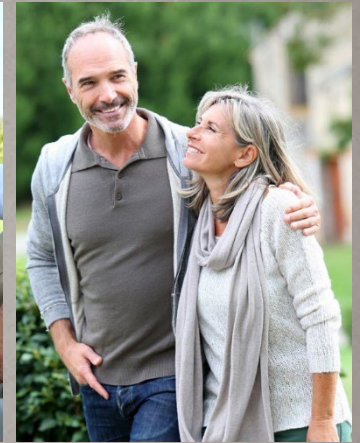


# University Health System, Inc. Community Health Needs Assessment 2022



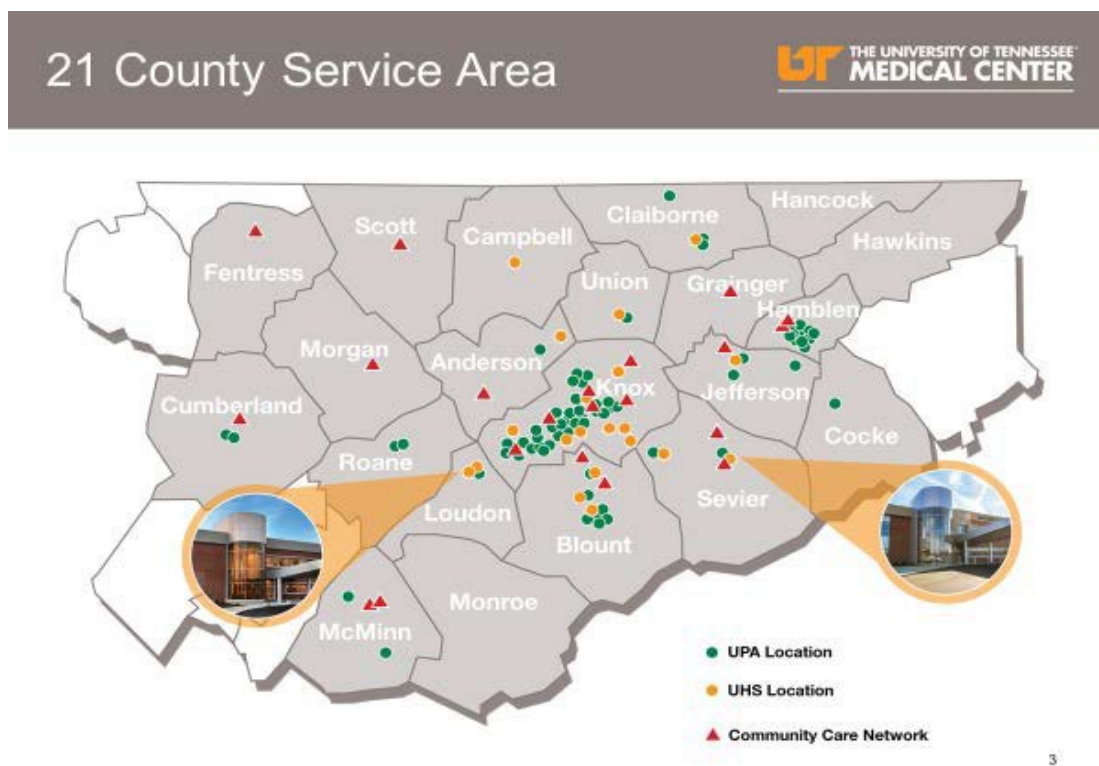
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## Organizational Profile

The University of Tennessee Medical Center is a not-for-profit health care system providing access to comprehensive health care services as an academic medical center. These services include a regional network of primary care and specialist providers, regional service centers, cancer chemotherapy centers, home infusion therapy, home health and aeromedical services. The hospital is licensed for 710 beds. With a threefold mission of healing, education and discovery, the medical center serves as the regional referral center for the East Tennessee community. Our 21-county service area comprises the eastern third of the state. The primary market is Knox County and the secondary market is the remaining twenty counties. Education and research are accomplished through our partnerships with the University of Tennessee and the University of Tennessee Graduate School of Medicine.



## **Health Care Service Offerings**

The medical center's main health care service offerings are grouped into eight Centers of Excellence (COE) that satisfy a major portion of the healthcare needs based on community needs identified through The Community Health Needs Assessment (CHNA) and a demographic analysis conducted during the Strategic Planning Process (SPP). The services delivered through the COEs are of high importance to our success based on the size of the service, community demographic makeup, or contribution in achieving our core competency. Additional services include general medicine and general surgical. The medical center delivers multidisciplinary care using evidence-based clinical pathways in a clinically integrated system. This care is grounded in a patient and family-centered model of care. Service offerings, relative importance to our organizational success and mechanism to deliver services. In 2021, inpatient admissions were 33,575 and 85,109 total emergency department visits (not admitted).

## **Assets**

Major facilities, technologies and equipment include:

- The medical center's major facility is located on 91 acres and has over 2.68 million square feet of space. The main campus includes a dedicated heart hospital, six medical office buildings and the Knoxville campus for the UT College of Pharmacy and the UT Graduate School of Medicine.
- Aeromedical services through UT LIFESTAR
- Regional Medical Communication Center
- The largest surgical facility in East Tennessee markets and other medical and surgical practice arenas featuring diagnostic picture archiving communication system, position emission tomography, magnetic resonance imaging, Simulation Center, surgical and parenteral admixture robotics and biplane fluoroscopy for neuro-interventional radiology.
- Lenoir City and Sevierville Regional Health Centers

## **Regulatory Requirements**

The medical center operates in a highly regulated health care environment governed by federal, state and local agencies. Processes are in place to assure compliance and currency with laws, regulations, and standards established by these key regulatory agencies. Specific federal and state regulatory agencies and laws include State of TN Department of Health, Tennessee Occupational Safety and Health Administration, Environmental Protection Agency, Office of Inspector General, College of American Pathologists, Clinical Laboratory Improvement Amendment,



American College of Surgeons and Federal Wide Assurance. In the pursuit of excellence the medical center has achieved accreditation and specific focus designations through The Joint Commission (TJC), TJC Disease Specific Certifications as a Comprehensive Stroke Center, Comprehensive Heart Center, ACC Chest Pain Center with Primary PCI Accreditation, Bariatric Accreditation, and the Gold Seal of Approval for Orthopedics in knee and hip replacement, American College of Surgeons verified Level I Trauma Center, and Magnet Status by the American Nurses Credentialing Center.

### **Organizational Leadership Structure**

The organizational structure and governance system consist of three groups which includes:

- A 17-member board of directors consisting of University of Tennessee leaders, medical staff physicians, community members and the medical center's president and CEO who serves and reports to the board of directors. The board of directors' committees include Finance, Human Resources, Performance Improvement, Nominating and Graduate Medical Education
- Senior Leaders, including seven senior vice presidents, chiefs of General Counsel and Development and vice presidents of Government Relations and Compliance who report to the president and CEO
- Self-governing Medical Executive Committee, chaired by the Chief of Staff

### **Our Workforce**

The medical center workforce includes full and part time team members, physicians, residents, healthcare students and volunteers. Registered nurses constitute the largest segment of team members. Fifty- four percent of the direct-care nurses have a BSN or higher degree. The workforce reflects the diversity of the service area. There are more than 800 physicians, dentists, podiatrists, physician assistants, nurse practitioners and psychologists who serve as the medical staff. Our health care workforce is comprised of:

- 4,036 team members
- 800 physicians
- 150 volunteers

## Organizational Mission, Vision, and Values

Our core competency, “An academic medical center partnering with physicians to care for all patients, especially the medically complex”, leverages our strategic advantage of being an academic medical center.

- **Mission:** To serve through healing, education and discovery.
- **Vision:** To be nationally recognized for excellence in patient care, medical education and biomedical research.
- **Values:** Integrity, Excellence, Compassion, Innovation, Collaboration, Dedication
- **Core Competency:** An academic medical center partnering with physicians to care for all patients, especially the medically complex.
- **Priorities:** Quality/Safety, Service, Efficiency/Effectiveness
- Today, the medical center provides access to comprehensive health care services as an academic medical center. These services include a regional network of primary care and specialist providers, regional service centers, cancer chemotherapy centers, and aeromedical services. With a threefold mission of healing, education and discovery, the medical center serves as the regional referral center for the East Tennessee community. Our 21-county service area comprises the eastern third of the state. The primary market is Knox County; the secondary market is the remaining 20 counties. Education and research is accomplished through our partnerships with the University of Tennessee and UT Graduate School of Medicine.

Service Offerings	
Centers of Excellence <i>(Note: 68 percent of inpatients are seen through the COE's)</i>	
Advanced Orthopaedic Center	Education, treatment, post-treatment to rehabilitation, with expertise in knee, hip, shoulder, hand and foot/ankle care.
Brain & Spine Institute	Neuroscience specialists using the latest diagnostics and treatments for brain and spine diseases.
Cancer Institute (CI)	The most advanced multidisciplinary care for cancer patients and their families with holistic treatment of body mind and spirit.
Emergency & Trauma Center	The only Level Trauma Center for adults and children in the 21-county region with a dedicated team of trauma surgeons and clinical staff on site 24/7/365 and home base to UT LIFESTAR.
Heart Lung Vascular Institute (HLVI)	Multidisciplinary teams dedicated to the treatment of heart, lung and vascular system conditions including complete care for health screenings, diagnosis, treatment, educational support and rehabilitation.
Center for Women & Infants	Comprehensive services for women and newborn infants, with a private room Level III NICU and a state-designated perinatal center for high-risk pregnancies.
Primary Care Collaborative	General treatment and care for adults with internal and family medicine needs.
Perioperative Medicine	Services for general and specialty surgical services not included in the COEs.

## **Health Care Systems and Services in Geographic Region**

The medical center, as an independent single campus hospital system, serves patients in a competitive region with 17 other healthcare organizations. The UPA, an independent physician association has its own governance structure. It is comprised of over 800 physician and clinician members and is devoted to the medical center. There are approximately 215 residents and fellows training in the 22 accredited specialty and sub-specialty programs in UT Graduate School of Medicine and medical center program. On campus, the University of Tennessee College of Pharmacy is located at the medical center and trains approximately 190 students. In keeping with the mission of serving through education there are numerous students from many disciplines and educational institutions experiencing the medical center as a training site. In addition to medical, dental, pharmacy and clinical pastoral care residents, nursing students from area colleges receive clinical training at the medical center. The campus also includes a school of radiologic technology and a medical technologist training program.

The medical center uses multiple community stakeholder listening posts such as market data, stakeholder platforms, and CHNA. This assists with planning efforts to support operations related to health improvement and strengthen local community services through collaborative efforts. Programs are validated annually during System Leadership Team, senior leaders, and board of directors meetings to review outcomes and market data. Reviews are conducted to evaluate success of local health improvement strategies. An action plan is created to systematically deploy these strategies through our access and health outreach activities. We review opportunities to improve our impact on social, economic, and environmental systems through our operational and strategic initiatives which aligns our identified needs during the assessment of our current and future success. Many of these health care services are delivered through our Centers of Excellence.

The SPP includes a demographic analysis which drives the community health care needs analysis. The COEs satisfy a major portion of the healthcare needs identified for our community through the demographic analysis. The services delivered through the COEs are of high importance to the medical center's success because of the size of the service, demographic makeup of the community, or contribution to our core competencies. A patient and family-centered model of care guides multidisciplinary teams in the delivery of health care.

## **The Medical Center's Role**

Fulfilling our Mission is through delivering compassionate, high quality, affordable health services to those in need of healing. The medical center demonstrates its commitment to service through

- Recognized excellence
- Research and education
- Accessibility
- Advocacy
- Collaboration with others in the provision of a wide range of health, social and support services that meet community needs and improve the quality of human life.

### **A Comprehensive Community Health Strategy:**

- First, it ensures clinical management considers the social determinants of patient health identified upon presentation.
- Secondly, it requires that the structures and operations of our organization are responsive to community needs.
- Thirdly, the comprehensive strategy requires collaboration to improve the social-economic-environmental structures of the communities that we serve.

### **Organizational Commitment to the Community**

In the Fiscal Year 2019, the Community Board, CEO, System Management Team, Physicians and COEs provided input for a five-year strategic planning session which included the Director of Network Development and Community Benefit. The 2022 Plan includes the priorities outlined in the 2022 CHNA. The 2022 Community Health Needs Assessment will be presented to the leadership of the hospital and Corporate Citizenship Committee and made widely available to the community.

The hospital leadership and board identified key needs from the assessment and developed a strategy to meet those needs. The goals and priorities outlined in the Community Benefit Plan are linked to the strategic plan of the medical center and focus on the key priorities established in the 2023-2024 Strategic Plan which includes outreach, clinical integration, medical staff development, COE-enhanced programs, academic enhancement, sustainability and leadership. The **Process to Support Key Communities and CNI Index will continue to use** where the population will be determined, problem analyzed, effective strategies are proposed and what resources will be needed to accomplish the goals identified by the hospital's leadership and board of directors. The Community Board, organized through the Development Office, and senior leadership of the hospital make conscious decisions how the resources of the hospital are used, honoring the mission, vision, and values of the hospital in its work within the hospital and community. Other programs and projects which are developed in the hospital through the various departments and COEs are brought to the System Leadership Team and then to senior leadership team for approval and then to the Community Board - UHS Board of Directors for final review and approval.



## **Community Health Needs Assessment Planning**

Program content, design, target population, continuation and/or termination and program monitoring occur in diverse environments throughout the medical center. The programs which are created within leadership are designed for program content, target audience, program continuation and/or termination and monitored with the assistance of the department's staff, hospital leadership, board members, and community stakeholders. Other programs within the medical center are created, designed, target population, continuation and/or termination by the departments and Executive Leadership. Although the COEs and steering committee of COE and senior leadership are the main decision makers, the department vice presidents and coordinators are responsible for monitoring the programs.

Community Board Members are selected based on their broad range of skills gained through leadership roles in their companies or community service positions. They possess a wide range of business, financial and strategic planning experience. All programs address the five core principles of the medical center 's Community Benefit programming and are evaluated for their effectiveness. Programs address the following:

- Programs address one or more risk factors that are defined, measured, modified, and prevalent among the community that constitute a health threat in the community and/or quality of life
- Reflect a special consideration of the populations that are being served in a culturally sensitive manner and meet the needs and preferences of the targeted groups
- Clearly and effectively target the risk factors and settings where care is delivered
- Make optimum use of the available resources within the community
- Collaborate whenever possible to reduce duplication of effort and reflect well organized, planned, evaluated, and organized programs which are evaluated for their effectiveness.

## **Definition of Community**

Regional and national rankings for health factors continue to be disappointing as cancer, heart disease, and diabetes rates continue to increase each year. Obesity continues to be a major problem in the United States, leading to additional diseases. From a global perspective, the United States falls behind other developing nations in health outcomes. Clearly, there are many needs that exist and need attention. The medical center and UHS exist to fulfill our mission of “delivering compassionate, high quality, affordable health services to those in need of healing.”

For the medical center to serve its region most effectively, it is essential to understand each community's individual needs. The medical center has conducted a Community Health Needs Assessment to profile the health of the residents within the local region. The assessment focuses on the medical center's nine core counties where UHS has facilities or provides service. Our commitment is to also offer services to counties without healthcare facilities and partnering with local healthcare providers to ensure access to quality and specialized services.

Activities associated with the development of this assessment have taken place during 2021-2022, including state, regional and county-specific secondary data collection and primary data obtained through 406 surveys with individuals from Knox County, TN, and surrounding counties. Throughout the assessment, high priority was given to determining the health status and available resources within each community.

Community and organization members meet with the medical center to discuss current health priorities and identify potential solutions. The information gathered from a local perspective, paired with regional, state and national data, helps to evaluate the region's health situation in order to begin formulating solutions for improvement.

In 2021, Tennessee ranked 41st, for overall health outcomes. Tennessee had high rates of adult obesity, cancer deaths, infant mortality, and diabetes.

Knox County ranked 6th out of 95 counties in Tennessee for combined health factors which includes health behaviors, clinical care, physical environment, and social and economic which influence the health of the county.

By examining local, national, and state data, the medical center can identify successful measures that have been used in other states to solve similar issues. In all sections of the medical center's CHNA, the most recent data available was utilized. After compiling the various sources of information, four top health priorities were identified by the CHNA. These priorities include:

- Cancer
- Substance Use
- Mental Health/Depression/Anxiety
- Obesity

In addition to monitoring the medical center's collected data, Tennessee's Vital Signs are 12 metrics selected through an extensive public engagement process meant to measure the pulse of Tennessee's population health. Taken together, they provide an at-a-glance view of leading indicators of health and prosperity. Each Vital Sign influences other aspects of health, helping people see the need to move upstream to address issues early.

**Tennessee's Vital Signs are:**

- **Youth Obesity - 39% students with overweight or obese BMI** -Coordinated School Health: Tennessee Department of Education
- **Physical Activity - 69% adults reported doing physical activity in last 30 days-** Behavioral Risk Factor Surveillance System: Tennessee Department of Health
- **Drug Overdose - 23,657 non-fatal overdoses-** Informatics & Analytics: Tennessee Department of Health
- **Youth Nicotine Use - 12% of high school students currently use electronic cigarettes-**Youth Risk Behavior Surveillance System: Tennessee Department of Education
- **Infant Mortality - 6.9 deaths per 1000 births** Death Statistics: Tennessee Department of Health
- **Teen Births - 25.3 per 1000 teenage women-**Birth Statistics: Tennessee Department of Health
- **Community Water Fluoridation - 89% of residents served-**CDC Water Fluoridation Reporting System
- **Frequent Mental Distress - 16% of adults reporting mental health > 14 days-**Behavioral Risk Factor Surveillance System: Tennessee Department of Health
- **3rd Grade Reading Level - 37% of 3rd graders reading-**Tennessee Department of Education
- **Preventable Hospitalizations - 1,531 preventable hospitalizations per 100,000.** Hospital Discharge Data System: Tennessee Department of Health
- **Per Capita Personal Income - \$47,179 annual income per person-**US Bureau of Economic Analysis.
- **Access to Parks and Greenways- 71% of population with adequate access to locations for physical** -Behavioral Risk Factor Surveillance System: Tennessee Department of Health.

By utilizing effective measures, available resources and community member involvement, county-specific plans have been developed and implemented which focus on preventing the growth of the four identified health outcomes. However, it is apparent that it takes more than just resources and an implementation plan to challenge these health priorities.

The following information has been collected and reviewed by the representatives from the medical center's System Management Team and senior leadership. Following a presentation to the Community Advisory Council Committee, future initiatives will be identified, prioritized, implemented, and monitored to ensure health status progress occurs.

### **Community Interview Summary**

In 2019, the medical center's Strategic Planning Department hosted focus group meetings to connect with community members of each county in which UHS operates a facility. Community participants were selected at random and convenience samples within the community and workplace. The interviewees in attendance were chosen based on age and demographics. These individuals were invited to discuss and determine the health priorities and resources available in the area which they live and where would each seek services for certain conditions or injury.

### **Collecting Community Input**

To complete the community health needs assessment, the medical center asked 21 representatives from across East Tennessee from other organizations for input which are listed in the following table.



## Summary Organizations Participating in Community Health Needs Assessment

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- |   |   |
|---|---|
| • American Medical Response<br>Emergency Medical Services | • Knox County Health Department                       |
| • Cherokee Health Systems                                 | • Medical Center Community<br>Health Advisory Council |
| • Corporate Health Partners                               |   |
| • Knox County Schools<br>Coordinated School Health        | • Medic   |
| • University of Tennessee<br>Extension                    | • Knox County Community Health<br>Council             |
| • East Tennessee Wellness<br>Roundtable                   | • Community Health Board                              |
| • Second Harvest Food Bank                                | • Knox County Mental Health Task<br>Force             |
| • The University of Tennessee                             | • United Way  |
| • CAC-Office on Aging                                     | • Knox Area Rescue Ministries                         |

To begin the community health needs assessment, it reviewed CHNA data collected to illustrate past and current health trends for Tennessee and Knox County. The individuals were asked to submit ideas and suggestions as to how the medical center could use the available resources to improve the health needs determined. After the CHNA had been reviewed, each group discussed the questions and continued brainstorming ways to address disparities and utilize resources. All information collected from the CHNA, and open discussion was analyzed and prioritized based on health needs and feedback.

In surveys obtained from 406 community representatives during the CHNA, several community health needs were identified. The survey questions given to each participant in the assessment will be available to view at the end of the report.

## **Corporate Citizenship Board**

It is the intent of the medical center to encourage new membership to the Corporate Citizenship Board that will better represent the community's expertise related to Community Benefit and Community Health integration. Each COE has a community steering committee that participate in planning efforts to guide the direction of care for the individuals we serve and prevention efforts in the community. This will remain an ongoing and evolving process.

### **Community Benefit Activities and Support:**

In fiscal year **2021**, the medical center provided a total of **\$ 78,420,121 in Community Benefit activities and \$346,754 of financial support.**

### **Non-Quantifiable Benefits**

Each year, medical center team members provide care to our citizen's abroad and in East Tennessee. Several Stories exist how our employees and physicians live the mission of providing quality care to the community both in their professional and personal lives. Mission fulfillment is lived within the hospital where hospital employees give their time, talent and treasures to promote the health and well-being of others. Over the past two years, many of our staff members contributed time to volunteer in the community to provide COVID-19 vaccinations. Our employees also contribute hundreds of hours serving on boards, committees, and fundraising events in the community.

Over **92,155** individuals were served by the generosity of our employees and the medical center's careful coordination of these efforts for our community

## **Programs to Meet Community Need**

The medical center conducts ongoing inventories regarding the assets within the hospital to meet the ongoing need within the community. In collaboration with its partners, the medical center engages others in the solution of assessing the assets within the community and engaging its partners in becoming part of the solution. We do this in synergy with one another through many initiatives. We come together to identify our assets and gaps by utilizing data and information from sources such as the 2021 Knox County Community Health Needs Assessment and other state and national data repositories. We also survey our community to identify the assets and the gaps in health and human services. Some of these unique services are listed below:

**Breast Health Outreach Program (BHOP)** where the hospital provides free education, prevention, diagnostics, and treatment for uninsured women. Nearly 18 years ago, we identified the need to provide these health services to women who were uninsured. The medical center, with the assistance of our partners from the Cancer Steering Committee, Susan G. Komen Foundation, American Cancer Society, the Wellness Community, Avon Foundation, health providers, radiologists, physicians, nurses, nutritionists, community members and others, help us meet the growing need for prevention, diagnosis, treatment, and follow-up care.

### **Regional Perinatal Center**

The medical center's Perinatal Center provides support to women with elevated risk and substance misuse pregnancies to support treatment for the unborn and aid in withdrawing the substance prior to birth. The program serves our 21-county region and has led to new evidence-based guidelines for health care providers and patients who have substance misuse issues and need support.

**Blood Drives:** The medical center partners with Medic Regional Blood Center to provide an opportunity for employees to give back to their community. The medical center is the region's largest consumer of blood products due to the complexity of service we provide to the community, including serving as the only Level I Trauma Center in our region. In 2021, the hospital donated over 400 units of blood.

**Contributions of Volunteers:** Since 1962, the medical center has enjoyed the services of the Volunteers who have given over 800,000 hours. The Volunteer Department coordinates the activities of three main groups of volunteers: The Auxiliary, Independent Volunteers, and the Junior Volunteers. All volunteers who donate time and service to the medical center work in a variety of settings such as inpatient and outpatient facility departments, patient reception areas, gift shop, etc. There are approximately 312 currently active volunteers at the medical center. These volunteers come from various backgrounds from all ages, including seniors and students with an interest in a healthcare career. Currently there are 140 adult volunteers, 82 college students and 90 high school students. These volunteers average 35,000-40,000 hours per year of total service. Volunteers are involved in such activities as delivering flowers, mail, and gifts, serving refreshments and providing warm blankets for the oncology patients, reading materials, a cheerful smile and a comforting word.

### **Top Health Priorities**

All 406 interviewees agreed that the most prevalent health priorities in all counties were diabetes, substance abuse, mental health/depression/anxiety and obesity.

<u>Top Health Priorities</u>	<u>Responses</u>
<input type="checkbox"/> <b>Opioid Drug/ Alcohol Use</b>	<b>214</b>
<input type="checkbox"/> <b>Mental Health/Depression</b>	<b>216</b>
<input type="checkbox"/> <b>Obesity</b>	<b>139</b>
<input type="checkbox"/> <b>Diabetes</b>	<b>108</b>

### **Strategic Challenges and Societal Responsibilities:**

In response to identified unmet health-related needs in the community needs assessment, the Fiscal Year (FY) 2021 for the medical center, our focus will be on increasing access to substance misuse resources, mental health resources, and health care access for the broader disadvantaged members of the surrounding community with health disparities.

Our focus is to create healthy connections in East Tennessee by providing and assisting in access to health care services, healthy women and infant services, chronic disease management programs, cancer prevention and injury prevention programs; our response to the growing needs in the community and an invitation for community partners to come and join us in this effort of creating a healthy Tennessee – one that is ready to be healthy, safe, and well.



## Community Collaboratives

- In 2019, many organizations, including the medical center, came together to create ALL 4 Knox ([all4knox.org](http://all4knox.org)). This is a joint effort of Knox County and the City of Knoxville with facilitation and coordination support from Metro Drug Coalition, the Knox County District Attorney General's Office and Knox County Health Department. It brings together governments, businesses, nonprofit organizations, faith-based communities and many others to address the substance misuse epidemic.
- Knoxville Rehabilitation Hospital is a state-of-the-art, 57-bed inpatient acute rehabilitation hospital dedicated to the treatment and recovery of individuals who have experienced the debilitating effects of a severe injury or illness which opened in 2021. This hospital was a community collaboration with Kindred Healthcare, LLC, Tennova Healthcare and The University of Tennessee Medical Center. Learn more at [knoxvillerehabhospital.com](http://knoxvillerehabhospital.com).
- National Healthcare Corporation, Tennova Healthcare, the medical center and Reliant Healthcare announced the creation of Knoxville Center for Behavioral Medicine, LLC. The 64-bed center, which opened in 2022, provides a comprehensive continuum of care for adults and geriatric patients with psychiatric, emotional, and addictive disorders. Learn more at [knoxvillebehavioralmedicine.com](http://knoxvillebehavioralmedicine.com).

## Ongoing Health Improvement Initiatives

- Cancer Prevention Breast Health Outreach Program — (BHOP) Mobile Mammography
- Cancer Prevention — Prostate Screenings
- Trauma Prevention and Support through Trauma Survivors Network — A collaboration of community partners working to support victims of trauma, children and families
- Trauma Prevention — Stop the Bleed, a statewide initiative focused on decreasing mortality rates associated with hemorrhage due to injury.
- Trauma Education such as TNCC, ATLS, ATCN, and FCCS course for allied health professionals
- Cardiovascular and Stroke Prevention and Awareness such as Heartwise and Strike out Stroke
- HLVI educational activities such as ACLS, ASLS, and BLS
- Pat Summitt Clinic and ongoing Alzheimer's Research
- Women's and Children's outreach efforts for prenatal care, high-risk obstetrics with special care emphasis on NAS and substance weaning protocols, and care of the pre-term newborn.

## Ongoing Health Improvement Initiatives

- Free Clinic in South Knoxville- The medical center is a partner of this organization in the community of providing discounted or free medical services and treatment to individuals who are not insured or medically underserved.
- Healthcare Clinic Partnership with Emerald Youth Foundation, Cherokee Health Systems, and the medical center providing discounted or free medical services and treatment to individuals who are not insured or medically underserved in the community.
- Immunizations with providing influenza vaccination clinics in corporate and community settings.
- Substance misuse and interventions in a organized community structure
- SIM-Lab opportunities to practice life- saving interventions to allied health professionals, residents, and physicians.

By also offering evidence-based programs, the medical center and the University Health Network will be effective in avoiding hospital admissions for three of the most prevalent ambulatory care sensitive conditions in our communities- Congestive Heart Failure (CHF), Chronic Obstructive Pulmonary Disease (COPD), and Diabetes, and injuries due to falls. The goal of these programs seeks to institutionalize evidence-based chronic disease self-management and fall prevention programs as an essential component of a broader disease and unintentional injury management strategy. With focus on disproportionate unmet health-related need populations, these programs will help the medical center confront the challenges of continuing to care for the uninsured and under-insured populations in an era of healthcare reform.

## **Identifying Available Resources**

The medical center realizes that there are numerous resources that can provide care for individuals. Our goal, to reduce costs and provide the best care possible for patients, is to identify these resources to prevent duplication of services. The interviewees were asked to list all the services and resources within their community. The interviewees acknowledged that many resources currently exist to help meet various health needs.

- County Health Departments
- Cherokee Health Systems
- Interfaith Health Center
- Helen Ross McNabb Centers

## **Improving Health Priorities**

The medical center is committed to a strategic plan to focus on health disparities and initiate priorities throughout the region. To enhance existing resources, the participants stressed the significance of increasing public awareness of both addressing one's health needs and the availability of health care options within each community.

- Encourage partnerships with communities to improve overall health status and address specific health issues.
- Expand regional healthcare centers in Knox and Hamblen Counties.
- Open free standing emergency department in Fentress County.
- Enhanced services for substance abuse counseling.
- Assistance with early health screenings for underinsured or uninsured.
- Focus on access for lack of services available in region such as chemotherapy and outpatient services closer to people's homes.
- Develop site for end-of-life or palliative care.
- Extend partnerships with community organizations.
- Share health information between physicians, pharmacies, and other health care providers.

## **COVID-19 Pandemic 2020-2021 Community Collaborations:**

In March 2020, Knox County along with Tennessee and the nation was faced with the alarming challenges of the COVID-19 pandemic. Collaborations between physician and nurse leadership of the Tennessee Department of Health (TDH), the Knox County Health Department (KCHD), the medical center, Covenant Health System, and Tennova Health System began meeting immediately for community planning, resource allocation, and leading the activation of the local Health Incident Command Center System (HICS) and Knoxville Board of Health in response to the pandemic.

Over the next 8 months the medical center, along with other community health partners, experienced staggering influx of critically and acutely ill patients affected with COVID-19. Inpatient capacity and staffing resources were strained despite planning efforts to convert floors and ICUs into dedicated areas to care for the population. Community events in person were canceled due to the quarantine efforts to prevent spread of the disease. In December 2020, the medical center began efforts to offer COVID-19 vaccines to our healthcare workers and first responders. By December 31, 2020, the medical center had provided over 5,000 COVID-19 vaccinations. Vaccinations will expand to our community and will continue well into 2021.

In the early months of 2021, the medical center continued to face COVID-19 challenges for hospital bed capacity and need for COVID-19 vaccination access. Only a few health providers in Tennessee were authorized to provide vaccinations until May of 2021 when local pharmacies and large physician practices were granted authorization to provide COVID-19 vaccinations. Throughout the year the medical center, along with other community health partners, continued to experience staggering influx of critically and acutely ill patients affected with COVID-19 and the new variant of Omicron. Inpatient capacity and staffing resources continued to be strained due to exhaustive efforts to provide care to the most critically ill. Hospitals were busy planning for the new normal of caring for COVID-19 patients while trying to reopen services for elective surgeries and other outpatient diagnostic tests which were delayed due to the pandemic and resource availability.

Over the next 12 months, the medical center focused on expanding our campus to create new capacity and establishing a Community COVID-19 Vaccination Clinic to administer COVID-19 vaccines and boosters. In 2021, the medical center provided over 50,000 vaccinations to hospital staff, allied health professionals, teachers, and community at large members. The medical center also provided vaccines at local community centers and churches in areas identified with health disparities and lack of access to care. Partnerships with CONNECT Ministries and the Faith Leaders Church Initiative provided the organization of volunteer nurses and the medical center pharmacy and clinical staff to engage with the North and South Knoxville communities to provide COVID-19 vaccinations and booster doses.



## **Our region faces cultural and socioeconomic hurdles that influence our collective health status.**

The region served by the medical center is steeped in heritage and rich in natural beauty. Unfortunately, many of our traditions aren't particularly healthy. Traditional southern cooking, for example, is not good for our waistlines or our hearts. And while there is no denying the importance of the tobacco industry to our region's development, there is also no denying tobacco use has serious health implications – especially lung disease and cancer.

Our goal for our region to just be a wonderful place to live. So, efforts to improve our health status will need to consider the historical, cultural, and environmental factors that influence it.

As is the case throughout the country, the uninsured and underinsured populations we serve are at increased health risk in part due to a lack of primary and preventive care. In turn, those populations can become significant financial concerns for a hospital and health system when they seek care in high-cost settings like emergency departments with little, if any, ability to pay for those services. I tol

### **Focus on Access**

One way we are improving access to healthcare services is by creating new touch points for those services in our communities. Outpatient chemotherapy and specialty provider clinics provide convenient, local access to a wide range of primary and specialty services. The medical center is providing access to preventive screenings in the workplace and through various locations in our region.

Another important aspect of improving the health of our region is ensuring a true partnership between our patients and their primary care physicians – so doctors have a clear understanding of patients' circumstances and preferences, while patients have a clear understanding of what they can do to better their health.

### **Focus on Population Health Management**

Many of our efforts to improve the health status of our service area involve empowering our community members to make healthier choices. Another goal of our community health initiative is to improve our environment, so the healthier choice is the easier, more affordable choice. To that end, we will be partnering with businesses, church, and community organizations to help create a foundation and

momentum for change in our region. The medical center will continue to engage business populations of employees and beneficiaries that provides employers an array of health options to help keep employees healthy. We are also establishing relationships with post-acute care facilities to ensure a full continuum of services to our patients.

## **Implementation Strategy**

The medical center's major initiatives to address the community health needs are comprehensive and include many of the programs that are supported primarily by the hospital and its grateful donors.

Programs delivered by the medical center are in response to the Community Health Needs Assessments, hospital's strategic goals and objectives, state, and national initiatives to promote public health.

The programs meet these core principles:

- The clinical encounter offers an important moment to integrate a community health strategy and raise the awareness of social determinants of health and health disparities that exist in our community.
- Identify Key Partners – Organizational structures and collaborations to invest and create a larger environment in which social determinants of health are improved. Every community has complex challenges that requires great care to understand. A community health strategy depends on creating a network of like-minded organizations that have similar commitments.
- Build Community Capacity – Collaborate with charitable resources to mobilize and build the capacity of existing community assets.
- Collaborative Governance - Engage diverse community stakeholders in the selection, design, implementation, and evaluation of program activities.

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## **Community Needs Index**

### **Improving Health**

The CNI identifies the severity of health disparity for every zip code in the United States and demonstrates the link between community need, access to care, and preventable hospitalizations. The ability to pinpoint neighborhoods with significant barriers to health care access is an important advancement for public health advocates and care providers. Because the CNI considers multiple factors that limit health care access, the tool may be more accurate than existing needs assessment methods.

### **How It Works**

Rather than relying solely on public health data, the CNI accounts for the underlying economic and structural barriers that affect overall health. Using a combination of research, literature, and experiential evidence, Dignity Health identified five prominent barriers that enable us to quantify health care access in communities across the nation. These barriers include those related to income, culture/language, education, insurance, and housing.

### **Assigning CNI Scores**

To determine the severity of barriers to health care access in a given community, the CNI gathers data about that community's socio-economy. For example, what percentage of the population is elderly and living in poverty; what percentage of the population is uninsured; what percentage of the population is unemployed, etc. Using this data, we assign a score to each barrier condition (with one representing less community need and five representing more community need).

The scores are then aggregated and averaged for a final CNI score (each barrier receives equal weight in the average). A score of 1.0 indicates a zip code with the lowest socio- economic barriers, while a score of 5.0 represents a zip code with the most socio- economic barriers.

### **Scores which describe a Community's Health**

A comparison of CNI scores to hospital utilization shows a strong correlation between high need and high use. When we examine admission rates per 1,000 populations (where available), we find a high correlation (95.5%) between hospitalization rates and CNI scores. In fact, admission rates for the most highly needy communities (areas shown in red in the online maps) are over 60% higher than communities with the lowest need (areas shown in blue).

Admission rates for conditions where appropriate outpatient care could prevent or reduce the need for hospital admission have also been evaluated. The conditions include pneumonia, asthma, congestive heart failure, and cellulitis. With proper outpatient care they do not generally require an acute care admission. When admission rates for these conditions were compared to CNI scores, we find that the most highly needy communities experience admission rates almost twice as often (97%) as the lowest need communities.

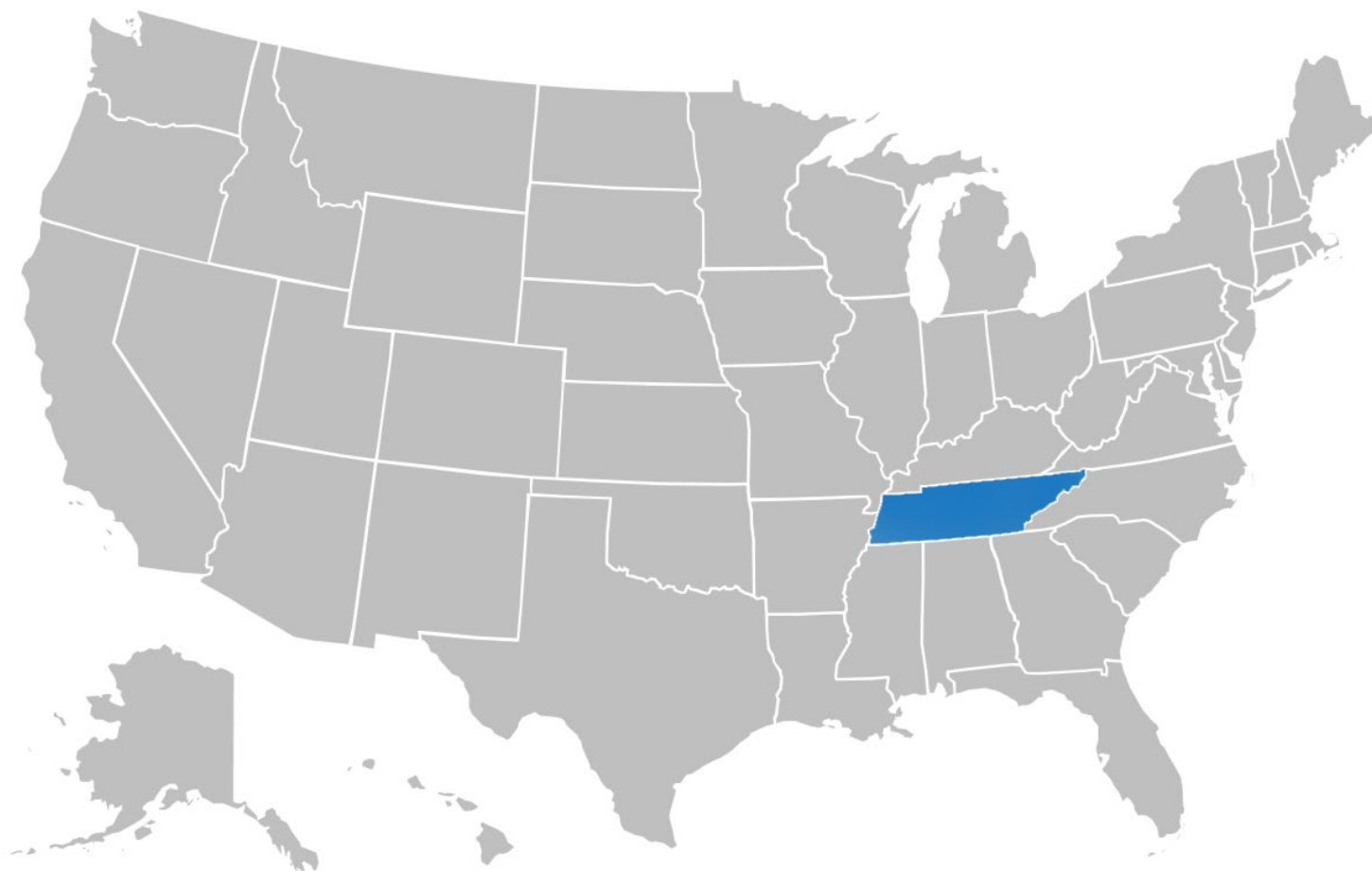
To determine the severity of barriers to health care access in each community, the CNI gathers data about that community's socio-economy. For example, what percentage of the population is elderly and living in poverty; what percentage of the population is uninsured; what percentage of the population is unemployed, etc.

Using this data, a score is assigned to each barrier condition. A score of 1.0 indicates a zip code with the lowest socio-economic barriers (low need), while a score of 5.0 represents a zip code with the most socio-economic barriers (high need). The scores are then aggregated and averaged for a final CNI score (each barrier receives equal weight in the average).

## County Health Rankings & Roadmaps

Building a Culture of Health, County by County

# Tennessee



## 2021 State Level Data and Ranks

## 2021 County Health Rankings for Tennessee: Measures and National/State Results

Measure	Description	US	TN	TN Minimum	TN Maximum
<b>HEALTH OUTCOMES</b>					
Premature death*	Years of potential life lost before age 75 per 100,000 population (age-adjusted).	6,900	9,400	4,300	16,500
Poor or fair health	Percentage of adults reporting fair or poor health (age-adjusted).	17%	21%	12%	30%
Poor physical health days	Average number of physically unhealthy days reported in past 30 days (age-adjusted).	3.7	4.7	3.3	6.2
Poor mental health days	Average number of mentally unhealthy days reported in past 30 days (age-adjusted).	4.1	5.2	4.0	6.3
Low birthweight*	Percentage of live births with low birthweight (< 2,500 grams).	8%	9%	6%	12%
<b>HEALTH FACTORS</b>					
<b>HEALTH BEHAVIORS</b>					
Adult smoking	Percentage of adults who are current smokers (age-adjusted).	17%	21%	14%	31%
Adult obesity	Percentage of the adult population (age 20 and older) that reports a body mass index (BMI) greater than or equal to 30 kg/m <sup>2</sup> .	30%	33%	23%	47%
Food environment index	Index of factors that contribute to a healthy food environment, from 0 (worst) to 10 (best).	7.8	6.2	5.7	9.4
Physical inactivity	Percentage of adults age 20 and over reporting no leisure-time physical activity.	23%	27%	18%	42%
Access to exercise opportunities	Percentage of population with adequate access to locations for physical activity.	84%	70%	3%	100%
Excessive drinking	Percentage of adults reporting binge or heavy drinking (age-adjusted).	19%	17%	13%	19%
Alcohol-impaired driving deaths	Percentage of driving deaths with alcohol involvement.	27%	25%	4%	71%
Sexually transmitted infections	Number of newly diagnosed chlamydia cases per 100,000 population.	539.9	569.0	134.7	1,065.0
Teen births*	Number of births per 1,000 female population ages 15-19.	21	29	5	78
<b>CLINICAL CARE</b>					
Uninsured	Percentage of population under age 65 without health insurance.	10%	12%	6%	18%
Primary care physicians	Ratio of population to primary care physicians.	1,320:1	1,400:1	14,760:1	570:1
Dentists	Ratio of population to dentists.	1,400:1	1,800:1	18,520:1	1,230:1
Mental health providers	Ratio of population to mental health providers.	380:1	630:1	16,830:1	270:1
Preventable hospital stays*	Rate of hospital stays for ambulatory-care sensitive conditions per 100,000 Medicare enrollees.	4,236	4,915	2,293	12,915
Mammography screening*	Percentage of female Medicare enrollees ages 65-74 that received an annual mammography screening.	42%	41%	24%	57%
Flu vaccinations*	Percentage of fee-for-service (FFS) Medicare enrollees that had an annual flu vaccination.	48%	50%	19%	59%
<b>SOCIAL &amp; ECONOMIC FACTORS</b>					
High school completion	Percentage of adults ages 25 and over with a high school diploma or equivalent.	88%	87%	73%	95%
Some college	Percentage of adults ages 25-44 with some post-secondary education.	66%	61%	30%	86%
Unemployment	Percentage of population ages 16 and older unemployed but seeking work.	3.7%	3.4%	2.4%	6.0%
Children in poverty*	Percentage of people under age 18 in poverty.	17%	19%	4%	41%
Income inequality	Ratio of household income at the 80th percentile to income at the 20th percentile.	4.9	4.7	3.6	6.3
Children in single-parent households	Percentage of children that live in a household headed by single parent.	26%	29%	9%	49%
Social associations	Number of membership associations per 10,000 population.	9.3	11.3	0.0	21.3
Violent crime	Number of reported violent crime offenses per 100,000 population.	386	621	111	1,346
Injury deaths*	Number of deaths due to injury per 100,000 population.	72	92	54	166
<b>PHYSICAL ENVIRONMENT</b>					
Air pollution - particulate matter	Average daily density of fine particulate matter in micrograms per cubic meter (PM2.5).	7.2	8.8	6.0	11.1
Drinking water violations	Indicator of the presence of health-related drinking water violations. 'Yes' indicates the presence of a violation, 'No' indicates no violation.	N/A	N/A	No	Yes
Severe housing problems	Percentage of households with at least 1 of 4 housing problems: overcrowding, high housing costs, lack of kitchen facilities, or lack of plumbing facilities.	18%	14%	6%	19%
Driving alone to work*	Percentage of the workforce that drives alone to work.	76%	83%	76%	89%
Long commute - driving alone	Among workers who commute in their car alone, the percentage that commute more than 30 minutes.	37%	35%	16%	63%

\* Indicates subgroup data by race and ethnicity is available



## 2021 County Health Rankings: Disaggregated State-Level Racial/Ethnic Data

Measure	Overall	AIAN	Asian	Black	Hispanic	White
<b>HEALTH OUTCOMES</b>						
Premature death*	9,400	3,600	3,500	12,200	4,800	9,100
Life expectancy	76	124.1	87	73.6	91	76.1
Premature age-adjusted mortality	450	180	160	560	200	450
Child mortality	60	---	40	100	50	50
Infant mortality	7	---	4	12	5	6
Low birthweight*	9%	8%	9%	14%	7%	8%
<b>HEALTH FACTORS</b>						
<b>HEALTH BEHAVIORS</b>						
Drug overdose deaths	28	16	4	20	9	32
Motor vehicle crash deaths	15	---	6	15	10	16
Teen births*	29	16	6	39	48	25
<b>CLINICAL CARE</b>						
Preventable hospital stays*	4,915	6,112	2,564	6,234	4,310	4,773
Mammography screening*	41%	29%	32%	38%	30%	42%
Flu vaccinations*	50%	42%	47%	38%	37%	52%
<b>SOCIAL &amp; ECONOMIC FACTORS</b>						
Reading scores <sup>^</sup>	3.0	N/A	---	2.6	---	3.2
Math scores <sup>^</sup>	2.9	N/A	---	2.5	---	3.1
Children in poverty* <sup>‡</sup>	19%	31%	10%	37%	35%	16%
Median household income	\$56,000	\$44,800	\$76,700	\$38,800	\$43,900	\$57,200
Injury deaths*	92	37	30	85	39	100
Homicides	8	---	3	26	6	4
Suicides	16	---	10	7	7	19
Firearm fatalities	18	---	8	30	9	16
<b>PHYSICAL ENVIRONMENT</b>						
Driving alone to work*	83%	79%	76%	82%	72%	85%

\* Ranked measure

<sup>^</sup> Data not available for AK, AZ, LA, MD, NM, NY, VT

<sup>^</sup> Data not available for AK, AZ, LA, MD, NY, VT, VA

<sup>‡</sup> Overall county level values of children in poverty are obtained from one-year modeled estimates from the Small Area Income and Poverty Estimates (SAIPE) Program. Because SAIPE does not provide estimates by racial and ethnic groups, data from the 5-year American Community Survey (ACS) was used to quantify children living in poverty by racial and ethnic groups.

N/A indicates data not available for this race/ethnicity.

--- Data not reported due to NCHS suppression rules (A missing value is reported for counties with fewer than 20 deaths or 10 births.)

## 2021 County Health Rankings: Ranked Measure Sources and Years of Data

Measure		Weight	Source	Years of Data
<b>HEALTH OUTCOMES</b>				
Length of Life	Premature death*	50%	National Center for Health Statistics - Mortality Files	2017-2019
Quality of Life	Poor or fair health	10%	Behavioral Risk Factor Surveillance System	2018
	Poor physical health days	10%	Behavioral Risk Factor Surveillance System	2018
	Poor mental health days	10%	Behavioral Risk Factor Surveillance System	2018
	Low birthweight*	20%	National Center for Health Statistics - Natality files	2013-2019
<b>HEALTH FACTORS</b>				
<b>HEALTH BEHAVIORS</b>				
Tobacco Use	Adult smoking	10%	Behavioral Risk Factor Surveillance System	2018
Diet and Exercise	Adult obesity	5%	United States Diabetes Surveillance System	2017
	Food environment index	2%	USDA Food Environment Atlas, Map the Meal Gap from Feeding America	2015 & 2018
	Physical inactivity	2%	United States Diabetes Surveillance System	2017
	Access to exercise opportunities	1%	Business Analyst, Delorme map data, ESRI, & US Census Tigerline Files	2010 & 2019
Alcohol and Drug Use	Excessive drinking	2.5%	Behavioral Risk Factor Surveillance System	2018
	Alcohol-impaired driving deaths	2.5%	Fatality Analysis Reporting System	2015-2019
Sexual Activity	Sexually transmitted infections	2.5%	National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention	2018
	Teen births*	2.5%	National Center for Health Statistics - Natality files	2013-2019
<b>CLINICAL CARE</b>				
Access to Care	Uninsured	5%	Small Area Health Insurance Estimates	2018
	Primary care physicians	3%	Area Health Resource File/American Medical Association	2018
	Dentists	1%	Area Health Resource File/National Provider Identification file	2019
	Mental health providers	1%	CMS, National Provider Identification	2020
Quality of Care	Preventable hospital stays*	5%	Mapping Medicare Disparities Tool	2018
	Mammography screening*	2.5%	Mapping Medicare Disparities Tool	2018
	Flu vaccinations*	2.5%	Mapping Medicare Disparities Tool	2018
<b>SOCIAL &amp; ECONOMIC FACTORS</b>				
Education	High school completion	5%	American Community Survey, 5-year estimates	2015-2019
	Some college	5%	American Community Survey, 5-year estimates	2015-2019
Employment	Unemployment	10%	Bureau of Labor Statistics	2019
Income	Children in poverty*	7.5%	Small Area Income and Poverty Estimates	2019
	Income inequality	2.5%	American Community Survey, 5-year estimates	2015-2019
Family and Social Support	Children in single-parent households	2.5%	American Community Survey, 5-year estimates	2015-2019
	Social associations	2.5%	County Business Patterns	2018
Community Safety	Violent crime	2.5%	Uniform Crime Reporting - FBI	2014 & 2016
	Injury deaths*	2.5%	National Center for Health Statistics - Mortality Files	2015-2019
<b>PHYSICAL ENVIRONMENT</b>				
Air and Water Quality	Air pollution - particulate matter	2.5%	Environmental Public Health Tracking Network	2016
	Drinking water violations	2.5%	Safe Drinking Water Information System	2019
Housing and Transit	Severe housing problems	2%	Comprehensive Housing Affordability Strategy (CHAS) data	2013-2017
	Driving alone to work*	2%	American Community Survey, 5-year estimates	2015-2019
	Long commute - driving alone	1%	American Community Survey, 5-year estimates	2015-2019

\*Indicates subgroup data by race and ethnicity is available

## 2021 County Health Rankings: Additional Measure Sources and Years of Data

Measure		Source	Years of Data
<b>HEALTH OUTCOMES</b>			
Length of Life	Life expectancy*	National Center for Health Statistics - Mortality Files	2017-2019
	Premature age-adjusted mortality*	National Center for Health Statistics - Mortality Files	2017-2019
	Child mortality*	National Center for Health Statistics - Mortality Files	2016-2019
	Infant mortality*	National Center for Health Statistics - Mortality Files	2013-2019
Quality of Life	Frequent physical distress	Behavioral Risk Factor Surveillance System	2018
	Frequent mental distress	Behavioral Risk Factor Surveillance System	2018
	Diabetes prevalence	United States Diabetes Surveillance System	2017
	HIV prevalence	National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention	2018
<b>HEALTH FACTORS</b>			
<b>HEALTH BEHAVIORS</b>			
Diet and Exercise	Food insecurity	Map the Meal Gap	2018
	Limited access to healthy foods	USDA Food Environment Atlas	2015
Alcohol and Drug Use	Drug overdose deaths*	National Center for Health Statistics - Mortality Files	2017-2019
	Motor vehicle crash deaths*	National Center for Health Statistics - Mortality Files	2013-2019
Other Health Behaviors	Insufficient sleep	Behavioral Risk Factor Surveillance System	2018
<b>CLINICAL CARE</b>			
Access to Care	Uninsured adults	Small Area Health Insurance Estimates	2018
	Uninsured children	Small Area Health Insurance Estimates	2018
	Other primary care providers	CMS, National Provider Identification	2020
<b>SOCIAL &amp; ECONOMIC FACTORS</b>			
Education	High school graduation	EDFacts	2017-2018
	Disconnected youth	American Community Survey, 5-year estimates	2015-2019
	Reading scores* <sup>+</sup>	Stanford Education Data Archive	2018
	Math scores* <sup>+</sup>	Stanford Education Data Archive	2018
Income	Median household income*	Small Area Income and Poverty Estimates	2019
	Children eligible for free or reduced price lunch	National Center for Education Statistics	2018-2019
Family and Social Support	Residential segregation - Black/White	American Community Survey, 5-year estimates	2015-2019
	Residential segregation - non-White/White	American Community Survey, 5-year estimates	2015-2019
Community Safety	Homicides*	National Center for Health Statistics - Mortality Files	2013-2019
	Suicides*	National Center for Health Statistics - Mortality Files	2015-2019
	Firearm fatalities*	National Center for Health Statistics - Mortality Files	2015-2019
	Juvenile arrests <sup>+</sup>	Easy Access to State and County Juvenile Court Case Counts	2018
<b>PHYSICAL ENVIRONMENT</b>			
Housing and Transit	Traffic volume	EJSCREEN: Environmental Justice Screening and Mapping Tool	2019
	Homeownership	American Community Survey, 5-year estimates	2015-2019
	Severe housing cost burden	American Community Survey, 5-year estimates	2015-2019
	Broadband access	American Community Survey, 5-year estimates	2015-2019

\*Indicates subgroup data by race and ethnicity is available

<sup>+</sup> Not available in all states

See additional contextual demographic information and measures online at [www.countyhealthrankings.org](http://www.countyhealthrankings.org)

## 2021 County Health Rankings for the 95 Ranked Counties in Tennessee

County	Health Outcomes	Health Factors	County	Health Outcomes	Health Factors	County	Health Outcomes	Health Factors	County	Health Outcomes	Health Factors
Anderson	36	21	Fentress	66	75	Lauderdale	87	94	Roane	40	28
Bedford	35	46	Franklin	19	19	Lawrence	51	51	Robertson	9	16
Benton	89	79	Gibson	44	34	Lewis	76	57	Rutherford	4	3
Bledsoe	17	92	Giles	42	47	Lincoln	39	40	Scott	91	84
Blount	10	10	Grainger	72	53	Loudon	11	12	Sequatchie	41	52
Bradley	16	26	Greene	59	49	Macon	71	78	Sevier	29	36
Campbell	93	81	Grundy	92	87	Madison	47	20	Shelby	69	42
Cannon	73	41	Hamblen	46	50	Marion	61	54	Smith	43	39
Carroll	34	43	Hamilton	18	8	Marshall	23	32	Stewart	22	33
Carter	65	63	Hancock	95	93	Maury	14	6	Sullivan	28	17
Cheatham	26	11	Hardeman	79	82	McMinn	60	38	Sumner	3	5
Chester	5	25	Hardin	85	69	McNairy	56	74	Tipton	24	27
Claiborne	75	58	Hawkins	49	60	Meigs	80	71	Trousdale	30	35
Clay	88	90	Haywood	90	85	Monroe	68	66	Unicoi	84	29
Cocke	94	91	Henderson	57	68	Montgomery	12	14	Union	77	80
Coffee	37	22	Henry	55	44	Moore	6	13	Van Buren	67	83
Crockett	63	67	Hickman	52	70	Morgan	83	88	Warren	58	64
Cumberland	32	37	Houston	54	65	Obion	50	61	Washington	21	7
Davidson	8	9	Humphreys	64	45	Overton	25	48	Wayne	48	77
Decatur	33	59	Jackson	62	86	Perry	81	89	Weakley	15	30
DeKalb	74	56	Jefferson	31	23	Pickett	38	62	White	45	31
Dickson	27	18	Johnson	78	72	Polk	70	55	Williamson	1	1
Dyer	82	73	Knox	13	2	Putnam	7	15	Wilson	2	4
Fayette	20	24	Lake	86	95	Rhea	53	76			

For more information on how these ranks are calculated visit [www.countyhealthrankings.org](http://www.countyhealthrankings.org)



### Stay Up-To-Date with County Health Rankings & Roadmaps

For the latest updates on Rankings, What Works for Health, Action Learning Guides, and more visit [www.countyhealthrankings.org](http://www.countyhealthrankings.org).

You can see what we are featuring on our webinar series, what communities are doing to improve health, and how you can get involved!

## Technical Notes

### How are race and ethnicity categories defined?

Race and ethnicity are different forms of identity but are sometimes categorized in non-exclusive ways. Race is a form of identity constructed by our society to give meaning to different groupings of observable physical traits. An individual may identify with more than one race group. Ethnicity is used to group individuals according to shared cultural elements. Racial and ethnic categorizations relate to health because our society sorts groups of individuals based on perceived identities. These categorizations have meaning because of social and political factors, including systems of power such as racism. Examining the variation among racial and ethnic groupings in health factors and outcomes is key to understanding and addressing historical and current context that underlie these differences.

Data sources differ in methods for defining and grouping race and ethnicity categories. To incorporate as much information as possible in our summaries, County Health Rankings & Roadmaps (CHR&R) race/ethnicity categories vary by data source. With a few exceptions, CHR&R adheres to the following nomenclature originally defined by [The Office of Management and Budget \(OMB\)](#):

**American Indian & Alaska Native (AIAN):** includes people who identify as American Indian or Alaska Native and do not identify as Hispanic.

**Asian:** includes people who identify as Asian or Pacific Islander and do not identify as Hispanic.

**Black:** includes people who identify as Black or African American and do not identify as Hispanic.

**Hispanic:** includes people who identify as Mexican, Puerto Rican, Cuban, Central or South American, other Hispanic, or Hispanic of unknown origin.

**White:** includes people who identify as White and do not identify as Hispanic.

Note:

- Racial and ethnic categorization masks variation within groups.
- Individuals may identify with multiple races, indicating that none of the offered categories reflect their identity; these individuals are not included in our summaries.
- OMB categories have limitations and have changed over time, reflecting the importance of attending to contemporary racialization as a principle for examining approaches to measurement.
- For some data sources, race categories other than White also include people who identify as Hispanic.

### Learn More:

The above definitions apply to all measures using data from the [National Center for Health Statistics](#) (see Ranked & Additional Measure Sources and Years of Data tables on pages 4 & 5). For this data source, all race/ethnicity categories are exclusive so that each individual fits into only one category.

Other data sources offer slight nuances of the race/ethnicity categories listed above. [The American Community Survey](#) (ACS) only provides an exclusive race and ethnicity category for people who identify as non-Hispanic White. An individual who identifies as Hispanic and as Black would be included in both the Hispanic *and* Black race/ethnicity categories. Another difference with ACS data is the separate race categories for people who identify as Asian and people who identify as Hawaiian & Other Pacific Islander. For measures of Children in Poverty and Driving Alone to Work, CHR&R reports a combined estimate for the Asian & Other Pacific Islander categories, while for Median Household Income we only report the Asian race category.

Measures using data from the [Center for Medicare and Medicaid Services](#) (Mammography, Preventable Hospital Stays, Flu Vaccinations) follows the ACS categories with the exception of having a combined Asian/Pacific Islander category. For this data source, race and ethnicity are not self-reported.

The [Stanford Education Data Archive](#) used for the Reading and Math Scores measures follow the [National Center for Education Statistics](#) (NCES) definitions of Asian or Pacific Islander, American Indian & Alaska Native, non-Hispanic Black, non-Hispanic White, and Hispanic.

### How do we rank counties?

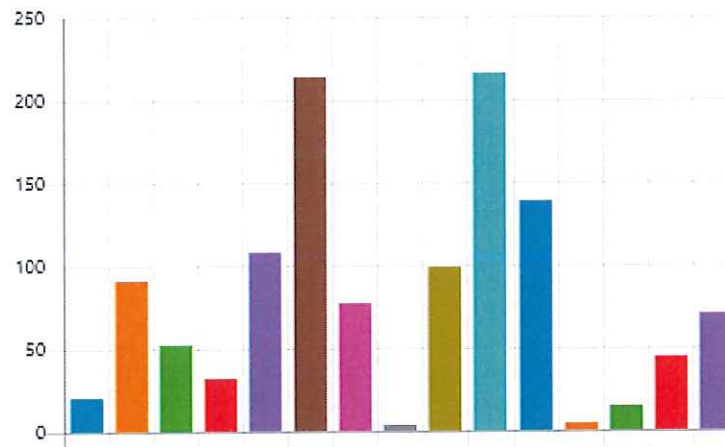
To calculate the ranks, we first standardize each of the measures using z-scores. Z-scores allow us to combine multiple measures because the measures are now on the same scale. The ranks are then calculated based on weighted sums of the measure z-scores within each state to create an aggregate z-score. The county with the best aggregate z-score (healthiest) gets a rank of #1 for that state. To see more detailed information on rank calculation please visit our methods in **Explore Health Rankings** on our website: [www.countyhealthrankings.org](http://www.countyhealthrankings.org).

## Community Health Needs Survey: University of Tennessee Medical Center

406 Responses   09:58 Average time to complete   Active Status

1. In your opinion, What is the biggest physical, emotional, or social health concern in your community? (You may choose up to three concerns).

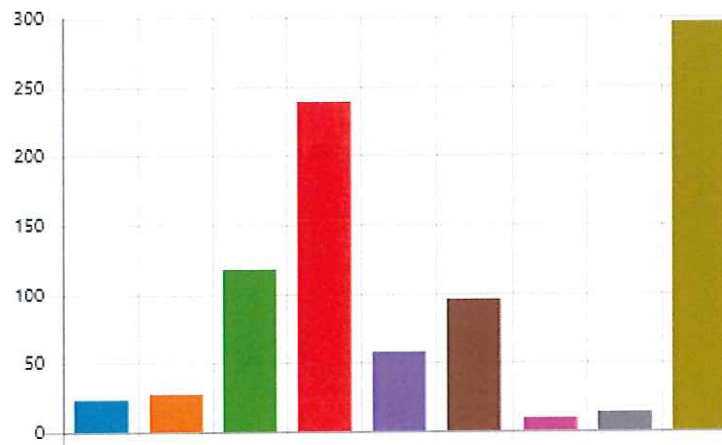
● Asthma/Lung Disease	21
● Cancer	91
● Dementia	52
● Dental Health	32
● Diabetes	108
● Drug and/or alcohol abuse	214
● Heart Disease	77
● HIV/AIDS	3
● Homelessness	99
● Mental Health/Depression	216
● Obesity	139
● Sexually Transmitted Dieases	5
● Stroke	15
● Tobacco Use	44
● Covid Virus	71





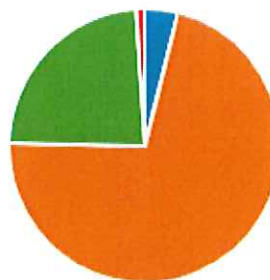
2. In your opinion, what main factor do you think prevents people in your community from seeking medical treatment? (Choose two responses).

Age	23
Cultural/religious beliefs	27
Access to health care	117
Lack of insurance	238
Access to physician appointments	57
Transportation not available	95
No parking at physician's office	10
Language barrier	13
Cost of healthcare services	296



3. Do you use tobacco products?

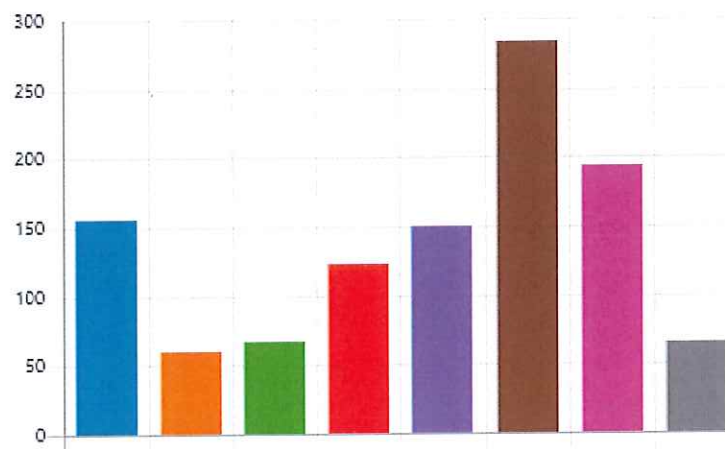
Yes, I currently use tobacco products	16
No, I have never used tobacco products	291
I have used tobacco products in the past	96
I am trying to quit the use of tobacco	4





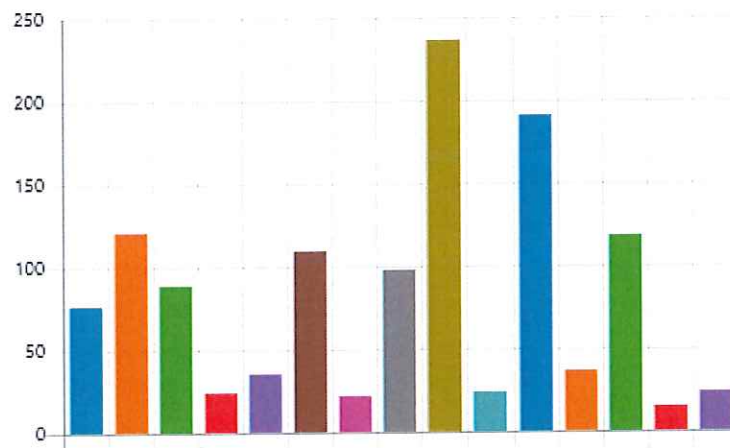
4. In your opinion, which of the following does your community need in order to improve the health of your family, friends, and neighbors? (You may choose up to three responses).

● Access to healthy food options	155
● More job opportunities	60
● Recreation facilities	67
● Public transportation to health...	123
● Substance abuse programs	150
● Mental health access and pro...	283
● Access to healthcare services i...	194
● Other	65



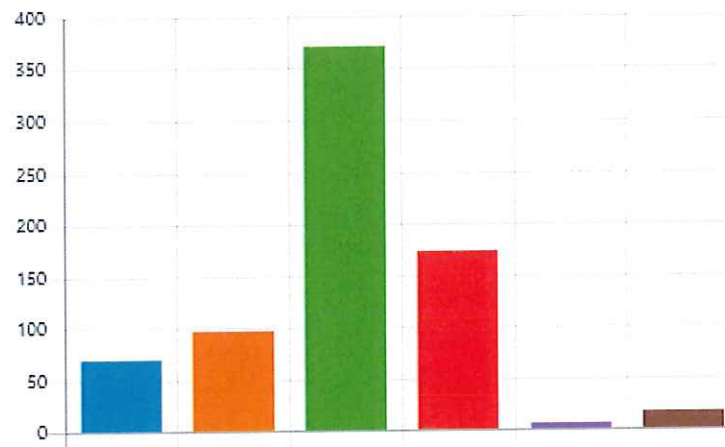
5. What health services or health screenings are needed in your community? (You may choose up to three responses).

● Cancer	76
● Diabetes	121
● Dentists/Oral Health	89
● Eating disorders	24
● Emergency preparedness	35
● Heart disease /Cardiovascular ...	109
● Lung disease	22
● Nutrition	98
● Mental health	236
● Prenatal Care	24
● Substance Abuse and Treatme...	191
● Tobacco cessation	36
● Physicians (Primary Care and/...	118
● Covid-19 Vaccinations	15
● Other	24



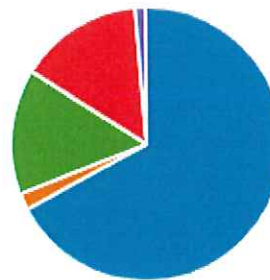
6. Where do you and your family get most of the information you use to treat your medical problems and improve your health? (Choose up to two responses).

Family or Friends	70
Pharmacy	96
Physician	371
Internet	172
Magazines	5
Health Department	16

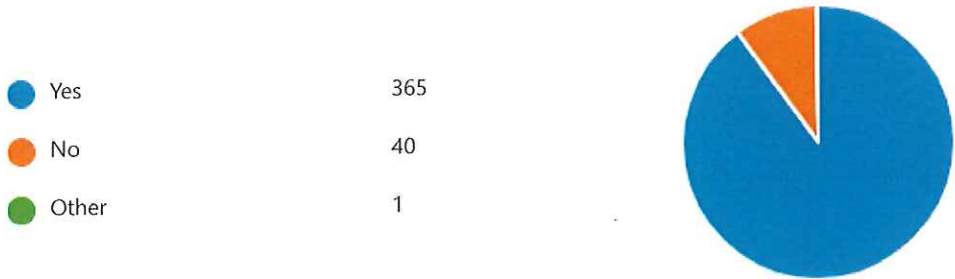


7. If you or someone in your family had a minor illness and required medical care, where would you go to access healthcare? (Choose only one response).

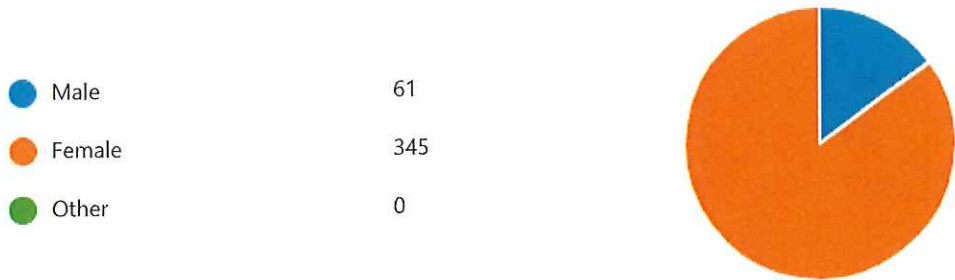
Physician's Office	273
Hospital/ Emergency Departm...	8
Walk in clinic	60
Urgent Care	60
Other	5



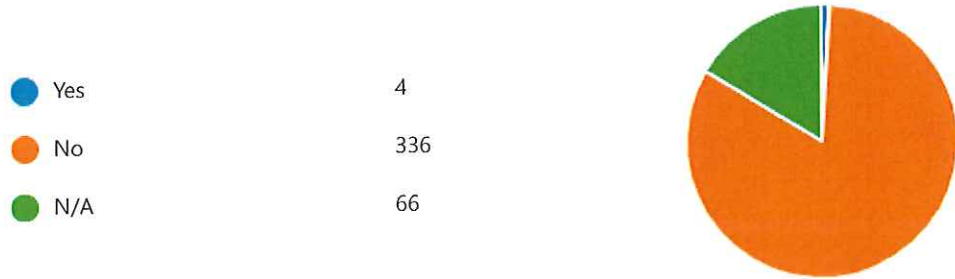
8. Have you had a routine physical exam in the past two years?



9. Are you female, male, or identify as another gender?

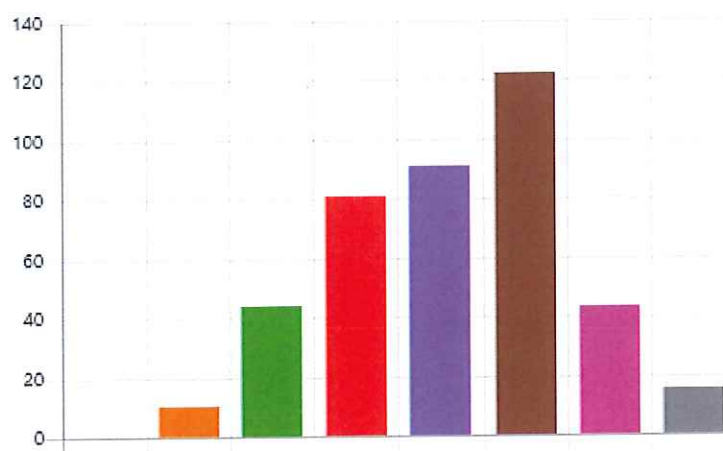


10. Female: Are you currently pregnant?



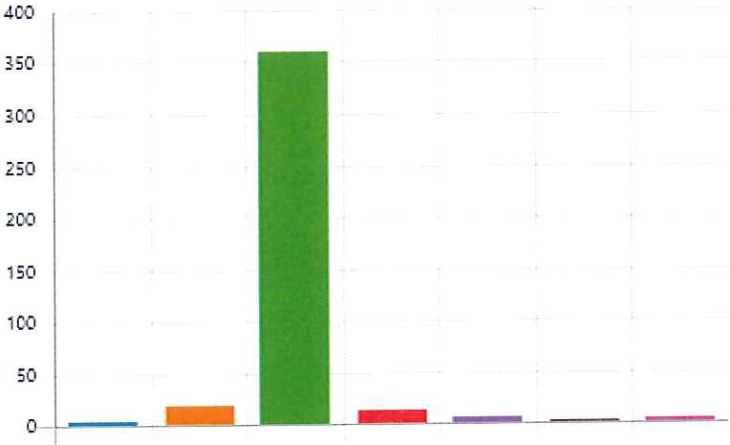
# 11. What category below includes your age?

Under 18	0
18-24	10
25-34	44
35-44	81
45-54	91
55-64	122
65-74	43
75 or older	15



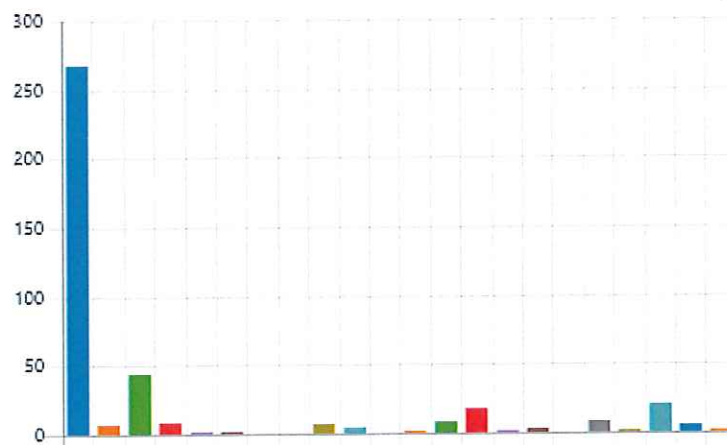
12. What is your racial/ ethnic background?

Asian	3
Black/African American	19
White/Caucasian	360
Hispanic	13
Multi racial or mixed ethnicities	6
Native American/Indian	1
Other	4



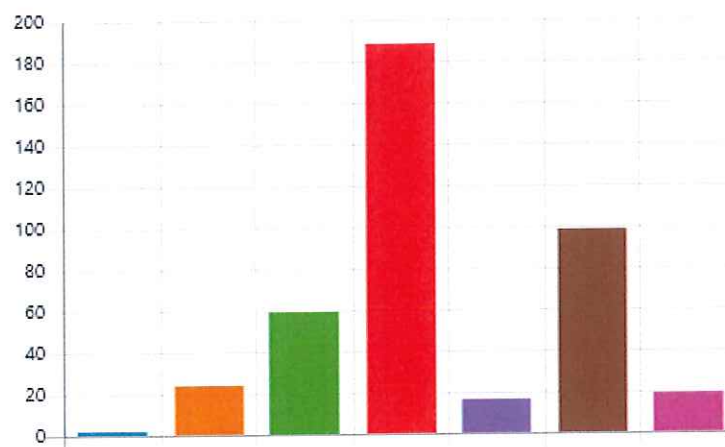
### 13. In what county is your home located in Tennessee

Knox County (Primary)	267
Anderson County	7
Blount County	43
Campbell County	8
Claiborne County	1
Cocke County	2
Cumberland County	0
Fentress County	0
Grainger County	7
Hamblen County	4
Hancock County	0
Hawkins County	1
Jefferson County	8
Loudon County	18
McMinn County	1
Monroe County	3
Morgan County	0
Roane County	8
Scott County	1
Sevier County	20
Union County	6
Other	1



#### 14. What is your highest level of education?

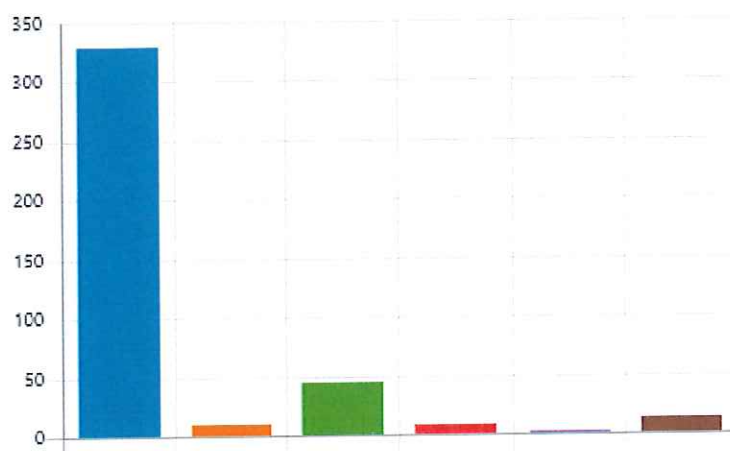
Some high school	2
High school graduate or GED	24
Some college	59
College graduate Associates o...	188
Technical School	16
Graduate school-Masters or D...	98
Doctorate	19





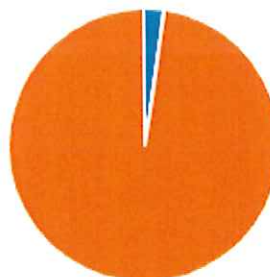
15. What type of health insurance do you have?

Commercial or Private	329
Exchange	9
Medicare	45
Medicaid/TennCare	8
I do not currently have insura...	2
Other	13



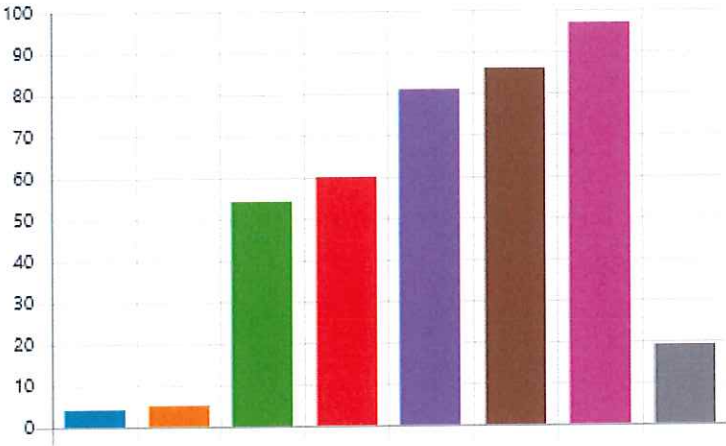
16. Do you receive aid from other state or federal assistance programs for the health or nutrition of you and your family such as WIC, SNAP, or Family First, ect.?

Yes	10
No	396
Other	0

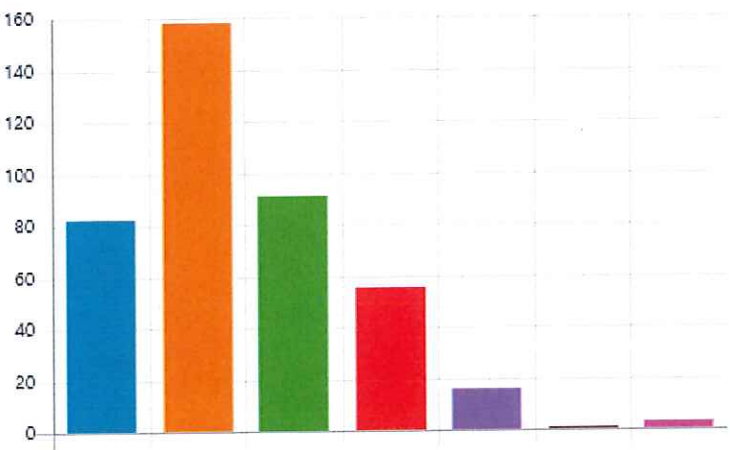
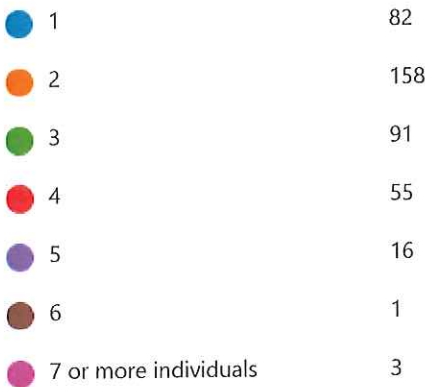


17. What is your current household income?

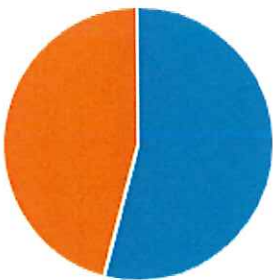
● \$0-10,000	4
● \$10,001-20,000	5
● \$20,001-35,000	54
● \$35,001-50,000	60
● \$50,001-75,000	81
● \$75,001-100,000	86
● \$100,001-200,000	97
● above \$200,000	19



18. How many individuals reside in your household?

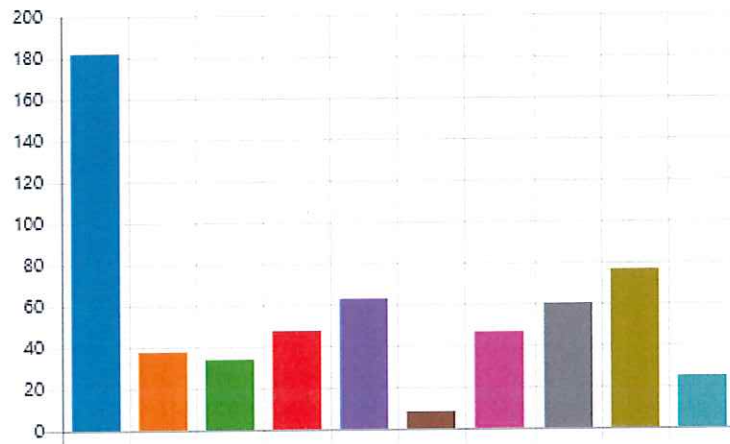


19. Do you receive your primary health care from a UT Medical Center practice?

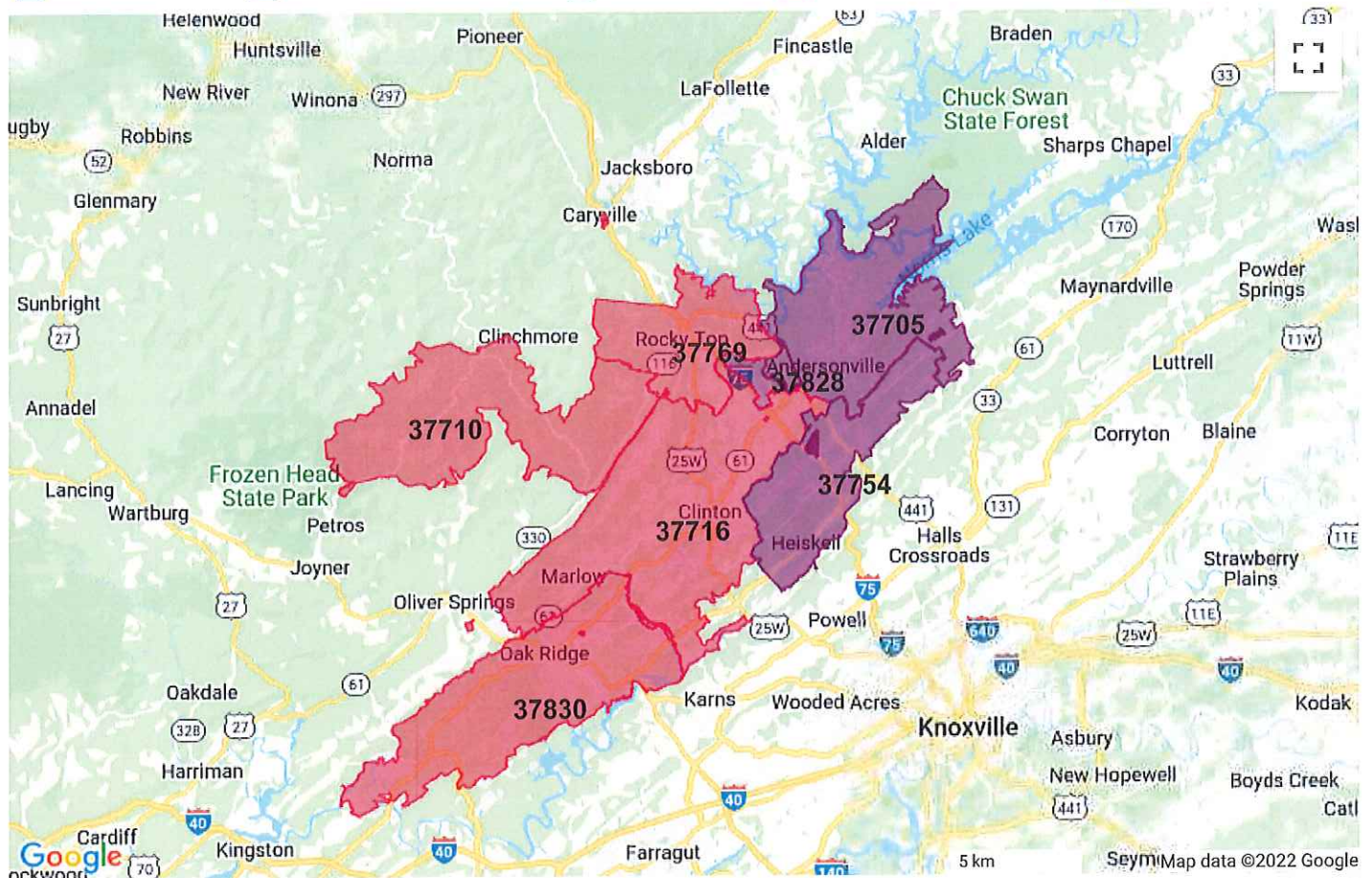


20. If you answered "Yes" to the previous question, please specify the healthcare office or service where you receive care currently or have received care for past health concerns. (Check all that apply).

UT Family or Internal Medicine...	182
UT Regional Health Centers	37
Cancer Institute	34
Advanced Orthopedic Center	47
Emergency and Trauma Service	63
Brain and Spine Institute	8
Heart Lung Vascular Institute	46
Women's and Infants	60
Outpatient Services	76
Other	25



Lowest Need ■ 1 - 1.7 Lowest ■ 1.8 - 2.5 2nd Lowest ■ 2.6 - 3.3 Mid ■ 3.4 - 4.1 2nd Highest ■ 4.2 - 5 Highest Highest Need



Mean(zipcode): 3.4 / Mean(person): 3.6

CNI Score Median: 3.8

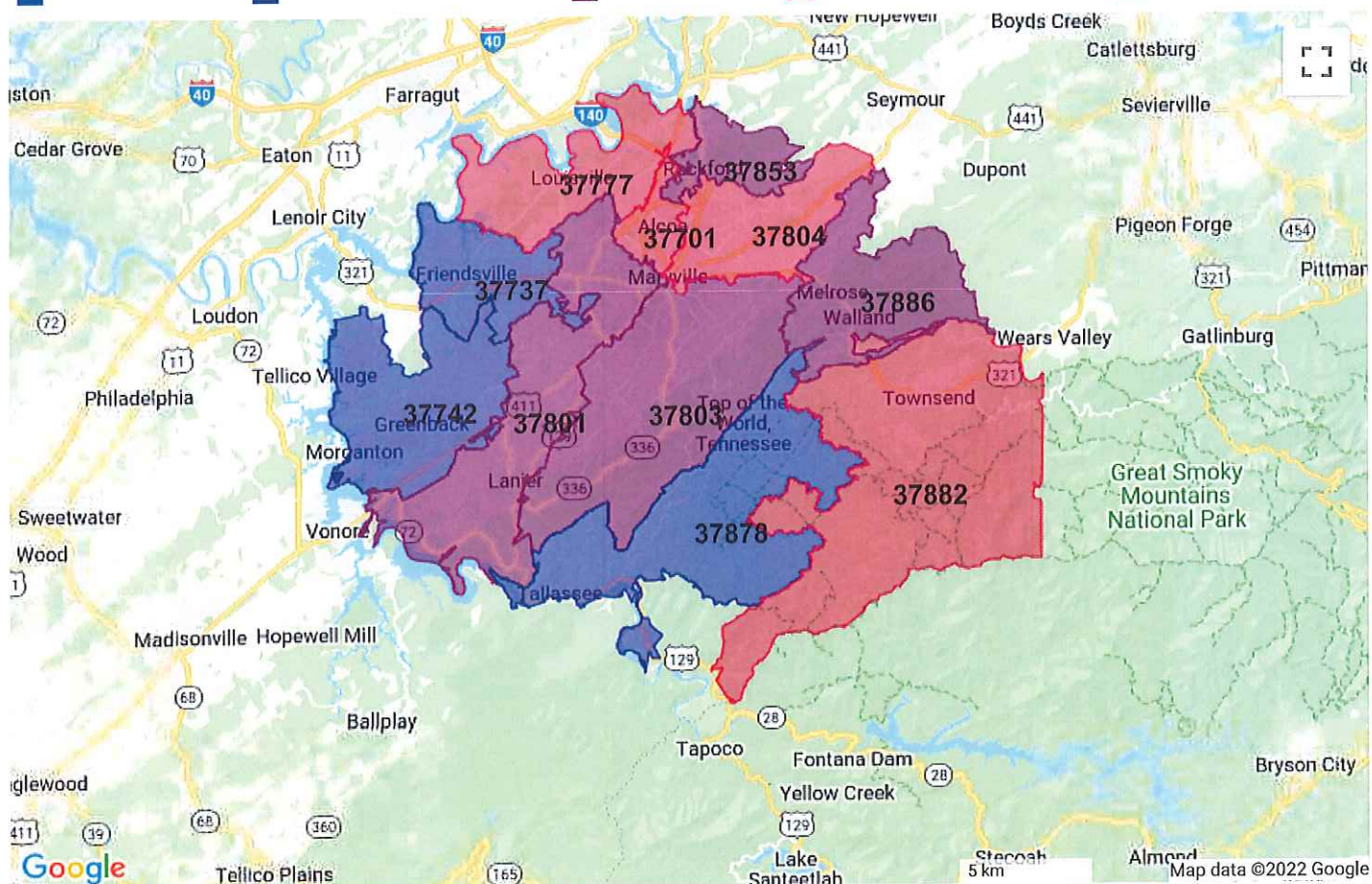
CNI Score Mode: 3,3.8

Zip Code	CNI Score	Population	City	County	State
37705	3	6113	Andersonville	Anderson	Tennessee
37710	3.8	1197	Briceville	Anderson	Tennessee
37716	3.8	26249	Clinton	Anderson	Tennessee
37754	2.8	5018	Heiskell	Anderson	Tennessee
37769	3.8	5843	Lake City	Anderson	Tennessee
37828	3	127	Norris	Anderson	Tennessee
37830	3.6	31956	Oak Ridge	Anderson	Tennessee



Lowest Need Highest Need

■ 1 - 1.7 Lowest    
 ■ 1.8 - 2.5 2nd Lowest    
 ■ 2.6 - 3.3 Mid    
 ■ 3.4 - 4.1 2nd Highest    
 ■ 4.2 - 5 Highest



Mean(zipcode): 3.1 / Mean(person): 3.1

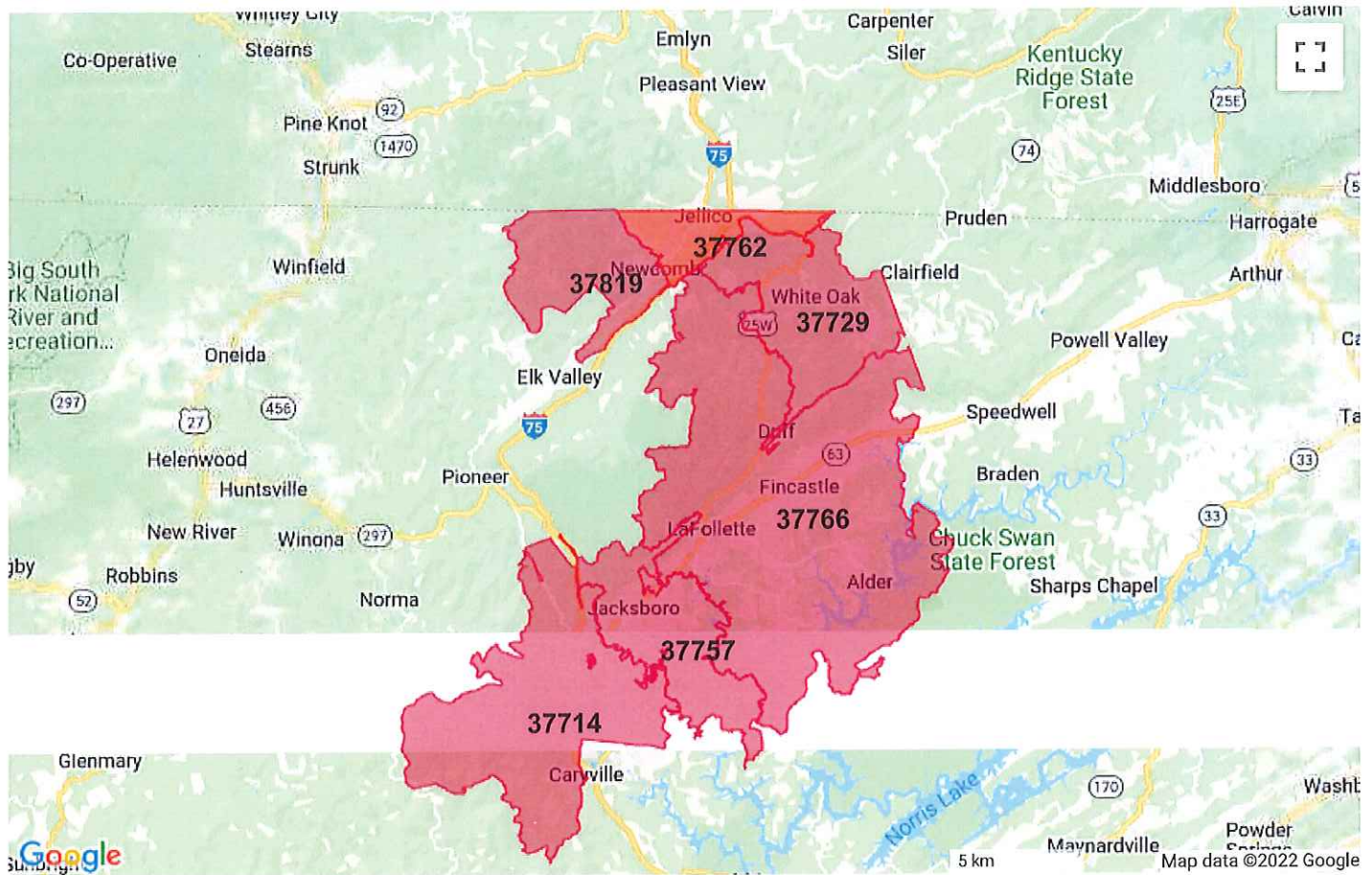
CNI Score Median: 3.2

CNI Score Mode: 2.4,3.4

Zip Code	CNI Score	Population	City	County	State
37701	4	7267	Alcoa	Blount	Tennessee
37737	2.4	6482	Friendsville	Blount	Tennessee
37742	2.4	6645	Greenback	Blount	Tennessee
37777	3.4	12010	Louisville	Blount	Tennessee
37801	3.2	28878	Maryville	Blount	Tennessee
37803	2.8	34603	Maryville	Blount	Tennessee
37804	3.4	25798	Maryville	Blount	Tennessee
37853	3.2	3802	Rockford	Blount	Tennessee
37878	2.4	902	Tallassee	Blount	Tennessee
37882	3.4	3192	Townsend	Blount	Tennessee
37886	3	4369	Walland	Blount	Tennessee

Lowest Need Highest Need

■ 1 - 1.7 Lowest    
 ■ 1.8 - 2.5 2nd Lowest    
 ■ 2.6 - 3.3 Mid    
 ■ 3.4 - 4.1 2nd Highest    
 ■ 4.2 - 5 Highest



Mean(zipcode): 3.7 / Mean(person): 3.8

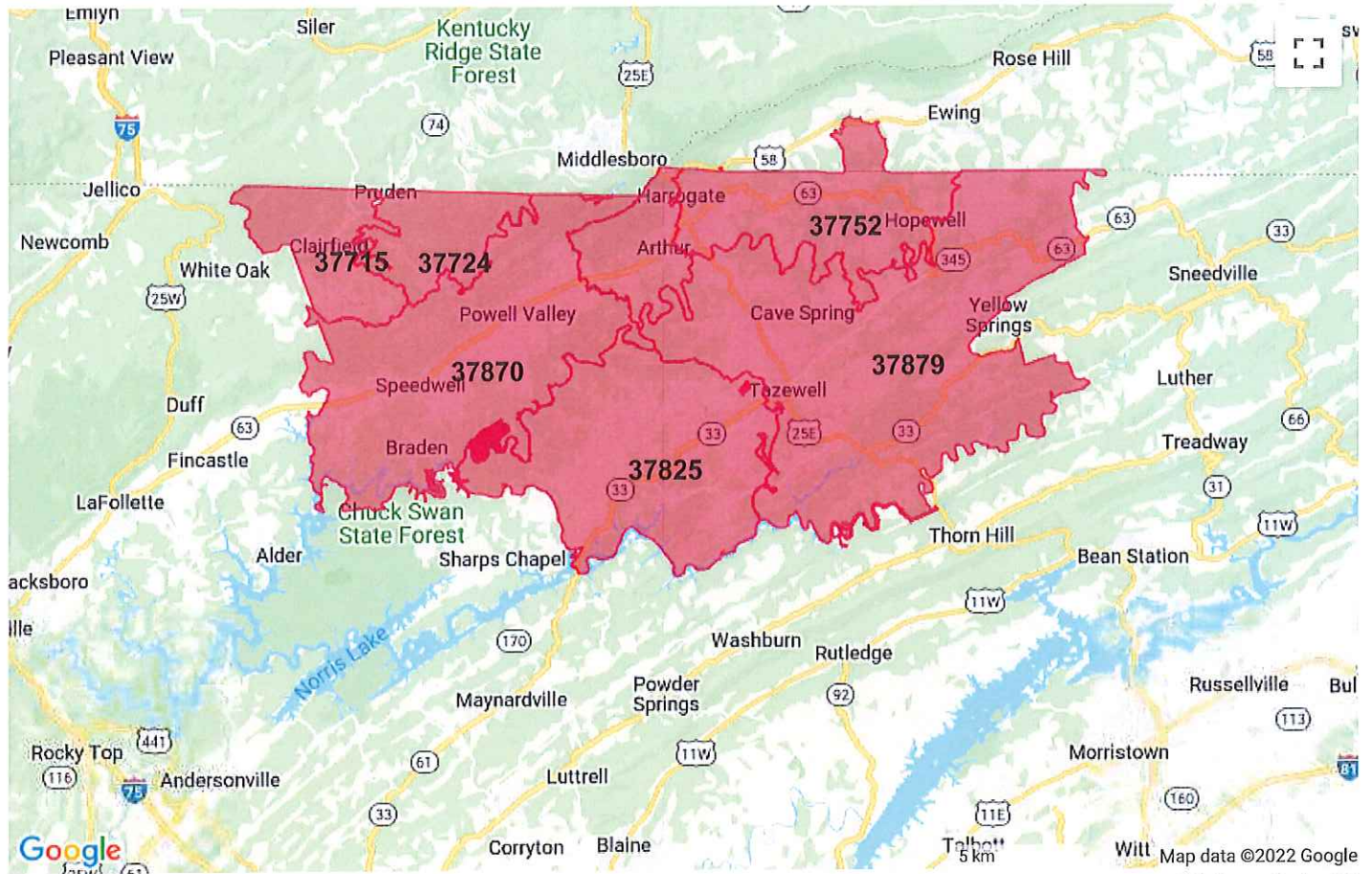
CNI Score Median: 3.6

CNI Score Mode: 3.4, 3.6

Zip Code	CNI Score	Population	City	County	State
37714	3.4	4303	Caryville	Campbell	Tennessee
37729	3.6	1326	Duff	Campbell	Tennessee
37757	3.4	9608	Jacksboro	Campbell	Tennessee
37762	4.4	2938	Jellico	Campbell	Tennessee
37766	4	18384	La Follette	Campbell	Tennessee
37819	3.6	739	Newcomb	Campbell	Tennessee



Lowest Need ■ 1 - 1.7 Lowest ■ 1.8 - 2.5 2nd Lowest ■ 2.6 - 3.3 Mid ■ 3.4 - 4.1 2nd Highest ■ 4.2 - 5 Highest Highest Need



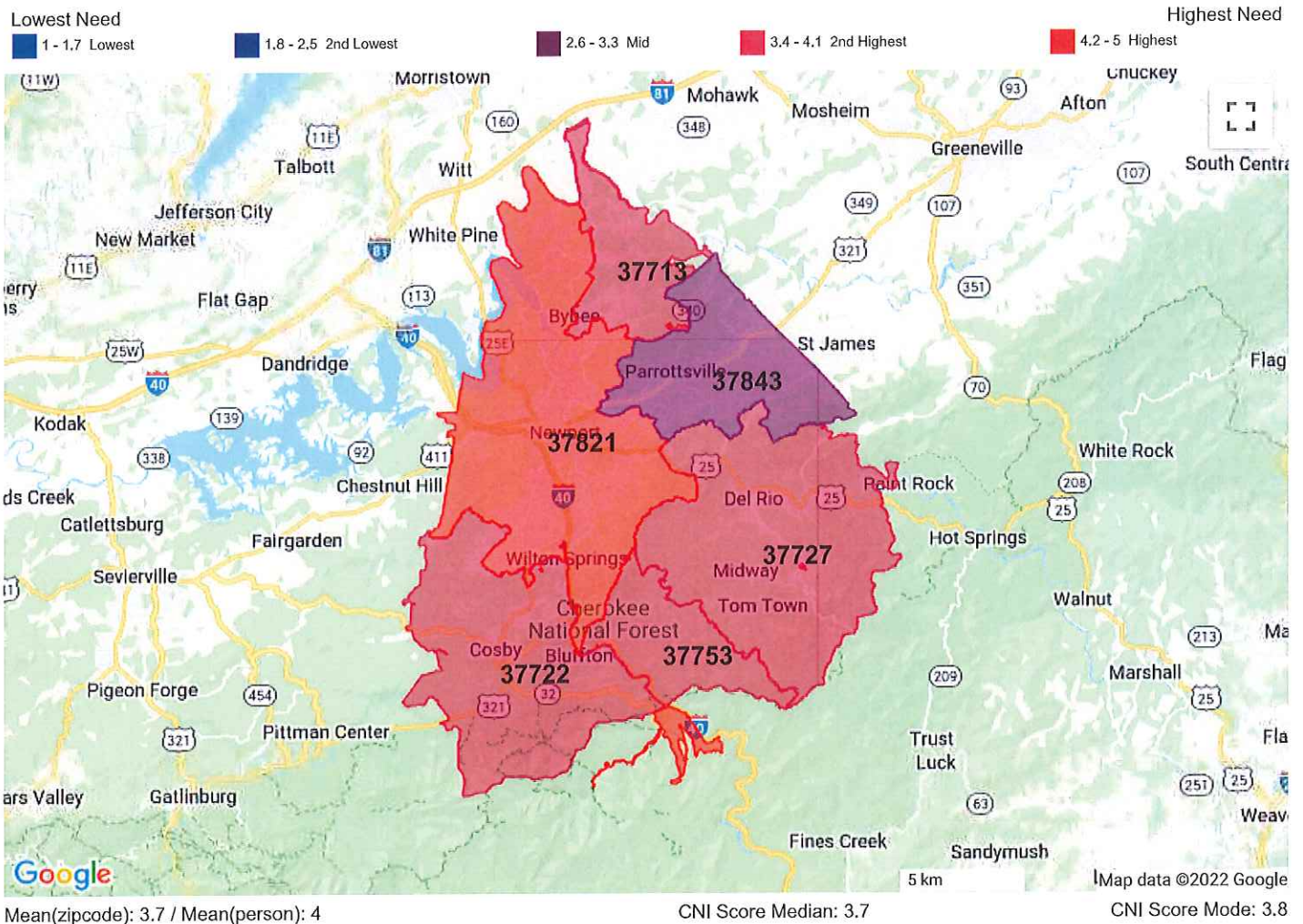
Mean(zipcode): 3.7 / Mean(person): 3.7

CNI Score Median: 3.6

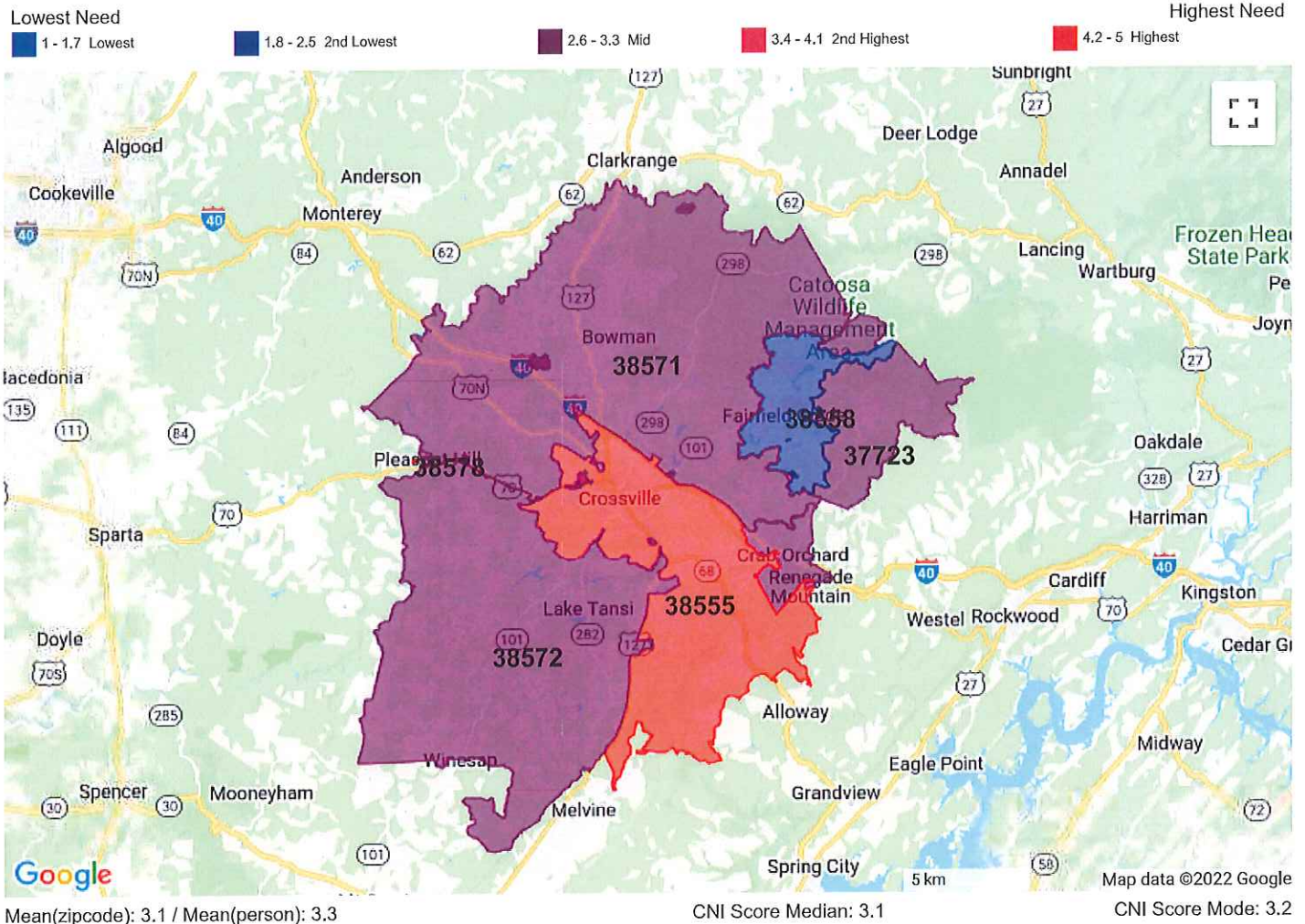
CNI Score Mode: 3.6

Zip Code	CNI Score	Population	City	County	State
37715	3.6	970	Clairfield	Claiborne	Tennessee
37724	3.8	4091	Cumberland Gap	Claiborne	Tennessee
37752	3.6	5199	Harrogate	Claiborne	Tennessee
37825	3.6	8615	New Tazewell	Claiborne	Tennessee
37870	3.6	4330	Speedwell	Claiborne	Tennessee
37879	4	10494	Tazewell	Claiborne	Tennessee





Zip Code	CNI Score	Population	City	County	State
37713	3.4	1424	Bybee	Cocke	Tennessee
37722	3.8	6214	Cosby	Cocke	Tennessee
37727	3.6	2144	Del Rio	Cocke	Tennessee
37753	3.8	864	Hartford	Cocke	Tennessee
37821	4.2	22930	Newport	Cocke	Tennessee
37843	3.2	3813	Parrottsville	Cocke	Tennessee

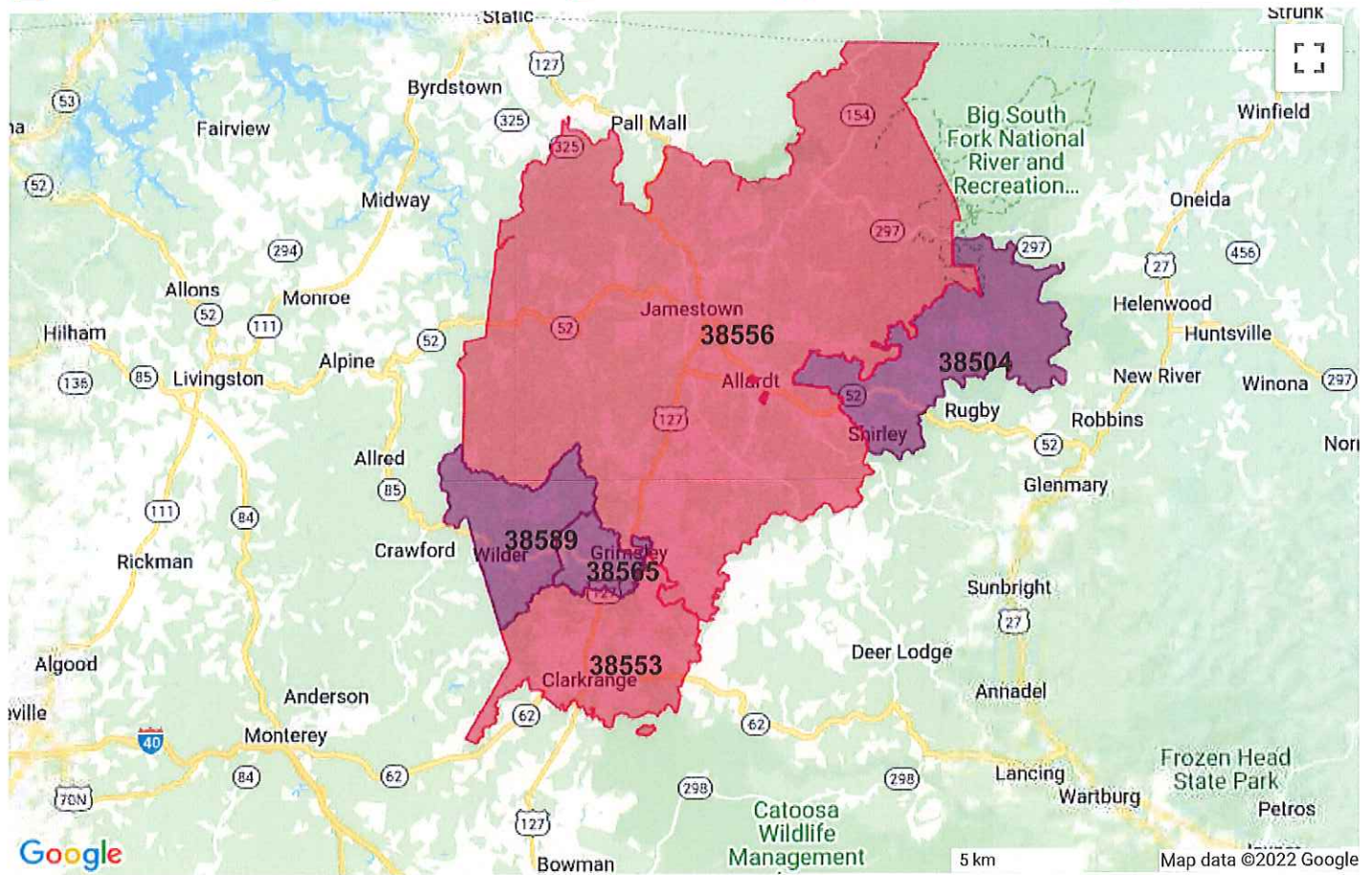


Zip Code	CNI Score	Population	City	County	State
37723	3.2	938	Crab Orchard	Cumberland	Tennessee
38555	4.2	19533	Crossville	Cumberland	Tennessee
38558	2.4	9079	Crossville	Cumberland	Tennessee
38571	3.2	14557	Crossville	Cumberland	Tennessee
38572	2.6	12448	Crossville	Cumberland	Tennessee
38578	3	53	Pleasant Hill	Cumberland	Tennessee



Lowest Need Highest Need

1 - 1.7 Lowest
  1.8 - 2.5 2nd Lowest
  2.6 - 3.3 Mid
  3.4 - 4.1 2nd Highest
  4.2 - 5 Highest



Mean(zipcode): 3.3 / Mean(person): 3.7

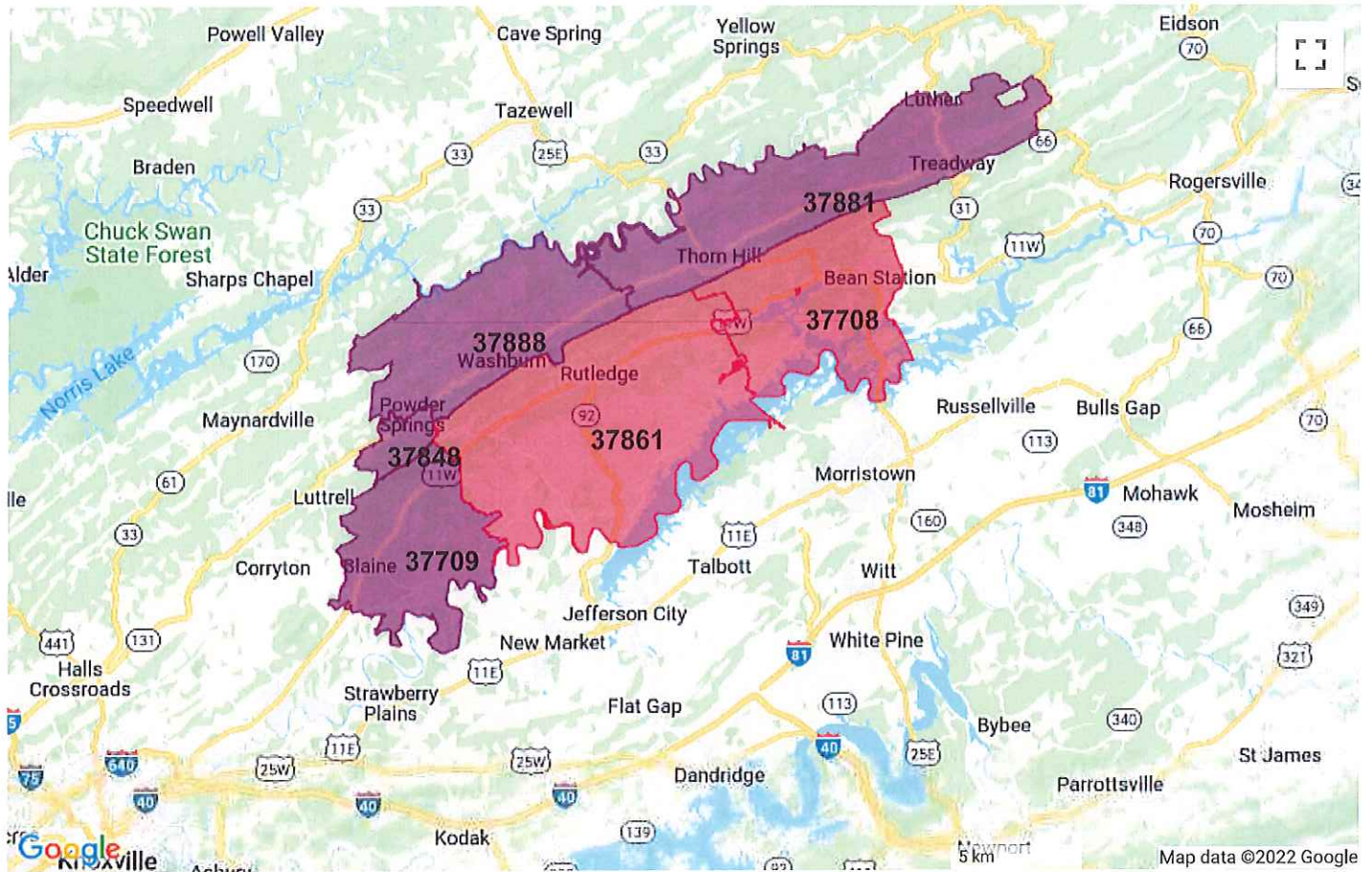
CNI Score Median: 3.2

CNI Score Mode: 3.2

Zip Code	CNI Score	Population	City	County	State
38504	3	952	Allardt	Fentress	Tennessee
38553	3.4	2624	Clarkrange	Fentress	Tennessee
38556	3.8	12868	Jamestown	Fentress	Tennessee
38565	3.2	942	Grimsley	Fentress	Tennessee
38589	3.2	322	Wilder	Fentress	Tennessee

Lowest Need Highest Need

1 - 1.7 Lowest
  1.8 - 2.5 2nd Lowest
  2.6 - 3.3 Mid
  3.4 - 4.1 2nd Highest
  4.2 - 5 Highest



Mean(zipcode): 3.2 / Mean(person): 3.4

CNI Score Median: 3.2

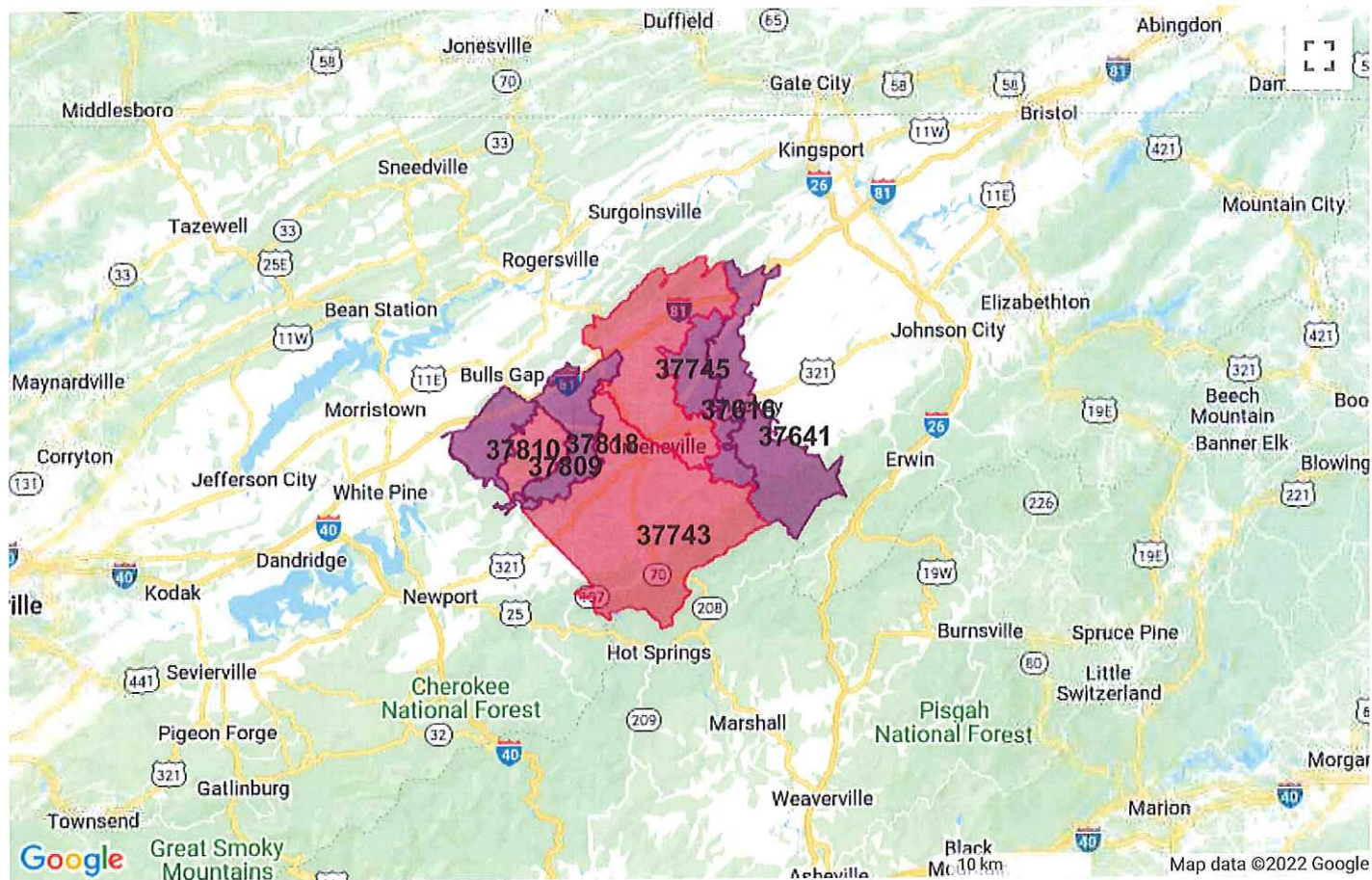
CNI Score Mode: 3.2

Zip Code	CNI Score	Population	City	County	State
37708	3.6	6747	Bean Station	Grainger	Tennessee
37709	2.6	3770	Blaine	Grainger	Tennessee
37848	3.2	366	Powder Springs	Grainger	Tennessee
37861	3.8	8770	Rutledge	Grainger	Tennessee
37881	3.2	2134	Thorn Hill	Grainger	Tennessee
37888	3	2791	Washburn	Grainger	Tennessee



Lowest Need      Highest Need

1 - 1.7 Lowest      1.8 - 2.5 2nd Lowest      2.6 - 3.3 Mid      3.4 - 4.1 2nd Highest      4.2 - 5 Highest



Mean(zipcode): 3.3 / Mean(person): 3.5

CNI Score Median: 3.4

CNI Score Mode: 3.2

Zip Code	CNI Score	Population	City	County	State
37616	3.2	5567	Afton	Greene	Tennessee
37641	3	8574	Chuckey	Greene	Tennessee
37743	3.6	25440	Greeneville	Greene	Tennessee
37745	3.8	18454	Greeneville	Greene	Tennessee
37809	3.4	2117	Midway	Greene	Tennessee
37810	3.2	1930	Mohawk	Greene	Tennessee
37818	3.2	4957	Mosheim	Greene	Tennessee

Lowest Need

1 - 1.7 Lowest

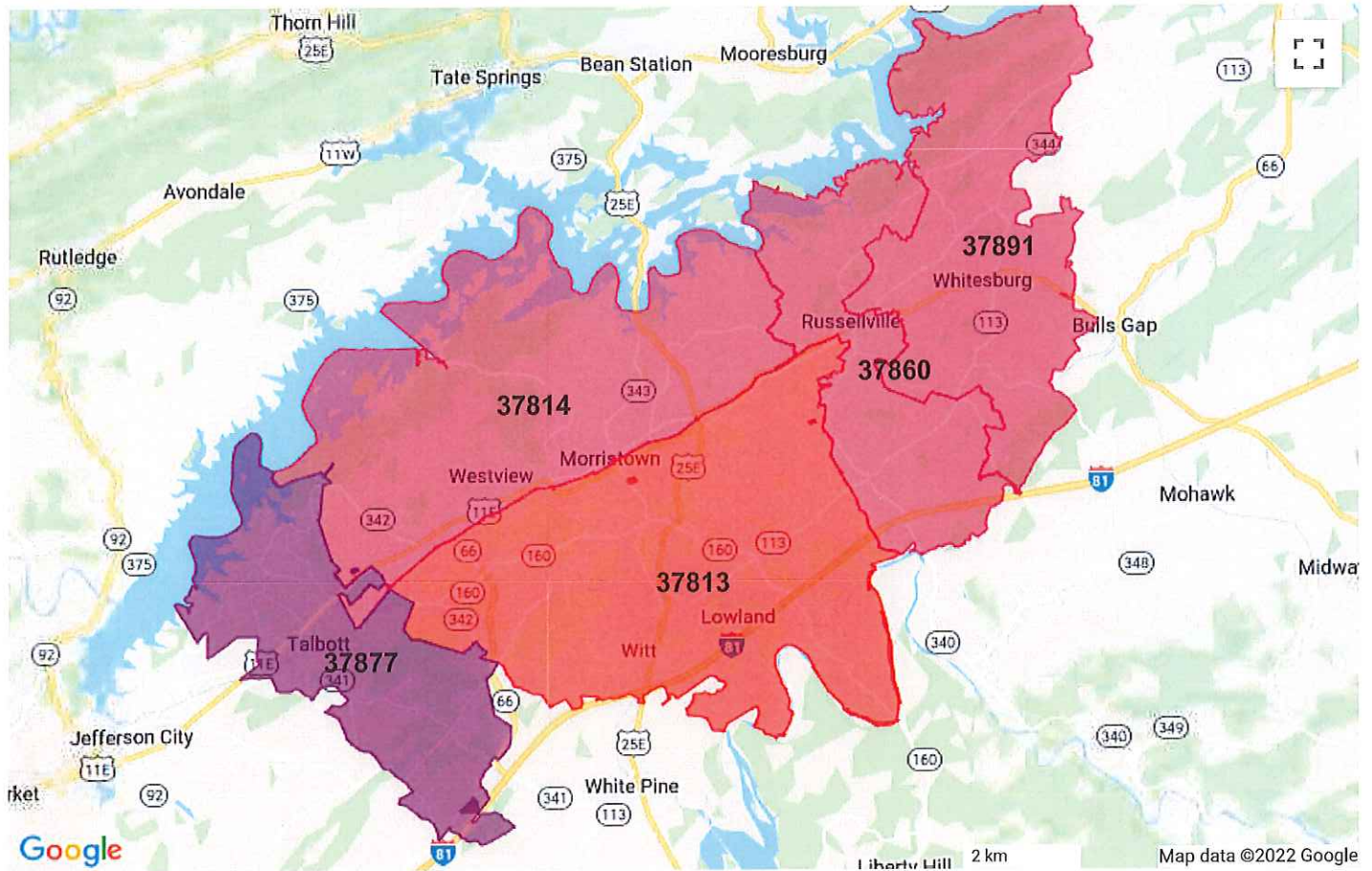
1.8 - 2.5 2nd Lowest

2.6 - 3.3 Mid

3.4 - 4.1 2nd Highest

4.2 - 5 Highest

Highest Need



Mean(zipcode): 3.8 / Mean(person): 4.1

CNI Score Median: 3.8

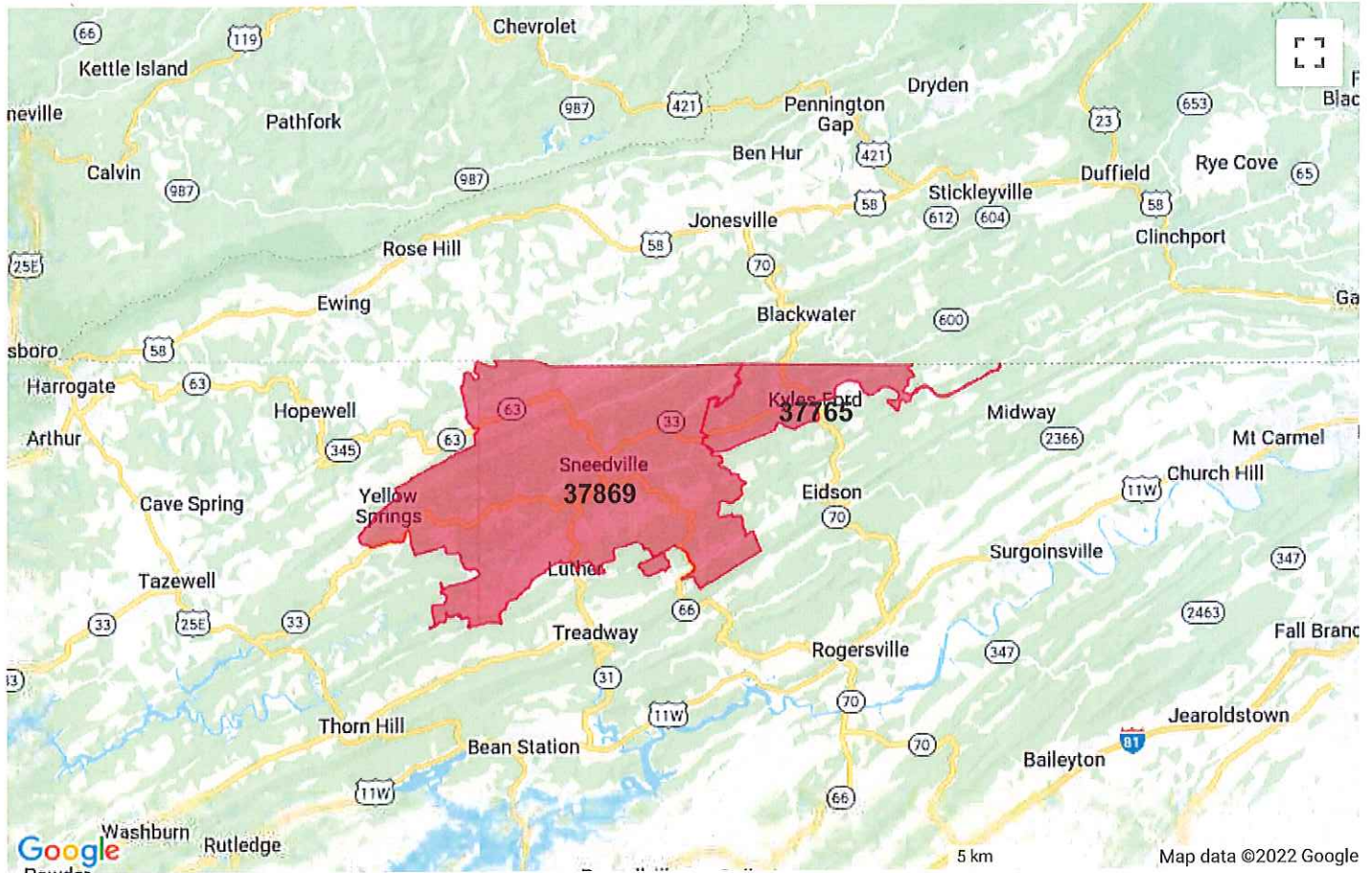
CNI Score Mode: None

Zip Code	CNI Score	Population	City	County	State
37813	4.8	18031	Morristown	Hamblen	Tennessee
37814	4	34396	Morristown	Hamblen	Tennessee
37860	3.4	4551	Russellville	Hamblen	Tennessee
37877	3.2	8777	Talbott	Hamblen	Tennessee
37891	3.8	3771	Whitesburg	Hamblen	Tennessee



Lowest Need Highest Need

1 - 1.7 Lowest
  1.8 - 2.5 2nd Lowest
  2.6 - 3.3 Mid
  3.4 - 4.1 2nd Highest
  4.2 - 5 Highest



Mean(zipcode): 3.7 / Mean(person): 3.9

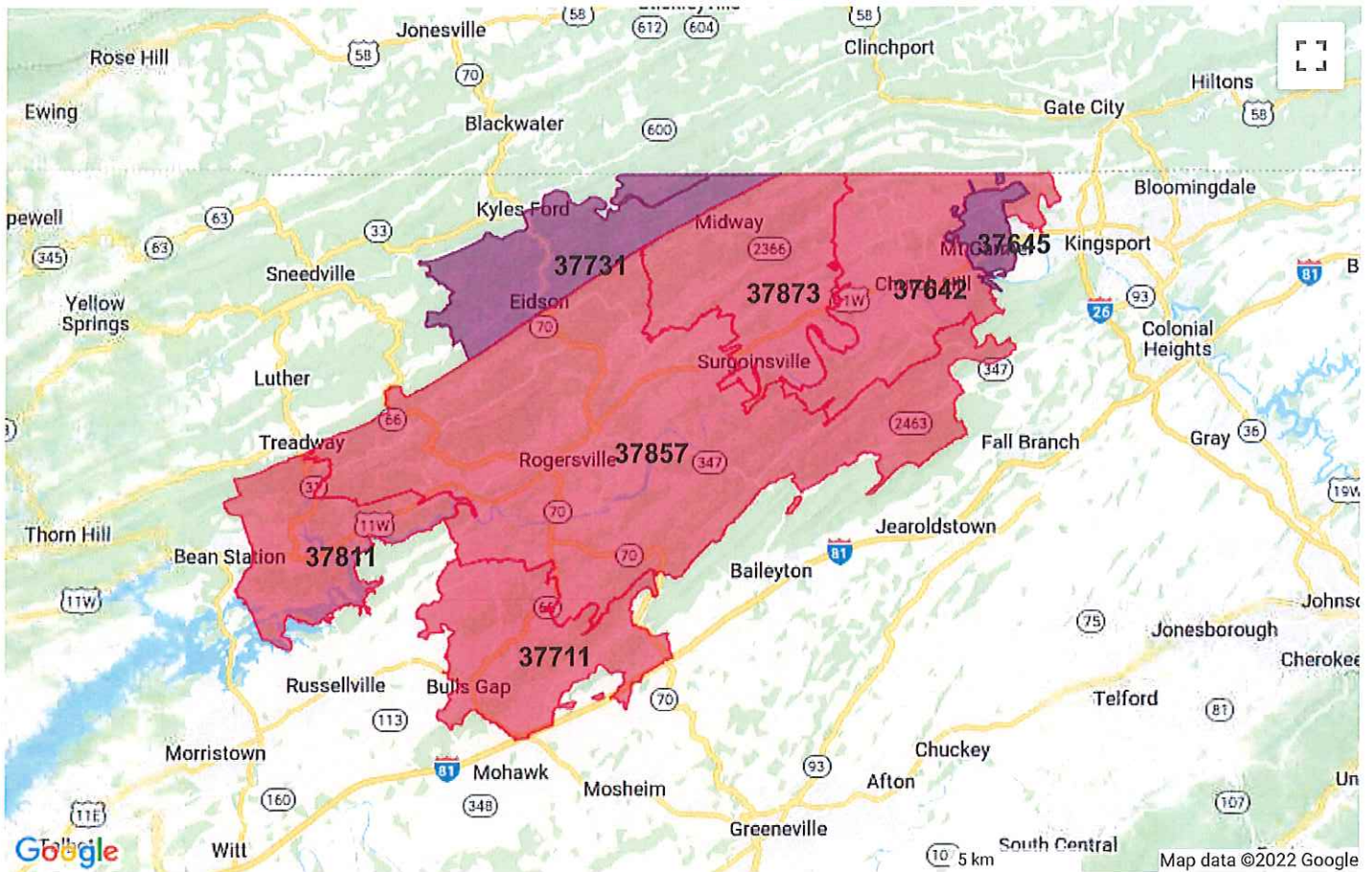
CNI Score Median: 3.7

Map data ©2022 Google  
CNI Score Mode: None

Zip Code	CNI Score	Population	City	County	State
37765	3.4	476	Kyles Ford	Hancock	Tennessee
37869	4	5026	Sneedville	Hancock	Tennessee

Lowest Need Highest Need

1 - 1.7 Lowest
  1.8 - 2.5 2nd Lowest
  2.6 - 3.3 Mid
  3.4 - 4.1 2nd Highest
  4.2 - 5 Highest



Mean(zipcode): 3.5 / Mean(person): 3.6

CNI Score Median: 3.6

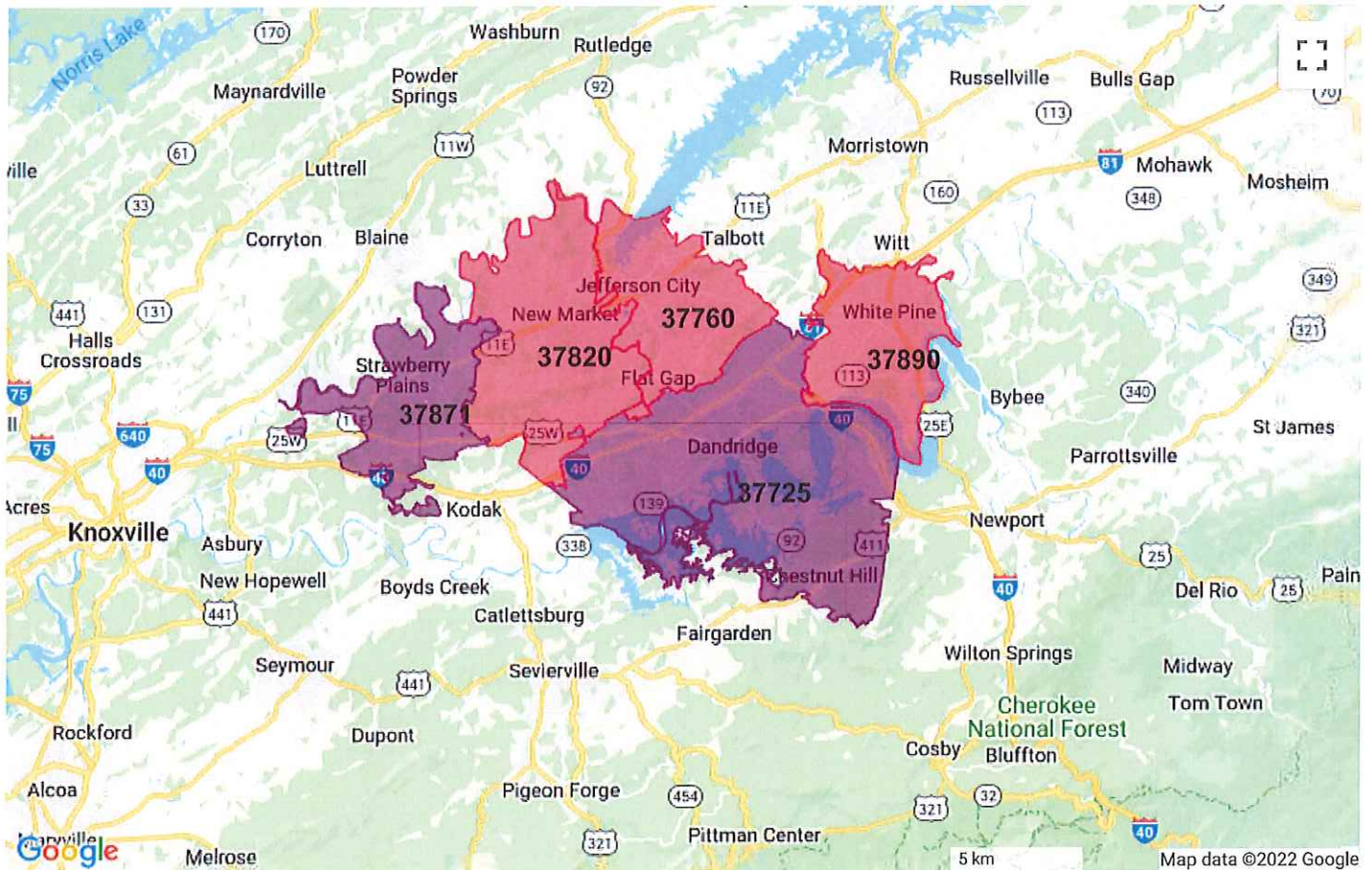
CNI Score Mode: 3.6

Zip Code	CNI Score	Population	City	County	State
37642	3.6	14917	Church Hill	Hawkins	Tennessee
37645	3.2	5826	Mount Carmel	Hawkins	Tennessee
37711	3.8	5108	Bulls Gap	Hawkins	Tennessee
37731	2.8	751	Eidson	Hawkins	Tennessee
37811	3.4	3508	Mooreburg	Hawkins	Tennessee
37857	3.8	20550	Rogersville	Hawkins	Tennessee
37873	3.6	4224	Surgoinsville	Hawkins	Tennessee



Lowest Need Highest Need

1 - 1.7 Lowest
  1.8 - 2.5 2nd Lowest
  2.6 - 3.3 Mid
  3.4 - 4.1 2nd Highest
  4.2 - 5 Highest



Mean(zipcode): 3.5 / Mean(person): 3.4

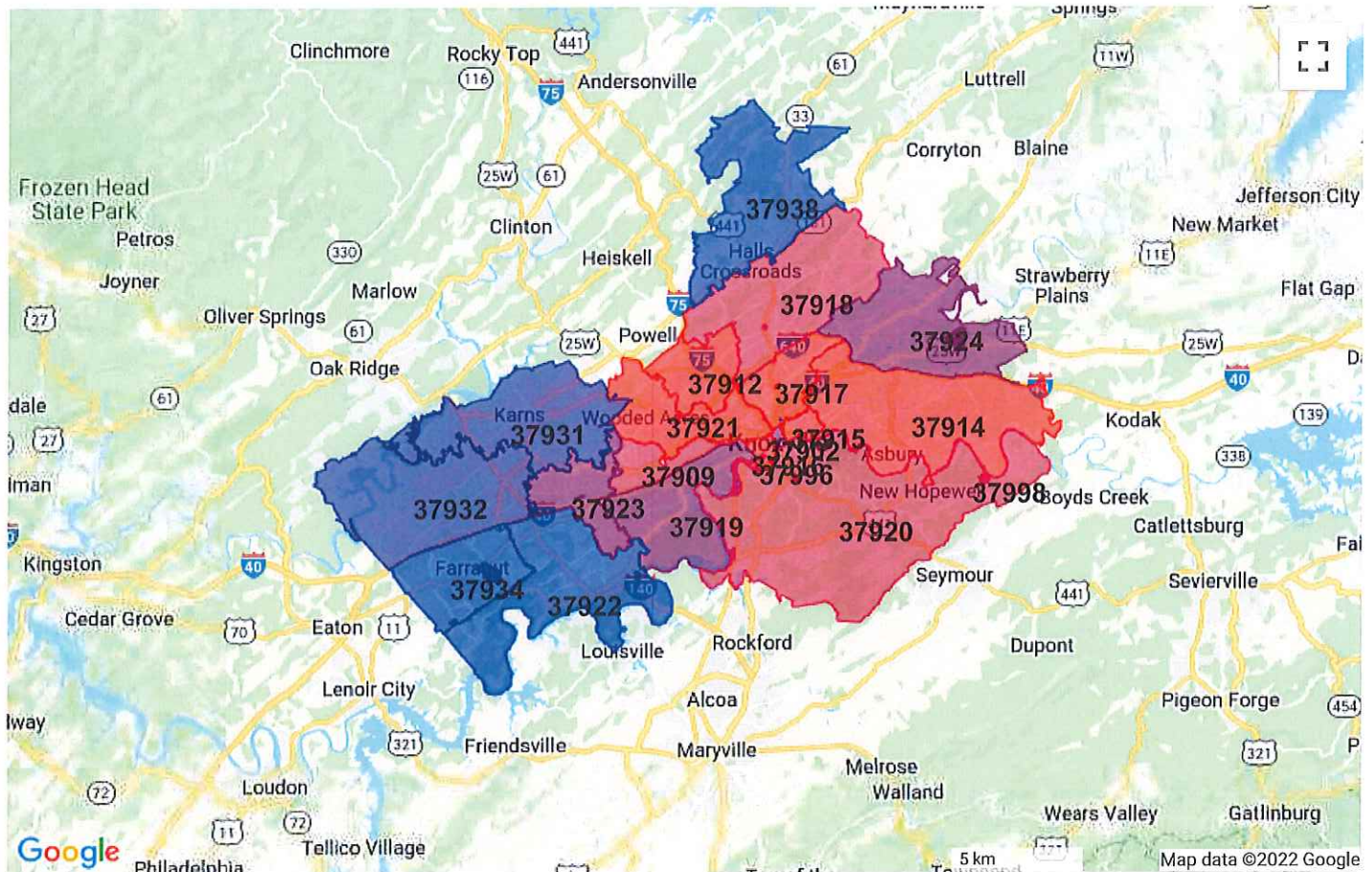
CNI Score Median: 3.4

CNI Score Mode: None

Zip Code	CNI Score	Population	City	County	State
37725	3	18784	Dandridge	Jefferson	Tennessee
37760	4	13390	Jefferson City	Jefferson	Tennessee
37820	3.4	7997	New Market	Jefferson	Tennessee
37871	3.2	9660	Strawberry Plains	Jefferson	Tennessee
37890	3.8	6998	White Pine	Jefferson	Tennessee



Lowest Need ■ 1 - 1.7 Lowest ■ 1.8 - 2.5 2nd Lowest ■ 2.6 - 3.3 Mid ■ 3.4 - 4.1 2nd Highest ■ 4.2 - 5 Highest Highest Need



Mean(zipcode): 3.3 / Mean(person): 3.2

CNI Score Median: 3.5

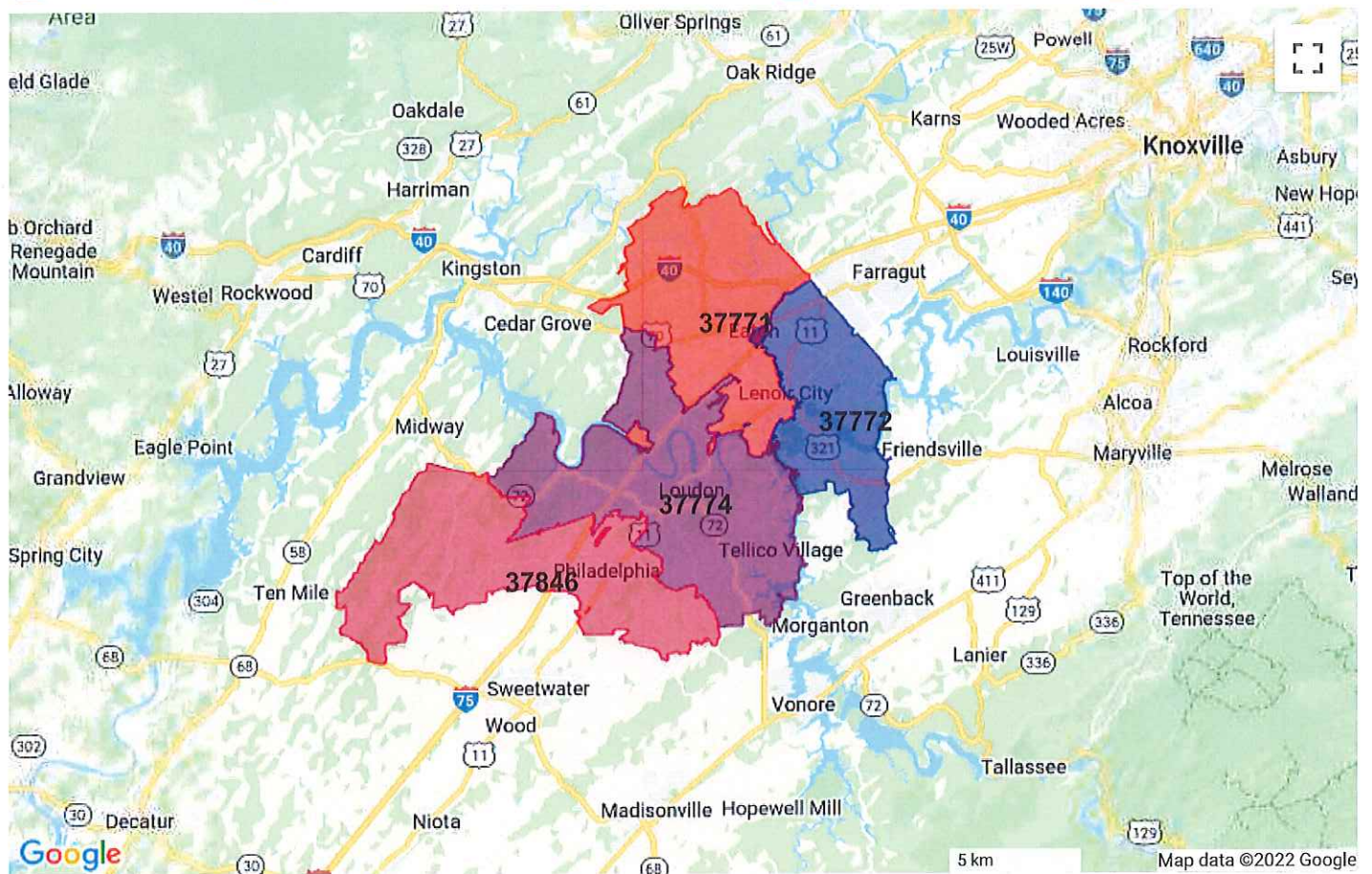
CNI Score Mode: 4.2

Zip Code	CNI Score	Population	City	County	State
37902	3.2	2081	Knoxville	Knox	Tennessee
37909	4	16039	Knoxville	Knox	Tennessee
37912	4.2	23011	Knoxville	Knox	Tennessee
37914	4.6	20644	Knoxville	Knox	Tennessee
37915	4.8	6097	Knoxville	Knox	Tennessee
37916	4.2	12960	Knoxville	Knox	Tennessee
37917	4.6	24969	Knoxville	Knox	Tennessee
37918	3.4	45974	Knoxville	Knox	Tennessee
37919	3.2	30517	Knoxville	Knox	Tennessee
37920	4	41072	Knoxville	Knox	Tennessee
37921	4.2	29808	Knoxville	Knox	Tennessee
37922	1.4	39370	Knoxville	Knox	Tennessee
37923	3	30901	Knoxville	Knox	Tennessee
37924	2.8	12944	Knoxville	Knox	Tennessee
37931	2.2	30367	Knoxville	Knox	Tennessee
37932	2.2	18007	Knoxville	Knox	Tennessee
37934	1.4	27087	Knoxville	Knox	Tennessee
37938	1.6	19394	Knoxville	Knox	Tennessee
37996	3.8	253	Knoxville	Knox	Tennessee
37998	3.6	559	Knoxville	Knox	Tennessee



Lowest Need Highest Need

1 - 1.7 Lowest
  1.8 - 2.5 2nd Lowest
  2.6 - 3.3 Mid
  3.4 - 4.1 2nd Highest
  4.2 - 5 Highest

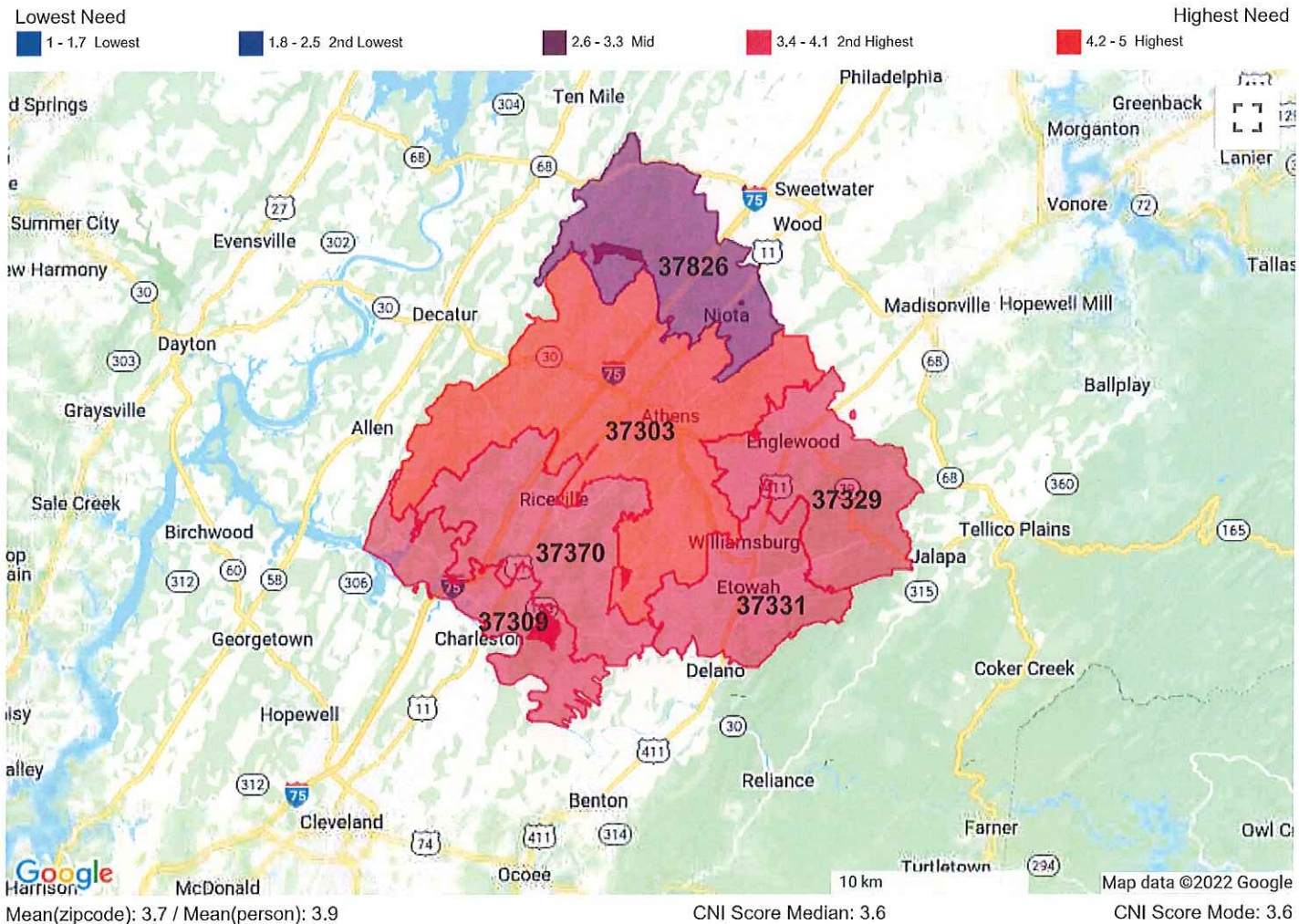


Mean(zipcode): 3.4 / Mean(person): 3.3

CNI Score Median: 3.5

CNI Score Mode: None

Zip Code	CNI Score	Population	City	County	State
37771	4.2	16930	Lenoir City	Loudon	Tennessee
37772	2.2	13188	Lenoir City	Loudon	Tennessee
37774	3.2	20951	Loudon	Loudon	Tennessee
37846	3.8	5135	Philadelphia	Loudon	Tennessee

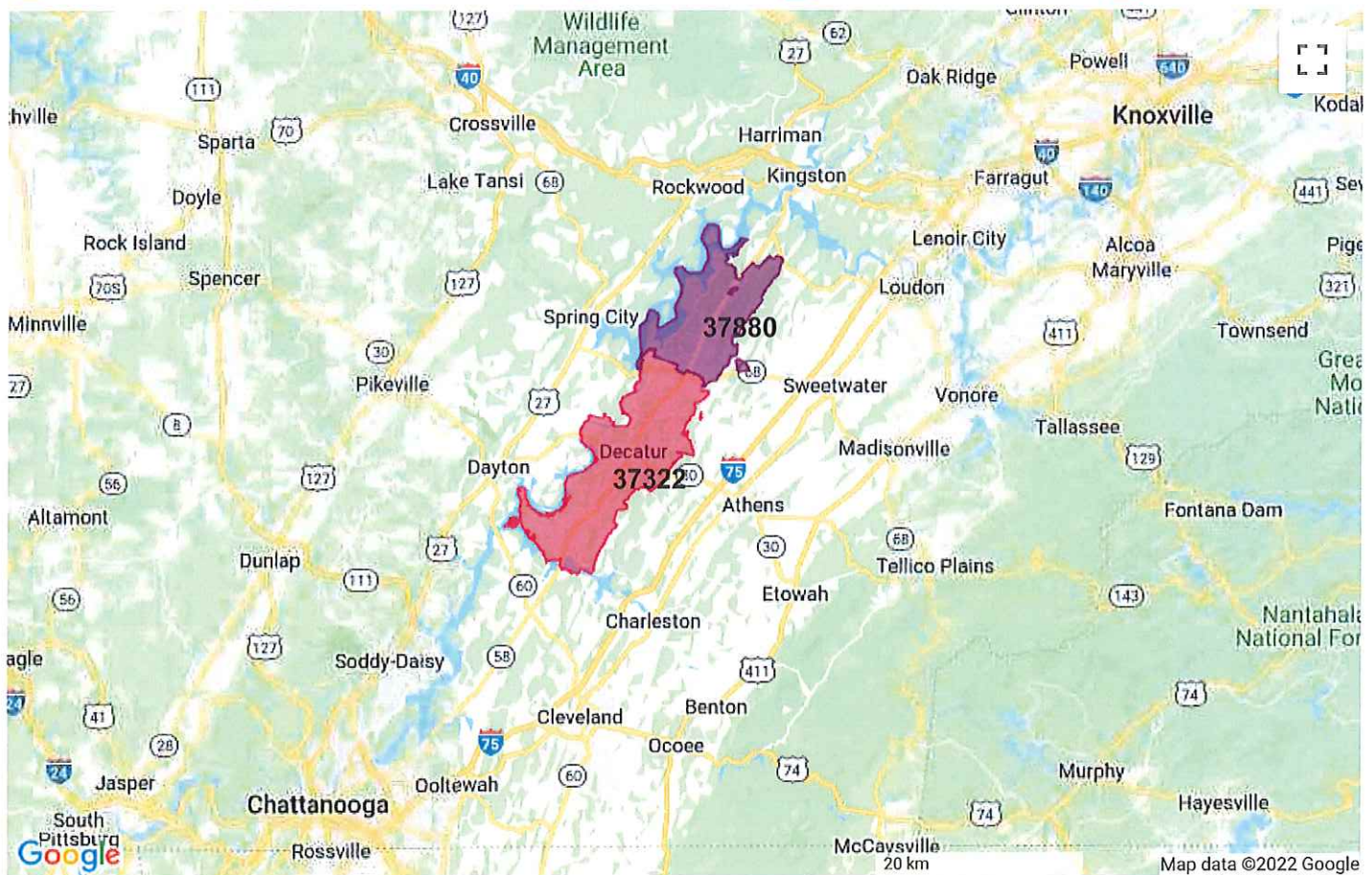


Zip Code	CNI Score	Population	City	County	State
37303	4.2	26473	Athens	Mcminn	Tennessee
37309	3.6	2156	Calhoun	Mcminn	Tennessee
37329	3.6	5548	Englewood	Mcminn	Tennessee
37331	4	7614	Etowah	Mcminn	Tennessee
37370	3.4	4971	Riceville	Mcminn	Tennessee
37826	3.2	4907	Niota	Mcminn	Tennessee



Lowest Need Highest Need

1 - 1.7 Lowest
  1.8 - 2.5 2nd Lowest
  2.6 - 3.3 Mid
  3.4 - 4.1 2nd Highest
  4.2 - 5 Highest



Mean(zipcode): 3.5 / Mean(person): 3.6

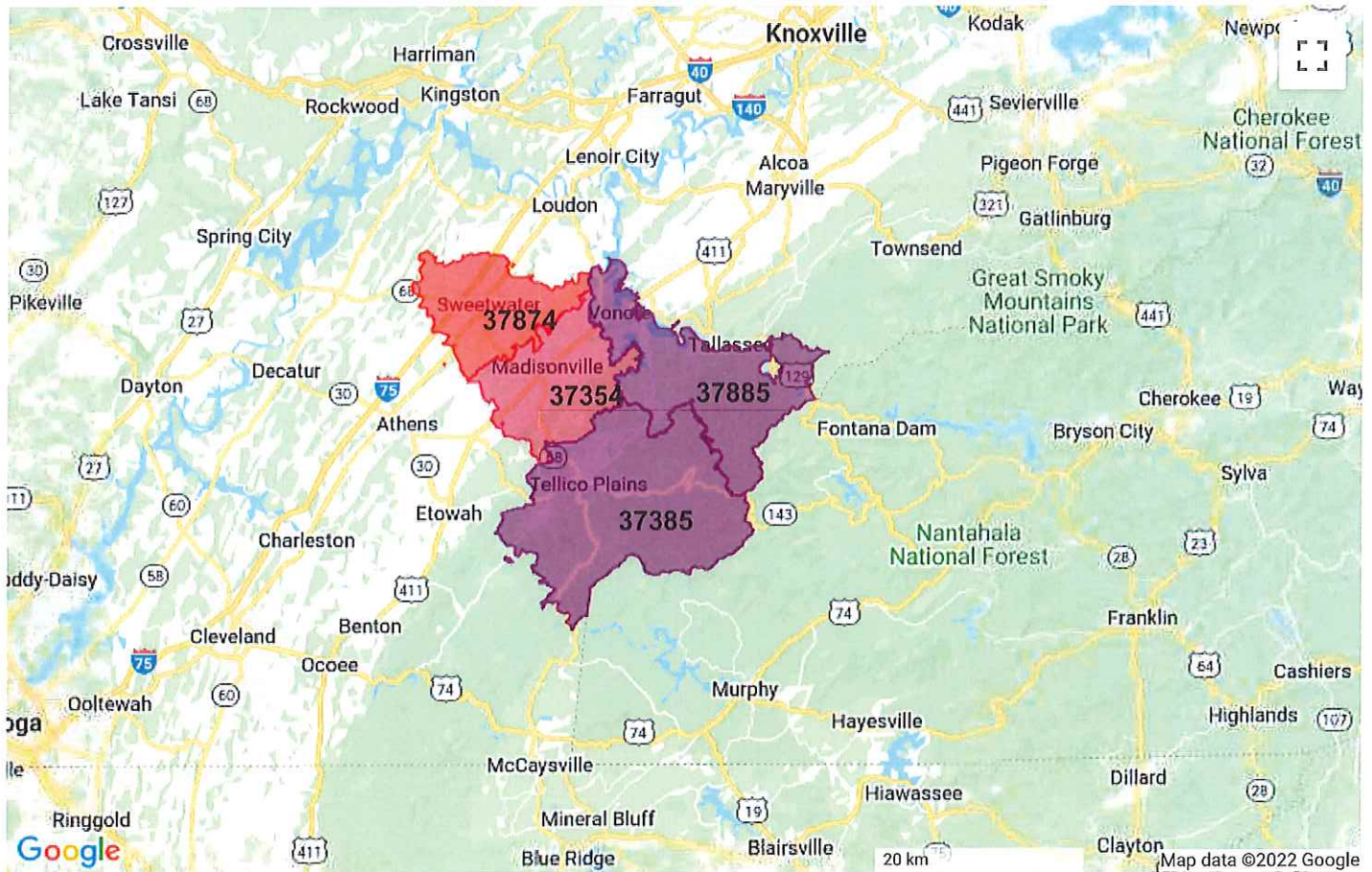
CNI Score Median: 3.5

CNI Score Mode: None

Zip Code	CNI Score	Population	City	County	State
<span style="display: inline-block; width: 15px; height: 10px; background-color: #FF0000; border: 1px solid black;"></span> 37322	3.8	8947	Decatur	Meigs	Tennessee
<span style="display: inline-block; width: 15px; height: 10px; background-color: #4B0082; border: 1px solid black;"></span> 37880	3.2	3570	Ten Mile	Meigs	Tennessee

Lowest Need      Highest Need

1 - 1.7 Lowest      1.8 - 2.5 2nd Lowest      2.6 - 3.3 Mid      3.4 - 4.1 2nd Highest      4.2 - 5 Highest



Mean(zipcode): 3.6 / Mean(person): 3.8

CNI Score Median: 3.6

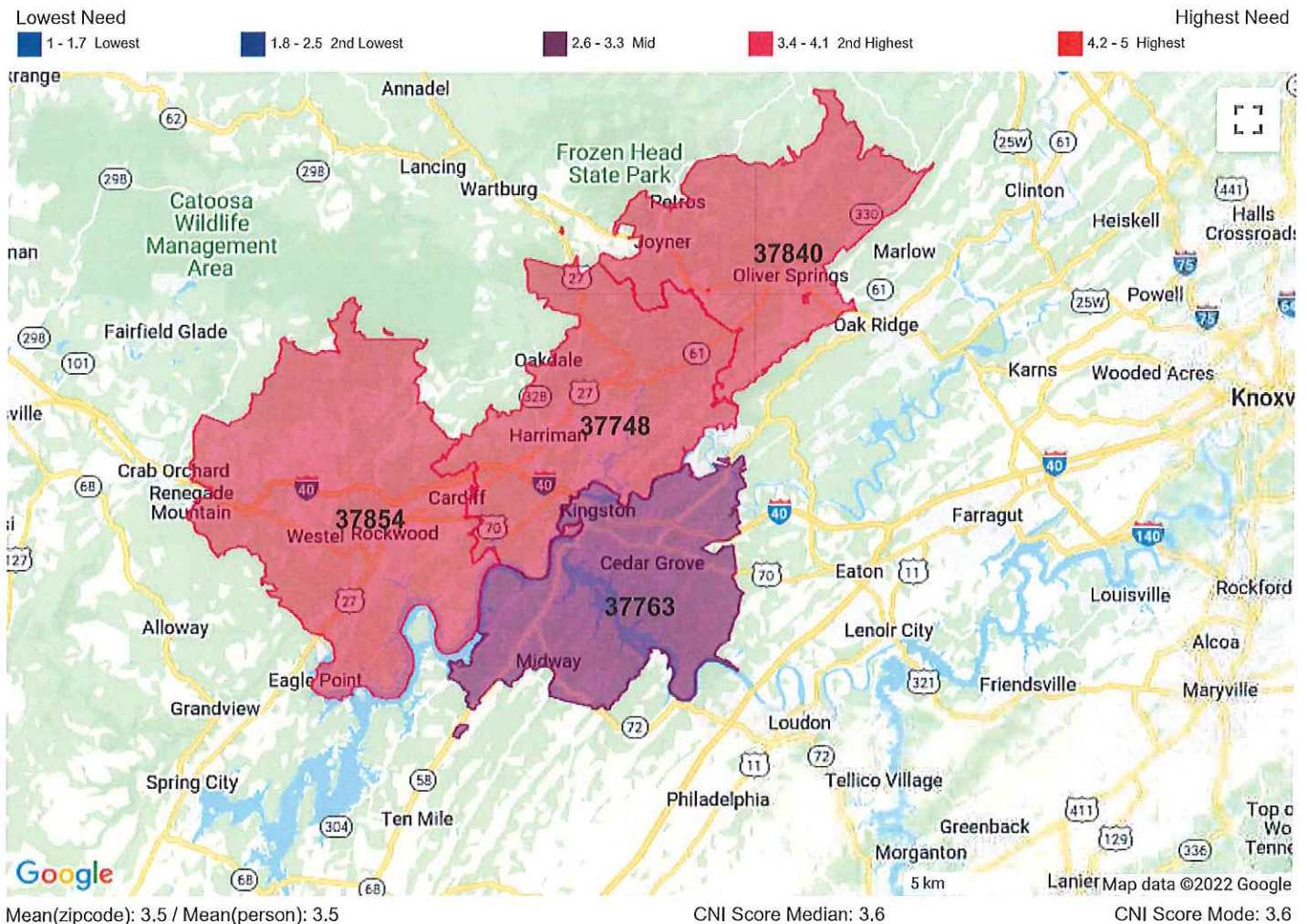
CNI Score Mode: 3.2

Zip Code	CNI Score	Population	City	County	State
37354	4	17587	Madisonville	Monroe	Tennessee
37385	3.2	8186	Tellico Plains	Monroe	Tennessee
37874	4.2	15409	Sweetwater	Monroe	Tennessee
37885	3.2	6013	Vonore	Monroe	Tennessee





Zip Code	CNI Score	Population	City	County	State
37726	3.8	2096	Deer Lodge	Morgan	Tennessee
37770	3.4	2676	Lancing	Morgan	Tennessee
37829	3.6	1689	Oakdale	Morgan	Tennessee
37872	3.4	2102	Sunbright	Morgan	Tennessee
37887	4.4	6985	Wartburg	Morgan	Tennessee

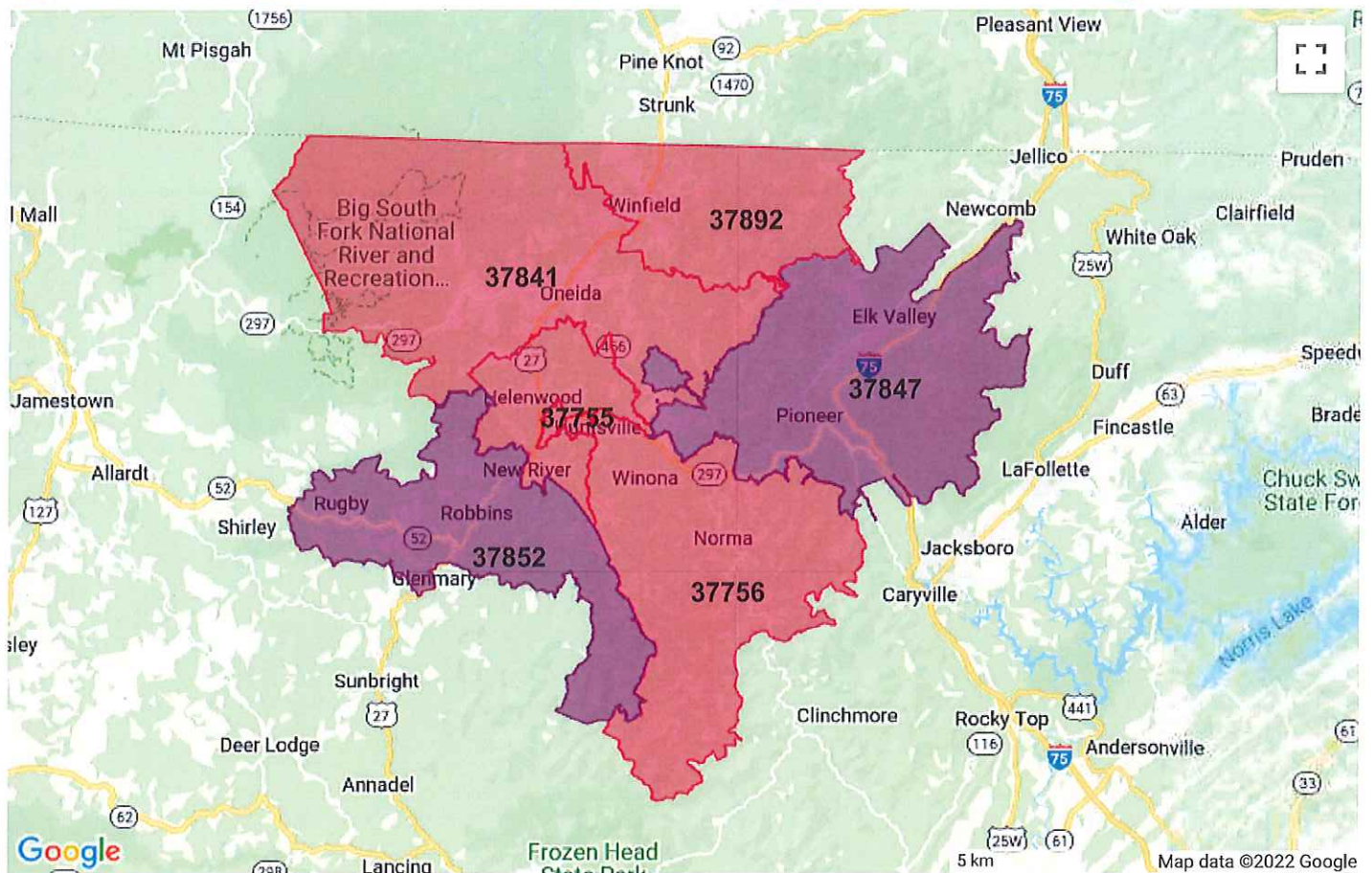


Zip Code	CNI Score	Population	City	County	State
37748	3.6	17061	Harriman	Roane	Tennessee
37763	2.8	15325	Kingston	Roane	Tennessee
37840	3.6	9962	Oliver Springs	Roane	Tennessee
37854	4	12903	Rockwood	Roane	Tennessee



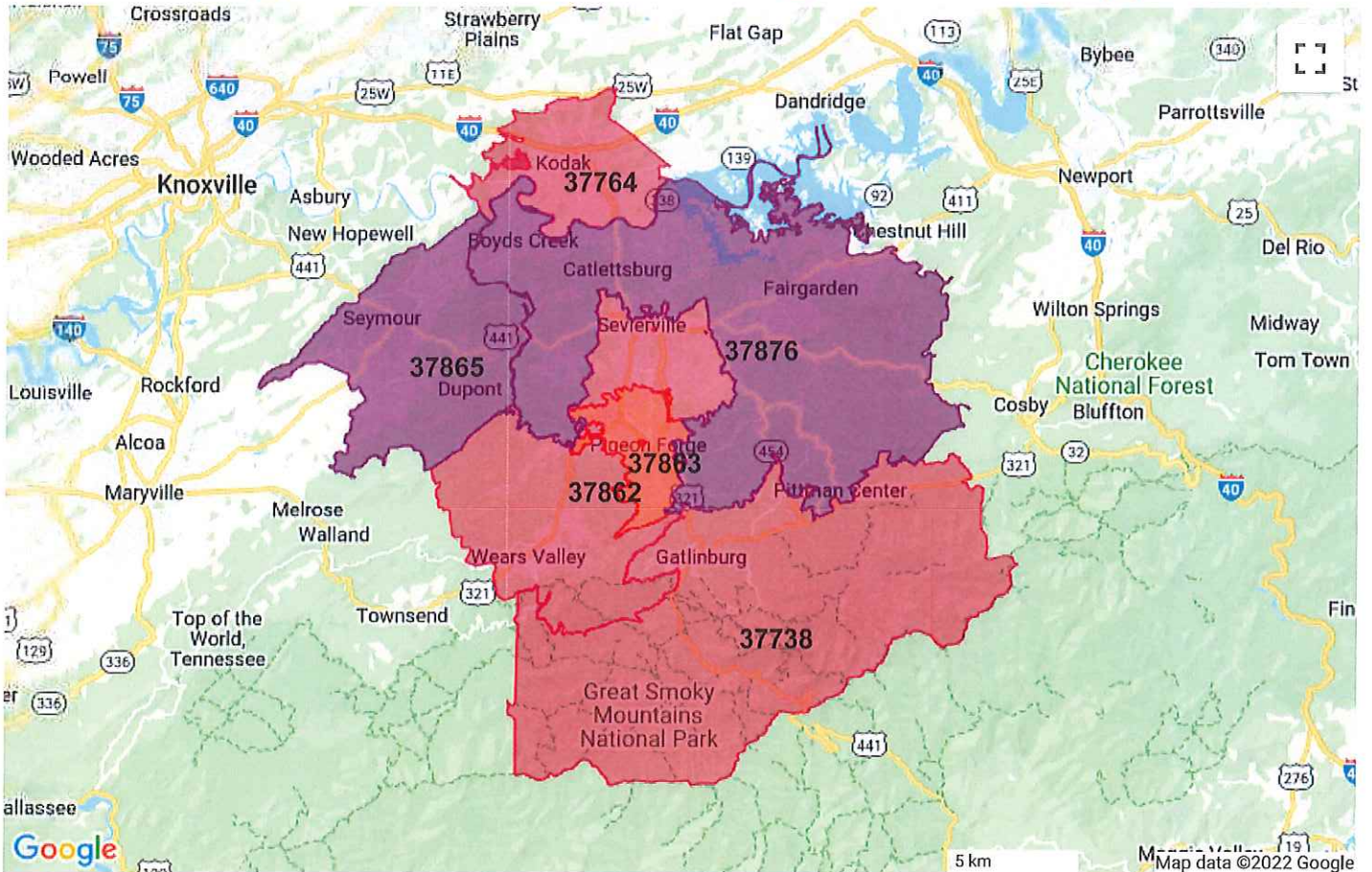
Lowest Need Highest Need

1 - 1.7 Lowest
  1.8 - 2.5 2nd Lowest
  2.6 - 3.3 Mid
  3.4 - 4.1 2nd Highest
  4.2 - 5 Highest



Zip Code	CNI Score	Population	City	County	State
37755	3.8	3466	Helenwood	Scott	Tennessee
37756	3.6	2904	Huntsville	Scott	Tennessee
37841	4	9521	Oneida	Scott	Tennessee
37847	3.2	2610	Pioneer	Scott	Tennessee
37852	3	2788	Robbins	Scott	Tennessee
37892	3.6	2016	Winfield	Scott	Tennessee

Lowest Need ■ 1 - 1.7 Lowest ■ 1.8 - 2.5 2nd Lowest ■ 2.6 - 3.3 Mid ■ 3.4 - 4.1 2nd Highest ■ 4.2 - 5 Highest Highest Need



Mean(zipcode): 3.7 / Mean(person): 3.5

CNI Score Median: 3.7

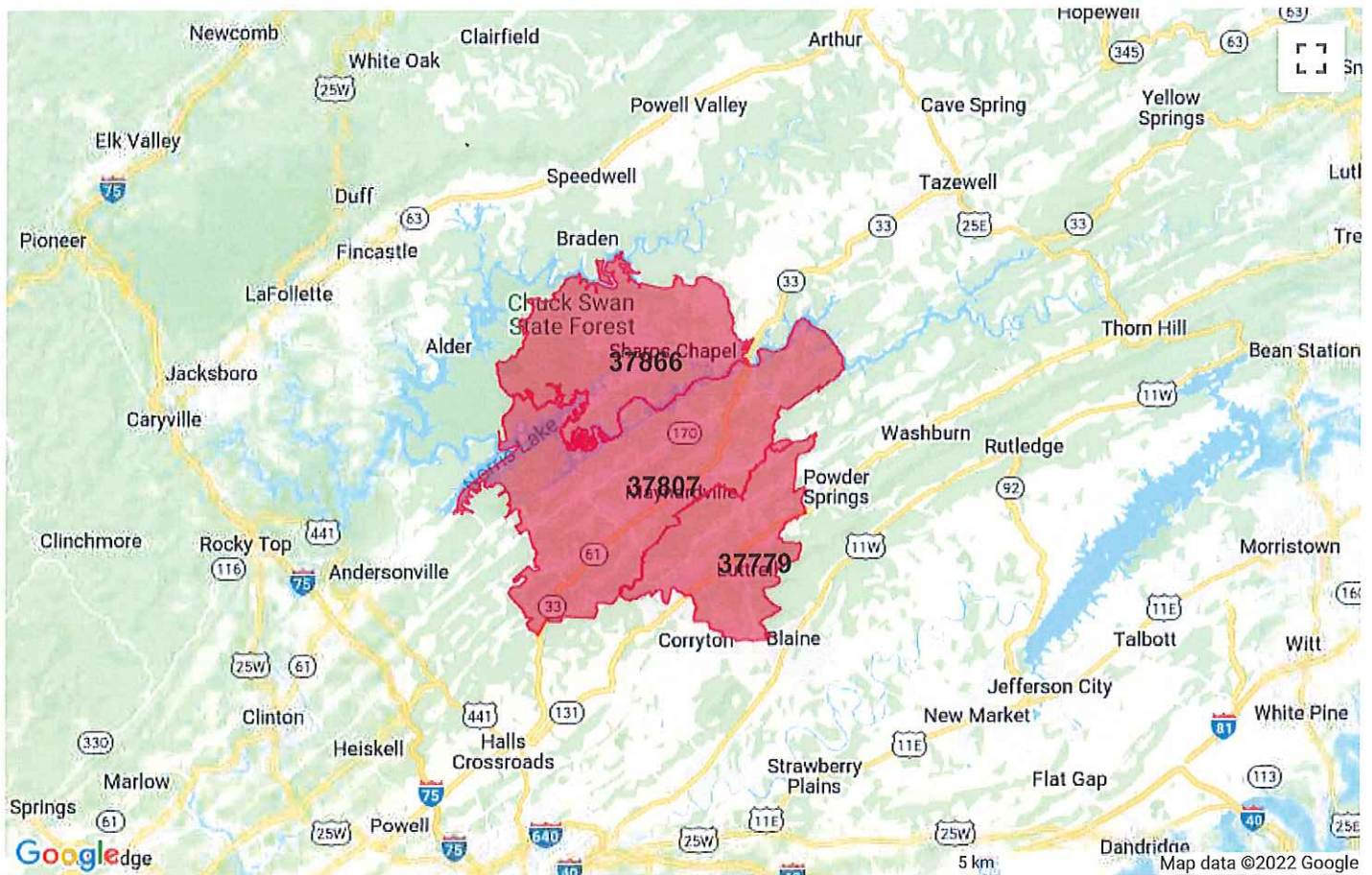
CNI Score Mode: None

Zip Code	CNI Score	Population	City	County	State
37738	3.8	6212	Gatlinburg	Sevier	Tennessee
37764	3.6	9982	Kodak	Sevier	Tennessee
37862	4	22499	Sevierville	Sevier	Tennessee
37863	4.6	7061	Pigeon Forge	Sevier	Tennessee
37865	2.8	22892	Seymour	Sevier	Tennessee
37876	3.2	33589	Sevierville	Sevier	Tennessee



Lowest Need Highest Need

1 - 1.7 Lowest
  1.8 - 2.5 2nd Lowest
  2.6 - 3.3 Mid
  3.4 - 4.1 2nd Highest
  4.2 - 5 Highest



Mean(zipcode): 3.6 / Mean(person): 3.7 CNI Score Median: 3.8 CNI Score Mode: None

Zip Code	CNI Score	Population	City	County	State
37779	3.6	4177	Luttrell	Union	Tennessee
37807	3.8	10301	Maynardville	Union	Tennessee
37866	3.4	1988	Sharps Chapel	Union	Tennessee