	22.8%	0.000	29.3%	24.8%	0.000	40.9%	27.7%	0.000
Household Characteristics	Uninsured	13.2%	14.0%	0.084	13.4%	16.8%	0.000	15.0%	17.1%	0.000
	Male	51.1%	51.0%	0.826	50.1%	50.9%	0.130	49.6%	50.3%	0.002
	Female	48.9%	49.0%	0.826	49.9%	49.1%	0.130	50.4%	49.7%	0.002
	Aged <=17	22.3%	23.4%	0.005	23.1%	25.9%	0.000	24.8%	26.3%	0.000
	Aged 18-64	57.5%	57.5%	0.912	59.4%	58.8%	0.305	62.0%	59.5%	0.000
	Aged >=65	20.2%	19.1%	0.024	17.6%	15.3%	0.000	13.1%	14.2%	0.000
	Disability proportion	18.6%	17.7%	0.024	17.1%	14.8%	0.000	11.9%	14.0%	0.000
	Single-parent households	6.5%	7.1%	0.058	7.3%	9.0%	0.000	7.7%	7.8%	0.651
Housing Type & Transportation	Limited English >5 years old	7.8%	8.2%	0.623	6.9%	12.5%	0.000	7.4%	8.6%	0.012
	Multi-unit structures	2.3%	1.9%	0.048	5.2%	4.3%	0.085	13.6%	5.2%	0.000
	Mobile homes	19.3%	27.5%	0.000	17.1%	17.8%	0.601	6.7%	22.1%	0.000
	Crowding	3.0%	3.6%	0.007	3.3%	5.5%	0.000	4.4%	5.5%	0.000
	No vehicle	6.0%	7.1%	0.002	6.1%	6.5%	0.381	5.3%	4.8%	0.019
	No internet	43.6%	53.7%	0.000	37.5%	52.5%	0.000	25.6%	41.2%	0.000
	Group quarters	5.5%	4.9%	0.446	4.4%	5.2%	0.402	1.7%	2.2%	0.129

Data: HRSA Data Warehouse. Rurality assigned using 2010 RUCA codes: Urban - 1.0-3.0, Large Rural - 4.0-6.0, Small Rural - 7.0 and higher

Primary Care HHS Region 7: Iowa, Kansas, Missouri, and Nebraska

Small Rural Tracts. In small rural areas, Primary Care HPSA tracts had lower poverty (20.2 percent vs. 22.4 percent, $p < 0.001$), housing burden (18.3 percent vs. 20.0 percent, $p < 0.01$), and mobile home residence (2.5 percent vs. 3.8 percent, $p < 0.01$) than non-HPSA tracts. Disability rates were lower (13.9 percent vs. 15.6 percent, $p < 0.001$) as was the share of households with internet access (29.3 percent vs. 32.5 percent, $p < 0.05$).

Large Rural Tracts. Few differences emerged in large rural areas. HPSA tracts had a smaller share of children under 18 (20.8 percent vs. 23.2 percent; $p < 0.001$), fewer residents experienced crowding (0.7 percent vs. 2.1 percent; $p < 0.001$), and there was a lower proportion of multi-unit structures (2.5 percent vs. 5.9 percent; $p < 0.001$).

Urban Tracts. Urban HPSA tracts had a lower share of college graduates (37.4 percent vs. 46.3 percent, $p < 0.001$), slightly higher proportion of residents with only a high school diploma (12.6 percent vs. 10.8 percent, $p < 0.001$), and higher housing burden (18.8 percent vs. 23.6 percent, $p < 0.001$). They also had lower levels of crowding (7.6 percent vs. 3.2 percent, $p < 0.001$), fewer single-parent households (4.5 percent vs. 6.2 percent, $p < 0.001$), and a lower share of residents with limited English proficiency (2.1 percent vs. 4.0 percent, $p < 0.01$). Internet access was more common in urban HPSAs (26.8 percent vs. 20.2 percent, $p < 0.001$).



Key Takeaways

- In small rural and large rural areas, few consistent differences were found between HPSAs and non-HPSAs.
- Urban HPSAs had lower educational attainment, lower internet access, and higher housing burden than their non-HPSA counterparts.
- HPSA tracts in small rural areas had higher poverty, more mobile home residence, and lower educational attainment than non-designated tracts.

Primary Care HPSAs and non-HPSAs: HHS Region 7

Variable Category	Variable Name	Small Rural Non-Area %	Small Rural Area %	p-value	Large Rural Non-Area %	Large Rural Area %	p-value	Urban Non-Area %	Urban Area %	p-value
Population and Tracts	N(est.)	2,279,201	353,773	-	1,977,364	59,879	-	9,158,468	409,434	-
	Number of tracts	765	125	-	551	17	-	2,369	105	-
Socio-economic Status	Below 150% poverty	22.4%	20.2%	0.001	24.5%	17.3%	0.000	18.9%	15.5%	0.000
	Unemployed	3.5%	3.4%	0.714	4.1%	5.1%	0.392	4.2%	3.3%	0.001
	Housing burden	20.0%	18.3%	0.003	23.2%	17.3%	0.000	23.6%	18.8%	0.000
	No High School Diploma	9.7%	9.5%	0.856	10.5%	9.9%	0.578	7.4%	7.2%	0.746
	High School Diploma	13.0%	13.3%	0.339	13.6%	12.6%	0.279	10.8%	12.6%	0.000
	Some College	21.7%	21.9%	0.668	22.4%	21.5%	0.455	21.1%	22.2%	0.043
	College graduate	31.8%	31.0%	0.258	33.9%	36.4%	0.258	46.3%	37.4%	0.000
Household Characteristics	Uninsured	8.6%	7.2%	0.002	9.0%	9.0%	0.987	7.6%	7.3%	0.481
	Male	50.4%	51.2%	0.064	50.6%	50.5%	0.944	49.5%	50.2%	0.065
	Female	49.6%	48.8%	0.064	49.4%	49.5%	0.944	50.5%	49.8%	0.065
	Aged <=17	22.9%	22.4%	0.175	23.2%	20.8%	0.000	23.1%	23.3%	0.629
	Aged 18-64	55.8%	56.4%	0.178	59.2%	60.3%	0.341	61.3%	58.9%	0.000
	Aged >=65	21.2%	21.2%	0.878	17.5%	18.9%	0.178	15.6%	17.8%	0.000
	Disability proportion	15.6%	13.9%	0.000	15.0%	13.1%	0.108	12.1%	12.9%	0.040
	Single-parent households	4.9%	4.8%	0.722	6.3%	5.7%	0.572	6.2%	4.5%	0.000
Housing Type & Transportation	Limited English >5 years old	4.5%	5.5%	0.189	6.9%	7.8%	0.764	4.0%	2.1%	0.003
	Multi-unit structures	3.8%	2.5%	0.001	5.9%	2.5%	0.000	11.6%	2.9%	0.000
	Mobile homes	8.8%	8.2%	0.501	8.3%	8.4%	0.964	3.2%	7.6%	0.000
	Crowding	1.7%	1.4%	0.120	2.1%	0.7%	0.000	1.9%	1.6%	0.233
	No vehicle	5.2%	4.9%	0.425	6.0%	5.1%	0.356	5.8%	3.3%	0.000
	No internet	32.5%	29.3%	0.007	28.8%	24.8%	0.109	20.2%	26.8%	0.000
	Group quarters	3.4%	4.0%	0.382	4.6%	7.0%	0.398	2.3%	1.7%	0.374

Data: HRSA Data Warehouse. Rurality assigned using 2010 RUCA codes: Urban - 1.0-3.0, Large Rural - 4.0-6.0, Small Rural - 7.0 and higher

Primary Care HHS Region 8: Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming

Small Rural Tracts. HPSA tracts in small rural areas had higher rates of residents without a high school diploma (8.5 percent vs. 7.7 percent, $p < 0.10$) and fewer college graduates (35.8 percent vs. 39.9 percent, $p < 0.001$). Uninsurance was higher (12.0 percent vs. 10.2 percent, $p < 0.01$), as was the share of children under age 18 (23.9 percent vs. 22.3 percent, $p < 0.01$), and residents living in mobile homes (18.0 percent vs. 12.4 percent, $p < 0.001$). HPSA tracts had a smaller share of residents with limited English proficiency (3.2 percent vs. 5.1 percent, $p < 0.001$) and lower rate of residents in group quarters (2.3 percent vs. 3.8 percent, $p < 0.01$).

Large Rural Tracts. In large rural areas, HPSA tracts had higher rates of residents without a high school diploma (7.9 percent vs. 6.4 percent, $p < 0.05$) and lower rates of college graduates (35.5 percent vs. 45.5 percent, $p < 0.001$). A larger share of the population was under age 18 (28.6 percent vs. 22.2 percent, $p < 0.001$). These tracts also had a larger proportion of residents with limited English proficiency (2.4 percent vs. 5.2 percent, $p < 0.001$), greater mobile home residence (10.8 percent vs. 9.5 percent, $p < 0.05$), and fewer households with vehicle access (3.0 percent with no vehicle vs. 4.5 percent, $p < 0.01$).

Urban Tracts. Urban HPSA tracts had lower educational attainment, with fewer college graduates (46.9 percent vs. 50.6 percent, $p < 0.10$) and more without a high school diploma (5.3 percent vs. 7.0 percent, $p < 0.05$). HPSA tracts also had a larger share of households with children under age 18 (25.6 percent vs. 24.0 percent, $p < 0.10$), more people living in mobile homes (6.9 percent vs. 3.3 percent, $p < 0.01$), and fewer with vehicle access (1.8 percent with no vehicle vs. 4.4 percent, $p < 0.001$).



Key Takeaways

- Educational attainment and internet access consistently differed between HPSA and non-HPSA tracts.
- Mobile home residence and uninsured rates were higher in HPSA tracts across multiple geographies.
- Large rural HPSA tracts had higher proportions of children and greater housing cost burden compared with large rural non-HPSA tracts.

Primary Care HPSAs and non-HPSAs: HHS Region 8

Variable Category	Variable Name	Small Rural Non-Area %	Small Rural Area %	p-value	Large Rural Non-Area %	Large Rural Area %	p-value	Urban Non-Area %	Urban Area %	p-value
Population and Tracts	N(est.)	1,214,390	540,852	-	1,242,713	214,590	-	8,996,480	182,559	-
	Number of tracts	408	220	-	306	52	-	2,080	46	-
Socio-economic Status	Below 150% poverty	21.5%	23.5%	0.055	19.3%	13.3%	0.000	15.7%	12.0%	0.028
	Unemployed	3.9%	4.2%	0.503	3.5%	4.1%	0.197	4.0%	4.0%	0.936
	Housing burden	22.9%	18.6%	0.000	24.1%	18.2%	0.000	24.5%	16.7%	0.000
	No High School Diploma	7.7%	8.5%	0.058	6.4%	7.9%	0.023	7.0%	5.3%	0.024
	High School Diploma	11.7%	11.5%	0.704	11.6%	13.6%	0.002	10.3%	12.0%	0.011
	Some College	22.8%	24.1%	0.002	21.7%	24.8%	0.001	21.5%	24.3%	0.001
	College graduate	39.9%	35.8%	0.000	45.5%	35.5%	0.000	50.6%	46.9%	0.085
Household Characteristics	Uninsured	10.2%	12.0%	0.007	8.7%	10.5%	0.061	7.7%	7.1%	0.391
	Male	51.7%	51.4%	0.474	51.6%	50.8%	0.144	50.5%	51.1%	0.192
	Female	48.3%	48.6%	0.474	48.4%	49.2%	0.144	49.5%	48.9%	0.192
	Aged <=17	22.3%	23.9%	0.003	22.2%	28.6%	0.000	24.0%	25.6%	0.134
	Aged 18-64	57.3%	55.2%	0.000	61.6%	59.4%	0.006	62.6%	60.0%	0.001
	Aged >=65	20.4%	20.9%	0.440	16.2%	12.0%	0.000	13.4%	14.5%	0.301
	Disability proportion	13.7%	13.2%	0.244	11.5%	11.8%	0.563	10.5%	10.0%	0.395
	Single-parent households	4.5%	4.5%	0.888	4.6%	5.4%	0.128	5.4%	4.3%	0.075
Housing Type & Transportation	Limited English >5 years old	5.1%	3.2%	0.000	5.2%	2.4%	0.000	4.2%	1.5%	0.000
	Multi-unit structures	5.6%	4.2%	0.051	11.4%	4.4%	0.000	15.0%	1.9%	0.000
	Mobile homes	12.4%	18.0%	0.000	9.5%	10.8%	0.432	3.3%	6.9%	0.011
	Crowding	2.3%	2.9%	0.068	2.3%	3.0%	0.041	2.7%	1.8%	0.073
	No vehicle	4.2%	4.2%	0.998	4.5%	3.0%	0.003	4.4%	1.8%	0.000
	No internet	29.3%	35.8%	0.009	21.5%	18.1%	0.078	15.9%	18.8%	0.559
	Group quarters	3.8%	2.3%	0.003	3.8%	1.0%	0.000	1.9%	0.8%	0.006

Data: HRSA Data Warehouse. Rurality assigned using 2010 RUCA codes: Urban - 1.0-3.0, Large Rural - 4.0-6.0, Small Rural - 7.0 and higher

Primary Care HHS Region 9: Arizona, California, Hawaii, and Nevada

Small Rural Tracts. In small rural areas, HPSA tracts had higher poverty (30.7 percent vs. 24.1 percent; $p < 0.001$), unemployment (9.1 percent vs. 7.0 percent; $p < 0.001$), and uninsured rates (9.9 percent vs. 7.6 percent; $p < 0.01$) than non-HPSA tracts. Educational attainment was lower, with more residents lacking a high school diploma (15.8 percent vs. 13.4 percent; $p < 0.05$) and fewer college graduates (27.9 percent vs. 34.0 percent; $p < 0.001$). These tracts also had more children under age 18 (22.2 percent vs. 20.3 percent; $p < 0.05$), more single-parent households (6.1 percent vs. 4.5 percent; $p < 0.01$), and more households without internet access (7.2 percent vs. 4.5 percent; $p < 0.001$). Mobile home residence (25.1 percent vs. 17.6 percent; $p < 0.01$) and a lack of internet access (52.7 percent vs. 28.6 percent; $p < 0.001$) were also more common in designated as compared to non-designated tracts.

Large Rural Tracts. HPSA tracts in large urban areas had higher rates of poverty (27.1 percent vs. 23.3 percent, $p < 0.001$), unemployment (8.0 percent vs. 6.9 percent, $p < 0.05$), and a larger share of children under age 18 (23.4 percent vs. 21.0 percent, $p < 0.001$). HPSA tracts had fewer older adults (17.9 percent vs. 21.8 percent; $p < 0.001$), more single-parent households (6.9 percent vs. 5.8 percent; $p < 0.01$), and higher multi-unit structure residency (6.5 percent vs. 4.5 percent; $p < 0.01$). Mobile home residence was less common in HPSAs (9.9 percent vs. 16.1 percent; $p < 0.001$).

Urban Tracts. Urban HPSA tracts had higher poverty (29.9 percent vs. 19.2 percent, $p < 0.001$), unemployment (8.2 percent vs. 6.2 percent, $p < 0.001$), and uninsured rates (9.8 percent vs. 7.5 percent, $p < 0.001$). Educational attainment was lower, with fewer college graduates (24.9 percent vs. 43.8 percent, $p < 0.001$). HPSA tracts had a greater share of children under age 18 (26.9 percent vs. 22.0 percent, $p < 0.001$), more single-parent households (8.7 percent vs. 6.1 percent, $p < 0.001$), and higher rates of mobile home residence (7.8 percent vs. 3.8 percent, $p < 0.001$) and households without internet (36.7 percent vs. 19.4 percent, $p < 0.001$) as compared to non-designated tracts.



Key Takeaways

- Across all geographies, HPSA tracts had higher proportions of poverty and uninsured rates.
- Small rural and urban HPSAs had lower educational attainment and greater housing instability.
- Large rural HPSAs had a higher proportion of children and fewer older adults.

Primary Care HPSAs and non-HPSAs: HHS Region 9

Variable Category	Variable Name	Small Rural Non-Area %	Small Rural Area %	p-value	Large Rural Non-Area %	Large Rural Area %	p-value	Urban Non-Area %	Urban Area %	p-value
Population and Tracts	N(est.)	626,234	663,998	-	1,028,189	1,290,388	-	44,620,626	2,854,357	-
	Number of tracts	229	243	-	269	351	-	10,373	669	-
Socio-economic Status	Below 150% poverty	24.1%	30.7%	0.000	23.3%	27.1%	0.000	19.2%	29.9%	0.000
	Unemployed	7.0%	9.1%	0.000	6.9%	8.0%	0.011	6.2%	8.2%	0.000
	Housing burden	27.0%	24.6%	0.018	28.2%	29.5%	0.089	28.5%	34.0%	0.000
	No High School Diploma	13.4%	15.8%	0.027	14.8%	16.4%	0.126	14.6%	25.8%	0.000
	High School Diploma	12.7%	11.1%	0.007	12.3%	11.7%	0.146	8.8%	10.0%	0.000
	Some College	25.8%	25.7%	0.896	25.4%	24.4%	0.060	20.6%	21.8%	0.000
	College graduate	34.0%	27.9%	0.000	32.8%	30.8%	0.103	43.8%	24.9%	0.000
Household Characteristics	Uninsured	7.6%	9.9%	0.001	7.8%	7.3%	0.243	7.5%	9.8%	0.000
	Male	52.9%	51.4%	0.094	50.9%	51.1%	0.756	49.9%	51.1%	0.000
	Female	47.1%	48.6%	0.094	49.1%	48.9%	0.756	50.1%	48.9%	0.000
	Aged <=17	20.3%	22.2%	0.019	21.0%	23.4%	0.000	22.0%	26.9%	0.000
	Aged 18-64	57.4%	57.2%	0.836	57.1%	58.8%	0.014	62.7%	60.5%	0.000
	Aged >=65	22.3%	20.6%	0.151	21.8%	17.9%	0.000	15.4%	12.6%	0.000
	Disability proportion	14.7%	15.7%	0.176	15.2%	14.4%	0.159	11.0%	12.3%	0.000
	Single-parent households	4.5%	6.1%	0.001	5.8%	6.9%	0.008	6.1%	8.7%	0.000
Housing Type & Transportation	Limited English >5 years old	11.2%	11.1%	0.966	9.5%	9.9%	0.786	9.9%	14.8%	0.000
	Multi-unit structures	3.2%	3.0%	0.649	4.5%	6.5%	0.002	16.5%	8.9%	0.000
	Mobile homes	17.6%	25.1%	0.009	16.1%	9.9%	0.000	3.8%	7.8%	0.000
	Crowding	4.5%	7.2%	0.000	5.2%	7.6%	0.000	8.3%	11.7%	0.000
	No vehicle	4.2%	6.4%	0.000	5.2%	6.0%	0.080	6.4%	7.3%	0.008
	No internet	28.6%	52.7%	0.000	26.2%	31.9%	0.004	19.4%	36.7%	0.000
	Group quarters	6.6%	5.0%	0.333	3.5%	3.3%	0.866	1.9%	2.6%	0.150

Data: HRSA Data Warehouse. Rurality assigned using 2010 RUCA codes: Urban - 1.0-3.0, Large Rural - 4.0-6.0, Small Rural - 7.0 and higher

Primary Care HHS Region 10: Alaska, Idaho, Oregon, and Washington

Small Rural Tracts. In small rural areas, HPSA tracts had higher rates of uninsured individuals (12.4 percent vs. 10.0 percent; $p < 0.01$), children under 18 (24.9 percent vs. 21.0 percent; $p < 0.001$), and adults aged 18–64 (57.8 percent vs. 55.8 percent; $p < 0.05$). The share of older adults was lower (17.3 percent vs. 23.3 percent; $p < 0.001$). Multi-unit structures were less common (2.2 percent vs. 3.3 percent; $p < 0.05$), while a lack of internet access (37.1 percent vs. 27.4 percent; $p < 0.01$), lack of vehicle access (13.6 percent vs. 4.8 percent; $p < 0.001$), and crowding (8.6 percent vs. 3.9 percent; $p < 0.001$) were more prevalent in designated as compared to non-designated tracts.

Large Rural Tracts. In large rural areas, HPSA tracts had lower poverty (19.1 percent vs. 23.7 percent; $p < 0.05$), lower disability rates (14.1 percent vs. 15.9 percent; $p < 0.05$), and fewer residents without internet access (16.4 percent vs. 25.2 percent; $p < 0.01$) as compared to non-designated tracts.

Urban Tracts. Urban HPSA tracts had more residents aged 65 and older (18.1 percent vs. 15.3 percent; $p < 0.001$), lower college graduation rates (45.8 percent vs. 48.3 percent; $p < 0.01$), and more adults without a high school diploma (7.8 percent vs. 5.9 percent; $p < 0.001$). These tracts also had higher rates of mobile home residence (9.0 percent vs. 4.8 percent; $p < 0.001$), more households without internet access (13.2 percent vs. 14.4 percent; $p < 0.05$), and less vehicle access (3.7 percent vs. 6.5 percent; $p < 0.001$) as compared to non-designated tracts.



Key Takeaways

- In small rural HPSAs, coverage gaps and infrastructure limitations were more common than in non-HPSAs.
- Large rural HPSAs had fewer residents living in poverty or with disabilities than in non-HPSAs.
- Urban HPSAs had a lower proportion of the population with lower educational attainment but had a higher proportion of mobile home residence.

Primary Care HPSAs and non-HPSAs: HHS Region 10

Variable Category	Variable Name	Small Rural Non-Area %	Small Rural Area %	p-value	Large Rural Non-Area %	Large Rural Area %	p-value	Urban Non-Area %	Urban Area %	p-value
Population and Tracts	N(est.)	908,129	270,040	-	1,614,622	116,952	-	10,215,210	1,381,900	-
	Number of tracts	289	92	-	390	38	-	2,306	303	-
Socio-economic Status	Below 150% poverty	23.4%	25.5%	0.150	23.7%	19.1%	0.013	17.0%	13.8%	0.000
	Unemployed	5.6%	6.7%	0.132	5.9%	5.2%	0.283	4.9%	4.9%	0.720
	Housing burden	24.5%	21.7%	0.003	27.3%	28.1%	0.672	26.2%	22.5%	0.000
	No High School Diploma	11.0%	12.3%	0.271	11.1%	9.7%	0.448	7.8%	5.9%	0.000
	High School Diploma	14.0%	12.3%	0.002	14.3%	14.2%	0.924	11.4%	12.5%	0.000
	Some College	25.6%	24.1%	0.025	25.6%	25.9%	0.840	22.6%	25.3%	0.000
	College graduate	33.1%	30.3%	0.081	35.3%	38.1%	0.222	48.3%	45.8%	0.005
Household Characteristics	Uninsured	10.0%	12.4%	0.007	8.4%	6.9%	0.128	6.6%	5.0%	0.000
	Male	51.4%	52.9%	0.022	50.1%	50.5%	0.698	50.3%	50.4%	0.554
	Female	48.6%	47.1%	0.022	49.9%	49.5%	0.698	49.7%	49.6%	0.554
	Aged <=17	21.0%	24.9%	0.000	22.7%	21.3%	0.310	21.6%	21.7%	0.742
	Aged 18-64	55.8%	57.8%	0.023	58.7%	58.9%	0.891	63.1%	60.2%	0.000
	Aged >=65	23.3%	17.3%	0.000	18.6%	19.8%	0.430	15.3%	18.1%	0.000
	Disability proportion	17.5%	15.0%	0.001	15.9%	14.1%	0.015	12.7%	13.1%	0.164
	Single-parent households	4.5%	5.2%	0.176	5.4%	4.7%	0.167	5.3%	4.8%	0.012
Housing Type & Transportation	Limited English >5 years old	6.3%	9.5%	0.066	6.3%	6.8%	0.845	5.2%	3.3%	0.000
	Multi-unit structures	3.3%	2.2%	0.018	7.6%	6.3%	0.321	15.0%	7.5%	0.000
	Mobile homes	17.7%	18.2%	0.787	12.4%	13.3%	0.776	4.8%	9.0%	0.000
	Crowding	3.9%	8.6%	0.000	4.0%	4.6%	0.501	3.5%	2.4%	0.000
	No vehicle	4.8%	13.6%	0.000	5.0%	4.9%	0.867	6.5%	3.7%	0.000
	No internet	27.4%	37.1%	0.003	25.2%	16.4%	0.003	14.4%	13.2%	0.049
	Group quarters	3.3%	5.6%	0.102	3.0%	3.3%	0.897	2.0%	1.9%	0.913

Data: HRSA Data Warehouse. Rurality assigned using 2010 RUCA codes: Urban - 1.0-3.0, Large Rural - 4.0-6.0, Small Rural - 7.0 and higher



Mental Health HPSAs, 2022

Mental Health HPSAs, National Census Tract Level, 2022

Key Takeaways

- Small rural HPSAs showed higher population proportions of poverty, lack of insurance, and lower educational attainment.
- Large rural HPSAs experienced similar patterns to small rural areas but to a lesser degree.
- Urban HPSAs had lower educational attainment, mobile home residence, and a higher proportion of households without internet access.

Small Rural Tracts. In small rural areas, Mental Health HPSA tracts had higher shares of residents living below 150 percent of the federal poverty level (26.0 percent vs. 24.4 percent; $p < 0.001$), without a high school diploma (12.8 percent vs. 11.6 percent; $p < 0.001$), and without insurance (9.9 percent vs. 8.8 percent; $p < 0.001$). These tracts also had more children under age 18 (22.1 percent vs. 20.4 percent; $p < 0.001$) and fewer adults aged 65 and older (20.7 percent vs. 21.8 percent; $p < 0.001$). Mobile home residence (17.8 percent vs. 16.3 percent; $p < 0.001$) and lack of internet access (38.9 percent vs. 35.1 percent; $p < 0.001$) were more common in designated as compared to non-designated tracts. The share of college graduates was lower (29.7 percent vs. 32.3 percent; $p < 0.001$), while housing burden was also lower (21.4 percent vs. 22.8 percent; $p < 0.001$).

Large Rural Tracts. In large rural areas, HPSA tracts had more residents without a high school diploma (12.7 percent vs. 11.2 percent; $p < 0.001$), more uninsured individuals (9.7 percent vs. 8.4 percent; $p < 0.001$), and more crowding (14.3 percent vs. 12.7 percent; $p < 0.001$). These areas had fewer college graduates (31.8 percent vs. 33.9 percent; $p < 0.001$) and a smaller share of adults aged 65 and older (18.2 percent vs. 19.2 percent; $p < 0.001$).

Urban Tracts. Urban Mental Health HPSA tracts had higher poverty (22.2 percent vs. 19.1 percent; $p < 0.001$), lower college graduation rates (36.8 percent vs. 46.7 percent; $p < 0.001$), and higher rates of crowding (9.1 percent vs. 4.0 percent; $p < 0.001$). They also had more children under 18 (23.8 percent vs. 21.9 percent; $p < 0.001$) and a higher proportion of households without internet access (26.1 percent vs. 20.1 percent; $p < 0.001$).

Mental Health HPSAs and non-HPSAs: National Census Tract Level, 2022

Variable Category	Variable Name	Small Rural Non-Area %	Small Rural Area %	p-value	Large Rural Non-Area %	Large Rural Area %	p-value	Urban Non-Area %	Urban Area %	p-value
Population and Tracts	N(est.)	8,299,892	14,622,783	-	11,903,003	16,312,585	-	234,743,492	45,215,838	-
	Number of tracts	2,808	4,981	-	3,262	4,506	-	57,546	11,311	-
Socio-economic Status	Below 150% poverty	24.4%	26.0%	0.000	24.5%	26.0%	0.000	19.1%	22.2%	0.000
	Unemployed	5.1%	5.0%	0.426	5.2%	5.3%	0.384	5.3%	5.6%	0.000
	Housing burden	22.8%	21.4%	0.000	24.5%	24.3%	0.541	27.0%	25.5%	0.000
	No High School Diploma	11.6%	12.8%	0.000	11.2%	12.7%	0.000	10.3%	12.4%	0.000
	High School Diploma	12.8%	13.0%	0.088	12.8%	13.2%	0.000	9.5%	11.7%	0.000
	Some College	20.2%	21.6%	0.000	20.8%	21.8%	0.000	18.9%	22.2%	0.000
	College graduate	32.3%	29.7%	0.000	33.9%	31.8%	0.000	46.7%	36.8%	0.000
Household Characteristics	Uninsured	8.8%	9.9%	0.000	8.4%	9.7%	0.000	8.3%	9.2%	0.000
	Male	50.5%	50.9%	0.006	49.9%	50.3%	0.000	49.4%	49.9%	0.000
	Female	49.5%	49.1%	0.006	50.1%	49.7%	0.000	50.6%	50.1%	0.000
	Aged <=17	20.4%	22.1%	0.000	20.9%	22.7%	0.000	21.9%	23.8%	0.000
	Aged 18-64	57.8%	57.2%	0.000	59.9%	59.1%	0.000	62.1%	60.6%	0.000
	Aged >=65	21.8%	20.7%	0.000	19.2%	18.2%	0.000	16.0%	15.6%	0.000
	Disability proportion	16.6%	16.6%	0.718	16.1%	15.5%	0.000	11.8%	13.3%	0.000
	Single-parent households	5.1%	5.6%	0.000	5.9%	6.6%	0.000	6.2%	6.8%	0.000
Housing Type & Transportation	Limited English >5 years old	5.8%	5.8%	0.986	5.8%	6.5%	0.017	6.9%	6.2%	0.000
	Multi-unit structures	3.2%	3.1%	0.573	6.1%	5.8%	0.109	17.8%	8.2%	0.000
	Mobile homes	16.3%	17.8%	0.000	12.7%	14.3%	0.000	4.0%	9.1%	0.000
	Crowding	2.1%	2.5%	0.000	2.2%	2.7%	0.000	3.5%	3.5%	0.729
	No vehicle	6.1%	6.3%	0.296	6.5%	6.1%	0.002	9.2%	5.9%	0.000
	No internet	35.1%	38.9%	0.000	29.5%	33.2%	0.000	20.1%	26.1%	0.000
	Group quarters	4.4%	4.0%	0.087	4.1%	3.9%	0.346	2.1%	2.2%	0.300

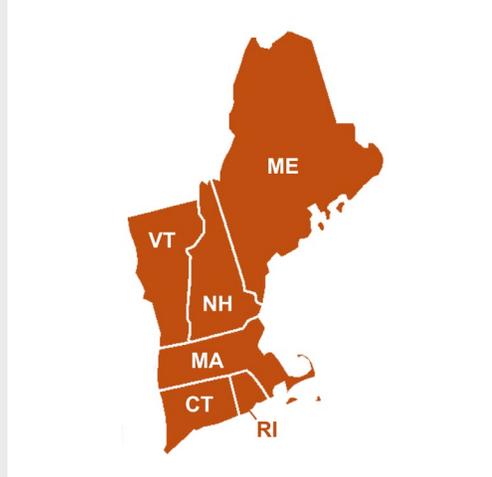
Data: HRSA Data Warehouse. Rurality assigned using 2010 RUCA codes: Urban - 1.0-3.0, Large Rural - 4.0-6.0, Small Rural - 7.0 and higher

Mental Health HHS Region 1: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont

Small Rural Tracts. In small rural areas, Mental Health HPSA tracts had higher rates of poverty (24.1 percent vs. 16.8 percent; $p < 0.001$), unemployment (5.0 percent vs. 4.0 percent; $p < 0.01$), and uninsurance (8.4 percent vs. 5.6 percent; $p < 0.001$). These tracts also had more residents without a high school diploma (8.4 percent vs. 6.0 percent; $p < 0.001$), fewer college graduates (35.7 percent vs. 47.3 percent; $p < 0.001$), and more individuals with disabilities (19.3 percent vs. 14.8 percent; $p < 0.001$). Mobile home residence (15.4 percent vs. 8.7 percent; $p < 0.001$), lack of internet access (33.0 percent vs. 24.2 percent; $p < 0.001$), and lack of vehicle access (7.4 percent vs. 5.3 percent; $p < 0.001$) were also more common in designated as compared to non-designated tracts.

Large Rural Tracts. In large rural areas, HPSA tracts had more residents aged 65 and older (24.4 percent vs. 20.9 percent; $p < 0.05$) and higher uninsurance (7.4 percent vs. 5.5 percent; $p < 0.01$). They had fewer children under age 18 (15.9 percent vs. 18.4 percent; $p < 0.05$), and fewer multi-unit structures (2.2 percent vs. 7.0 percent; $p < 0.001$) as compared to non-designated tracts.

Urban Tracts. Urban Mental Health HPSA tracts had lower housing burden (22.0 percent vs. 26.5 percent; $p < 0.001$), fewer residents without a high school diploma (5.6 percent vs. 8.7 percent; $p < 0.001$), and more college graduates (55.8 percent vs. 51.2 percent; $p < 0.01$). They also had fewer children under 18 (16.2 percent vs. 19.8 percent; $p < 0.001$), more adults aged 65 and older (22.4 percent vs. 17.1 percent; $p < 0.001$), and lower rates of internet and vehicle access.



Key Takeaways

- Small rural HPSAs had higher poverty, unemployment, and uninsured rates, along with lower educational attainment and greater disability.
- Large rural HPSAs had more uninsured adults and older residents, fewer children, and less multi-unit structure presence.
- Urban HPSAs had lower housing burden, higher college graduation rates, and better access to vehicles.

Mental Health HPSAs and non-HPSAs: HHS Region 1

Variable Category	Variable Name	Small Rural Non-Area %	Small Rural Area %	p-value	Large Rural Non-Area %	Large Rural Area %	p-value	Urban Non-Area %	Urban Area %	p-value
Population and Tracts	N(est.)	770,994	297,818	-	777,067	53,469	-	12,947,178	233,621	-
	Number of tracts	263	112	-	219	17	-	3,032	60	-
Socio-economic Status	Below 150% poverty	16.8%	24.1%	0.000	18.0%	19.6%	0.487	15.8%	13.8%	0.066
	Unemployed	4.0%	5.0%	0.010	4.2%	4.9%	0.403	5.4%	6.2%	0.058
	Housing burden	26.2%	24.9%	0.102	27.5%	26.5%	0.629	26.5%	22.0%	0.000
	No High School Diploma	6.0%	8.4%	0.000	6.9%	8.2%	0.201	8.7%	5.6%	0.000
	High School Diploma	9.4%	11.5%	0.000	10.7%	11.9%	0.292	8.5%	8.5%	0.877
	Some College	17.2%	19.3%	0.000	17.7%	18.3%	0.513	15.8%	16.8%	0.128
	College graduate	47.3%	35.7%	0.000	44.6%	39.8%	0.094	51.2%	55.8%	0.011
Household Characteristics	Uninsured	5.6%	8.4%	0.000	5.5%	7.4%	0.003	3.8%	3.3%	0.164
	Male	49.9%	49.9%	0.995	49.3%	50.8%	0.321	49.1%	49.3%	0.658
	Female	50.1%	50.1%	0.995	50.7%	49.2%	0.321	50.9%	50.7%	0.658
	Aged <=17	17.4%	17.3%	0.947	18.4%	15.9%	0.019	19.8%	16.2%	0.000
	Aged 18-64	58.0%	57.7%	0.656	60.8%	59.7%	0.517	63.1%	61.4%	0.117
	Aged >=65	24.6%	25.0%	0.668	20.9%	24.4%	0.025	17.1%	22.4%	0.000
	Disability proportion	14.8%	19.3%	0.000	15.1%	16.8%	0.193	11.9%	11.2%	0.170
	Single-parent households	4.2%	4.4%	0.670	5.1%	3.7%	0.063	5.9%	4.9%	0.174
Housing Type & Transportation	Limited English >5 years old	3.8%	3.3%	0.402	5.0%	6.2%	0.595	7.5%	5.6%	0.384
	Multi-unit structures	3.5%	3.7%	0.764	7.0%	2.2%	0.000	13.7%	6.5%	0.000
	Mobile homes	8.7%	15.4%	0.000	7.5%	10.1%	0.342	1.5%	3.6%	0.004
	Crowding	1.3%	1.5%	0.146	1.5%	0.9%	0.046	2.1%	0.7%	0.000
	No vehicle	5.3%	7.4%	0.000	7.0%	6.1%	0.452	9.7%	5.5%	0.000
	No internet	24.2%	33.0%	0.000	20.1%	26.6%	0.077	16.8%	12.5%	0.000
Group quarters	3.4%	2.8%	0.412	4.1%	4.2%	0.949	3.2%	4.6%	0.486	

Data: HRSA Data Warehouse. Rurality assigned using 2010 RUCA codes: Urban - 1.0-3.0, Large Rural - 4.0-6.0, Small Rural - 7.0 and higher

Mental Health HHS Region 2: New Jersey and New York

Small Rural Tracts. In small rural areas across Region 2, there were no statistically significant differences between Mental Health HPSA and non-HPSA tracts. Rates of poverty, unemployment, housing burden, educational attainment, insurance coverage, age distribution, disability, and housing conditions were similar across both groups.

Large Rural Tracts. HPSA tracts in large rural areas had a lower proportion of multi-unit structures (3.7 versus 6.0 percent, $p < 0.05$) was the only statistically significant difference observed between designated and non-designated tracts.

Urban Tracts. Urban Mental Health HPSA tracts had a lower share of individuals living below 150 percent of poverty (13.3 percent vs. 19.2 percent; $p < 0.001$), lower housing burden (23.2 percent vs. 29.4 percent; $p < 0.001$), and fewer residents without a high school diploma (6.0 percent vs. 11.9 percent; $p < 0.001$). However, these tracts also had fewer college graduates (43.9 percent vs. 48.1 percent; $p < 0.01$), more residents with only a high school diploma (11.8 percent vs. 8.3 percent; $p < 0.001$), and a higher share with some college education (19.2 percent vs. 15.2 percent; $p < 0.001$). HPSA tracts had fewer uninsured individuals (4.4 percent vs. 5.9 percent; $p < 0.001$), more residents aged 65 and older (22.3 percent vs. 16.6 percent; $p < 0.001$), and higher disability rates (13.5 percent vs. 11.1 percent; $p < 0.001$). Households in urban designated tracts had less vehicle access (4.7 percent vs. 23.5 percent without; $p < 0.001$) and higher rates of crowding (1.2 percent vs. 5.4 percent; $p < 0.001$) and a higher rate of mobile home residence (7.5 percent vs. 1.2 percent; $p < 0.001$) but a lower proportion of households without internet access (17.4 percent vs. 24.2 percent; $p < 0.001$).



Key Takeaways

- **Small rural HPSAs showed no statistically significant differences from non-HPSAs, indicating similar population and housing characteristics across designations.**
- **Large rural HPSAs had a lower share of multi-unit structures compared to non-HPSAs, though no other consistent differences emerged.**
- **Urban HPSAs had lower poverty, uninsured rates, and housing burden than non-HPSAs, but also had more mobile home residence, higher disability rates, and lower levels of college completion.**

Mental Health HPSAs and non-HPSAs: HHS Region 2

Variable Category	Variable Name	Small Rural Non-Area %	Small Rural Area %	p-value	Large Rural Non-Area %	Large Rural Area %	p-value	Urban Non-Area %	Urban Area %	p-value
Population and Tracts	N(est.)	728,330	105,635	-	908,406	54,568	-	27,147,229	299,274	-
	Number of tracts	283	42	-	274	16	-	6,885	92	-
Socio-economic Status	Below 150% poverty	23.5%	23.9%	0.741	23.4%	26.7%	0.151	19.2%	13.3%	0.000
	Unemployed	5.8%	5.1%	0.186	5.5%	5.8%	0.756	6.4%	5.6%	0.011
	Housing burden	24.1%	22.4%	0.096	25.9%	23.2%	0.195	29.4%	23.2%	0.000
	No High School Diploma	11.2%	9.7%	0.115	11.1%	12.8%	0.456	11.9%	6.0%	0.000
	High School Diploma	12.3%	13.4%	0.122	12.9%	14.0%	0.319	8.3%	11.8%	0.000
	Some College	16.4%	17.2%	0.234	17.7%	15.4%	0.062	15.2%	19.2%	0.000
	College graduate	38.1%	37.7%	0.848	37.7%	33.7%	0.085	48.1%	43.9%	0.002
Household Characteristics	Uninsured	6.0%	5.6%	0.568	4.7%	5.9%	0.248	5.9%	4.4%	0.000
	Male	51.2%	51.3%	0.867	50.6%	52.1%	0.504	48.9%	49.7%	0.014
	Female	48.8%	48.7%	0.867	49.4%	47.9%	0.504	51.1%	50.3%	0.014
	Aged <=17	19.0%	19.5%	0.654	20.1%	21.4%	0.366	21.1%	18.5%	0.000
	Aged 18-64	59.9%	59.8%	0.873	61.2%	59.3%	0.400	62.2%	59.2%	0.000
	Aged >=65	21.0%	20.8%	0.801	18.7%	19.3%	0.648	16.6%	22.3%	0.000
	Disability proportion	15.2%	15.8%	0.444	15.1%	16.3%	0.352	11.1%	13.5%	0.000
	Single-parent households	4.4%	4.6%	0.730	5.9%	6.2%	0.652	6.2%	4.0%	0.000
Housing Type & Transportation	Limited English >5 years old	9.0%	6.3%	0.237	7.8%	7.1%	0.875	9.4%	2.8%	0.000
	Multi-unit structures	3.2%	3.0%	0.713	6.0%	3.7%	0.018	24.8%	3.7%	0.000
	Mobile homes	14.8%	12.0%	0.113	8.5%	13.2%	0.115	1.2%	7.5%	0.000
	Crowding	1.8%	1.3%	0.066	1.6%	2.0%	0.426	5.4%	1.2%	0.000
	No vehicle	8.5%	9.7%	0.195	9.8%	11.2%	0.550	23.5%	4.7%	0.000
	No internet	32.4%	34.9%	0.566	26.2%	34.7%	0.093	24.2%	17.4%	0.000
Group quarters	7.4%	5.4%	0.359	5.9%	6.5%	0.897	2.4%	1.9%	0.495	

Data: HRSA Data Warehouse. Rurality assigned using 2010 RUCA codes: Urban - 1.0-3.0, Large Rural - 4.0-6.0, Small Rural - 7.0 and higher

Mental Health HHS Region 3: Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, and West Virginia

Small Rural Tracts. In small rural areas, Mental Health HPSA tracts had a higher share of residents living below 150 percent of poverty compared to non-HPSAs (26.8 versus 24.3 percent, $p < 0.01$), and a higher proportion of adults without a high school diploma (14.0 versus 12.3 percent, $p < 0.01$). HPSA tracts also had a larger proportion of residents with some college education (17.8 versus 16.9 percent, $p < 0.05$) and higher rates of disability (19.1 versus 16.9 percent, $p < 0.001$). Mobile home residence was also more common in designated (19.8 versus 16.5 percent, $p < 0.05$) as compared to non-designated tracts.

Large Rural Tracts. In large rural areas, HPSA tracts had a larger share of adults aged 18 to 64 (60.3 versus 58.1 percent, $p < 0.05$) and more residents with limited English proficiency (8.0 versus 4.5 percent, $p < 0.05$). These areas had a lower proportion of adults aged 65 and older (20.6 versus 22.7 percent, $p < 0.01$), and fewer single-parent households (4.7 versus 5.7 percent, $p < 0.05$). A greater share of households lacked internet access (36.4 versus 30.5 percent, $p < 0.05$), and there was a higher percentage of residents in group quarters (7.0 versus 3.7 percent, $p < 0.05$).

Urban Tracts. Urban Mental Health HPSAs in Region 3 had lower housing burden (21.6 versus 24.1 percent, $p < 0.001$) and fewer college graduates (36.0 versus 47.9 percent, $p < 0.001$). Tracts had a higher share with some college education (20.3 versus 16.8 percent, $p < 0.001$) and a higher share of residents aged 65 and older (17.7 versus 16.7 percent, $p < 0.01$). Disability rates were higher in HPSAs (14.1 versus 12.3 percent, $p < 0.001$). There were fewer residents with limited English proficiency (3.2 versus 5.5 percent, $p < 0.001$) and fewer without vehicle access (6.5 versus 9.2 percent, $p < 0.001$). Urban HPSAs also had a larger share of residents without internet access (26.8 versus 20.4 percent, $p < 0.001$).



Key Takeaways

- Designated HPSAs in small rural areas had higher poverty rates, more adults without a high school diploma, higher disability prevalence, and more mobile home residence than non-designated tracts.
- HPSAs in large rural areas had higher proportions of adults aged 18 to 64, more residents with limited English proficiency, fewer older adults and single-parent households, and a higher proportion of households without internet access than non-HPSAs.
- Urban HPSAs had lower housing burden, fewer levels of college graduates, more older adults, higher disability rates, and lower internet access, while having fewer uninsured than non-HPSA tracts.

Mental Health HPSAs and non-HPSAs: HHS Region 3

Variable Category	Variable Name	Small Rural Non-Area %	Small Rural Area %	p-value	Large Rural Non-Area %	Large Rural Area %	p-value	Urban Non-Area %	Urban Area %	p-value
Population and Tracts	N(est.)	1,000,532	638,209	-	1,500,484	376,014	-	25,871,301	1,846,075	-
	Number of tracts	321	206	-	455	107	-	6,582	462	-
Socio-economic Status	Below 150% poverty	24.3%	26.8%	0.007	23.0%	22.3%	0.574	17.4%	17.5%	0.817
	Unemployed	5.2%	5.2%	0.923	5.5%	5.2%	0.453	5.3%	5.0%	0.119
	Housing burden	21.7%	21.4%	0.693	22.6%	21.9%	0.401	24.1%	21.6%	0.000
	No High School Diploma	12.3%	14.0%	0.006	10.3%	10.8%	0.440	8.6%	9.3%	0.008
	High School Diploma	12.7%	12.2%	0.250	11.6%	11.5%	0.787	9.0%	11.7%	0.000
	Some College	16.9%	17.8%	0.042	17.6%	16.9%	0.166	16.8%	20.3%	0.000
	College graduate	28.2%	28.1%	0.840	32.1%	31.5%	0.625	47.9%	36.0%	0.000
	Uninsured	7.1%	7.1%	0.855	6.5%	6.4%	0.786	6.0%	5.3%	0.001
Household Characteristics	Male	50.4%	50.4%	0.998	49.6%	50.9%	0.081	49.1%	49.6%	0.029
	Female	49.6%	49.6%	0.998	50.4%	49.1%	0.081	50.9%	50.4%	0.029
	Aged <=17	19.3%	19.3%	0.976	19.2%	19.1%	0.771	21.3%	21.5%	0.639
	Aged 18-64	58.4%	57.5%	0.119	58.1%	60.3%	0.016	61.9%	60.8%	0.000
	Aged >=65	22.2%	23.2%	0.084	22.7%	20.6%	0.006	16.7%	17.7%	0.001
	Disability proportion	16.9%	19.1%	0.000	16.9%	16.9%	0.991	12.3%	14.1%	0.000
	Single-parent households	5.0%	5.2%	0.640	5.7%	4.7%	0.019	6.3%	6.1%	0.483
	Limited English >5 years old	5.7%	5.9%	0.832	4.5%	8.0%	0.038	5.5%	3.2%	0.000
Housing Type & Transportation	Multi-unit structures	2.7%	2.5%	0.580	4.7%	4.7%	0.971	12.9%	7.4%	0.000
	Mobile homes	16.5%	19.8%	0.011	11.8%	13.5%	0.242	3.0%	6.9%	0.000
	Crowding	1.2%	1.4%	0.200	1.4%	1.2%	0.298	2.0%	1.7%	0.002
	No vehicle	7.5%	7.3%	0.677	7.7%	7.0%	0.325	9.2%	6.5%	0.000
	No internet	37.9%	39.4%	0.407	30.5%	36.4%	0.015	20.4%	26.8%	0.000
	Group quarters	4.7%	4.9%	0.890	3.7%	7.0%	0.048	2.6%	2.1%	0.147

Data: HRSA Data Warehouse. Rurality assigned using 2010 RUCA codes: Urban - 1.0-3.0, Large Rural - 4.0-6.0, Small Rural - 7.0 and higher

Mental Health HHS Region 4: Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee

Small Rural Tracts. In small rural areas, Mental Health HPSA tracts had a higher share of residents living below 150 percent of poverty (33.4 percent vs. 29.2 percent; $p < 0.001$) and higher unemployment (6.3 percent vs. 5.8 percent; $p < 0.05$). Educational attainment was lower, with more residents without a high school diploma (17.3 percent vs. 15.7 percent; $p < 0.001$), fewer with only a high school diploma (13.7 percent vs. 14.3 percent; $p < 0.05$), and fewer college graduates (24.9 percent vs. 27.5 percent; $p < 0.001$). HPSA tracts also had more single-parent households (7.3 percent vs. 5.9 percent; $p < 0.001$), higher rates of mobile home residence (29.8 percent vs. 26.1 percent; $p < 0.001$), more crowding (2.3 percent vs. 2.0 percent; $p < 0.05$), more without vehicle access (7.2 percent vs. 6.3 percent; $p < 0.01$), and more residents without internet access (47.0 percent vs. 40.8 percent; $p < 0.001$) as compared to non-designated areas.

Large Rural Tracts. Among large rural tracts, Mental Health HPSAs had a higher proportion of residents living below 150 percent of poverty (30.9 versus 27.9 percent, $p < 0.001$) and more residents with some college education (20.4 versus 21.0 percent, $p < 0.05$). HPSAs also had more children under age 18 (22.3 versus 21.7 percent, $p < 0.05$) and fewer adults aged 65 and older (18.2 versus 18.9 percent, $p < 0.05$). Uninsurance was more prevalent (11.1 versus 10.6 percent, $p < 0.05$), and a higher share of without internet access (41.6 versus 36.2 percent, $p < 0.001$) compared to non-designated tracts.

Urban Tracts. Urban HPSAs in Region 4 had higher rates of poverty (23.1 versus 21.6 percent, $p < 0.001$), more residents without a high school diploma (11.3 versus 10.2 percent, $p < 0.001$), and fewer college graduates (36.4 versus 44.2 percent, $p < 0.001$). The uninsured rate was lower (10.5 versus 11.0 percent, $p < 0.01$) as compared to non-HPSAs. Vehicle access was more common in HPSAs (only 4.9 percent without access versus 5.6 percent, $p < 0.001$), but mobile home residence (15.2 versus 8.1 percent, $p < 0.001$) and a lack of internet access (29.3 versus 23.0 percent, $p < 0.001$) were more common.



Key Takeaways

- **Small rural HPSAs had higher poverty, unemployment, more residents with no high school diploma, and fewer college graduates.**
- **Large rural HPSAs had higher poverty rates, a slightly older population, and lower share of households without internet access.**
- **Urban HPSAs had lower educational attainment, more mobile home residence, and lower internet access, but lower housing burden, fewer older adults, and slightly better vehicle access.**

Mental Health HPSAs and non-HPSAs: HHS Region 4

Variable Category	Variable Name	Small Rural Non-Area %	Small Rural Area %	p-value	Large Rural Non-Area %	Large Rural Area %	p-value	Urban Non-Area %	Urban Area %	p-value
Population and Tracts	N(est.)	1,626,017	2,856,634	-	3,018,669	4,273,644	-	47,012,506	8,595,993	-
	Number of tracts	566	980	-	820	1,237	-	11,443	2,227	-
Socio-economic Status	Below 150% poverty	29.2%	33.4%	0.000	27.9%	30.9%	0.000	21.6%	23.1%	0.000
	Unemployed	5.8%	6.3%	0.045	5.5%	5.8%	0.177	5.1%	5.3%	0.070
	Housing burden	22.9%	22.8%	0.680	23.8%	24.6%	0.050	28.0%	23.7%	0.000
	No High School Diploma	15.7%	17.3%	0.000	14.4%	14.5%	0.835	10.2%	11.3%	0.000
	High School Diploma	14.3%	13.7%	0.018	13.3%	13.1%	0.347	10.2%	12.4%	0.000
	Some College	20.1%	19.8%	0.193	21.0%	20.4%	0.022	19.6%	21.5%	0.000
	College graduate	27.5%	24.9%	0.000	30.5%	30.4%	0.826	44.2%	36.4%	0.000
Household Characteristics	Uninsured	11.2%	10.7%	0.138	10.6%	11.1%	0.025	11.0%	10.5%	0.001
	Male	50.2%	50.0%	0.591	49.3%	49.2%	0.646	48.9%	49.4%	0.000
	Female	49.8%	50.0%	0.591	50.7%	50.8%	0.646	51.1%	50.6%	0.000
	Aged <=17	19.8%	21.8%	0.000	21.7%	22.3%	0.024	21.2%	22.8%	0.000
	Aged 18-64	58.5%	58.7%	0.550	59.5%	59.5%	0.895	61.1%	60.7%	0.020
	Aged >=65	21.7%	19.5%	0.000	18.9%	18.2%	0.045	17.7%	16.6%	0.000
	Disability proportion	18.4%	19.5%	0.000	17.1%	16.9%	0.481	12.8%	15.0%	0.000
	Single-parent households	5.9%	7.3%	0.000	6.9%	7.9%	0.000	6.8%	7.1%	0.055
Housing Type & Transportation	Limited English >5 years old	5.9%	5.6%	0.702	5.0%	4.9%	0.782	6.3%	3.8%	0.000
	Multi-unit structures	2.5%	1.9%	0.019	3.6%	3.9%	0.439	13.6%	5.6%	0.000
	Mobile homes	26.1%	29.8%	0.000	20.1%	21.9%	0.019	8.1%	15.2%	0.000
	Crowding	2.0%	2.3%	0.035	2.3%	2.3%	0.649	2.7%	2.1%	0.000
	No vehicle	6.3%	7.2%	0.002	5.6%	6.5%	0.000	5.6%	4.9%	0.000
	No internet	40.8%	47.0%	0.000	36.2%	41.6%	0.000	23.0%	29.3%	0.000
	Group quarters	4.5%	4.3%	0.743	3.2%	3.6%	0.329	2.1%	2.4%	0.130

Data: HRSA Data Warehouse. Rurality assigned using 2010 RUCA codes: Urban - 1.0-3.0, Large Rural - 4.0-6.0, Small Rural - 7.0 and higher

Mental Health HHS Region 5: Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin

Small Rural Tracts. In small rural areas, Mental Health HPSA tracts had higher shares of residents without a high school diploma (10.3 percent vs. 8.7 percent; $p < 0.001$), with only a high school diploma (13.0 percent vs. 12.1 percent; $p < 0.001$), and without health insurance (8.0 percent vs. 7.0 percent; $p < 0.05$). College completion was lower (30.9 percent vs. 32.5 percent; $p < 0.01$). These tracts also had a smaller share of residents living in multi-unit structures (3.6 percent vs. 4.6 percent; $p < 0.05$) and lacked vehicle access (6.4 percent vs. 5.7 percent; $p < 0.05$) as compared to non-designated tracts.

Large Rural Tracts. HPSA tracts in large rural areas showed lower educational attainment, with more residents lacking a high school diploma (10.0 percent vs. 7.6 percent; $p < 0.001$) and fewer with a college degree (31.0 percent vs. 36.2 percent; $p < 0.001$). These tracts also had higher uninsurance (6.5 percent vs. 5.6 percent; $p < 0.001$), higher proportion in mobile homes (8.5 percent vs. 6.7 percent; $p < 0.001$), and a larger share of residents with disabilities (15.5 percent vs. 14.1 percent; $p < 0.001$) than non-designated tracts.

Urban Tracts. Urban Mental Health HPSA tracts had lower educational attainment across all levels. Fewer residents held college degrees (38.1 percent vs. 46.9 percent; $p < 0.001$), while more lacked a high school diploma (9.6 percent vs. 8.2 percent; $p < 0.001$) or had only a high school diploma (11.7 percent vs. 9.8 percent; $p < 0.001$). These tracts also had higher poverty (21.4 percent vs. 18.5 percent; $p < 0.001$), uninsurance (6.5 percent vs. 5.7 percent; $p < 0.001$), and disability rates (12.9 percent vs. 11.9 percent; $p < 0.001$). Mobile home residence (4.2 percent vs. 2.2 percent; $p < 0.001$), lack of internet access (24.3 percent vs. 18.8 percent; $p < 0.001$), and group quarters (2.5 percent vs. 1.9 percent; $p < 0.01$) were also more common as compared to non-designated tracts.



Key Takeaways

- **Poverty, limited education, and higher disability rates were more common in HPSA tracts across all geographies.**
- **Lack of internet access appeared more frequently in HPSAs, particularly in large rural and urban areas.**
- **Urban HPSAs had the widest differences from non-HPSAs, with substantial gaps in educational attainment, housing conditions, and income levels.**

Mental Health HPSAs and non-HPSAs: HHS Region 5

Variable Category	Variable Name	Small Rural Non-Area %	Small Rural Area %	p-value	Large Rural Non-Area %	Large Rural Area %	p-value	Urban Non-Area %	Urban Area %	p-value
Population and Tracts	N(est.)	1,233,171	3,649,512	-	2,021,599	3,506,096	-	31,259,103	11,282,580	-
	Number of tracts	375	1,179	-	531	949	-	8,201	2,958	-
Socio-economic Status	Below 150% poverty	19.9%	21.2%	0.014	22.3%	22.8%	0.450	18.5%	21.4%	0.000
	Unemployed	4.2%	4.3%	0.359	4.7%	4.8%	0.748	5.3%	5.7%	0.001
	Housing burden	20.5%	20.3%	0.541	22.6%	21.6%	0.075	24.4%	24.4%	0.757
	No High School Diploma	8.7%	10.3%	0.000	7.6%	10.0%	0.000	8.2%	9.6%	0.000
	High School Diploma	12.1%	13.0%	0.000	12.1%	13.0%	0.001	9.8%	11.7%	0.000
	Some College	21.2%	21.2%	0.905	21.3%	20.8%	0.061	19.7%	21.6%	0.000
	College graduate	32.5%	30.9%	0.006	36.2%	31.0%	0.000	46.9%	38.1%	0.000
Household Characteristics	Uninsured	7.0%	8.0%	0.013	5.6%	6.5%	0.000	5.7%	6.5%	0.000
	Male	50.5%	50.8%	0.196	50.4%	50.3%	0.604	49.4%	49.6%	0.017
	Female	49.5%	49.2%	0.196	49.6%	49.7%	0.604	50.6%	50.4%	0.017
	Aged <=17	21.9%	21.7%	0.547	20.0%	21.7%	0.000	22.1%	22.8%	0.000
	Aged 18-64	57.1%	56.7%	0.156	61.3%	59.0%	0.000	61.7%	61.0%	0.000
	Aged >=65	20.9%	21.6%	0.084	18.7%	19.4%	0.059	16.2%	16.2%	0.938
	Disability proportion	14.2%	15.5%	0.000	14.1%	15.5%	0.000	11.9%	12.9%	0.000
	Single-parent households	4.9%	4.8%	0.525	5.4%	5.7%	0.307	6.3%	6.8%	0.000
Housing Type & Transportation	Limited English >5 years old	4.3%	3.5%	0.144	5.9%	4.8%	0.113	4.3%	4.7%	0.124
	Multi-unit structures	4.6%	3.6%	0.015	8.2%	5.5%	0.000	13.4%	7.9%	0.000
	Mobile homes	9.4%	11.1%	0.005	6.7%	8.5%	0.000	2.2%	4.2%	0.000
	Crowding	1.7%	1.7%	0.601	1.5%	1.6%	0.229	2.0%	1.9%	0.158
	No vehicle	5.7%	6.4%	0.014	6.1%	6.4%	0.324	7.8%	7.6%	0.387
	No internet	32.2%	34.8%	0.073	24.9%	29.5%	0.000	18.8%	24.3%	0.000
	Group quarters	3.4%	2.7%	0.165	5.0%	3.8%	0.085	1.9%	2.5%	0.001

Data: HRSA Data Warehouse. Rurality assigned using 2010 RUCA codes: Urban - 1.0-3.0, Large Rural - 4.0-6.0, Small Rural - 7.0 and higher

Mental Health HHS Region 6: Arkansas, Louisiana, New Mexico, Oklahoma, and Texas

Small Rural Tracts. Small rural HPSA-designated tracts had higher shares of individuals below 150 percent of the poverty line (31.4 percent vs. 29.0 percent, $p < 0.01$), without a high school diploma (17.6 percent vs. 14.0 percent, $p < 0.001$), and without health insurance (14.4 percent vs. 12.0 percent, $p < 0.001$) compared to non-HPSA tracts. College completion was lower in HPSA tracts (23.2 percent vs. 27.5 percent, $p < 0.001$), and there were greater shares of households without internet access (50.7 percent vs. 41.8 percent, $p < 0.001$) and crowding (3.5 percent vs. 2.7 percent, $p < 0.001$). HPSA tracts also had a larger share of residents aged 17 or younger (23.1 percent vs. 22.0 percent, $p < 0.01$) and fewer aged 65 or older (19.2 percent vs. 20.9 percent, $p < 0.01$) as compared to non-designated tracts.

Large Rural Tracts. In large rural areas, HPSA tracts had higher poverty (30.9 percent vs. 28.7 percent; $p < 0.01$), more residents without a high school diploma (16.7 percent vs. 13.9 percent; $p < 0.001$), and more group quarters residents (42.9 percent vs. 36.7 percent; $p < 0.001$). A larger share of crowding (4.1 percent vs. 3.3 percent; $p < 0.01$), and a higher rate of mobile home residence (18.2 percent vs. 15.6 percent; $p < 0.01$). Disability rates were lower (15.8 percent vs. 18.2 percent; $p < 0.001$), and the share of older adults was slightly smaller (16.7 percent vs. 17.7 percent; $p < 0.05$) as compared to non-designated tracts.

Urban Tracts. HPSA areas had higher poverty (27.5 percent vs. 22.5 percent, $p < 0.001$), more residents without a high school diploma (16.9 percent vs. 13.3 percent, $p < 0.001$), and lower college graduation rates (32.8 percent vs. 41.7 percent, $p < 0.001$). These tracts also had greater share of households without internet access (37.5 percent vs. 24.0 percent, $p < 0.001$), in mobile homes (17.2 percent vs. 5.5 percent, $p < 0.001$), and crowding (5.2 percent vs. 4.3 percent, $p < 0.001$) than non-designated tracts.



Key Takeaways

- HPSA tracts across Region 6 had consistently higher poverty, lower educational attainment, and greater mobile home residence than non-HPSAs.
- Children, households without internet access, and single-parent households were more common in HPSA tracts across rural and urban settings.
- Urban HPSAs had the largest differences in social and housing indicators, including education, household composition, and disability.

Mental Health HPSAs and non-HPSAs: HHS Region 6

Variable Category	Variable Name	Small Rural Non-Area %	Small Rural Area %	p-value	Large Rural Non-Area %	Large Rural Area %	p-value	Urban Non-Area %	Urban Area %	p-value
Population and Tracts	N(est.)	1,102,473	2,056,733	-	1,430,973	2,749,902	-	28,425,590	7,219,846	-
	Number of tracts	366	725	-	390	779	-	6,787	1,877	-
Socio-economic Status	Below 150% poverty	29.0%	31.4%	0.001	28.7%	30.9%	0.005	22.5%	27.5%	0.000
	Unemployed	5.6%	5.8%	0.410	5.5%	5.9%	0.135	5.4%	5.6%	0.089
	Housing burden	21.3%	21.4%	0.794	24.2%	24.8%	0.358	27.3%	24.2%	0.000
	No High School Diploma	14.0%	17.6%	0.000	13.9%	16.7%	0.000	13.3%	16.9%	0.000
	High School Diploma	13.9%	13.9%	0.889	14.4%	13.6%	0.007	10.4%	11.7%	0.000
	Some College	22.5%	21.8%	0.069	22.5%	21.9%	0.056	20.9%	21.4%	0.009
	College graduate	27.5%	23.2%	0.000	28.4%	28.2%	0.818	41.7%	32.8%	0.000
Household Characteristics	Uninsured	12.0%	14.4%	0.000	13.6%	14.4%	0.077	15.0%	15.7%	0.016
	Male	50.2%	51.5%	0.006	49.6%	50.7%	0.002	49.7%	49.8%	0.286
	Female	49.8%	48.5%	0.006	50.4%	49.3%	0.002	50.3%	50.2%	0.286
	Aged <=17	22.0%	23.1%	0.005	23.0%	24.1%	0.005	24.7%	25.7%	0.000
	Aged 18-64	57.1%	57.7%	0.256	59.2%	59.2%	0.940	62.4%	59.7%	0.000
	Aged >=65	20.9%	19.2%	0.001	17.7%	16.7%	0.010	12.9%	14.5%	0.000
	Disability proportion	18.8%	17.9%	0.018	18.2%	15.8%	0.000	11.7%	13.7%	0.000
	Single-parent households	6.0%	7.1%	0.000	6.8%	8.1%	0.000	7.6%	7.9%	0.076
Housing Type & Transportation	Limited English >5 years old	6.4%	8.8%	0.013	6.5%	9.0%	0.001	7.5%	7.8%	0.191
	Multi-unit structures	2.3%	2.1%	0.342	5.2%	4.9%	0.532	14.7%	6.2%	0.000
	Mobile homes	18.5%	24.6%	0.000	15.6%	18.2%	0.011	5.5%	17.2%	0.000
	Crowding	2.7%	3.5%	0.000	3.3%	4.1%	0.001	4.3%	5.2%	0.000
	No vehicle	6.1%	6.6%	0.209	5.8%	6.4%	0.075	5.4%	5.0%	0.010
	No internet	41.8%	50.7%	0.000	36.7%	42.9%	0.000	24.0%	37.5%	0.000
	Group quarters	4.6%	5.6%	0.240	4.4%	4.7%	0.721	1.7%	2.1%	0.067

Data: HRSA Data Warehouse. Rurality assigned using 2010 RUCA codes: Urban - 1.0-3.0, Large Rural - 4.0-6.0, Small Rural - 7.0 and higher

Mental Health HHS Region 7: Iowa, Kansas, Missouri, and Nebraska

Small Rural Tracts. In small rural areas, Mental Health HPSA tracts had lower rates of poverty (20.3 percent vs. 25.4 percent; $p < 0.001$), unemployment (3.1 percent vs. 4.4 percent; $p < 0.001$), and uninsurance (7.3 percent vs. 10.4 percent; $p < 0.001$) than non-HPSA tracts. Housing burden (18.7 percent vs. 21.7 percent; $p < 0.001$) and mobile home residence (6.1 percent vs. 13.3 percent; $p < 0.001$) were also less common. Educational attainment was higher, with more college graduates (33.4 percent vs. 28.8 percent; $p < 0.001$) and fewer residents lacking a high school diploma (8.8 percent vs. 11.0 percent; $p < 0.001$). The share of residents under age 18 was slightly higher in HPSAs (23.2 percent vs. 22.3 percent; $p < 0.01$) as compared to non-designated tracts.

Large Rural Tracts. In large rural areas, HPSA tracts had lower poverty (22.3 percent vs. 26.9 percent; $p < 0.001$), unemployment (3.6 percent vs. 4.8 percent; $p < 0.001$), and uninsured rates (8.0 percent vs. 10.3 percent; $p < 0.001$). A higher share of residents held college degrees (35.7 percent vs. 31.9 percent; $p < 0.001$), and mobile home residence was less common (6.7 percent vs. 10.4 percent; $p < 0.001$). Disability rates were lower (14.3 percent vs. 15.9 percent; $p < 0.001$), while the proportion of adults aged 65 and older was slightly higher (18.2 percent vs. 16.8 percent; $p < 0.05$) than non-designated tracts.

Urban Tracts. Urban Mental Health HPSA tracts had more residents without a high school diploma (8.2 percent vs. 7.3 percent; $p < 0.05$), fewer college graduates (40.3 percent vs. 46.5 percent; $p < 0.001$), and higher levels of mobile home residence (5.7 percent vs. 3.2 percent; $p < 0.001$). These tracts also had a higher proportion of households without internet access (23.4 percent vs. 20.2 percent; $p < 0.01$), but fewer households lacked vehicle access (4.6 percent vs. 5.8 percent; $p < 0.001$) as compared to non-designated tracts.



Key Takeaways

- Across all geographies, HPSA tracts in Region 7 had lower disability rates and lower housing burden than non-HPSAs.
- Small and large rural HPSAs showed educational advantages and fewer social risks relative to non-HPSAs.
- Urban HPSAs had more mobile home residence, lower educational attainment, and a lower share of households with internet access.

Mental Health HPSAs and non-HPSAs: HHS Region 7

Variable Category	Variable Name	Small Rural Non-Area %	Small Rural Area %	p-value	Large Rural Non-Area %	Large Rural Area %	p-value	Urban Non-Area %	Urban Area %	p-value
Population and Tracts	N(est.)	964,110	1,668,864	-	885,611	1,151,632	-	8,693,122	874,780	-
	Number of tracts	314	576	-	239	329	-	2,236	238	-
Socio-economic Status	Below 150% poverty	25.4%	20.3%	0.000	26.9%	22.3%	0.000	18.7%	19.2%	0.524
	Unemployed	4.4%	3.1%	0.000	4.8%	3.6%	0.000	4.2%	3.3%	0.000
	Housing burden	21.7%	18.7%	0.000	23.6%	22.7%	0.213	23.5%	21.8%	0.007
	No High School Diploma	11.0%	8.8%	0.000	11.0%	10.1%	0.171	7.3%	8.2%	0.031
	High School Diploma	13.4%	12.8%	0.028	13.8%	13.4%	0.332	10.8%	12.0%	0.000
	Some College	20.9%	22.2%	0.000	21.8%	22.9%	0.035	21.1%	21.9%	0.029
	College graduate	28.8%	33.4%	0.000	31.9%	35.7%	0.000	46.5%	40.3%	0.000
Household Characteristics	Uninsured	10.4%	7.3%	0.000	10.3%	8.0%	0.000	7.6%	7.6%	0.954
	Male	50.4%	50.6%	0.540	51.0%	50.3%	0.112	49.4%	50.5%	0.000
	Female	49.6%	49.4%	0.540	49.0%	49.7%	0.112	50.6%	49.5%	0.000
	Aged <=17	22.3%	23.2%	0.006	22.8%	23.4%	0.221	23.1%	23.5%	0.267
	Aged 18-64	56.2%	55.7%	0.208	60.4%	58.4%	0.002	61.3%	60.0%	0.010
	Aged >=65	21.5%	21.1%	0.257	16.8%	18.2%	0.012	15.6%	16.5%	0.036
	Disability proportion	16.9%	14.5%	0.000	15.9%	14.3%	0.000	12.1%	12.9%	0.022
	Single-parent households	5.0%	4.8%	0.419	6.4%	6.3%	0.710	6.2%	5.3%	0.000
Housing Type & Transportation	Limited English >5 years old	4.0%	5.0%	0.029	7.9%	6.3%	0.130	3.9%	4.5%	0.343
	Multi-unit structures	4.1%	3.3%	0.097	5.6%	6.0%	0.479	11.4%	9.6%	0.066
	Mobile homes	13.3%	6.1%	0.000	10.4%	6.7%	0.000	3.2%	5.7%	0.000
	Crowding	2.0%	1.4%	0.000	2.0%	2.1%	0.814	1.8%	1.9%	0.596
	No vehicle	5.5%	5.0%	0.064	6.1%	5.9%	0.612	5.8%	4.6%	0.000
	No internet	36.2%	29.7%	0.000	30.3%	27.4%	0.043	20.2%	23.4%	0.002
	Group quarters	3.2%	3.6%	0.370	6.3%	3.5%	0.004	2.2%	2.5%	0.618

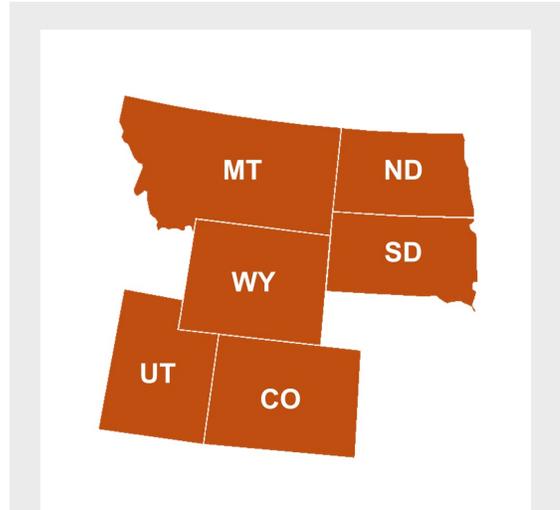
Data: HRSA Data Warehouse. Rurality assigned using 2010 RUCA codes: Urban - 1.0-3.0, Large Rural - 4.0-6.0, Small Rural - 7.0 and higher

Mental Health HHS Region 8: Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming

Small Rural Tracts. In Region 8, small rural Mental Health HPSA tracts had higher poverty rates (22.3 percent vs. 19.0 percent; $p < 0.05$), lower college graduation rates (38.1 percent vs. 46.6 percent; $p < 0.001$), and a greater share of adults without a high school diploma (8.1 percent vs. 5.8 percent; $p < 0.001$). These tracts also had a higher share of households without internet access (31.7 percent vs. 25.8 percent; $p < 0.05$) and higher levels of mobile home residence (14.5 percent vs. 9.0 percent; $p < 0.001$). Households in HPSA areas were more likely to lack vehicle access (4.3 percent vs. 3.0 percent; $p < 0.01$), and the proportion of male residents was slightly higher (51.7 percent vs. 50.5 percent; $p < 0.05$) as compared to non-designated tracts.

Large Rural Tracts. Among large rural tracts, HPSA areas had lower educational attainment, with fewer college graduates (42.7 percent vs. 54.0 percent; $p < 0.001$) and more residents lacking a high school diploma (7.0 percent vs. 4.0 percent; $p < 0.001$). These tracts had a larger share of children under age 18 (23.6 percent vs. 19.9 percent; $p < 0.01$) and adults aged 65 and older (15.9 percent vs. 13.4 percent; $p < 0.05$). Uninsurance (9.3 percent vs. 6.6 percent; $p < 0.001$) and unemployment (3.7 percent vs. 2.8 percent; $p < 0.05$) were both more common. HPSA tracts also had higher rate of mobile home residence (10.1 percent vs. 6.8 percent; $p < 0.05$) and more single-parent households (4.9 percent vs. 3.5 percent; $p < 0.01$) than non-designated tracts.

Urban Tracts. Urban Mental Health HPSA tracts had lower college graduation rates (46.6 percent vs. 53.6 percent; $p < 0.001$), more crowding (4.2 percent vs. 2.7 percent; $p < 0.001$), and higher uninsurance rates (8.6 percent vs. 7.0 percent; $p < 0.001$). These tracts also had a larger share of residents under age 18 (25.9 percent vs. 22.4 percent; $p < 0.001$), higher share of households without internet access (17.9 percent vs. 14.3 percent; $p < 0.001$), and slightly more crowding (2.9 percent vs. 2.4 percent; $p < 0.01$).



Key Takeaways

- Mental health HPSA tracts in Region 8 had lower educational attainment and higher poverty rates, especially in rural areas.
- Indicators such as lack of vehicle access, mobile home residence, and uninsured status were more prevalent in HPSAs across all geography types.
- Urban HPSAs showed consistent differences from non-HPSAs across socio-economic, housing, and access-related measures.

Mental Health HPSAs and non-HPSAs: HHS Region 8

Variable Category	Variable Name	Small Rural Non-Area %	Small Rural Area %	p-value	Large Rural Non-Area %	Large Rural Area %	p-value	Urban Non-Area %	Urban Area %	p-value
Population and Tracts	N(est.)	115,651	1,639,591	-	177,095	1,280,208	-	5,059,031	4,120,008	-
	Number of tracts	45	583	-	38	320	-	1,175	951	-
Socio-economic Status	Below 150% poverty	19.0%	22.3%	0.010	18.2%	18.4%	0.929	14.6%	16.9%	0.000
	Unemployed	3.5%	4.0%	0.262	2.8%	3.7%	0.024	3.9%	4.1%	0.058
	Housing burden	22.2%	21.5%	0.644	25.0%	23.0%	0.166	24.4%	24.3%	0.854
	No High School Diploma	5.8%	8.1%	0.000	4.0%	7.0%	0.000	7.0%	7.0%	0.982
	High School Diploma	9.3%	11.8%	0.000	9.3%	12.3%	0.000	9.5%	11.4%	0.000
	Some College	22.4%	23.3%	0.277	20.9%	22.3%	0.100	19.6%	24.1%	0.000
	College graduate	46.6%	38.1%	0.000	54.0%	42.7%	0.000	53.6%	46.6%	0.000
Household Characteristics	Uninsured	9.3%	10.8%	0.107	6.6%	9.3%	0.000	7.0%	8.6%	0.000
	Male	50.5%	51.7%	0.011	52.3%	51.3%	0.145	50.5%	50.5%	0.932
	Female	49.5%	48.3%	0.011	47.7%	48.7%	0.145	49.5%	49.5%	0.932
	Aged <=17	22.7%	22.8%	0.913	19.9%	23.6%	0.002	22.4%	25.9%	0.000
	Aged 18-64	55.9%	56.7%	0.411	66.7%	60.5%	0.000	63.9%	60.9%	0.000
	Aged >=65	21.4%	20.5%	0.535	13.4%	15.9%	0.028	13.6%	13.2%	0.152
	Disability proportion	11.9%	13.7%	0.013	10.4%	11.7%	0.085	10.0%	11.2%	0.000
	Single-parent households	4.6%	4.5%	0.824	3.5%	4.9%	0.005	5.5%	5.3%	0.503
Housing Type & Transportation	Limited English >5 years old	4.2%	4.5%	0.653	4.4%	4.8%	0.856	4.2%	4.1%	0.841
	Multi-unit structures	4.3%	5.2%	0.453	15.2%	9.7%	0.023	17.8%	10.9%	0.000
	Mobile homes	9.0%	14.5%	0.000	6.8%	10.1%	0.036	2.7%	4.2%	0.000
	Crowding	1.6%	2.6%	0.004	2.0%	2.4%	0.264	2.4%	2.9%	0.001
	No vehicle	3.0%	4.3%	0.001	3.5%	4.4%	0.167	4.8%	3.9%	0.000
	No internet	25.8%	31.7%	0.013	17.5%	21.4%	0.084	14.3%	17.9%	0.000
	Group quarters	3.1%	3.4%	0.696	4.0%	3.3%	0.728	1.8%	2.0%	0.518

Data: HRSA Data Warehouse. Rurality assigned using 2010 RUCA codes: Urban - 1.0-3.0, Large Rural - 4.0-6.0, Small Rural - 7.0 and higher

Mental Health HHS Region 9: Arizona, California, Hawaii, and Nevada

Small Rural Tracts. In Region 9, small rural HPSA tracts had higher rates of poverty (30.0 percent vs. 23.6 percent, $p < 0.001$), unemployment (8.5 percent vs. 7.4 percent, $p < 0.05$), and uninsured residents (9.3 percent vs. 8.0 percent, $p < 0.05$) than non-HPSA tracts. Educational attainment differed as well: HPSA tracts had a lower share of college graduates (27.5 percent vs. 35.9 percent, $p < 0.001$) and a higher share of residents without a high school diploma (16.5 percent vs. 11.8 percent, $p < 0.001$). Households without internet access were more prevalent (48.0 percent vs. 29.9 percent, $p < 0.001$), and there was a higher rate of crowding (6.4 percent vs. 5.1 percent, $p < 0.05$). Children under age 18 made up a larger share of the population in HPSA tracts (22.3 percent vs. 19.7 percent, $p < 0.01$), while the share of those aged 65 and older was smaller (20.4 percent vs. 23.1 percent, $p < 0.05$) as compared to non-designated tracts.

Large Rural Tracts. Among large rural tracts, HPSA areas had higher rates of residents without a high school diploma (17.6 percent vs. 11.6 percent, $p < 0.001$) and lower shares of college graduates (29.4 percent vs. 36.8 percent, $p < 0.001$). HPSA tracts also had higher proportions of children under age 18 (23.2 percent vs. 20.4 percent, $p < 0.001$) and fewer older adults (18.5 percent vs. 22.0 percent, $p < 0.001$). These areas had higher uninsurance (7.9 percent vs. 6.8 percent, $p < 0.05$), higher proportion without internet access (32.3 percent vs. 23.0 percent, $p < 0.001$), and greater crowding (6.9 percent vs. 5.6 percent, $p < 0.05$).

Urban Tracts. In urban tracts, HPSA areas had lower college graduation rates (31.4 percent vs. 45.0 percent, $p < 0.001$) and higher rates of residents without a high school diploma (21.1 percent vs. 14.1 percent, $p < 0.001$). Uninsurance was also more common (8.4 percent vs. 7.5 percent, $p < 0.001$), and there were more residents under age 18 (24.9 percent vs. 21.7 percent, $p < 0.001$). HPSA tracts had a higher rate of mobile home residence (5.9 percent vs. 3.7 percent, $p < 0.001$), less internet access (27.6 percent vs. 18.9 percent, $p < 0.001$), and more crowding (9.7 percent vs. 8.2 percent, $p < 0.001$).



Key Takeaways

- HPSA-designated tracts across Region 9 had lower levels of educational attainment and higher rates of poverty and unemployment, particularly in rural areas.
- Children, uninsured individuals, and households without internet were more commonly found in HPSA tracts across all geographic classifications.
- Urban HPSAs showed widespread differences from non-HPSAs, especially in socio-economic and housing conditions.

Mental Health HPSAs and non-HPSAs: HHS Region 9

Variable Category	Variable Name	Small Rural Non-Area %	Small Rural Area %	p-value	Large Rural Non-Area %	Large Rural Area %	p-value	Urban Non-Area %	Urban Area %	p-value
Population and Tracts	N(est.)	498,809	791,423	-	724,553	1,594,024	-	39,362,223	8,112,760	-
	Number of tracts	194	278	-	193	427	-	9,185	1,857	-
Socio-economic Status	Below 150% poverty	23.6%	30.0%	0.000	24.1%	26.0%	0.072	18.8%	25.2%	0.000
	Unemployed	7.4%	8.5%	0.038	7.4%	7.5%	0.688	6.0%	7.7%	0.000
	Housing burden	26.5%	25.3%	0.260	29.1%	28.8%	0.759	28.1%	32.4%	0.000
	No High School Diploma	11.8%	16.5%	0.000	11.6%	17.6%	0.000	14.1%	21.1%	0.000
	High School Diploma	11.8%	11.9%	0.814	11.4%	12.2%	0.046	8.6%	10.1%	0.000
	Some College	25.6%	25.8%	0.821	24.8%	24.8%	0.998	20.3%	22.9%	0.000
	College graduate	35.9%	27.5%	0.000	36.8%	29.4%	0.000	45.0%	31.4%	0.000
Household Characteristics	Uninsured	8.0%	9.3%	0.050	6.8%	7.9%	0.014	7.5%	8.4%	0.000
	Male	52.1%	52.2%	0.904	49.8%	51.6%	0.000	50.0%	50.2%	0.104
	Female	47.9%	47.8%	0.904	50.2%	48.4%	0.000	50.0%	49.8%	0.104
	Aged <=17	19.7%	22.3%	0.002	20.4%	23.2%	0.000	21.7%	24.9%	0.000
	Aged 18-64	57.3%	57.3%	0.963	57.6%	58.3%	0.297	62.9%	60.8%	0.000
	Aged >=65	23.1%	20.4%	0.032	22.0%	18.5%	0.000	15.4%	14.3%	0.000
	Disability proportion	15.7%	14.9%	0.261	16.2%	14.1%	0.000	10.8%	12.2%	0.000
	Single-parent households	4.3%	6.0%	0.000	5.6%	6.8%	0.002	5.9%	7.8%	0.000
Housing Type & Transportation	Limited English >5 years old	9.3%	12.3%	0.109	5.9%	11.5%	0.000	9.8%	11.8%	0.000
	Multi-unit structures	2.8%	3.3%	0.354	5.9%	5.5%	0.532	17.6%	8.8%	0.000
	Mobile homes	18.0%	23.6%	0.090	12.7%	12.7%	0.992	3.7%	5.9%	0.000
	Crowding	5.1%	6.4%	0.019	5.6%	6.9%	0.011	8.2%	9.7%	0.000
	No vehicle	4.8%	5.6%	0.129	5.8%	5.6%	0.582	6.5%	6.3%	0.454
	No internet	29.9%	48.0%	0.000	23.0%	32.3%	0.000	18.9%	27.6%	0.000
	Group quarters	5.5%	6.0%	0.772	1.8%	4.1%	0.004	2.0%	1.9%	0.815

Data: HRSA Data Warehouse. Rurality assigned using 2010 RUCA codes: Urban - 1.0-3.0, Large Rural - 4.0-6.0, Small Rural - 7.0 and higher

Mental Health HHS Region 10: Alaska, Idaho, Oregon, and Washington

Small Rural Tracts. In Region 10, small rural HPSA tracts had higher levels of unemployment (6.1 percent vs. 5.1 percent, $p < 0.05$), uninsured residents (11.0 percent vs. 8.9 percent, $p < 0.01$), and poverty (24.4 percent vs. 22.0 percent, $p < 0.05$) compared to non-HPSA tracts. The share of residents without a high school diploma was also higher (11.6 percent vs. 10.1 percent, $p < 0.05$), while the share holding a high school diploma was slightly lower (13.3 percent vs. 14.8 percent, $p < 0.05$). Children under age 18 comprised a larger share of the population in HPSA tracts (22.3 percent vs. 20.5 percent, $p < 0.05$), and the percentage of households without vehicle access (7.1 percent vs. 4.5 percent, $p < 0.01$) and more crowding (5.1 percent vs. 3.7 percent, $p < 0.05$) was greater. Internet access was also less common (30.6 percent vs. 24.8 percent, $p < 0.01$) as compared to non-designated tracts.

Large Rural Tracts. Among large rural tracts, HPSA areas had lower college graduation rates (34.6 percent vs. 38.2 percent, $p < 0.05$) and a higher proportion of residents with only a high school diploma (14.7 percent vs. 13.2 percent, $p < 0.01$). Housing burden was lower in HPSA areas (26.6 percent vs. 29.4 percent, $p < 0.05$), and a greater share of residents had a disability (16.1 percent vs. 14.7 percent, $p < 0.05$). A higher share of crowding (3.7 percent vs. 5.1 percent, $p < 0.05$), and mobile home residence (13.4 percent vs. 9.9 percent, $p < 0.01$) in designated as compared to non-designated tracts.

Urban Tracts. In urban tracts, HPSA areas had a lower share of college graduates (40.0 percent vs. 50.3 percent, $p < 0.001$) and higher shares of residents without a high school diploma (9.1 percent vs. 7.1 percent, $p < 0.001$). The proportion of uninsured residents was also higher (7.3 percent vs. 6.2 percent, $p < 0.001$), as was the percentage of children under age 18 (23.4 percent vs. 21.1 percent, $p < 0.001$) and those aged 65 and older (17.1 percent vs. 15.3 percent, $p < 0.001$). HPSA tracts had higher rates of mobile home residence (9.6 percent vs. 4.0 percent, $p < 0.001$), lesser prevalence of internet access (17.5 percent vs. 13.3 percent, $p < 0.001$), and lower vehicle access (4.3 percent vs. 6.7 percent, $p < 0.001$) than non-designated tracts.



Key Takeaways

- HPSA tracts in Region 10 had higher rates of poverty, lack of insurance, and lower educational attainment across all geographies.
- Housing burden was lower in HPSAs, particularly in rural areas, though mobile home residence and lack of vehicle were more common in urban HPSAs.
- Urban HPSA tracts had higher poverty, lower educational attainment, and greater housing cost burden compared with urban non-HPSA tracts.

Mental Health HPSAs and non-HPSAs: HHS Region 10

Variable Category	Variable Name	Small Rural Non-Area %	Small Rural Area %	p-value	Large Rural Non-Area %	Large Rural Area %	p-value	Urban Non-Area %	Urban Area %	p-value
Population and Tracts	N(est.)	259,805	918,364	-	458,546	1,273,028	-	8,966,209	2,630,901	-
	Number of tracts	81	300	-	103	325	-	2,020	589	-
Socio-economic Status	Below 150% poverty	22.0%	24.4%	0.029	24.0%	23.1%	0.608	16.4%	17.3%	0.077
	Unemployed	5.1%	6.1%	0.042	5.8%	5.8%	0.960	5.0%	4.8%	0.318
	Housing burden	26.8%	23.1%	0.000	29.4%	26.6%	0.013	26.3%	23.7%	0.000
	No High School Diploma	10.1%	11.6%	0.050	10.6%	11.2%	0.565	7.1%	9.1%	0.000
	High School Diploma	14.8%	13.3%	0.027	13.2%	14.7%	0.004	10.9%	13.7%	0.000
	Some College	26.2%	25.0%	0.100	26.5%	25.4%	0.123	22.2%	25.4%	0.000
	College graduate	34.0%	32.1%	0.206	38.2%	34.6%	0.011	50.3%	40.0%	0.000
Household Characteristics	Uninsured	8.9%	11.0%	0.002	7.5%	8.6%	0.017	6.2%	7.3%	0.000
	Male	52.0%	51.7%	0.614	49.2%	50.4%	0.019	50.3%	50.5%	0.344
	Female	48.0%	48.3%	0.614	50.8%	49.6%	0.019	49.7%	49.5%	0.344
	Aged <=17	20.5%	22.3%	0.026	22.1%	22.9%	0.288	21.1%	23.4%	0.000
	Aged 18-64	58.0%	55.7%	0.011	60.1%	58.2%	0.074	63.7%	59.5%	0.000
	Aged >=65	21.5%	22.0%	0.662	17.9%	18.9%	0.319	15.3%	17.1%	0.000
	Disability proportion	16.8%	17.0%	0.785	14.7%	16.1%	0.025	12.3%	14.3%	0.000
	Single-parent households	3.9%	4.9%	0.010	5.0%	5.5%	0.189	5.2%	5.4%	0.409
Housing Type & Transportation	Limited English >5 years old	7.1%	7.0%	0.903	6.5%	6.3%	0.841	5.1%	4.7%	0.254
	Multi-unit structures	2.6%	3.2%	0.280	10.6%	6.5%	0.006	16.1%	7.2%	0.000
	Mobile homes	18.8%	17.5%	0.421	9.9%	13.4%	0.002	4.0%	9.6%	0.000
	Crowding	3.7%	5.1%	0.012	5.1%	3.7%	0.017	3.5%	3.1%	0.044
	No vehicle	4.5%	7.1%	0.004	5.2%	4.9%	0.563	6.7%	4.3%	0.000
	No internet	24.8%	30.6%	0.002	29.3%	22.9%	0.117	13.3%	17.5%	0.000
Group quarters	4.5%	3.6%	0.410	3.1%	3.0%	0.900	2.0%	2.0%	0.980	

Data: HRSA Data Warehouse. Rurality assigned using 2010 RUCA codes: Urban - 1.0-3.0, Large Rural - 4.0-6.0, Small Rural - 7.0 and higher

Dental Health HPSAs, 2022

Dental Health HPSAs, National Census Tract Level, 2022

Key Takeaways

- Poverty, unemployment, and lack of high school completion were more common in HPSA-designated tracts, especially in rural areas.
- Housing conditions such as mobile home residence and lack of internet access were consistently more prevalent in HPSA areas.
- Urban HPSAs showed distinct differences in housing burden, education levels, and living arrangements compared to non-HPSA tracts.

Small Rural Tracts. Nationally, small rural tracts designated as Dental Health HPSAs had higher rates of poverty (29.4 percent vs. 24.8 percent, $p < 0.001$), unemployment (5.9 percent vs. 4.9 percent, $p < 0.001$), and uninsurance (12.0 percent vs. 9.1 percent, $p < 0.001$) than non-HPSA tracts. Educational attainment was lower, with more residents lacking a high school diploma (15.0 percent vs. 12.0 percent, $p < 0.001$) and fewer holding college degrees (27.6 percent vs. 31.1 percent, $p < 0.001$). These tracts also had more children under 18 (22.7 percent vs. 21.3 percent, $p < 0.001$), single-parent households (6.4 percent vs. 5.3 percent, $p < 0.001$), greater crowding (3.6 percent vs. 2.2 percent, $p < 0.001$), and households without internet access (49.3 percent vs. 35.7 percent, $p < 0.001$) as compared to non-designated tracts.

Large Rural Tracts. In large rural areas, HPSA tracts had higher poverty (30.2 percent vs. 25.0 percent, $p < 0.001$), unemployment (6.5 percent vs. 5.1 percent, $p < 0.001$), and uninsurance (11.8 percent vs. 8.9 percent, $p < 0.001$). More residents lacked a high school diploma (15.4 percent vs. 11.8 percent, $p < 0.001$), and fewer had completed college (30.4 percent vs. 32.9 percent, $p < 0.001$). These tracts also had higher rates of mobile home residence (18.7 percent vs. 13.3 percent, $p < 0.001$), limited English proficiency (8.0 percent vs. 6.1 percent, $p < 0.01$), single-parent households (7.5 percent vs. 6.2 percent, $p < 0.001$), and households without internet access (41.5 percent vs. 30.9 percent, $p < 0.001$) as compared to non-designated tracts.

Urban Tracts. In urban areas, Dental Health HPSA tracts had lower college graduation rates (37.4 percent vs. 45.3 percent, $p < 0.001$), lower internet access (6.2 percent vs. 8.8 percent, $p < 0.001$), and higher levels of crowding (11.8 percent vs. 4.7 percent, $p < 0.001$). The proportion of residents in mobile homes was also higher in HPSA tracts (26.4 percent vs. 20.9 percent, $p < 0.001$), as was the share living in group quarters (3.1 percent vs. 2.1 percent, $p < 0.01$) as compared to non-designated tracts.

Dental Health HPSAs and non-HPSAs: National Census Tract Level, 2022

Variable Category	Variable Name	Small Rural Non-Area %	Small Rural Area %	p-value	Large Rural Non-Area %	Large Rural Area %	p-value	Urban Non-Area %	Urban Area %	p-value
Population and Tracts	N(est.)	19,815,019	3,107,656	-	26,214,927	2,000,661	-	274,408,835	5,550,495	-
	Number of tracts	6,694	1,095	-	7,173	595	-	67,374	1,483	-
Socio-economic Status	Below 150% poverty	24.8%	29.4%	0.000	25.0%	30.2%	0.000	19.6%	20.1%	0.119
	Unemployed	4.9%	5.9%	0.000	5.1%	6.5%	0.000	5.4%	5.1%	0.002
	Housing burden	22.1%	21.1%	0.001	24.3%	25.4%	0.012	26.8%	24.9%	0.000
	No High School Diploma	12.0%	15.0%	0.000	11.8%	15.4%	0.000	10.6%	11.1%	0.041
	High School Diploma	13.0%	12.4%	0.000	13.0%	13.0%	0.990	9.8%	12.1%	0.000
	Some College	21.1%	21.2%	0.548	21.4%	21.6%	0.453	19.4%	21.9%	0.000
	College graduate	31.1%	27.6%	0.000	32.9%	30.4%	0.000	45.3%	37.4%	0.000
Household Characteristics	Uninsured	9.1%	12.0%	0.000	8.9%	11.8%	0.000	8.4%	7.5%	0.000
	Male	50.8%	51.0%	0.324	50.1%	50.3%	0.512	49.4%	50.3%	0.000
	Female	49.2%	49.0%	0.324	49.9%	49.7%	0.512	50.6%	49.7%	0.000
	Aged <=17	21.3%	22.7%	0.000	21.8%	23.1%	0.000	22.2%	21.9%	0.069
	Aged 18-64	57.4%	57.2%	0.312	59.5%	59.3%	0.615	61.9%	61.4%	0.023
	Aged >=65	21.3%	20.1%	0.000	18.7%	17.6%	0.001	15.9%	16.7%	0.000
	Disability proportion	16.6%	16.5%	0.431	15.7%	15.7%	0.983	12.0%	13.6%	0.000
	Single-parent households	5.3%	6.4%	0.000	6.2%	7.5%	0.000	6.3%	6.3%	0.994
Housing Type & Transportation	Limited English >5 years old	5.7%	6.4%	0.049	6.1%	8.0%	0.002	6.8%	5.7%	0.001
	Multi-unit structures	3.2%	2.8%	0.004	5.9%	5.7%	0.610	16.4%	8.3%	0.000
	Mobile homes	16.6%	21.3%	0.000	13.3%	18.7%	0.000	4.7%	11.8%	0.000
	Crowding	2.2%	3.6%	0.000	2.4%	3.2%	0.000	3.5%	2.8%	0.000
	No vehicle	6.0%	7.9%	0.000	6.2%	7.0%	0.005	8.8%	6.2%	0.000
	No internet	35.7%	49.3%	0.000	30.9%	41.5%	0.000	20.9%	26.4%	0.000
	Group quarters	4.1%	4.3%	0.484	3.9%	4.3%	0.485	2.1%	3.1%	0.002

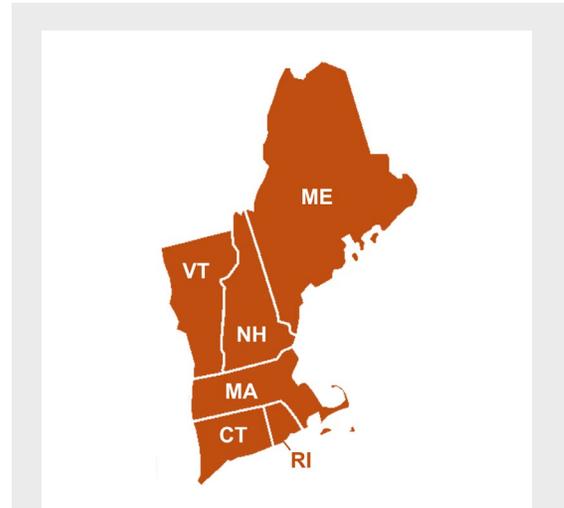
Data: HRSA Data Warehouse. Rurality assigned using 2010 RUCA codes: Urban - 1.0-3.0, Large Rural - 4.0-6.0, Small Rural - 7.0 and higher

Dental Health HHS Region 1: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont

Small Rural Tracts. In Region 1, small rural tracts designated as Dental Health HPSAs had higher rates of poverty (22.6 percent vs. 18.7 percent, $p < 0.05$), unemployment (6.0 percent vs. 4.2 percent, $p < 0.05$), and uninsurance (8.2 percent vs. 6.3 percent, $p < 0.05$) compared to non-HPSAs. Educational attainment differed, with fewer college graduates (37.4 percent vs. 44.3 percent, $p < 0.05$) and more residents with some college but no degree (19.6 percent vs. 17.7 percent, $p < 0.05$). A larger share of residents without internet access (34.7 percent vs. 26.3 percent, $p < 0.01$), and disability prevalence was also higher (20.2 percent vs. 15.9 percent, $p < 0.05$) compared to non-designated tracts.

Large Rural Tracts. Among large rural tracts, Dental Health HPSAs had lower poverty (15.1 percent vs. 18.2 percent, $p < 0.01$) and fewer residents with only a high school diploma (9.5 percent vs. 10.8 percent, $p < 0.001$). Housing patterns also varied, with HPSA tracts having fewer multi-unit structures (1.2 percent vs. 6.8 percent, $p < 0.001$), less mobile home residence (0.2 percent vs. 7.8 percent, $p < 0.001$), and lower share of group quarters (1.4 percent vs. 4.1 percent, $p < 0.001$) as compared to non-designated tracts. Most other household characteristics showed no statistically significant differences.

Urban Tracts. There were no urban census tracts designated as Dental Health HPSAs in Region 1.



Key Takeaways

- In small rural areas, Dental HPSA tracts were marked by higher poverty, unemployment, and uninsurance, along with higher rates of households without internet access.
- Educational attainment and disability levels differed between small rural HPSA and non-HPSA tracts.
- Large rural HPSAs in Region 1 showed lower poverty and less housing crowding and instability compared to non-HPSAs.

Dental Health HPSAs and non-HPSAs: HHS Region 1

Variable Category	Variable Name	Small Rural Non-Area %	Small Rural Area %	p-value	Large Rural Non-Area %	Large Rural Area %	p-value	Urban Non-Area %	Urban Area %	p-value
Population and Tracts	N(est.)	1,024,093	44,719	-	815,241	15,295	-	13,180,799	0	-
	Number of tracts	354	21	-	233	3	-	3,092	0	-
Socio-economic Status	Below 150% poverty	18.7%	22.6%	0.039	18.2%	15.1%	0.005	15.8%	-	-
	Unemployed	4.2%	6.0%	0.014	4.2%	8.0%	0.165	5.4%	-	-
	Housing burden	25.8%	26.0%	0.888	27.4%	29.0%	0.599	26.4%	-	-
	No High School Diploma	6.6%	8.1%	0.136	7.0%	7.1%	0.926	8.7%	-	-
	High School Diploma	10.0%	10.1%	0.904	10.8%	9.5%	0.000	8.5%	-	-
	Some College	17.7%	19.6%	0.037	17.8%	17.1%	0.702	15.8%	-	-
	College graduate	44.3%	37.4%	0.024	44.3%	46.8%	0.504	51.3%	-	-
Household Characteristics	Uninsured	6.3%	8.2%	0.040	5.6%	7.7%	0.298	3.8%	-	-
	Male	49.9%	50.0%	0.982	49.5%	47.6%	0.471	49.1%	-	-
	Female	50.1%	50.0%	0.982	50.5%	52.4%	0.471	50.9%	-	-
	Aged <=17	17.4%	16.9%	0.498	18.2%	18.1%	0.957	19.8%	-	-
	Aged 18-64	58.0%	56.2%	0.051	60.8%	58.9%	0.617	63.0%	-	-
	Aged >=65	24.6%	27.0%	0.094	21.0%	23.1%	0.414	17.2%	-	-
	Disability proportion	15.9%	20.2%	0.011	15.3%	11.6%	0.053	11.9%	-	-
	Single-parent households	4.2%	4.8%	0.529	5.0%	4.6%	0.394	5.9%	-	-
Housing Type & Transportation	Limited English >5 years old	3.7%	4.4%	0.400	5.0%	7.0%	0.498	7.4%	-	-
	Multi-unit structures	3.4%	5.6%	0.267	6.8%	1.2%	0.000	13.6%	-	-
	Mobile homes	10.5%	13.2%	0.125	7.8%	0.2%	0.000	1.5%	-	-
	Crowding	1.4%	0.9%	0.016	1.5%	0.6%	0.108	2.0%	-	-
	No vehicle	5.9%	7.4%	0.188	7.0%	4.8%	0.386	9.6%	-	-
	No internet	26.3%	34.7%	0.006	20.3%	29.6%	0.498	16.7%	-	-
Group quarters	3.2%	3.3%	0.926	4.1%	1.4%	0.000	3.2%	-	-	

Data: HRSA Data Warehouse. Rurality assigned using 2010 RUCA codes: Urban - 1.0-3.0, Large Rural - 4.0-6.0, Small Rural - 7.0 and higher

Dental Health HHS Region 2: New York and New Jersey

There were no Dental Health HPSAs at the census tract level observed in HHS Region 2.

Dental Health HPSAs and non-HPSAs: HHS Region 2

Variable Category	Variable Name	Small Rural Non-Area %	Small Rural Area %	p-value	Large Rural Non-Area %	Large Rural Area %	p-value	Urban Non-Area %	Urban Area %	p-value
Population and Tracts	N(est.)	833,965	0	-	962,974	0	-	27,446,503	0	-
	Number of tracts	325	0	-	290	0	-	6,977	0	-
Socio-economic Status	Below 150% poverty	23.6%	-	-	23.6%	-	-	19.1%	-	-
	Unemployed	5.7%	-	-	5.5%	-	-	6.4%	-	-
	Housing burden	23.9%	-	-	25.7%	-	-	29.3%	-	-
	No High School Diploma	11.0%	-	-	11.2%	-	-	11.8%	-	-
	High School Diploma	12.5%	-	-	13.0%	-	-	8.3%	-	-
	Some College	16.5%	-	-	17.6%	-	-	15.2%	-	-
	College graduate	38.0%	-	-	37.5%	-	-	48.1%	-	-
Household Characteristics	Uninsured	6.0%	-	-	4.8%	-	-	5.9%	-	-
	Male	51.2%	-	-	50.7%	-	-	48.9%	-	-
	Female	48.8%	-	-	49.3%	-	-	51.1%	-	-
	Aged <=17	19.1%	-	-	20.2%	-	-	21.1%	-	-
	Aged 18-64	59.9%	-	-	61.1%	-	-	62.2%	-	-
	Aged >=65	21.0%	-	-	18.7%	-	-	16.7%	-	-
	Disability proportion	15.3%	-	-	15.1%	-	-	11.1%	-	-
	Single-parent households	4.4%	-	-	5.9%	-	-	6.2%	-	-
Housing Type & Transportation	Limited English >5 years old	8.6%	-	-	7.7%	-	-	9.4%	-	-
	Multi-unit structures	3.2%	-	-	5.9%	-	-	24.6%	-	-
	Mobile homes	14.4%	-	-	8.8%	-	-	1.3%	-	-
	Crowding	1.8%	-	-	1.6%	-	-	5.4%	-	-
	No vehicle	8.6%	-	-	9.9%	-	-	23.3%	-	-
	No internet	32.8%	-	-	26.7%	-	-	24.2%	-	-
Group quarters	7.2%	-	-	6.0%	-	-	2.4%	-	-	

Data: HRSA Data Warehouse. Rurality assigned using 2010 RUCA codes: Urban - 1.0-3.0, Large Rural - 4.0-6.0, Small Rural - 7.0 and higher

Dental Health HHS Region 3: Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, and West Virginia

Small Rural Tracts. In Region 3, most indicators showed no statistical differences between small rural Dental Health HPSA and non-HPSA tracts. However, HPSA tracts had higher housing burden (23.3 percent vs. 21.2 percent, $p < 0.05$), a greater share of residents with some college education (19.2 percent vs. 16.9 percent, $p < 0.001$), and more college graduates (31.4 percent vs. 27.5 percent, $p < 0.01$). Mobile home residence was lower in HPSA tracts (14.1 percent vs. 18.5 percent, $p < 0.05$) as compared to non-designated tracts.

Large Rural Tracts. Among large rural tracts, HPSA areas had higher housing burden (26.1 percent vs. 22.2 percent, $p < 0.01$), more residents with some college education (21.6 percent vs. 17.1 percent, $p < 0.001$), and a larger share of adults aged 65 and older (25.7 percent vs. 22.0 percent, $p < 0.01$). These tracts had fewer working-age adults (55.5 percent vs. 58.8 percent, $p < 0.01$) and fewer residents with limited English proficiency (3.4 percent vs. 5.3 percent, $p < 0.05$). HPSA tracts also had greater proportion of households with internet access (25.2 percent vs. 32.2 percent, $p < 0.01$) and fewer residents in group quarters (2.0 percent vs. 4.5 percent, $p < 0.01$) as compared to non-designated tracts.

Urban Tracts. In urban areas, Dental Health HPSA tracts had greater housing burden (25.8 percent vs. 23.8 percent, $p < 0.001$), more residents with some college education (20.8 percent vs. 16.7 percent, $p < 0.001$), and fewer college graduates (40.8 percent vs. 47.8 percent, $p < 0.001$). These tracts had a slightly higher share of adults aged 18 to 64 (62.4 percent vs. 61.8 percent, $p < 0.05$), higher disability rates (13.0 percent vs. 12.3 percent, $p < 0.01$), and higher proportion of households without internet access (23.4 percent vs. 20.6 percent, $p < 0.001$). Vehicle access was less common (7.1 percent without access vs. 9.2 percent, $p < 0.001$) as compared to non-designated tracts.



Key Takeaways

- Housing burden and enrollment in some college were more common in Dental HPSA tracts across all geographies.
- In both large rural and urban areas, Dental HPSAs had fewer college graduates and a higher share of households without internet access.
- Large rural HPSAs showed lower rates of limited English proficiency, while urban HPSAs had less internet access.

Dental Health HPSAs and non-HPSAs: HHS Region 3

Variable Category	Variable Name	Small Rural Non-Area %	Small Rural Area %	p-value	Large Rural Non-Area %	Large Rural Area %	p-value	Urban Non-Area %	Urban Area %	p-value
Population and Tracts	N(est.)	1,374,221	264,520	-	1,722,940	153,558	-	25,183,491	2,533,885	-
	Number of tracts	439	88	-	515	47	-	6,368	676	-
Socio-economic Status	Below 150% poverty	25.3%	25.0%	0.854	23.1%	20.0%	0.066	17.3%	18.0%	0.174
	Unemployed	5.2%	5.1%	0.725	5.4%	5.0%	0.423	5.3%	5.1%	0.147
	Housing burden	21.2%	23.3%	0.038	22.2%	26.1%	0.004	23.8%	25.8%	0.000
	No High School Diploma	12.9%	13.4%	0.489	10.4%	11.2%	0.375	8.6%	9.0%	0.099
	High School Diploma	12.6%	11.9%	0.203	11.5%	12.8%	0.106	9.0%	11.5%	0.000
	Some College	16.9%	19.2%	0.000	17.1%	21.6%	0.000	16.7%	20.8%	0.000
	College graduate	27.5%	31.4%	0.005	31.8%	34.2%	0.240	47.8%	40.8%	0.000
Household Characteristics	Uninsured	7.2%	6.8%	0.450	6.5%	6.3%	0.705	6.0%	5.9%	0.511
	Male	50.6%	49.7%	0.143	49.9%	48.9%	0.116	49.1%	49.5%	0.026
	Female	49.4%	50.3%	0.143	50.1%	51.1%	0.116	50.9%	50.5%	0.026
	Aged <=17	19.5%	18.4%	0.094	19.2%	18.9%	0.701	21.3%	21.4%	0.863
	Aged 18-64	58.2%	57.3%	0.286	58.8%	55.5%	0.001	61.8%	62.4%	0.049
	Aged >=65	22.3%	24.3%	0.033	22.0%	25.7%	0.007	16.9%	16.2%	0.018
	Disability proportion	17.7%	18.1%	0.651	16.9%	16.9%	0.946	12.3%	13.0%	0.001
	Single-parent households	5.1%	5.1%	0.945	5.4%	5.8%	0.681	6.2%	6.7%	0.061
Housing Type & Transportation	Limited English >5 years old	5.7%	5.9%	0.889	5.3%	3.4%	0.017	5.4%	4.4%	0.028
	Multi-unit structures	2.5%	3.1%	0.248	4.6%	5.9%	0.470	12.8%	10.1%	0.000
	Mobile homes	18.5%	14.1%	0.037	12.2%	11.8%	0.872	3.2%	3.7%	0.130
	Crowding	1.3%	1.5%	0.206	1.3%	1.7%	0.123	2.0%	1.7%	0.001
	No vehicle	7.6%	6.4%	0.053	7.6%	7.0%	0.542	9.2%	7.1%	0.000
	No internet	38.2%	40.1%	0.471	32.2%	25.2%	0.007	20.6%	23.4%	0.000
Group quarters	4.8%	4.8%	0.965	4.5%	2.0%	0.001	2.6%	3.0%	0.303	

Data: HRSA Data Warehouse. Rurality assigned using 2010 RUCA codes: Urban - 1.0-3.0, Large Rural - 4.0-6.0, Small Rural - 7.0 and higher

Dental Health HHS Region 4: Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee

Small Rural Tracts. In Region 4, small rural Dental Health HPSA tracts had higher poverty rates (38.0 percent vs. 31.0 percent, $p < 0.001$), greater unemployment (7.5 percent vs. 5.9 percent, $p < 0.001$), and a larger share of adults without a high school diploma (19.4 percent vs. 16.3 percent, $p < 0.001$) compared to non-HPSA tracts. College graduation rates were lower (23.1 percent vs. 26.2 percent, $p < 0.001$), and uninsurance was more common (13.3 percent vs. 10.5 percent, $p < 0.001$). HPSA tracts also had higher rates of mobile home residence and more households without vehicle access. The share of residents aged 65 and older was lower (18.4 percent vs. 20.5 percent, $p < 0.001$), while single-parent households were more prevalent (8.9 percent vs. 6.4 percent, $p < 0.001$) than non-designated tracts.

Large Rural Tracts. Large rural HPSA tracts had higher shares of residents living in poverty (36.3 percent vs. 29.0 percent, $p < 0.001$), more unemployment (6.7 percent vs. 5.6 percent, $p < 0.01$), and a greater proportion without a high school diploma (16.2 percent vs. 14.3 percent, $p < 0.001$). Although college graduation rates were similar between groups, HPSA tracts had higher uninsurance (12.2 percent vs. 10.7 percent, $p < 0.01$). They also had more residents in mobile homes (27.8 percent vs. 20.5 percent, $p < 0.001$) and a larger share without internet access (50.9 percent vs. 38.2 percent, $p < 0.001$) as compared to non-designated tracts.

Urban Tracts. Urban HPSA tracts had lower housing burden (22.3 percent vs. 27.4 percent, $p < 0.001$) but higher shares of residents below 150 percent of poverty (26.7 percent vs. 21.8 percent, $p < 0.001$) and without a high school diploma (15.3 percent vs. 10.3 percent, $p < 0.001$). These tracts also had a higher proportion of households without internet access (43.9 percent vs. 23.8 percent, $p < 0.001$) and in group quarters (4.1 percent vs. 2.1 percent, $p < 0.05$) as compared to non-designated tracts.



Key Takeaways

- Poverty, unemployment, and lack of educational attainment were more common in HPSA-designated tracts across all geographies.
- Housing challenges – such as mobile home residence, internet access, and lack of vehicle access – were consistently more prevalent in HPSA areas.
- Urban HPSAs showed the greatest differences from non-HPSAs in terms of social and housing conditions.

Dental Health HPSAs and non-HPSAs: HHS Region 4

Variable Category	Variable Name	Small Rural Non-Area %	Small Rural Area %	p-value	Large Rural Non-Area %	Large Rural Area %	p-value	Urban Non-Area %	Urban Area %	p-value
Population and Tracts	N(est.)	3,900,124	582,527	-	6,627,461	664,852	-	55,003,473	605,026	-
	Number of tracts	1,348	198	-	1,840	217	-	13,482	188	-
Socio-economic Status	Below 150% poverty	31.0%	38.0%	0.000	29.0%	36.3%	0.000	21.8%	26.7%	0.000
	Unemployed	5.9%	7.5%	0.000	5.6%	6.7%	0.004	5.2%	6.3%	0.001
	Housing burden	22.6%	24.2%	0.014	24.1%	25.8%	0.029	27.4%	22.3%	0.000
	No High School Diploma	16.3%	19.4%	0.000	14.3%	16.2%	0.000	10.3%	15.3%	0.000
	High School Diploma	14.1%	12.4%	0.000	13.3%	11.7%	0.000	10.5%	13.0%	0.000
	Some College	20.1%	18.8%	0.001	20.8%	19.0%	0.000	19.9%	20.6%	0.101
	College graduate	26.2%	23.1%	0.000	30.3%	31.7%	0.188	43.2%	26.6%	0.000
Household Characteristics	Uninsured	10.5%	13.3%	0.000	10.7%	12.2%	0.001	10.9%	10.8%	0.802
	Male	50.0%	50.4%	0.511	49.2%	49.2%	0.974	48.9%	50.7%	0.002
	Female	50.0%	49.6%	0.511	50.8%	50.8%	0.974	51.1%	49.3%	0.002
	Aged <=17	20.9%	22.1%	0.010	22.0%	21.9%	0.750	21.4%	21.9%	0.334
	Aged 18-64	58.5%	59.5%	0.067	59.4%	60.7%	0.024	61.0%	60.5%	0.377
	Aged >=65	20.5%	18.4%	0.000	18.6%	17.4%	0.007	17.6%	17.6%	0.948
	Disability proportion	19.3%	18.1%	0.018	17.0%	16.6%	0.345	13.1%	16.2%	0.000
	Single-parent households	6.4%	8.9%	0.000	7.4%	8.7%	0.002	6.8%	6.7%	0.636
Housing Type & Transportation	Limited English >5 years old	5.4%	7.4%	0.052	4.7%	6.8%	0.026	5.9%	5.3%	0.544
	Multi-unit structures	2.2%	1.6%	0.015	3.8%	3.7%	0.795	12.5%	1.6%	0.000
	Mobile homes	27.8%	32.3%	0.002	20.5%	27.8%	0.000	8.9%	36.9%	0.000
	Crowding	2.1%	3.0%	0.000	2.3%	2.2%	0.556	2.6%	2.3%	0.270
	No vehicle	6.5%	9.6%	0.000	5.9%	8.1%	0.000	5.5%	5.8%	0.521
	No internet	43.0%	56.8%	0.000	38.2%	50.9%	0.000	23.8%	43.9%	0.000
	Group quarters	4.1%	5.9%	0.052	3.2%	5.5%	0.008	2.1%	4.1%	0.024

Data: HRSA Data Warehouse. Rurality assigned using 2010 RUCA codes: Urban - 1.0-3.0, Large Rural - 4.0-6.0, Small Rural - 7.0 and higher

Dental Health HHS Region 5: Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin

Small Rural Tracts. In Region 5, differences between Dental Health HPSA and non-HPSA tracts were most apparent in small rural and urban areas. In small rural tracts, HPSA areas had lower rates of poverty (19.2 percent vs. 21.0 percent, $p < 0.01$), lower unemployment (3.8 percent vs. 4.3 percent, $p < 0.05$), and fewer residents with disabilities (13.5 percent vs. 15.4 percent, $p < 0.001$). HPSA tracts also had a higher share of college graduates (33.4 percent vs. 31.1 percent, $p < 0.05$) and more children under age 18 (23.0 percent vs. 21.7 percent, $p < 0.01$) than non-designated tracts.

Large Rural Tracts. In large rural areas, HPSA tracts had lower poverty rates (17.0 percent vs. 22.7 percent, $p < 0.001$), lower shares of people aged 18 to 64 (57.0 percent vs. 59.8 percent, $p < 0.05$), and a higher share of older adults aged 65 and over (21.7 percent vs. 19.1 percent, $p < 0.01$). HPSA tracts also had more adults with some college education (23.5 percent vs. 21.0 percent, $p < 0.01$) and fewer single-parent households (4.0 percent vs. 5.6 percent, $p < 0.001$).

Urban Tracts. In urban areas, HPSA tracts had lower unemployment (3.8 percent vs. 5.4 percent, $p < 0.01$), less housing burden (18.3 percent vs. 24.4 percent, $p < 0.001$), and fewer residents with limited English proficiency (2.4 percent vs. 4.4 percent, $p < 0.05$). Uninsurance was also lower (3.2 percent vs. 5.9 percent, $p < 0.001$), as was the share of households without vehicle access (3.9 percent vs. 7.7 percent, $p < 0.001$). However, mobile home residence was more common in HPSA tracts (6.9 percent vs. 2.7 percent, $p < 0.01$) as compared to non-designated tracts.



Key Takeaways

- Housing burden, poverty, and disability were often lower in HPSA-designated tracts across Region 5, particularly in rural areas.
- HPSA tracts tended to have higher levels of educational attainment and older populations in some geographies.
- Urban HPSA tracts stood out for lower insurance coverage, limited internet access, and more mobile home residence.

Dental Health HPSAs and non-HPSAs: HHS Region 5

Variable Category	Variable Name	Small Rural Non-Area %	Small Rural Area %	p-value	Large Rural Non-Area %	Large Rural Area %	p-value	Urban Non-Area %	Urban Area %	p-value
Population and Tracts	N(est.)	4,488,992	393,691	-	5,454,022	73,673	-	42,473,780	67,903	-
	Number of tracts	1,427	127	-	1,459	21	-	11,140	19	-
Socio-economic Status	Below 150% poverty	21.0%	19.2%	0.003	22.7%	17.0%	0.000	19.3%	16.0%	0.064
	Unemployed	4.3%	3.8%	0.041	4.8%	4.6%	0.809	5.4%	3.8%	0.004
	Housing burden	20.4%	19.4%	0.057	22.0%	19.4%	0.085	24.4%	18.3%	0.000
	No High School Diploma	9.8%	11.3%	0.192	9.1%	7.9%	0.178	8.6%	6.8%	0.100
	High School Diploma	12.9%	11.5%	0.000	12.7%	12.4%	0.734	10.3%	11.3%	0.207
	Some College	21.2%	21.3%	0.952	21.0%	23.5%	0.001	20.2%	23.2%	0.001
	College graduate	31.1%	33.4%	0.013	32.9%	36.2%	0.118	44.6%	38.2%	0.001
Household Characteristics	Uninsured	7.5%	9.7%	0.090	6.2%	4.8%	0.003	5.9%	3.2%	0.000
	Male	50.7%	50.7%	0.852	50.3%	51.2%	0.390	49.4%	50.4%	0.067
	Female	49.3%	49.3%	0.852	49.7%	48.8%	0.390	50.6%	49.6%	0.067
	Aged <=17	21.7%	23.0%	0.004	21.0%	21.3%	0.775	22.3%	23.9%	0.114
	Aged 18-64	56.9%	55.4%	0.000	59.8%	57.0%	0.010	61.5%	59.5%	0.084
	Aged >=65	21.4%	21.6%	0.772	19.1%	21.7%	0.001	16.2%	16.5%	0.816
	Disability proportion	15.4%	13.5%	0.000	15.0%	14.3%	0.453	12.1%	12.3%	0.880
	Single-parent households	4.8%	4.5%	0.268	5.6%	4.0%	0.000	6.4%	5.5%	0.147
Housing Type & Transportation	Limited English >5 years old	3.8%	3.3%	0.397	5.2%	3.2%	0.171	4.4%	2.4%	0.003
	Multi-unit structures	3.7%	4.9%	0.046	6.5%	4.4%	0.179	11.9%	12.2%	0.940
	Mobile homes	10.9%	8.0%	0.000	7.9%	7.9%	1.000	2.7%	6.9%	0.002
	Crowding	1.7%	1.9%	0.225	1.6%	1.5%	0.832	2.0%	1.8%	0.778
	No vehicle	6.2%	7.5%	0.203	6.3%	5.1%	0.169	7.7%	3.9%	0.000
	No internet	33.9%	37.0%	0.464	27.8%	27.2%	0.785	20.3%	20.2%	0.997
	Group quarters	2.9%	2.3%	0.176	4.3%	2.6%	0.253	2.0%	1.6%	0.407

Data: HRSA Data Warehouse. Rurality assigned using 2010 RUCA codes: Urban - 1.0-3.0, Large Rural - 4.0-6.0, Small Rural - 7.0 and higher

Dental Health HHS Region 6: Arkansas, Louisiana, New Mexico, Oklahoma, and Texas

Small Rural Tracts. In Region 6, notable differences emerged between Dental Health HPSA and non-HPSA tracts across all geography types. In small rural areas, HPSA tracts had a higher percentage of residents living below 150 percent of poverty (32.6 percent vs. 29.8 percent, $p < 0.01$) and more residents without a high school diploma (18.9 percent vs. 15.5 percent, $p < 0.001$). College attainment was lower in HPSA tracts (22.3 percent vs. 25.6 percent, $p < 0.001$), and the proportion of households without internet access was higher (54.9 percent vs. 44.9 percent, $p < 0.001$) than non-designated tracts. Rates of mobile home residence (27.3 percent vs. 20.7 percent, $p < 0.001$) and households without vehicle access (7.2 percent vs. 6.1 percent, $p < 0.01$) were also higher in HPSA tracts than in non-designated tracts.

Large Rural Tracts. In large rural tracts, HPSA areas had higher poverty (39.1 percent vs. 28.9 percent, $p < 0.001$), unemployment (7.9 percent vs. 5.4 percent, $p < 0.001$), and lower educational attainment. A larger share of residents lacked a high school diploma (23.9 percent vs. 14.6 percent, $p < 0.001$) and fewer held a college degree (21.6 percent vs. 29.2 percent, $p < 0.001$). HPSA tracts also had more mobile home residence (20.9 percent vs. 16.8 percent, $p < 0.01$), a higher proportion of children under 18 (25.6 percent vs. 23.4 percent, $p < 0.01$), more single-parent households (10.5 percent vs. 7.3 percent, $p < 0.001$), and greater limited English proficiency (14.1 percent vs. 7.3 percent, $p < 0.001$).

Urban Tracts. Urban HPSA tracts had higher poverty (31.8 percent vs. 23.4 percent, $p < 0.001$), unemployment (6.5 percent vs. 5.4 percent, $p < 0.05$), and more residents without a high school diploma (18.7 percent vs. 14.0 percent, $p < 0.001$). College graduation was lower (26.1 percent vs. 40.0 percent, $p < 0.001$), and households without internet access was more common (49.9 percent vs. 26.5 percent, $p < 0.001$). These tracts also had more mobile home residence (34.0 percent vs. 7.6 percent, $p < 0.001$) and slightly fewer households without vehicle access (4.5 percent vs. 5.3 percent, $p < 0.05$) as compared to non-designated tracts.



Key Takeaways

- In small rural areas, HPSA tracts had higher poverty, lower educational attainment, lower share of households with internet, and higher mobile home residence rates.
- In large rural areas, HPSA tracts showed elevated poverty, unemployment, lower education, more children and single-parent households, and higher limited English proficiency.
- In urban areas, HPSA tracts had more poverty, less education, greater mobile home residence, and a larger share of households without internet access.

Dental Health HPSAs and non-HPSAs: HHS Region 6

Variable Category	Variable Name	Small Rural Non-Area %	Small Rural Area %	p-value	Large Rural Non-Area %	Large Rural Area %	p-value	Urban Non-Area %	Urban Area %	p-value
Population and Tracts	N(est.)	2,350,417	808,789	-	3,656,189	524,686	-	35,265,974	379,462	-
	Number of tracts	795	296	-	1,006	163	-	8,555	109	-
Socio-economic Status	Below 150% poverty	29.8%	32.6%	0.001	28.9%	39.1%	0.000	23.4%	31.8%	0.000
	Unemployed	5.7%	5.8%	0.755	5.4%	7.9%	0.000	5.4%	6.5%	0.012
	Housing burden	21.4%	21.1%	0.666	24.4%	25.6%	0.153	26.8%	19.4%	0.000
	No High School Diploma	15.5%	18.9%	0.000	14.6%	23.9%	0.000	14.0%	18.7%	0.000
	High School Diploma	14.1%	13.5%	0.080	13.9%	13.4%	0.202	10.6%	11.9%	0.003
	Some College	22.5%	20.7%	0.000	22.4%	20.0%	0.000	21.0%	20.9%	0.882
	College graduate	25.6%	22.3%	0.000	29.2%	21.6%	0.000	40.0%	26.1%	0.000
Household Characteristics	Uninsured	13.6%	13.3%	0.623	13.9%	16.3%	0.006	15.2%	12.6%	0.001
	Male	51.1%	51.0%	0.881	50.1%	51.4%	0.099	49.7%	51.7%	0.000
	Female	48.9%	49.0%	0.881	49.9%	48.6%	0.099	50.3%	48.3%	0.000
	Aged <=17	22.5%	23.6%	0.010	23.4%	25.6%	0.001	24.9%	24.8%	0.809
	Aged 18-64	57.7%	56.9%	0.090	59.3%	58.9%	0.566	61.9%	59.1%	0.000
	Aged >=65	19.8%	19.5%	0.557	17.3%	15.5%	0.001	13.2%	16.0%	0.000
	Disability proportion	18.2%	18.1%	0.727	16.7%	15.8%	0.093	12.1%	15.7%	0.000
	Single-parent households	6.6%	7.2%	0.096	7.3%	10.5%	0.000	7.7%	6.8%	0.049
Housing Type & Transportation	Limited English >5 years old	8.0%	7.9%	0.897	7.3%	14.1%	0.000	7.5%	8.1%	0.612
	Multi-unit structures	2.3%	1.8%	0.038	5.1%	3.9%	0.030	13.1%	0.8%	0.000
	Mobile homes	20.7%	27.3%	0.000	16.8%	20.9%	0.005	7.6%	34.0%	0.000
	Crowding	3.2%	3.1%	0.548	3.6%	5.3%	0.000	4.5%	4.9%	0.446
	No vehicle	6.1%	7.2%	0.008	5.8%	8.4%	0.000	5.3%	4.5%	0.047
	No internet	44.9%	54.9%	0.000	38.0%	60.0%	0.000	26.5%	49.9%	0.000
	Group quarters	5.5%	4.5%	0.235	4.4%	5.6%	0.362	1.7%	2.6%	0.258

Data: HRSA Data Warehouse. Rurality assigned using 2010 RUCA codes: Urban - 1.0-3.0, Large Rural - 4.0-6.0, Small Rural - 7.0 and higher

Dental Health HHS Region 7: Iowa, Kansas, Missouri, and Nebraska

Small Rural Tracts. In Region 7, small rural Dental Health HPSA tracts had a higher rates of residents without a high school diploma (12.5 percent vs. 9.4 percent, $p < 0.01$) and fewer with a college degree (26.9 percent vs. 32.2 percent, $p < 0.001$). These tracts also had higher uninsurance (10.5 percent vs. 8.2 percent, $p < 0.05$), more crowding (13.1 percent vs. 8.3 percent, $p < 0.01$), and a slightly greater share crowding (2.1 percent vs. 1.6 percent, $p < 0.05$). Multi-unit structures were less common in HPSA tracts (2.4 percent vs. 3.8 percent, $p < 0.01$) as compared to non-designated tracts.

Large Rural Tracts. In large rural areas, HPSA tracts had lower housing burden (17.8 percent vs. 23.2 percent, $p < 0.001$), fewer residents with limited English proficiency (1.2 percent vs. 7.1 percent, $p < 0.001$), and a higher share of residents aged 65 and older (19.7 percent vs. 17.5 percent, $p < 0.01$). Single-parent households were less common (4.8 percent vs. 6.4 percent, $p < 0.05$), but mobile home residence was higher (17.7 percent vs. 8.1 percent, $p < 0.05$). Group quarters were also less prevalent (1.0 percent vs. 4.8 percent, $p < 0.001$) in designated as compared to non-designated tracts.

Urban Tracts. Urban HPSA tracts had lower poverty (15.8 percent vs. 18.8 percent, $p < 0.01$) and higher rates of high school completion (12.8 percent vs. 10.9 percent, $p < 0.01$), but fewer college graduates (37.2 percent vs. 46.1 percent, $p < 0.001$). These tracts also had fewer children under 18 (21.2 percent vs. 23.2 percent, $p < 0.001$), fewer single-parent households (4.9 percent vs. 6.2 percent, $p < 0.01$), and less crowding (1.2 percent vs. 1.9 percent, $p < 0.001$). However, mobile home residence (8.6 percent vs. 3.3 percent, $p < 0.001$) and lack of internet access (27.5 percent vs. 20.3 percent, $p < 0.01$) were more common in designated as compared to non-designated tracts.



Key Takeaways

- In small rural areas, HPSA tracts had lower educational attainment, higher uninsurance and multi-unit structures, and more mobile home residence.
- In large rural areas, HPSA tracts had lower housing burden and fewer limited English speakers, but more residents aged 65 and older.
- In urban areas, HPSA tracts had less poverty, lower college attainment, greater share of households without internet, and fewer single-parent households.

Dental Health HPSAs and non-HPSAs: HHS Region 7

Variable Category	Variable Name	Small Rural Non-Area %	Small Rural Area %	p-value	Large Rural Non-Area %	Large Rural Area %	p-value	Urban Non-Area %	Urban Area %	p-value
Population and Tracts	N(est.)	2,398,389	234,585	-	1,987,590	49,653	-	9,294,112	273,790	-
	Number of tracts	813	77	-	553	15	-	2,401	73	-
Socio-economic Status	Below 150% poverty	21.9%	24.0%	0.082	24.3%	21.2%	0.304	18.8%	15.8%	0.003
	Unemployed	3.5%	3.9%	0.208	4.1%	4.7%	0.371	4.1%	3.5%	0.048
	Housing burden	19.9%	18.4%	0.058	23.2%	17.8%	0.000	23.5%	19.4%	0.000
	No High School Diploma	9.4%	12.5%	0.001	10.5%	11.1%	0.687	7.3%	8.2%	0.151
	High School Diploma	12.9%	14.0%	0.032	13.6%	13.5%	0.888	10.9%	12.8%	0.001
	Some College	21.8%	21.4%	0.531	22.4%	22.1%	0.786	21.2%	21.2%	0.910
	College graduate	32.2%	26.9%	0.000	34.1%	32.8%	0.711	46.1%	37.2%	0.000
Household Characteristics	Uninsured	8.2%	10.5%	0.012	9.0%	10.2%	0.378	7.6%	7.0%	0.206
	Male	50.5%	51.4%	0.074	50.7%	48.9%	0.035	49.5%	50.2%	0.203
	Female	49.5%	48.6%	0.074	49.3%	51.1%	0.035	50.5%	49.8%	0.203
	Aged <=17	22.9%	22.8%	0.930	23.2%	22.1%	0.195	23.2%	21.2%	0.000
	Aged 18-64	55.8%	56.4%	0.319	59.3%	58.2%	0.242	61.2%	60.9%	0.720
	Aged >=65	21.3%	20.8%	0.462	17.5%	19.7%	0.003	15.6%	17.8%	0.000
	Disability proportion	15.3%	16.3%	0.135	14.9%	17.3%	0.202	12.1%	13.4%	0.020
	Single-parent households	4.8%	4.9%	0.968	6.4%	4.8%	0.031	6.2%	4.9%	0.001
Housing Type & Transportation	Limited English >5 years old	4.6%	4.9%	0.743	7.1%	1.2%	0.000	3.9%	4.6%	0.636
	Multi-unit structures	3.8%	2.4%	0.002	6.0%	1.4%	0.000	11.4%	5.5%	0.000
	Mobile homes	8.3%	13.1%	0.002	8.1%	17.7%	0.040	3.3%	8.6%	0.000
	Crowding	1.6%	2.1%	0.048	2.1%	1.4%	0.194	1.9%	1.2%	0.000
	No vehicle	5.1%	5.4%	0.570	6.0%	5.3%	0.471	5.8%	4.5%	0.022
	No internet	31.6%	36.7%	0.070	28.5%	33.7%	0.205	20.3%	27.5%	0.001
	Group quarters	3.5%	3.5%	0.943	4.8%	1.0%	0.000	2.2%	4.0%	0.180

Data: HRSA Data Warehouse. Rurality assigned using 2010 RUCA codes: Urban - 1.0-3.0, Large Rural - 4.0-6.0, Small Rural - 7.0 and higher

Dental Health HHS Region 8: Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming

Small Rural Tracts. In Region 8, small rural Dental Health HPSA tracts had more residents below 150 percent of poverty (26.8 percent vs. 21.2 percent, $p < 0.001$), more without a high school diploma (9.6 percent vs. 7.6 percent, $p < 0.001$), and fewer college graduates (35.6 percent vs. 39.3 percent, $p < 0.001$) compared to non-HPSA tracts. These tracts also had higher uninsurance (12.9 percent vs. 10.3 percent, $p < 0.05$), higher unemployment (4.9 percent vs. 3.8 percent, $p < 0.05$), and more mobile home residence (17.5 percent vs. 13.5 percent, $p < 0.01$). Crowding was more common (3.6 percent vs. 2.3 percent, $p < 0.05$) as compared to non-designated tracts.

Large Rural Tracts. In large rural areas, HPSA tracts had lower poverty (11.9 percent vs. 18.7 percent, $p < 0.001$) but fewer college graduates (37.1 percent vs. 44.4 percent, $p < 0.01$) and more residents with some college education (25.7 percent vs. 22.0 percent, $p < 0.01$). The share of children under 18 was also higher (27.6 percent vs. 22.9 percent, $p < 0.001$). Multi-unit structures (3.1 percent vs. 10.7 percent, $p < 0.001$) and group quarters (1.1 percent vs. 3.5 percent, $p < 0.05$) were less common in HPSA tracts compared to non-designated tracts.

Urban Tracts. In urban areas, HPSA tracts showed a lower share of residents with a college degree (40.8 percent vs. 50.9 percent, $p < 0.001$), but higher proportions with only a high school diploma (12.1 percent vs. 10.3 percent, $p < 0.001$) or some college (23.0 percent vs. 21.5 percent, $p < 0.01$). These tracts also had more mobile home residence (7.4 percent vs. 3.2 percent, $p < 0.001$) and lower rates of vehicle access (3.2 percent vs. 4.4 percent, $p < 0.01$) than non-designated tracts.



Key Takeaways

- HPSA tracts in Region 8 had higher poverty, unemployment, and uninsured rates, especially in small rural areas.
- Large rural HPSAs had lower college completion and fewer multi-unit structures but more children under 18.
- Urban HPSA tracts had lower educational attainment, more mobile home residence, and less vehicle access.

Dental Health HPSAs and non-HPSAs: HHS Region 8

Variable Category	Variable Name	Small Rural Non-Area %	Small Rural Area %	p-value	Large Rural Non-Area %	Large Rural Area %	p-value	Urban Non-Area %	Urban Area %	p-value
Population and Tracts	N(est.)	1,461,305	293,937	-	1,388,165	69,138	-	8,823,904	355,135	-
	Number of tracts	509	119	-	346	12	-	2,032	94	-
Socio-economic Status	Below 150% poverty	21.2%	26.8%	0.000	18.7%	11.9%	0.000	15.6%	17.1%	0.309
	Unemployed	3.8%	4.9%	0.043	3.5%	4.3%	0.277	4.0%	4.6%	0.096
	Housing burden	22.1%	18.9%	0.000	23.3%	22.3%	0.625	24.3%	24.4%	0.957
	No High School Diploma	7.6%	9.6%	0.000	6.5%	8.6%	0.151	6.8%	11.6%	0.000
	High School Diploma	11.7%	11.2%	0.315	11.9%	12.8%	0.413	10.3%	12.1%	0.000
	Some College	23.2%	23.0%	0.602	22.0%	25.7%	0.003	21.5%	23.0%	0.002
	College graduate	39.3%	35.6%	0.000	44.4%	37.1%	0.001	50.9%	40.8%	0.000
Household Characteristics	Uninsured	10.3%	12.9%	0.011	8.8%	11.5%	0.177	7.7%	8.5%	0.183
	Male	51.6%	51.7%	0.823	51.5%	51.2%	0.734	50.5%	50.8%	0.382
	Female	48.4%	48.3%	0.823	48.5%	48.8%	0.734	49.5%	49.2%	0.382
	Aged <=17	22.6%	23.9%	0.084	22.9%	27.6%	0.000	24.0%	24.7%	0.263
	Aged 18-64	56.9%	55.6%	0.063	61.4%	59.7%	0.202	62.6%	61.8%	0.204
	Aged >=65	20.6%	20.5%	0.899	15.7%	12.7%	0.074	13.4%	13.5%	0.916
	Disability proportion	13.7%	12.9%	0.101	11.6%	10.6%	0.198	10.5%	11.2%	0.074
	Single-parent households	4.4%	5.0%	0.129	4.8%	3.8%	0.282	5.4%	5.9%	0.358
Housing Type & Transportation	Limited English >5 years old	4.6%	4.0%	0.402	4.8%	4.4%	0.785	4.1%	5.5%	0.187
	Multi-unit structures	5.4%	4.0%	0.081	10.7%	3.1%	0.000	15.0%	6.6%	0.000
	Mobile homes	13.5%	17.5%	0.003	9.7%	8.3%	0.617	3.2%	7.4%	0.000
	Crowding	2.3%	3.6%	0.016	2.4%	2.3%	0.774	2.6%	3.2%	0.215
	No vehicle	4.1%	4.8%	0.133	4.2%	4.6%	0.619	4.4%	3.2%	0.005
	No internet	29.4%	41.1%	0.004	21.0%	20.7%	0.942	15.7%	21.3%	0.051
	Group quarters	3.4%	2.8%	0.365	3.5%	1.1%	0.010	1.8%	1.9%	0.936

Data: HRSA Data Warehouse. Rurality assigned using 2010 RUCA codes: Urban - 1.0-3.0, Large Rural - 4.0-6.0, Small Rural - 7.0 and higher

Dental Health HHS Region 9: Arizona, California, Hawaii, and Nevada

Small Rural Tracts. In Region 9, Dental Health HPSA tracts showed numerous differences from non-HPSA tracts across all geography types, particularly in small rural and urban areas. In small rural areas, HPSA tracts had a markedly higher share of residents below 150 percent of the poverty line (39.1 percent vs. 25.4 percent, $p < 0.001$), a higher uninsured rate (15.4 percent vs. 7.6 percent, $p < 0.001$), and a lower share of college graduates (22.6 percent vs. 32.2 percent, $p < 0.001$). These tracts also had more mobile home residence (37.6 percent vs. 18.7 percent, $p < 0.001$), higher rates of crowding (10.5 percent vs. 5.1 percent, $p < 0.001$), and more residents without vehicle access (9.3 percent vs. 4.6 percent, $p < 0.001$) than non-designated tracts.

Large Rural Tracts. In large rural areas, the uninsured rate was higher in HPSA tracts (12.6 percent vs. 7.3 percent, $p < 0.05$), and the share of college graduates was lower (26.3 percent vs. 31.9 percent, $p < 0.05$). HPSA tracts also had a higher proportion of children (26.0 percent vs. 22.2 percent, $p < 0.05$) and a higher proportion of households without internet access (4.3 percent vs. 2.9 percent, $p < 0.05$). Fewer multi-unit structures were present in HPSA tracts (2.0 percent vs. 5.8 percent, $p < 0.001$) than in non-designated tracts.

Urban Tracts. Urban HPSA tracts displayed considerable differences across numerous measures. The poverty rate was higher (29.3 percent vs. 19.8 percent, $p < 0.001$), the share of college graduates was lower (25.7 percent vs. 42.9 percent, $p < 0.001$), and a higher proportion of residents lacked a high school diploma (22.9 percent vs. 15.2 percent, $p < 0.001$). Uninsurance was also more common (11.8 percent vs. 7.6 percent, $p < 0.001$), as mobile home residence (18.5 percent vs. 3.9 percent, $p < 0.001$) and households without internet access (4.7 percent vs. 2.2 percent, $p < 0.001$). Urban HPSA tracts had more single-parent households (8.7 percent vs. 6.2 percent, $p < 0.001$) and a greater share of residents with limited English proficiency (15.0 percent vs. 10.1 percent, $p < 0.01$) than did non-designated tracts.



Key Takeaways

- Dental HPSA tracts had higher poverty, uninsured rates, and lower educational attainment, particularly in small rural and urban areas.
- Households lacking internet access was more prevalent in HPSAs across all geographic types.
- Large rural HPSAs had fewer college graduates, less housing burden, and lower multi-unit structure prevalence.

Dental Health HPSAs and non-HPSAs: HHS Region 9

Variable Category	Variable Name	Small Rural Non-Area %	Small Rural Area %	p-value	Large Rural Non-Area %	Large Rural Area %	p-value	Urban Non-Area %	Urban Area %	p-value
Population and Tracts	N(est.)	1,096,985	193,247	-	2,212,038	106,539	-	46,984,317	490,666	-
	Number of tracts	401	71	-	592	28	-	10,917	125	-
Socio-economic Status	Below 150% poverty	25.4%	39.1%	0.000	25.1%	30.7%	0.098	19.8%	29.3%	0.000
	Unemployed	7.7%	10.5%	0.008	7.4%	9.1%	0.127	6.3%	6.8%	0.207
	Housing burden	27.3%	16.5%	0.000	29.2%	22.4%	0.004	28.9%	28.6%	0.741
	No High School Diploma	14.1%	17.9%	0.004	15.5%	19.2%	0.190	15.2%	22.9%	0.000
	High School Diploma	12.1%	10.2%	0.023	12.0%	12.5%	0.621	8.9%	11.9%	0.000
	Some College	25.7%	25.9%	0.829	24.9%	24.7%	0.939	20.7%	23.7%	0.000
	College graduate	32.2%	22.6%	0.000	31.9%	26.3%	0.032	42.9%	25.7%	0.000
Household Characteristics	Uninsured	7.6%	15.4%	0.000	7.3%	12.6%	0.013	7.6%	11.8%	0.000
	Male	52.5%	50.1%	0.002	51.0%	51.2%	0.928	50.0%	51.3%	0.103
	Female	47.5%	49.9%	0.002	49.0%	48.8%	0.928	50.0%	48.7%	0.103
	Aged <=17	20.6%	25.0%	0.000	22.2%	26.0%	0.029	22.3%	23.6%	0.074
	Aged 18-64	57.5%	56.2%	0.254	58.1%	57.8%	0.857	62.6%	60.3%	0.016
	Aged >=65	21.9%	18.8%	0.074	19.8%	16.2%	0.053	15.2%	16.1%	0.415
	Disability proportion	15.2%	15.4%	0.849	14.8%	14.3%	0.704	11.0%	13.5%	0.000
	Single-parent households	4.8%	8.0%	0.000	6.5%	5.7%	0.414	6.2%	8.7%	0.000
Housing Type & Transportation	Limited English >5 years old	11.7%	7.6%	0.004	9.7%	10.8%	0.753	10.1%	15.0%	0.002
	Multi-unit structures	3.4%	1.2%	0.000	5.8%	2.0%	0.000	16.1%	10.2%	0.000
	Mobile homes	18.7%	37.6%	0.000	12.6%	13.8%	0.724	3.9%	18.5%	0.000
	Crowding	5.1%	10.5%	0.000	6.4%	8.3%	0.204	8.5%	10.9%	0.001
	No vehicle	4.6%	9.3%	0.000	5.6%	5.7%	0.956	6.4%	7.6%	0.061
	No internet	31.0%	99.4%	0.000	28.4%	51.1%	0.032	20.3%	35.7%	0.000
	Group quarters	6.4%	2.4%	0.001	3.4%	3.5%	0.966	2.0%	4.1%	0.132

Data: HRSA Data Warehouse. Rurality assigned using 2010 RUCA codes: Urban - 1.0-3.0, Large Rural - 4.0-6.0, Small Rural - 7.0 and higher

Dental Health HHS Region 10: Alaska, Idaho, Oregon, and Washington

Small Rural Tracts. In Region 10, Dental Health HPSA tracts exhibited several differences from non-HPSA tracts, with notable contrasts observed across all geography types. In small rural areas, HPSA tracts had a higher unemployment rate (7.6 percent vs. 5.3 percent, $p < 0.001$), a lower share of residents without a high school diploma (9.1 percent vs. 12.0 percent, $p < 0.001$), and higher uninsurance (12.0 percent vs. 10.1 percent, $p < 0.05$). The share of adults aged 18 to 64 was higher (59.0 percent vs. 55.3 percent, $p < 0.001$), while the share aged 65 and older was lower (18.1 percent vs. 23.2 percent, $p < 0.001$). HPSA tracts had less mobile home residence (11.6 percent vs. 19.7 percent, $p < 0.001$), but more households lacked vehicle access (13.2 percent vs. 4.6 percent, $p < 0.001$), crowding (7.8 percent vs. 3.9 percent, $p < 0.01$), and a higher proportion of residents in group quarters (6.3 percent vs. 3.0 percent, $p < 0.05$) as compared to non-designated tracts.

Large Rural Tracts. In large rural areas, educational attainment was higher in HPSA tracts, with fewer residents lacking a high school diploma (6.9 percent vs. 12.1 percent, $p < 0.001$) and more with a college degree (37.9 percent vs. 34.9 percent, $p < 0.05$). Mobile home residence was less common in HPSA tracts (8.7 percent vs. 13.4 percent, $p < 0.001$), and multi-unit structures were less prevalent (5.7 percent vs. 8.0 percent, $p < 0.05$) than in non-designated tracts.

Urban Tracts. Urban HPSA tracts had lower educational attainment and fewer resources than their non-HPSA counterparts. The share of residents with a college degree was lower (43.7 percent vs. 48.3 percent, $p < 0.001$), and a higher proportion had only a high school diploma (12.6 percent vs. 11.4 percent, $p < 0.001$) or some college (25.7 percent vs. 22.7 percent, $p < 0.001$). Uninsurance was lower (5.5 percent vs. 6.5 percent, $p < 0.001$), as was vehicle access (4.2 percent without vs. 6.3 percent without, $p < 0.001$), and more mobile home residence (9.6 percent vs. 4.9 percent, $p < 0.001$). Multi-unit structures were less common in HPSA tracts (8.3 percent vs. 14.5 percent, $p < 0.001$) as compared to non-designated tracts.



Key Takeaways

- In small rural areas, HPSA tracts had higher unemployment, lower high school non-completion, more uninsurance, fewer seniors, and greater internet and vehicle access challenges.
- In large rural areas, HPSA tracts had better educational attainment and less mobile home residence, and a lower proportion of fewer seniors.
- In urban areas, HPSA tracts had lower education, more mobile home residence, and an older population.

Dental Health HPSAs and non-HPSAs: HHS Region 10

Variable Category	Variable Name	Small Rural Non-Area %	Small Rural Area %	p-value	Large Rural Non-Area %	Large Rural Area %	p-value	Urban Non-Area %	Urban Area %	p-value
Population and Tracts	N(est.)	886,528	291,641	-	1,388,307	343,267	-	10,752,482	844,628	-
	Number of tracts	283	98	-	339	89	-	2,410	199	-
Socio-economic Status	Below 150% poverty	24.2%	22.9%	0.307	24.5%	18.9%	0.000	16.7%	15.5%	0.091
	Unemployed	5.3%	7.6%	0.000	5.8%	6.1%	0.514	4.9%	4.7%	0.360
	Housing burden	24.6%	21.8%	0.002	27.5%	26.6%	0.467	25.8%	24.9%	0.268
	No High School Diploma	12.0%	9.1%	0.000	12.1%	6.9%	0.000	7.6%	6.5%	0.001
	High School Diploma	13.7%	13.2%	0.354	14.2%	14.7%	0.353	11.4%	12.6%	0.000
	Some College	25.5%	24.6%	0.171	25.6%	26.0%	0.416	22.7%	25.7%	0.000
	College graduate	32.4%	33.0%	0.673	34.9%	37.9%	0.021	48.3%	43.7%	0.000
Household Characteristics	Uninsured	10.1%	12.0%	0.017	8.3%	8.2%	0.817	6.5%	5.5%	0.000
	Male	51.3%	53.0%	0.013	49.9%	51.0%	0.022	50.3%	50.6%	0.383
	Female	48.7%	47.0%	0.013	50.1%	49.0%	0.022	49.7%	49.4%	0.383
	Aged <=17	21.5%	22.9%	0.186	22.7%	22.3%	0.551	21.7%	19.9%	0.000
	Aged 18-64	55.3%	59.0%	0.000	58.4%	59.9%	0.106	62.9%	61.0%	0.002
	Aged >=65	23.2%	18.1%	0.000	18.9%	17.8%	0.295	15.4%	19.1%	0.000
	Disability proportion	17.6%	14.9%	0.000	15.9%	15.1%	0.160	12.7%	13.5%	0.015
	Single-parent households	4.5%	5.2%	0.127	5.5%	5.1%	0.343	5.3%	4.6%	0.020
Housing Type & Transportation	Limited English >5 years old	6.7%	8.1%	0.408	6.8%	4.5%	0.044	5.1%	3.8%	0.066
	Multi-unit structures	3.0%	3.2%	0.782	8.0%	5.7%	0.031	14.5%	8.3%	0.000
	Mobile homes	19.7%	11.6%	0.000	13.4%	8.7%	0.000	4.9%	9.6%	0.000
	Crowding	3.9%	7.8%	0.001	4.1%	4.0%	0.769	3.4%	3.2%	0.320
	No vehicle	4.6%	13.2%	0.000	5.2%	4.4%	0.164	6.3%	4.2%	0.000
	No internet	27.2%	36.4%	0.003	26.5%	16.9%	0.000	14.3%	13.9%	0.568
	Group quarters	3.0%	6.3%	0.029	3.1%	2.9%	0.845	2.0%	2.3%	0.621

Data: HRSA Data Warehouse. Rurality assigned using 2010 RUCA codes: Urban - 1.0-3.0, Large Rural - 4.0-6.0, Small Rural - 7.0 and higher

⊕ Medically Underserved Areas (MUAs), 2022

MUAs, National Census Tract Level, 2022

Key Takeaways

- Across all geographies, MUA tracts had higher poverty, unemployment, and uninsured rates, along with lower educational attainment.
- Disability, mobile home residence, and lack of internet access were more common in MUA tracts in both rural and urban settings.
- Urban MUAs experienced the largest differences in educational attainment and housing conditions.

Small Rural Tracts. In small rural areas, MUA tracts had higher rates of poverty (28.2 percent vs. 21.3 percent, $p < 0.001$), unemployment (5.6 percent vs. 4.3 percent, $p < 0.001$), and uninsurance (10.3 percent vs. 8.3 percent, $p < 0.001$). Educational attainment was lower in MUA tracts, with more residents lacking a high school diploma (13.8 percent vs. 10.3 percent, $p < 0.001$) and fewer college graduates (28.3 percent vs. 34.1 percent, $p < 0.001$). MUA tracts also had a higher disability rate (17.8 percent vs. 14.9 percent, $p < 0.001$), and greater mobile home residence (21.0 percent vs. 11.8 percent, $p < 0.001$). They also had a higher proportion of households without internet access (41.7 percent vs. 31.3 percent, $p < 0.001$) and a higher share of households without vehicle access (6.5 percent vs. 5.8 percent, $p < 0.001$) than non-designated tracts.

Large Rural Tracts. In large rural areas, similar trends were observed. MUA tracts had a higher share of individuals below 150 percent of the poverty line (28.4 percent vs. 22.9 percent, $p < 0.001$), more uninsurance (10.0 percent vs. 8.4 percent, $p < 0.001$), and higher proportions of adults without a high school diploma (13.7 percent vs. 10.7 percent, $p < 0.001$). The proportion of college graduates was lower in MUA tracts (30.5 percent vs. 34.5 percent, $p < 0.001$). MUA tracts also had higher proportions of disability (16.7 percent vs. 15.0 percent, $p < 0.001$), and mobile home residence (18.0 percent vs. 10.2 percent, $p < 0.001$), with a higher share of households without internet access (36.7 percent vs. 27.6 percent, $p < 0.001$).

Urban Tracts. Urban MUA tracts had higher poverty and lower educational attainment compared with urban non-MUA tracts. Poverty rates were higher (27.2 percent vs. 17.3 percent, $p < 0.001$), as were unemployment (6.5 percent vs. 5.0 percent, $p < 0.001$) and uninsurance (10.7 percent vs. 7.7 percent, $p < 0.001$). Educational attainment was lower, with fewer college graduates (35.9 percent vs. 47.9 percent, $p < 0.001$) and more adults without a high school diploma (14.8 percent vs. 9.4 percent, $p < 0.001$). A larger proportion of households without internet (30.4 percent vs. 18.2 percent, $p < 0.001$), and vehicle access was lower (13.1 percent without vs. 7.4 percent without, $p < 0.001$).

Designated and non-Designated Medically Underserved Areas: National Census Tract Level, 2022

Variable Category	Variable Name	Small Rural Non-Area %	Small Rural Area %	p-value	Large Rural Non-Area %	Large Rural Area %	p-value	Urban Non-Area %	Urban Area %	p-value
Population and Tracts	N(est.)	9,285,355	13,637,320	-	15,685,965	12,529,623	-	214,273,614	65,685,716	-
	Number of tracts	3,073	4,716	-	4,135	3,633	-	51,438	17,419	-
Socio-economic Status	Below 150% poverty	21.3%	28.2%	0.000	22.9%	28.4%	0.000	17.3%	27.2%	0.000
	Unemployed	4.3%	5.6%	0.000	4.8%	5.8%	0.000	5.0%	6.5%	0.000
	Housing burden	21.6%	22.1%	0.005	24.2%	24.6%	0.109	25.8%	30.0%	0.000
	No High School Diploma	10.3%	13.8%	0.000	10.7%	13.7%	0.000	9.4%	14.8%	0.000
	High School Diploma	12.3%	13.3%	0.000	12.9%	13.2%	0.004	9.4%	11.2%	0.000
	Some College	20.7%	21.4%	0.000	21.2%	21.6%	0.009	19.2%	20.2%	0.000
	College graduate	34.1%	28.3%	0.000	34.5%	30.5%	0.000	47.9%	35.9%	0.000
Household Characteristics	Uninsured	8.3%	10.3%	0.000	8.4%	10.0%	0.000	7.7%	10.7%	0.000
	Male	50.8%	50.7%	0.427	50.3%	49.9%	0.001	49.4%	49.5%	0.119
	Female	49.2%	49.3%	0.427	49.7%	50.1%	0.001	50.6%	50.5%	0.119
	Aged <=17	21.6%	21.4%	0.236	21.6%	22.3%	0.000	22.1%	22.5%	0.000
	Aged 18-64	57.8%	57.1%	0.000	59.9%	58.8%	0.000	61.9%	61.7%	0.001
	Aged >=65	20.6%	21.5%	0.000	18.4%	18.9%	0.012	16.0%	15.9%	0.212
	Disability proportion	14.9%	17.8%	0.000	15.0%	16.7%	0.000	11.4%	14.2%	0.000
	Single-parent households	4.9%	5.8%	0.000	5.9%	6.9%	0.000	5.9%	7.5%	0.000
Housing Type & Transportation	Limited English >5 years old	5.7%	5.8%	0.681	6.4%	6.0%	0.202	6.3%	8.4%	0.000
	Multi-unit structures	4.1%	2.5%	0.000	6.4%	5.3%	0.000	16.2%	16.5%	0.175
	Mobile homes	11.8%	21.0%	0.000	10.2%	18.0%	0.000	3.5%	9.3%	0.000
	Crowding	2.0%	2.7%	0.000	2.2%	2.8%	0.000	3.3%	4.4%	0.000
	No vehicle	5.8%	6.5%	0.000	6.2%	6.4%	0.036	7.4%	13.1%	0.000
	No internet	31.3%	41.7%	0.000	27.6%	36.7%	0.000	18.2%	30.4%	0.000
	Group quarters	4.2%	4.1%	0.648	4.3%	3.6%	0.003	1.9%	2.9%	0.000

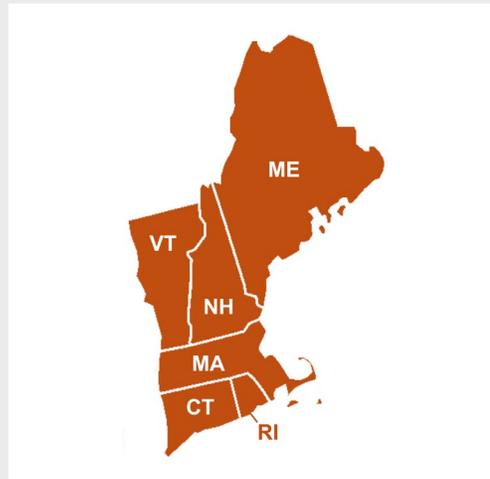
Data: HRSA Data Warehouse. Rurality assigned using 2010 RUCA codes: Urban - 1.0-3.0, Large Rural - 4.0-6.0, Small Rural - 7.0 and higher

MUAs in HHS Regional Offices Region 1 for 2022, National Census Tract Level

Small Rural Tracts. In Region 1, census tracts designated as Medically Underserved Areas (MUAs) showed notable differences from non-MUA tracts across rural and urban settings. In small rural areas, differences between MUA and non-MUA tracts were generally limited. There were no statistically significant differences in poverty, unemployment, or insurance coverage. However, MUA tracts had a lower share of college graduates (42.5 percent vs. 44.8 percent, $p < 0.10$) and a higher share of residents aged 65 and older (26.3 percent vs. 24.0 percent, $p < 0.01$). They also showed slightly higher rates of mobile home residence (11.9 percent vs. 10.0 percent, $p < 0.05$).

Large Rural Tracts. In large rural areas, several socioeconomic and housing variables differed between MUA and non-MUA tracts. MUA tracts had higher poverty rates (23.6 percent vs. 16.9 percent, $p < 0.001$), more adults without a high school diploma (9.6 percent vs. 6.4 percent, $p < 0.01$), and fewer college graduates (39.2 percent vs. 45.5 percent, $p < 0.01$). The disability rate was also higher in MUA tracts (17.3 percent vs. 14.8 percent, $p < 0.01$), and they had lower rates of mobile home residence (6.0 percent vs. 8.0 percent, $p < 0.10$) and fewer multi-unit structures (4.9 percent vs. 7.1 percent, $p < 0.05$) as compared to non-designated tracts.

Urban Tracts. Urban areas in Region 1 displayed the widest differences between MUA and non-MUA tracts. MUA tracts had higher poverty (29.0 percent vs. 13.6 percent, $p < 0.001$), unemployment (7.6 percent vs. 5.0 percent, $p < 0.001$), and housing burden (36.9 percent vs. 24.6 percent, $p < 0.001$). Urban MUA tracts also had higher disability rates (14.8 percent vs. 11.4 percent, $p < 0.001$), more single-parent households (9.5 percent vs. 5.3 percent, $p < 0.001$), greater mobile home residence (1.9 percent vs. 1.4 percent, $p < 0.10$), and lower vehicle access (20.7 percent without vs. 7.8 percent without, $p < 0.001$).



Key Takeaways

- Differences between MUA and non-MUA tracts in small rural areas were limited, while large rural MUAs had lower educational attainment and higher housing burden.
- Urban MUA tracts consistently showed lower educational attainment, higher poverty and unemployment, and more language and internet access barriers.
- Across both large rural and urban areas, disability and household challenges were more common in MUA tracts.

Designated and non-Designated Medically Underserved Areas: HHS Region 1

Variable Category	Variable Name	Small Rural Non-Area %	Small Rural Area %	p-value	Large Rural Non-Area %	Large Rural Area %	p-value	Urban Non-Area %	Urban Area %	p-value
Population and Tracts	N(est.)	715,795	353,017	-	677,024	153,512	-	11,282,689	1,898,110	-
	Number of tracts	250	125	-	191	45	-	2,580	512	-
Socio-economic Status	Below 150% poverty	18.8%	18.9%	0.957	16.9%	23.6%	0.000	13.6%	29.0%	0.000
	Unemployed	4.2%	4.4%	0.446	4.1%	4.9%	0.088	5.0%	7.6%	0.000
	Housing burden	25.7%	26.2%	0.507	26.5%	31.3%	0.007	24.6%	36.9%	0.000
	No High School Diploma	6.5%	7.0%	0.258	6.4%	9.6%	0.001	7.3%	16.8%	0.000
	High School Diploma	9.7%	10.5%	0.069	10.5%	12.1%	0.024	8.2%	10.0%	0.000
	Some College	17.7%	18.0%	0.609	17.7%	18.3%	0.359	15.6%	16.7%	0.000
	College graduate	44.8%	42.5%	0.096	45.5%	39.2%	0.005	53.6%	37.4%	0.000
Household Characteristics	Uninsured	6.4%	6.2%	0.687	5.7%	5.0%	0.340	3.5%	5.7%	0.000
	Male	49.8%	50.2%	0.372	49.2%	50.2%	0.142	49.0%	49.2%	0.530
	Female	50.2%	49.8%	0.372	50.8%	49.8%	0.142	51.0%	50.8%	0.530
	Aged <=17	17.7%	16.7%	0.029	18.3%	17.9%	0.640	19.7%	20.3%	0.094
	Aged 18-64	58.3%	57.0%	0.040	60.7%	60.8%	0.897	62.6%	65.4%	0.000
	Aged >=65	24.0%	26.3%	0.003	21.0%	21.2%	0.857	17.7%	14.3%	0.000
	Disability proportion	15.9%	16.5%	0.281	14.8%	17.3%	0.002	11.4%	14.8%	0.000
	Single-parent households	4.2%	4.3%	0.915	4.9%	5.4%	0.358	5.3%	9.5%	0.000
Housing Type & Transportation	Limited English >5 years old	4.1%	2.9%	0.051	4.4%	8.1%	0.064	6.4%	13.5%	0.000
	Multi-unit structures	3.6%	3.5%	0.965	7.1%	4.9%	0.024	12.4%	20.3%	0.000
	Mobile homes	10.0%	11.9%	0.047	8.0%	6.0%	0.125	1.4%	1.9%	0.085
	Crowding	1.4%	1.2%	0.083	1.4%	1.4%	0.983	1.7%	3.9%	0.000
	No vehicle	6.1%	5.7%	0.460	6.5%	9.2%	0.014	7.8%	20.7%	0.000
	No internet	27.7%	24.7%	0.032	19.9%	23.1%	0.146	14.9%	27.5%	0.000
	Group quarters	3.6%	2.4%	0.048	3.5%	6.6%	0.096	3.1%	3.6%	0.335

Data: HRSA Data Warehouse. Rurality assigned using 2010 RUCA codes: Urban - 1.0-3.0, Large Rural - 4.0-6.0, Small Rural - 7.0 and higher

MUAs in HHS Regional Offices Region 2 for 2022, National Census Tract Level

Small Rural Tracts. In Region 2, MUA and non-MUA tracts showed few statistically significant differences in small and large rural areas, while urban tracts had differences across a broader set of indicators. Among small rural areas, only a few differences emerged. MUA tracts had fewer college graduates (34.4 percent vs. 39.0 percent, $p < 0.01$), a higher uninsured rate (7.5 percent vs. 5.6 percent, $p < 0.05$), and higher mobile home residence (20.1 percent vs. 12.8 percent, $p < 0.001$) than non-designated tracts. The proportion of residents living in multi-unit structures was lower (2.4 percent vs. 3.5 percent, $p < 0.05$). Other differences, including poverty, unemployment, and educational attainment below a high school diploma, were not statistically significant.

Large Rural Tracts. In large rural areas, differences were also limited. MUA tracts had higher poverty levels (28.9 percent vs. 22.6 percent, $p < 0.01$). There were no statistically significant differences in educational attainment, unemployment, housing burden, or insurance status.

Urban Tracts. Urban areas in Region 2 showed broader differences between MUA and non-MUA tracts. MUA tracts had higher poverty (31.6 percent vs. 15.9 percent, $p < 0.001$), unemployment (9.0 percent vs. 5.8 percent, $p < 0.001$), and housing burden (39.5 percent vs. 26.7 percent, $p < 0.001$). Educational attainment was lower in MUA tracts, with fewer college graduates (38.3 percent vs. 50.6 percent, $p < 0.001$) and more adults without a high school diploma (18.5 percent vs. 10.1 percent, $p < 0.001$). MUA tracts also had higher disability rates (13.0 percent vs. 10.6 percent, $p < 0.001$), more single-parent households (9.5 percent vs. 5.3 percent, $p < 0.001$), and less vehicle access (46.9 percent without vs. 17.2 percent without, $p < 0.001$) compared to non-designated tracts.



Key Takeaways

- **Urban MUA tracts consistently differed from non-MUAs across social, economic, and housing indicators, including poverty, unemployment, and internet access.**
- **In large rural areas, MUA tracts had higher poverty and greater share of households without internet access.**
- **Small rural MUA tracts showed few differences, with lower educational attainment and fewer multi-unit structures.**

Designated and non-Designated Medically Underserved Areas: HHS Region 2

Variable Category	Variable Name	Small Rural Non-Area %	Small Rural Area %	p-value	Large Rural Non-Area %	Large Rural Area %	p-value	Urban Non-Area %	Urban Area %	p-value
Population and Tracts	N(est.)	650,306	183,659	-	807,785	155,189	-	21,846,829	5,599,674	-
	Number of tracts	254	71	-	245	45	-	5,549	1,428	-
Socio-economic Status	Below 150% poverty	23.3%	24.5%	0.294	22.6%	28.9%	0.010	15.9%	31.6%	0.000
	Unemployed	5.8%	5.6%	0.763	5.6%	5.4%	0.838	5.8%	9.0%	0.000
	Housing burden	24.3%	22.5%	0.030	25.8%	25.5%	0.868	26.7%	39.5%	0.000
	No High School Diploma	10.8%	11.7%	0.296	11.1%	11.8%	0.533	10.1%	18.5%	0.000
	High School Diploma	12.4%	12.7%	0.573	12.9%	13.5%	0.356	8.1%	9.2%	0.000
	Some College	16.3%	17.2%	0.130	17.6%	17.6%	0.987	15.0%	15.8%	0.000
	College graduate	39.0%	34.4%	0.001	37.9%	35.5%	0.249	50.6%	38.3%	0.000
Household Characteristics	Uninsured	5.6%	7.5%	0.021	4.7%	5.3%	0.328	5.5%	7.6%	0.000
	Male	51.3%	50.8%	0.376	50.6%	51.0%	0.798	49.1%	48.3%	0.000
	Female	48.7%	49.2%	0.376	49.4%	49.0%	0.798	50.9%	51.7%	0.000
	Aged <=17	18.7%	20.2%	0.087	20.0%	20.9%	0.430	20.8%	22.4%	0.000
	Aged 18-64	60.1%	59.2%	0.407	61.4%	59.6%	0.178	61.9%	63.5%	0.000
	Aged >=65	21.1%	20.5%	0.510	18.6%	19.6%	0.361	17.3%	14.1%	0.000
	Disability proportion	15.4%	14.9%	0.406	14.8%	16.7%	0.073	10.6%	13.0%	0.000
	Single-parent households	4.5%	4.3%	0.683	5.8%	6.5%	0.485	5.3%	9.5%	0.000
Housing Type & Transportation	Limited English >5 years old	9.1%	6.8%	0.312	7.9%	7.1%	0.799	8.4%	13.0%	0.000
	Multi-unit structures	3.5%	2.4%	0.035	5.9%	5.6%	0.811	19.2%	45.7%	0.000
	Mobile homes	12.8%	20.1%	0.000	8.4%	10.6%	0.243	1.3%	1.2%	0.845
	Crowding	1.7%	1.8%	0.908	1.6%	1.5%	0.764	4.5%	8.9%	0.000
	No vehicle	8.7%	8.1%	0.395	9.5%	11.7%	0.207	17.2%	46.9%	0.000
	No internet	31.0%	38.8%	0.022	25.4%	33.5%	0.007	20.3%	39.1%	0.000
	Group quarters	7.7%	5.4%	0.302	6.1%	5.4%	0.807	2.3%	2.7%	0.048

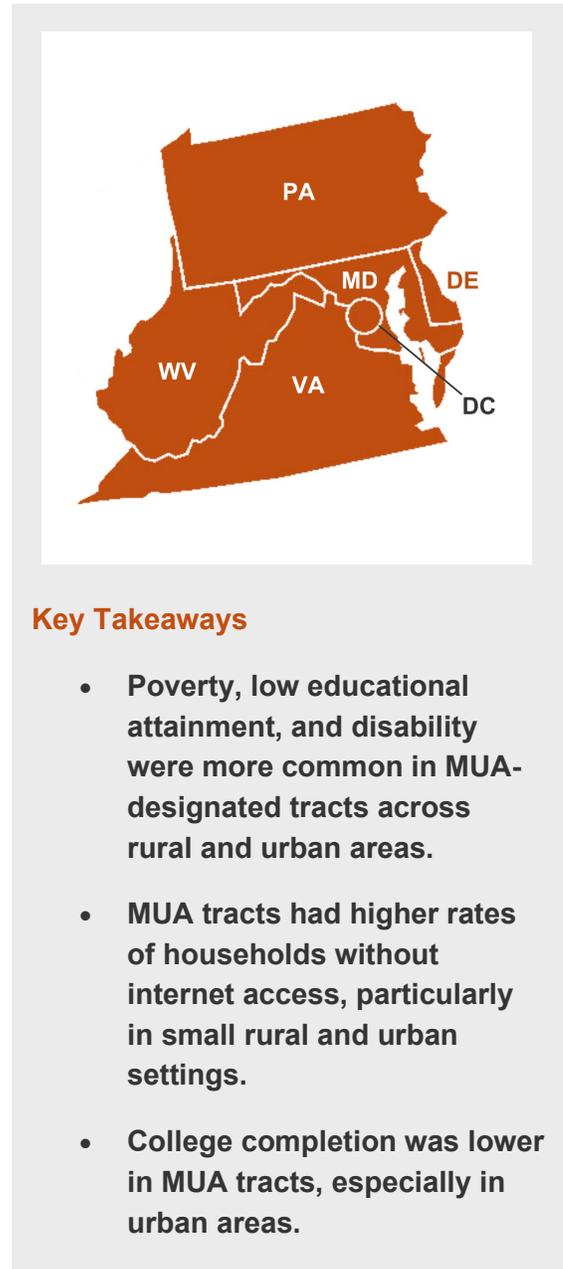
Data: HRSA Data Warehouse. Rurality assigned using 2010 RUCA codes: Urban - 1.0-3.0, Large Rural - 4.0-6.0, Small Rural - 7.0 and higher

MUAs in HHS Regional Offices Region 3 for 2022, National Census Tract Level

Small Rural Tracts. In Region 3, small rural MUA tracts differed from non-MUA tracts in several socio-economic and housing characteristics. Small rural MUAs had a higher share of residents living below 150 percent of poverty (26.7 percent vs. 22.6 percent, $p < 0.001$), more without a high school diploma (14.1 percent vs. 10.9 percent, $p < 0.001$), and fewer with a college degree (27.3 percent vs. 29.8 percent, $p < 0.01$). These areas also had more residents with only a high school diploma or some college, and higher disability prevalence (18.4 percent vs. 16.5 percent, $p < 0.001$) than non-designated tracts.

Large Rural Tracts. Large rural MUA tracts in Region 3 had less favorable socioeconomic indicators than large rural non-MUA tracts. They had higher proportions of residents living below 150 percent of poverty (24.4 percent vs. 21.7 percent, $p < 0.01$), and higher percentages without a high school diploma (11.9 percent vs. 9.4 percent, $p < 0.001$). The disability proportion was higher (17.9 percent vs. 16.2 percent, $p < 0.001$) within large rural areas. A higher share of residents were aged 65 and older (24.7 percent vs. 20.5 percent, $p < 0.001$) as compared to non-designated tracts.

Urban Tracts. Urban MUAs had distinct demographic and housing differences. These tracts had a higher proportion of residents below 150 percent of poverty (28.6 percent vs. 14.8 percent, $p < 0.001$), higher unemployment (7.4 percent vs. 4.8 percent, $p < 0.001$), and lower educational attainment. The share without a high school diploma was 12.4 percent in MUAs vs. 7.8 percent in non-MUAs ($p < 0.001$), and the college graduation rate was lower (34.8 percent vs. 50.0 percent, $p < 0.001$). Urban MUAs had more mobile home residence (6.3 percent vs. 2.5 percent, $p < 0.001$), higher disability proportion (16.3 percent vs. 11.5 percent, $p < 0.001$) than did non-designated tracts.



Key Takeaways

- Poverty, low educational attainment, and disability were more common in MUA-designated tracts across rural and urban areas.
- MUA tracts had higher rates of households without internet access, particularly in small rural and urban settings.
- College completion was lower in MUA tracts, especially in urban areas.

Designated and non-Designated Medically Underserved Areas: HHS Region 3

Variable Category	Variable Name	Small Rural Non-Area %	Small Rural Area %	p-value	Large Rural Non-Area %	Large Rural Area %	p-value	Urban Non-Area %	Urban Area %	p-value
Population and Tracts	N(est.)	574,718	1,064,023	-	1,099,411	777,087	-	22,566,331	5,151,045	-
	Number of tracts	183	344	-	305	257	-	5,563	1,481	-
Socio-economic Status	Below 150% poverty	22.6%	26.7%	0.000	21.7%	24.4%	0.007	14.8%	28.6%	0.000
	Unemployed	5.0%	5.3%	0.370	5.3%	5.6%	0.326	4.8%	7.4%	0.000
	Housing burden	20.7%	22.0%	0.054	22.9%	21.9%	0.178	22.6%	30.1%	0.000
	No High School Diploma	10.9%	14.1%	0.000	9.4%	11.9%	0.000	7.8%	12.4%	0.000
	High School Diploma	11.4%	13.0%	0.001	11.0%	12.3%	0.001	8.7%	11.3%	0.000
	Some College	15.9%	18.0%	0.000	16.7%	18.5%	0.000	16.6%	18.9%	0.000
	College graduate	29.8%	27.3%	0.004	32.3%	31.6%	0.483	50.0%	34.8%	0.000
Household Characteristics	Uninsured	6.8%	7.3%	0.266	6.5%	6.5%	0.947	5.8%	6.9%	0.000
	Male	50.6%	50.3%	0.665	50.1%	49.5%	0.194	49.3%	48.6%	0.000
	Female	49.4%	49.7%	0.665	49.9%	50.5%	0.194	50.7%	51.4%	0.000
	Aged <=17	19.3%	19.4%	0.921	19.4%	18.9%	0.266	21.4%	21.0%	0.075
	Aged 18-64	59.0%	57.6%	0.025	60.1%	56.4%	0.000	61.7%	62.6%	0.001
	Aged >=65	21.7%	23.1%	0.008	20.5%	24.7%	0.000	16.9%	16.4%	0.012
	Disability proportion	16.5%	18.4%	0.000	16.2%	17.9%	0.000	11.5%	16.3%	0.000
	Single-parent households	4.9%	5.2%	0.351	5.6%	5.3%	0.543	5.8%	8.5%	0.000
Housing Type & Transportation	Limited English >5 years old	6.1%	5.6%	0.716	6.0%	4.0%	0.041	5.0%	6.6%	0.000
	Multi-unit structures	3.1%	2.3%	0.040	5.0%	4.4%	0.413	12.7%	12.2%	0.438
	Mobile homes	14.0%	19.8%	0.000	9.0%	16.6%	0.000	2.5%	6.3%	0.000
	Crowding	1.1%	1.4%	0.018	1.2%	1.5%	0.037	1.9%	2.3%	0.000
	No vehicle	7.2%	7.5%	0.521	7.9%	7.0%	0.109	7.2%	16.9%	0.000
	No internet	34.1%	40.9%	0.000	30.6%	33.1%	0.107	17.8%	34.3%	0.000
	Group quarters	5.3%	4.5%	0.507	5.2%	3.1%	0.028	2.3%	4.1%	0.000

Data: HRSA Data Warehouse. Rurality assigned using 2010 RUCA codes: Urban - 1.0-3.0, Large Rural - 4.0-6.0, Small Rural - 7.0 and higher

MUAs in HHS Regional Offices Region 4 for 2022, National Census Tract Level

Small Rural Tracts. In HHS Region 4, small rural tracts designated as Medically Underserved Areas (MUAs) showed higher rates of socioeconomic need and housing-related challenges compared to non-designated small rural tracts. Designated tracts had a higher share of residents living below 150 percent of the poverty level (32.1 percent vs. 30.4 percent; $p < 0.05$) and a greater proportion without a high school diploma (16.9 percent vs. 15.6 percent; $p < 0.01$). Differences in other educational attainment and insurance coverage were not statistically significant. Mobile home residence was more prevalent in designated small rural tracts (29.1 percent vs. 24.4 percent; $p < 0.001$) than in non-designated tracts.

Large Rural Tracts. Among large rural tracts, those designated as MUAs had higher levels of poverty (30.8 percent vs. 27.1 percent; $p < 0.001$), mobile home residence (23.1 percent vs. 17.1 percent; $p < 0.001$), and lower educational attainment, including a higher proportion of residents without a high school diploma (14.9 percent vs. 13.5 percent; $p < 0.001$). Disability rates were also slightly elevated (17.2 percent vs. 16.5 percent; $p < 0.01$) than seen in non-designated tracts.

Urban Tracts. Urban MUA tracts exhibited widespread differences across nearly all indicators. These tracts had a higher proportion of individuals below 150 percent of poverty (24.0 percent vs. 20.6 percent; $p < 0.001$), higher mobile home residence (15.3 percent vs. 5.5 percent; $p < 0.001$), and more individuals without a high school diploma (11.4 percent vs. 9.7 percent; $p < 0.001$). The urban area also had a lower share of college graduates and a slightly higher proportion of residents without vehicle access than in non-designated tracts.



Key Takeaways

- MUA-designated tracts had higher poverty, lower educational attainment, and mobile home residence across all geographies.
- Urban and large rural MUA tracts had higher share of households without internet and older adults.
- Multi-unit structures were less common in urban MUA tracts compared to non-MUA areas.

Designated and non-Designated Medically Underserved Areas: HHS Region 4

Variable Category	Variable Name	Small Rural Non-Area %	Small Rural Area %	p-value	Large Rural Non-Area %	Large Rural Area %	p-value	Urban Non-Area %	Urban Area %	p-value
Population and Tracts	N(est.)	610,775	3,871,876	-	2,373,354	4,918,959	-	34,665,778	20,942,721	-
	Number of tracts	238	1,308	-	614	1,443	-	8,313	5,357	-
Socio-economic Status	Below 150% poverty	30.4%	32.1%	0.042	27.1%	30.8%	0.000	20.6%	24.0%	0.000
	Unemployed	6.0%	6.2%	0.767	4.8%	6.1%	0.000	4.9%	5.6%	0.000
	Housing burden	23.5%	22.7%	0.247	23.9%	24.4%	0.274	27.9%	26.4%	0.000
	No High School Diploma	15.6%	16.9%	0.010	13.5%	14.9%	0.000	9.7%	11.4%	0.000
	High School Diploma	13.0%	14.1%	0.004	13.5%	13.0%	0.048	9.7%	12.0%	0.000
	Some College	19.3%	20.0%	0.065	20.4%	20.8%	0.171	19.3%	21.0%	0.000
	College graduate	26.1%	25.8%	0.662	30.9%	30.2%	0.229	46.5%	37.1%	0.000
Household Characteristics	Uninsured	9.9%	11.0%	0.006	10.5%	11.1%	0.040	10.9%	10.8%	0.447
	Male	49.1%	50.2%	0.002	49.3%	49.2%	0.830	48.8%	49.2%	0.000
	Female	50.9%	49.8%	0.002	50.7%	50.8%	0.830	51.2%	50.8%	0.000
	Aged <=17	21.8%	21.0%	0.065	21.9%	22.1%	0.498	21.8%	20.9%	0.000
	Aged 18-64	59.0%	58.6%	0.429	59.9%	59.3%	0.038	61.9%	59.6%	0.000
	Aged >=65	19.3%	20.4%	0.009	18.2%	18.6%	0.108	16.3%	19.6%	0.000
	Disability proportion	19.2%	19.1%	0.888	16.5%	17.2%	0.007	12.0%	15.1%	0.000
	Single-parent households	6.2%	6.8%	0.074	6.8%	7.8%	0.000	7.0%	6.6%	0.000
Housing Type & Transportation	Limited English >5 years old	4.5%	5.9%	0.069	5.0%	4.8%	0.673	6.4%	5.1%	0.000
	Multi-unit structures	2.8%	2.0%	0.113	4.2%	3.6%	0.077	15.0%	8.0%	0.000
	Mobile homes	24.4%	29.1%	0.000	17.1%	23.1%	0.000	5.5%	15.3%	0.000
	Crowding	2.0%	2.3%	0.085	2.2%	2.4%	0.179	2.7%	2.3%	0.000
	No vehicle	7.4%	6.8%	0.234	5.6%	6.4%	0.002	5.3%	5.7%	0.000
	No internet	42.5%	45.1%	0.119	36.8%	40.6%	0.001	21.1%	28.9%	0.000
	Group quarters	3.4%	4.5%	0.118	3.3%	3.4%	0.817	1.8%	2.6%	0.000

Data: HRSA Data Warehouse. Rurality assigned using 2010 RUCA codes: Urban - 1.0-3.0, Large Rural - 4.0-6.0, Small Rural - 7.0 and higher

MUAs in HHS Regional Offices Region 5 for 2022, National Census Tract Level

Small Rural Tracts. In HHS Region 5, small rural MUA tracts had higher levels of socioeconomic and housing-related challenges compared with non-MUA tracts. Designated small rural tracts had higher rates of poverty (22.7 percent vs. 19.5 percent; $p < 0.001$), unemployment (4.7 percent vs. 4.0 percent; $p < 0.001$), and crowding (13.4 percent vs. 8.8 percent; $p < 0.001$) than non-designated tracts. Educational attainment was slightly lower, with a smaller proportion of college graduates (30.6 percent vs. 31.7 percent; $p < 0.05$). Differences were also observed in age distribution and disability rates, including a higher share of residents aged 65 and older (22.7 percent vs. 20.5 percent; $p < 0.001$) and a higher disability proportion (16.5 percent vs. 14.3 percent; $p < 0.001$) compared to non-designated tracts.

Large Rural Tracts. Among large rural tracts, designated areas also exhibited higher poverty (25.2 percent vs. 21.6 percent; $p < 0.001$), greater unemployment (5.2 percent vs. 4.6 percent; $p < 0.05$), and more crowding (10.8 percent vs. 6.8 percent; $p < 0.001$). Educational attainment was modestly lower, with a smaller share of college graduates (31.4 percent vs. 33.5 percent; $p < 0.01$). Designated tracts when compared to non-designated tracts, had slightly higher disability rates (16.1 percent vs. 14.6 percent; $p < 0.001$).

Urban Tracts. Urban MUAs in Region 5 demonstrated substantial differences across multiple dimensions. Poverty levels were double in designated tracts compared to non-designated tracts (33.0 percent vs. 16.6 percent; $p < 0.001$), and mobile home residence was also more prevalent (3.9 percent vs. 2.5 percent; $p < 0.001$). Designated tracts had higher rates of residents without a high school diploma (14.4 percent vs. 7.4 percent; $p < 0.001$), lower college completion (33.3 percent vs. 46.8 percent; $p < 0.001$), and greater internet inaccessibility (14.8 percent vs. 6.3 percent; $p < 0.001$) as compared to non-designated tracts.



Key Takeaways

- Across all geographies, MUA tracts had higher poverty and disability rates.
- Educational attainment was lower in MUA-designated tracts, with fewer college graduates and more adults with limited education.
- Urban MUA tracts had higher unemployment and higher share of households without internet access compared to non-MUA areas.

Designated and non-Designated Medically Underserved Areas: HHS Region 5

Variable Category	Variable Name	Small Rural Non-Area %	Small Rural Area %	p-value	Large Rural Non-Area %	Large Rural Area %	p-value	Urban Non-Area %	Urban Area %	p-value
Population and Tracts	N(est.)	2,853,686	2,028,997	-	4,041,740	1,485,955	-	35,650,605	6,891,078	-
	Number of tracts	857	697	-	1,046	434	-	8,941	2,218	-
Socio-economic Status	Below 150% poverty	19.5%	22.7%	0.000	21.6%	25.2%	0.000	16.6%	33.0%	0.000
	Unemployed	4.0%	4.7%	0.000	4.6%	5.2%	0.012	4.8%	8.4%	0.000
	Housing burden	20.1%	20.7%	0.051	21.8%	22.5%	0.157	23.0%	31.7%	0.000
	No High School Diploma	9.8%	10.0%	0.479	8.8%	9.8%	0.002	7.4%	14.4%	0.000
	High School Diploma	12.4%	13.3%	0.000	12.8%	12.4%	0.176	10.0%	12.0%	0.000
	Some College	20.8%	21.8%	0.000	21.1%	20.7%	0.134	20.1%	20.8%	0.000
	College graduate	31.7%	30.6%	0.027	33.5%	31.4%	0.003	46.8%	33.3%	0.000
Household Characteristics	Uninsured	7.9%	7.5%	0.433	6.0%	6.7%	0.003	5.5%	8.2%	0.000
	Male	50.5%	51.1%	0.001	50.3%	50.3%	0.933	49.4%	49.7%	0.024
	Female	49.5%	48.9%	0.001	49.7%	49.7%	0.933	50.6%	50.3%	0.024
	Aged <=17	22.3%	21.1%	0.000	21.0%	21.1%	0.803	22.2%	22.7%	0.013
	Aged 18-64	57.2%	56.2%	0.000	59.8%	59.7%	0.829	61.2%	63.0%	0.000
	Aged >=65	20.5%	22.7%	0.000	19.1%	19.2%	0.967	16.6%	14.3%	0.000
	Disability proportion	14.3%	16.5%	0.000	14.6%	16.1%	0.000	11.6%	14.8%	0.000
	Single-parent households	4.9%	4.6%	0.069	5.7%	5.2%	0.043	5.9%	9.4%	0.000
Housing Type & Transportation	Limited English >5 years old	3.9%	3.5%	0.360	5.5%	4.2%	0.035	3.9%	7.3%	0.000
	Multi-unit structures	4.3%	3.2%	0.000	6.9%	5.5%	0.011	11.3%	15.4%	0.000
	Mobile homes	8.8%	13.4%	0.000	6.8%	10.8%	0.000	2.5%	3.9%	0.000
	Crowding	1.6%	1.8%	0.176	1.5%	1.8%	0.008	1.8%	3.1%	0.000
	No vehicle	6.2%	6.4%	0.485	6.2%	6.5%	0.434	6.3%	14.8%	0.000
	No internet	33.4%	35.3%	0.178	26.3%	31.9%	0.000	17.9%	32.7%	0.000
	Group quarters	3.0%	2.8%	0.478	4.5%	3.4%	0.074	1.7%	3.9%	0.000

Data: HRSA Data Warehouse. Rurality assigned using 2010 RUCA codes: Urban - 1.0-3.0, Large Rural - 4.0-6.0, Small Rural - 7.0 and higher

MUAs in HHS Regional Offices Region 6 for 2022, National Census Tract Level

Small Rural Tracts. In HHS Region 6, small rural MUA tracts had higher levels of socioeconomic and housing challenges compared with non-MUA tracts. These designated tracts had a higher percentage of individuals below one hundred fifty percent of the poverty level (32.1 percent vs. 24.8 percent; $p < 0.001$) and higher unemployment (6.1 percent vs. 4.6 percent; $p < 0.001$). They also had lower rates of college completion (23.8 percent vs. 28.2 percent; $p < 0.001$) and higher mobile home residence (23.8 percent vs. 17.4 percent; $p < 0.001$). A larger share of the population was aged 65 and older (20.3 percent vs. 17.8 percent; $p < 0.001$), and the disability rate was notably higher (19.3 percent vs. 14.3 percent; $p < 0.001$).

Large Rural Tracts. Among large rural tracts, MUA tracts had higher levels of socioeconomic and housing challenges compared with non-MUA tracts. The share of the population living in poverty (33.0 percent vs. 27.2 percent; $p < 0.001$), unemployed (6.3 percent vs. 5.2 percent; $p < 0.001$), and without a high school diploma (17.3 percent vs. 14.1 percent; $p < 0.001$) was greater in designated areas. College graduation rates were lower (26.3 percent vs. 30.3 percent; $p < 0.001$), and the proportion of residents living in mobile homes was higher (20.0 percent vs. 14.5 percent; $p < 0.001$) than in non-designated tracts.

Urban Tracts. In urban areas, MUAs were more socioeconomically challenged across most indicators. Designated urban tracts had higher poverty (29.5 percent vs. 20.7 percent; $p < 0.001$), lower educational attainment (18.7 percent without a high school diploma vs. 11.8 percent; $p < 0.001$), and fewer college graduates (31.9 percent vs. 43.6 percent; $p < 0.001$). These tracts also had higher proportions of uninsured residents (16.9 percent vs. 14.3 percent; $p < 0.001$), households without vehicle access (6.4 percent vs. 4.8 percent; $p < 0.001$) as compared to non-designated tracts.



Key Takeaways

- MUA tracts across all geographies had higher rates of poverty and share of households lacking internet access.
- Educational attainment was lower in MUA-designated tracts, particularly in large rural and urban areas.
- Urban MUA tracts had greater challenges related to unemployment, internet access, and limited English proficiency.

Designated and non-Designated Medically Underserved Areas: HHS Region 6

Variable Category	Variable Name	Small Rural Non-Area %	Small Rural Area %	p-value	Large Rural Non-Area %	Large Rural Area %	p-value	Urban Non-Area %	Urban Area %	p-value
Population and Tracts	N(est.)	704,443	2,454,763	-	2,065,787	2,115,088	-	24,183,619	11,461,817	-
	Number of tracts	231	860	-	548	621	-	5,685	2,979	-
Socio-economic Status	Below 150% poverty	24.8%	32.1%	0.000	27.2%	33.0%	0.000	20.7%	29.5%	0.000
	Unemployed	4.6%	6.1%	0.000	5.2%	6.3%	0.000	5.1%	6.1%	0.000
	Housing burden	20.1%	21.7%	0.009	24.7%	24.5%	0.741	26.7%	26.8%	0.731
	No High School Diploma	16.5%	16.3%	0.868	14.1%	17.3%	0.000	11.8%	18.7%	0.000
	High School Diploma	13.9%	13.9%	0.935	14.2%	13.6%	0.040	10.4%	11.2%	0.000
	Some College	21.9%	22.1%	0.641	22.4%	21.8%	0.098	21.2%	20.6%	0.000
	College graduate	28.2%	23.8%	0.000	30.3%	26.3%	0.000	43.6%	31.9%	0.000
Household Characteristics	Uninsured	15.7%	12.9%	0.000	14.9%	13.4%	0.002	14.3%	16.9%	0.000
	Male	52.3%	50.7%	0.013	50.4%	50.2%	0.558	49.6%	49.8%	0.050
	Female	47.7%	49.3%	0.013	49.6%	49.8%	0.558	50.4%	50.2%	0.050
	Aged <=17	23.9%	22.4%	0.008	23.3%	24.1%	0.018	24.6%	25.8%	0.000
	Aged 18-64	58.3%	57.3%	0.102	59.9%	58.6%	0.005	62.4%	60.8%	0.000
	Aged >=65	17.8%	20.3%	0.000	16.9%	17.2%	0.362	13.1%	13.5%	0.025
	Disability proportion	14.3%	19.3%	0.000	15.9%	17.3%	0.000	11.3%	13.9%	0.000
	Single-parent households	6.1%	6.9%	0.029	6.7%	8.6%	0.000	7.2%	8.7%	0.000
Housing Type & Transportation	Limited English >5 years old	10.6%	7.2%	0.011	7.8%	8.5%	0.382	6.7%	9.4%	0.000
	Multi-unit structures	3.1%	1.9%	0.006	5.9%	4.1%	0.000	15.1%	8.5%	0.000
	Mobile homes	17.4%	23.8%	0.000	14.5%	20.0%	0.000	5.5%	13.1%	0.000
	Crowding	3.5%	3.1%	0.172	3.6%	4.0%	0.133	4.1%	5.4%	0.000
	No vehicle	5.0%	6.8%	0.000	5.5%	6.9%	0.000	4.8%	6.4%	0.000
	No internet	35.9%	50.7%	0.000	33.6%	47.8%	0.000	21.2%	38.4%	0.000
	Group quarters	6.6%	4.9%	0.180	4.9%	4.3%	0.394	1.5%	2.2%	0.001

Data: HRSA Data Warehouse. Rurality assigned using 2010 RUCA codes: Urban - 1.0-3.0, Large Rural - 4.0-6.0, Small Rural - 7.0 and higher

MUAs in HHS Regional Offices Region 7 for 2022, National Census Tract Level

Small Rural Tracts. In HHS Region 7, small rural MUA tracts had higher levels of socioeconomic and housing challenges compared with non-MUA tracts. These areas had a greater share of residents living below one hundred fifty percent of the poverty level (25.4 percent vs. 19.7 percent; $p < 0.001$) and higher unemployment (3.8 percent vs. 3.3 percent; $p < 0.05$). The educational attainment was lower in designated tracts, with fewer college graduates (28.8 percent vs. 33.9 percent; $p < 0.001$) and more residents without a high school diploma (11.2 percent vs. 8.5 percent; $p < 0.001$). Designated small rural MUAs also had a higher uninsured rate (10.3 percent vs. 7.1 percent; $p < 0.001$), a larger population aged 65 and older (22.2 percent vs. 20.5 percent; $p < 0.001$), and a higher disability rate (17.2 percent vs. 14.1 percent; $p < 0.001$). Housing indicators showed more mobile home residence (11.9 percent vs. 6.3 percent; $p < 0.001$) and a lower share of multi-unit structures (2.5 percent vs. 4.5 percent; $p < 0.001$) than in non-designated tracts.

Large Rural Tracts. Designated large rural MUAs had fewer differences. While poverty, unemployment, and educational attainment levels were similar between designated and non-designated tracts, designated areas had a higher uninsured rate (9.9 percent vs. 8.6 percent; $p < 0.05$), more mobile home residence (10.3 percent vs. 7.3 percent; $p < 0.01$) compared to non-designated tracts.

Urban Tracts. Urban MUA tracts had a greater share of residents living in poverty (31.7 percent vs. 16.9 percent, $p < 0.001$), higher unemployment (5.5 percent vs. 3.9 percent, $p < 0.001$), and fewer college graduates (32.4 percent vs. 47.8 percent, $p < 0.001$) compared with urban non-MUA tracts. These tracts, compared to non-designated tracts, also had more uninsured individuals (12.4 percent vs. 6.9 percent; $p < 0.001$), more mobile home residence (6.0 percent vs. 3.1 percent; $p < 0.001$).



Key Takeaways

- **Small rural MUA tracts had higher poverty, lower educational attainment, more uninsured individuals, and greater mobile home residence.**
- **Large rural MUA tracts had higher rates of households without internet access, with fewer differences in educational attainment.**
- **Urban MUA tracts had differences across most indicators, including education and housing.**

Designated and non-Designated Medically Underserved Areas: HHS Region 7

Variable Category	Variable Name	Small Rural Non-Area %	Small Rural Area %	p-value	Large Rural Non-Area %	Large Rural Area %	p-value	Urban Non-Area %	Urban Area %	p-value
Population and Tracts	N(est.)	1,513,470	1,119,504	-	1,370,956	666,287	-	8,405,208	1,162,694	-
	Number of tracts	478	412	-	373	195	-	2,112	362	-
Socio-economic Status	Below 150% poverty	19.7%	25.4%	0.000	24.1%	24.6%	0.619	16.9%	31.7%	0.000
	Unemployed	3.3%	3.8%	0.017	4.1%	4.1%	0.778	3.9%	5.5%	0.000
	Housing burden	19.2%	20.5%	0.004	23.5%	22.3%	0.102	22.5%	29.6%	0.000
	No High School Diploma	8.5%	11.2%	0.000	10.3%	10.8%	0.457	6.6%	13.2%	0.000
	High School Diploma	12.7%	13.5%	0.006	13.7%	13.4%	0.401	10.6%	13.1%	0.000
	Some College	21.6%	22.0%	0.244	22.4%	22.5%	0.774	21.1%	21.9%	0.028
	College graduate	33.9%	28.8%	0.000	34.2%	33.6%	0.528	47.8%	32.4%	0.000
Household Characteristics	Uninsured	7.1%	10.3%	0.000	8.6%	9.9%	0.020	6.9%	12.4%	0.000
	Male	50.5%	50.7%	0.428	50.7%	50.5%	0.610	49.5%	49.8%	0.246
	Female	49.5%	49.3%	0.428	49.3%	49.5%	0.610	50.5%	50.2%	0.246
	Aged <=17	23.1%	22.6%	0.162	23.0%	23.5%	0.312	23.2%	22.5%	0.157
	Aged 18-64	56.4%	55.1%	0.000	59.6%	58.6%	0.087	61.0%	62.8%	0.001
	Aged >=65	20.5%	22.2%	0.000	17.4%	17.9%	0.319	15.8%	14.7%	0.002
	Disability proportion	14.1%	17.2%	0.000	14.9%	15.2%	0.432	11.7%	15.3%	0.000
	Single-parent households	4.9%	4.8%	0.722	6.5%	6.0%	0.230	6.0%	7.2%	0.000
Housing Type & Transportation	Limited English >5 years old	5.0%	4.2%	0.108	7.0%	6.8%	0.833	3.4%	7.7%	0.000
	Multi-unit structures	4.5%	2.5%	0.000	5.6%	6.3%	0.389	10.7%	15.1%	0.000
	Mobile homes	6.3%	11.9%	0.000	7.3%	10.3%	0.003	3.1%	6.0%	0.000
	Crowding	1.5%	1.8%	0.007	1.8%	2.6%	0.005	1.7%	2.9%	0.000
	No vehicle	4.9%	5.5%	0.009	6.1%	5.8%	0.451	5.0%	10.6%	0.000
	No internet	28.7%	36.7%	0.000	27.1%	31.9%	0.001	18.6%	34.2%	0.000
Group quarters	3.7%	3.2%	0.191	4.8%	4.4%	0.609	1.9%	4.6%	0.000	

Data: HRSA Data Warehouse. Rurality assigned using 2010 RUCA codes: Urban - 1.0-3.0, Large Rural - 4.0-6.0, Small Rural - 7.0 and higher

MUAs in HHS Regional Offices Region 8 for 2022, National Census Tract Level

Small Rural Tracts. In HHS Region 8, small rural tracts designated as Medically Underserved Areas (MUAs) were marked by greater socioeconomic and health-related challenges compared to non-designated tracts. Designated small rural tracts had a higher proportion of residents living below one hundred fifty percent of the poverty level (25.0 percent vs. 17.9 percent; $p < 0.001$) and higher unemployment (4.6 percent vs. 3.2 percent; $p < 0.001$). Fewer residents in designated tracts had a college degree (36.5 percent vs. 41.9 percent; $p < 0.001$) and more lacked a high school diploma (8.9 percent vs. 6.6 percent; $p < 0.001$). These areas also had higher rates of uninsurance (11.5 percent vs. 9.7 percent; $p < 0.01$), more residents aged 65 and older (21.4 percent vs. 19.3 percent; $p < 0.01$), and a higher disability proportion (14.2 percent vs. 12.5 percent; $p < 0.001$) compared to non-designated tracts.

Large Rural Tracts. Among large rural tracts, designated MUAs had elevated levels of poverty (20.4 percent vs. 17.7 percent; $p < 0.05$) and unemployment (4.3 percent vs. 3.3 percent; $p < 0.01$), and a smaller share of residents had a college degree (40.4 percent vs. 45.3 percent; $p < 0.01$). Designated large rural tracts also had a higher share of residents aged 65 and older (17.5 percent vs. 14.9 percent; $p < 0.01$), more single-parent households (5.4 percent vs. 4.5 percent; $p < 0.05$), and greater mobile home residence (12.3 percent vs. 8.8 percent; $p < 0.01$) than non-designated tracts.

Urban Tracts. Urban MUA tracts in Region 8 had consistently higher levels of socioeconomic and housing challenges compared with non-MUA tracts. Designated tracts had higher poverty (20.1 percent vs. 14.2 percent; $p < 0.001$), unemployment (4.4 percent vs. 3.9 percent; $p < 0.01$), and uninsurance (9.2 percent vs. 7.2 percent; $p < 0.001$). They also had lower rates of college graduation (48.4 percent vs. 51.2 percent; $p < 0.01$), more limited English proficiency (5.3 percent vs. 3.8 percent; $p < 0.01$), and a greater share of households without internet access (21.8 percent vs. 14.0 percent; $p < 0.001$) as compared to non-designated tracts.



Key Takeaways

- Small rural MUA tracts had more poverty, unemployment, lower education, and higher rates of disability and mobile home residence.
- Large rural MUA tracts had more poverty, older populations, and more disability, with fewer college graduates.
- Urban MUA tracts had more widespread differences across economic, educational, housing, and technological access indicators.

Designated and non-Designated Medically Underserved Areas: HHS Region 8

Variable Category	Variable Name	Small Rural Non-Area %	Small Rural Area %	p-value	Large Rural Non-Area %	Large Rural Area %	p-value	Urban Non-Area %	Urban Area %	p-value
Population and Tracts	N(est.)	715,032	1,040,210	-	1,085,155	372,148	-	6,929,127	2,249,912	-
	Number of tracts	232	396	-	256	102	-	1,567	559	-
Socio-economic Status	Below 150% poverty	17.9%	25.0%	0.000	17.7%	20.4%	0.024	14.2%	20.1%	0.000
	Unemployed	3.2%	4.6%	0.000	3.3%	4.3%	0.005	3.9%	4.4%	0.001
	Housing burden	21.6%	21.6%	0.935	23.0%	23.8%	0.393	23.6%	26.6%	0.000
	No High School Diploma	6.6%	8.9%	0.000	6.3%	7.5%	0.062	6.6%	8.2%	0.000
	High School Diploma	11.7%	11.6%	0.759	11.3%	13.5%	0.003	10.3%	10.4%	0.475
	Some College	23.0%	23.4%	0.402	22.0%	22.5%	0.518	21.4%	22.2%	0.010
	College graduate	41.9%	36.5%	0.000	45.3%	40.4%	0.005	51.2%	48.4%	0.001
Household Characteristics	Uninsured	9.7%	11.5%	0.001	8.7%	9.5%	0.207	7.2%	9.2%	0.000
	Male	52.1%	51.3%	0.015	51.2%	52.2%	0.202	50.4%	50.9%	0.020
	Female	47.9%	48.7%	0.015	48.8%	47.8%	0.202	49.6%	49.1%	0.020
	Aged <=17	22.6%	22.9%	0.548	23.7%	21.4%	0.004	24.0%	24.1%	0.843
	Aged 18-64	58.1%	55.7%	0.000	61.4%	61.1%	0.782	62.2%	63.6%	0.006
	Aged >=65	19.3%	21.4%	0.001	14.9%	17.5%	0.001	13.8%	12.3%	0.000
	Disability proportion	12.5%	14.2%	0.000	11.2%	12.7%	0.011	10.4%	10.9%	0.046
	Single-parent households	4.1%	4.7%	0.021	4.5%	5.4%	0.033	5.5%	5.1%	0.089
Housing Type & Transportation	Limited English >5 years old	4.8%	4.3%	0.509	4.3%	6.1%	0.249	3.8%	5.3%	0.001
	Multi-unit structures	7.0%	3.9%	0.000	10.6%	9.7%	0.564	14.5%	15.3%	0.472
	Mobile homes	12.8%	15.1%	0.013	8.8%	12.3%	0.005	2.9%	5.0%	0.000
	Crowding	2.2%	2.7%	0.067	2.3%	2.8%	0.164	2.4%	3.5%	0.000
	No vehicle	3.8%	4.6%	0.007	4.3%	4.2%	0.957	4.0%	5.6%	0.000
	No internet	23.5%	36.7%	0.000	20.2%	23.2%	0.073	14.0%	21.8%	0.000
Group quarters	3.5%	3.2%	0.644	2.9%	4.7%	0.245	1.6%	2.6%	0.011	

Data: HRSA Data Warehouse. Rurality assigned using 2010 RUCA codes: Urban - 1.0-3.0, Large Rural - 4.0-6.0, Small Rural - 7.0 and higher

MUAs in HHS Regional Offices Region 9 for 2022, National Census Tract Level

Small Rural Tracts. In HHS Region 9, designated Medically Underserved Areas (MUAs) in small rural tracts had higher poverty rates (30.0 percent vs. 24.3 percent; $p < 0.001$), unemployment (9.1 percent vs. 6.7 percent; $p < 0.001$), and uninsurance (9.7 percent vs. 7.7 percent; $p < 0.01$) than their non-designated counterparts. These areas also had a lower share of college graduates (28.8 percent vs. 33.7 percent; $p < 0.01$), more residents aged 65 and older (22.6 percent vs. 19.9 percent; $p < 0.05$), and a higher disability proportion (16.2 percent vs. 13.9 percent; $p < 0.01$). Crowding (24.1 percent vs. 17.9 percent; $p < 0.05$) and lack of vehicle access (6.0 percent vs. 4.3 percent; $p < 0.01$) were also more common in designated small rural areas.

Large Rural Tracts. Designated large rural tracts in Region 9 also showed higher poverty (26.6 percent vs. 24.2 percent; $p < 0.05$), lower educational attainment (29.7 percent vs. 33.6 percent college graduates; $p < 0.01$), and more residents with disabilities (16.0 percent vs. 13.5 percent; $p < 0.001$). These areas also had more crowding (14.8 percent vs. 10.6 percent; $p < 0.01$) and more households without internet access (32.3 percent vs. 26.6 percent; $p < 0.01$) as compared to non-designated tracts.

Urban Tracts. Urban designated MUAs in Region 9 displayed consistently worse indicators than their non-designated counterparts. Poverty (29.1 percent vs. 18.1 percent; $p < 0.001$), unemployment (7.8 percent vs. 6.0 percent; $p < 0.001$), and uninsurance (10.7 percent vs. 7.0 percent; $p < 0.001$) were all more prevalent. These areas had lower levels of college graduates (30.1 percent vs. 45.1 percent; $p < 0.001$), higher disability (12.2 percent vs. 10.8 percent; $p < 0.001$), and more limited English proficiency (15.5 percent vs. 9.1 percent; $p < 0.001$). Housing instability indicators such as crowding (13.6 percent vs. 7.5 percent; $p < 0.001$), no vehicle access (10.7 percent vs. 5.6 percent; $p < 0.001$), and mobile home residence (5.3 percent vs. 3.8 percent; $p < 0.001$) were also higher in urban MUAs as compared to non-designated tracts.



Key Takeaways

- Small rural MUA tracts had more poverty, unemployment, uninsured individuals, disability, and fewer college graduates.
- Large rural MUA tracts had more poverty, uninsured individuals, disability, residence in mobile homes, and fewer college graduates.
- Urban MUA tracts exhibited differences across most socio-economic, housing, and access indicators compared to non-MUA urban tracts.

Designated and non-Designated Medically Underserved Areas: HHS Region 9

Variable Category	Variable Name	Small Rural Non-Area %	Small Rural Area %	p-value	Large Rural Non-Area %	Large Rural Area %	p-value	Urban Non-Area %	Urban Area %	p-value
Population and Tracts	N(est.)	556,036	734,196	-	1,190,567	1,128,010	-	39,873,847	7,601,136	-
	Number of tracts	218	254	-	316	304	-	9,149	1,893	-
Socio-economic Status	Below 150% poverty	24.3%	30.0%	0.000	24.2%	26.6%	0.018	18.1%	29.1%	0.000
	Unemployed	6.7%	9.1%	0.000	7.3%	7.7%	0.335	6.0%	7.8%	0.000
	Housing burden	27.2%	24.7%	0.012	29.9%	28.0%	0.021	27.4%	36.3%	0.000
	No High School Diploma	13.6%	15.4%	0.098	15.5%	16.0%	0.664	13.4%	25.1%	0.000
	High School Diploma	12.6%	11.3%	0.033	11.5%	12.5%	0.024	8.8%	9.1%	0.012
	Some College	26.2%	25.4%	0.291	24.4%	25.4%	0.069	20.8%	20.2%	0.001
	College graduate	33.7%	28.8%	0.001	33.6%	29.7%	0.001	45.1%	30.1%	0.000
Household Characteristics	Uninsured	7.7%	9.7%	0.004	7.1%	8.0%	0.030	7.0%	10.7%	0.000
	Male	53.1%	51.4%	0.039	51.5%	50.6%	0.111	50.0%	50.3%	0.008
	Female	46.9%	48.6%	0.039	48.5%	49.4%	0.111	50.0%	49.7%	0.008
	Aged <=17	20.9%	21.5%	0.491	21.8%	23.0%	0.064	22.1%	23.2%	0.000
	Aged 18-64	59.1%	55.9%	0.001	58.9%	57.1%	0.004	62.4%	63.4%	0.000
	Aged >=65	19.9%	22.6%	0.027	19.3%	19.9%	0.443	15.5%	13.4%	0.000
	Disability proportion	13.9%	16.2%	0.001	13.5%	16.0%	0.000	10.8%	12.2%	0.000
	Single-parent households	4.9%	5.6%	0.104	6.6%	6.3%	0.507	5.9%	7.9%	0.000
Housing Type & Transportation	Limited English >5 years old	12.0%	10.5%	0.430	10.6%	8.8%	0.139	9.1%	15.5%	0.000
	Multi-unit structures	3.8%	2.6%	0.041	5.9%	5.3%	0.338	15.5%	19.1%	0.000
	Mobile homes	17.9%	24.1%	0.037	10.6%	14.8%	0.003	3.8%	5.3%	0.000
	Crowding	4.7%	6.8%	0.000	6.4%	6.7%	0.583	7.5%	13.6%	0.000
	No vehicle	4.3%	6.0%	0.001	5.4%	5.9%	0.299	5.6%	10.7%	0.000
	No internet	27.3%	51.2%	0.000	26.6%	32.3%	0.006	18.2%	32.1%	0.000
	Group quarters	6.9%	5.0%	0.244	4.1%	2.5%	0.110	1.9%	2.6%	0.004

Data: HRSA Data Warehouse. Rurality assigned using 2010 RUCA codes: Urban - 1.0-3.0, Large Rural - 4.0-6.0, Small Rural - 7.0 and higher

MUAs in HHS Regional Offices Region 10 for 2022, National Census Tract Level

Small Rural Tracts. Designated areas in small rural tracts had higher rates of poverty (25.3 percent vs. 21.0 percent; $p < 0.001$), unemployment (6.4 percent vs. 4.8 percent; $p < 0.001$), and uninsurance (11.6 percent vs. 8.5 percent; $p < 0.001$) than their non-designated counterparts. These areas also had lower educational attainment, with more residents lacking a high school diploma (12.6 percent vs. 8.7 percent; $p < 0.001$) and fewer college graduates (29.9 percent vs. 37.5 percent; $p < 0.001$). These areas also had a higher proportion of single-parent households (5.2 percent vs. 3.6 percent; $p < 0.001$), limited English proficiency (8.3 percent vs. 4.4 percent; $p < 0.001$), crowding (5.9 percent vs. 2.9 percent; $p < 0.001$), and lack of vehicle access (7.9 percent vs. 3.9 percent; $p < 0.001$) compared to non-designated tracts.

Large Rural Tracts. Large rural MUAs showed similar patterns. They had higher unemployment (6.3 percent vs. 5.5 percent; $p < 0.05$), lower college attainment (31.4 percent vs. 38.7 percent; $p < 0.001$), and higher uninsurance (9.2 percent vs. 7.6 percent; $p < 0.01$). These areas also had a larger share of children (24.2 percent vs. 21.4 percent; $p < 0.001$) and lower share of adults aged 65 and older (17.4 percent vs. 19.6 percent; $p < 0.01$). Higher proportion of households without internet access (30.4 percent vs. 20.2 percent; $p < 0.001$) and crowding (5.2 percent vs. 3.2 percent; $p < 0.001$) than non-designated tracts.

Urban Tracts. Urban designated MUAs exhibited consistently poorer outcomes than their non-designated counterparts. Poverty (20.0 percent vs. 15.6 percent; $p < 0.001$), unemployment (5.4 percent vs. 4.8 percent; $p < 0.001$), and uninsurance (7.4 percent vs. 6.2 percent; $p < 0.001$) were higher. These areas had fewer college graduates (40.7 percent vs. 50.2 percent; $p < 0.001$), more residents without high school diplomas (9.8 percent vs. 6.9 percent; $p < 0.001$), and more limited English speakers (6.4 percent vs. 4.6 percent; $p < 0.001$).



Key Takeaways

- **Small rural MUA tracts had more poverty, unemployment, uninsured individuals, and language barriers, with fewer college graduates and higher rates of limited transportation and connectivity.**
- **Large rural MUA tracts had higher unemployment, uninsured rates, and youth population, with fewer older adults and college graduates.**
- **Urban MUA tracts had differences across educational attainment, language, income, access, and housing variables compared to non-MUA tracts.**

Designated and non-Designated Medically Underserved Areas: HHS Region 10

Variable Category	Variable Name	Small Rural Non-Area %	Small Rural Area %	p-value	Large Rural Non-Area %	Large Rural Area %	p-value	Urban Non-Area %	Urban Area %	p-value
Population and Tracts	N(est.)	391,094	787,075	-	974,186	757,388	-	8,869,581	2,727,529	-
	Number of tracts	132	249	-	241	187	-	1,979	630	-
Socio-economic Status	Below 150% poverty	21.0%	25.3%	0.000	22.4%	24.6%	0.073	15.6%	20.0%	0.000
	Unemployed	4.8%	6.4%	0.000	5.5%	6.3%	0.035	4.8%	5.4%	0.000
	Housing burden	24.2%	23.8%	0.632	28.0%	26.5%	0.133	25.0%	28.0%	0.000
	No High School Diploma	8.7%	12.6%	0.000	9.4%	13.2%	0.000	6.9%	9.8%	0.000
	High School Diploma	12.9%	14.0%	0.056	13.8%	14.9%	0.014	11.0%	13.3%	0.000
	Some College	25.0%	25.4%	0.465	25.7%	25.6%	0.972	22.5%	24.3%	0.000
	College graduate	37.5%	29.9%	0.000	38.7%	31.4%	0.000	50.2%	40.7%	0.000
Household Characteristics	Uninsured	8.5%	11.6%	0.000	7.6%	9.2%	0.001	6.2%	7.4%	0.000
	Male	51.2%	52.0%	0.131	50.2%	50.0%	0.787	50.2%	50.8%	0.004
	Female	48.8%	48.0%	0.131	49.8%	50.0%	0.787	49.8%	49.2%	0.004
	Aged <=17	20.4%	22.6%	0.004	21.4%	24.2%	0.000	21.6%	21.4%	0.572
	Aged 18-64	55.7%	56.5%	0.285	58.9%	58.4%	0.523	62.7%	62.8%	0.811
	Aged >=65	23.9%	20.9%	0.003	19.6%	17.4%	0.009	15.7%	15.8%	0.777
	Disability proportion	17.0%	16.9%	0.862	15.6%	15.9%	0.636	12.4%	14.0%	0.000
	Single-parent households	3.6%	5.2%	0.000	5.1%	5.7%	0.107	5.0%	6.0%	0.000
Housing Type & Transportation	Limited English >5 years old	4.4%	8.3%	0.000	6.0%	6.8%	0.418	4.6%	6.4%	0.000
	Multi-unit structures	3.0%	3.1%	0.900	7.5%	7.6%	0.874	13.8%	15.0%	0.216
	Mobile homes	16.8%	18.4%	0.221	11.0%	14.4%	0.004	4.8%	6.8%	0.000
	Crowding	2.9%	5.9%	0.000	3.2%	5.2%	0.000	3.1%	4.2%	0.000
	No vehicle	3.9%	7.9%	0.000	5.2%	4.8%	0.409	5.7%	7.7%	0.000
	No internet	24.7%	31.8%	0.000	20.2%	30.4%	0.000	13.4%	17.0%	0.000
	Group quarters	2.6%	4.4%	0.050	3.4%	2.6%	0.289	1.7%	2.8%	0.002

Data: HRSA Data Warehouse. Rurality assigned using 2010 RUCA codes: Urban - 1.0-3.0, Large Rural - 4.0-6.0, Small Rural - 7.0 and higher

Conclusion

This study examined differences in health care access by analyzing Health Professional Shortage Areas (HPSAs) and Medically Underserved Areas (MUAs) at both the national and regional levels. The findings show shortages in primary care, mental health, and dental health services, with distinct regional and rural-urban variations. HPSA and MUA designations are essential tools guiding over 30 federal programs in their decision-making related to eligibility and funding priorities, extending their influence beyond geographic, population, or facility categorizations. These designations direct the allocation of resources like scholarships and grants, and facilitate waivers for foreign physician visas to directly address health workforce shortages. Partners, collaborators, and other interested parties – including federal and state agencies, local health departments, health care providers, and academic institutions – can use shortage designations to inform strategic planning, policy development, and research efforts. Furthermore, enhancing public understanding of these designations can foster community engagement.

The findings emphasize the opportunity for policy interventions to improve health workforce distribution and address access differences across areas. Strategies may include increasing provider incentives for rural placements, expanding telehealth services, and integrating population characteristics into workforce planning. Addressing these shortages is key to ensuring better access to care across all geographic regions.

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