

VIRGINIA DEPARTMENT OF HEALTH

Office of Licensure and Certification

Division of Certificate of Public Need

Staff Analysis

January 19, 2024

RE: COPN Request No. VA-8737

OrthoVirginia, Inc.

Richmond, Virginia

Establish a Specialized Center for CT Imaging

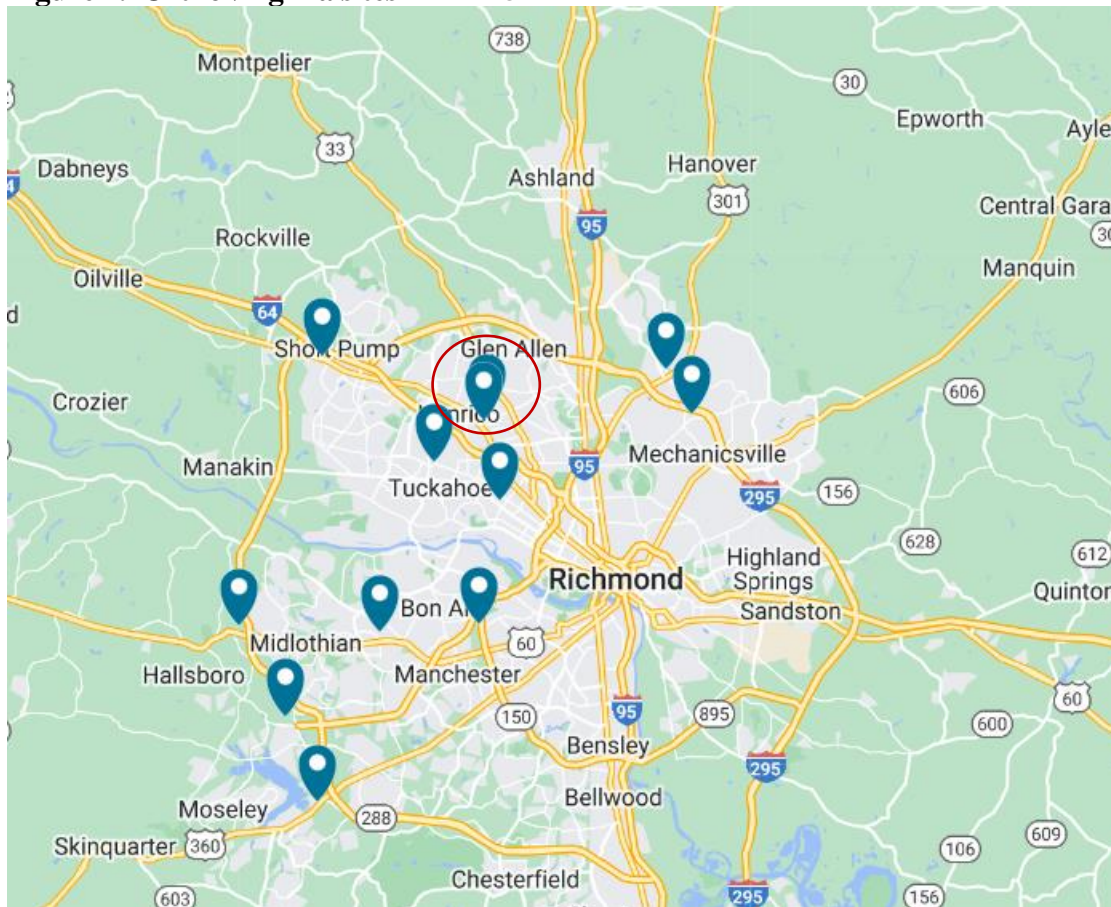
Applicant

OrthoVirginia, Inc. is a Virginia stock corporation and is the sole owner of the proposed project. OrthoVirginia has been the sole occupant of the site located at 7858 Shrader Road, Henrico County, Virginia for approximately two decades. It is space leased from ARHC AORMDVA01, LLC, a Delaware limited liability company. OrthoVirginia's subsidiaries include OrthoVirginia Research Foundation, OrthoVirginia PAC, OrthoVirginia Care Management, LLC; Chippenham Ambulatory Surgery Center, LLC; OrthoVirginia Technology, LLC; MD ValueCare, LLC; Memorial Ambulatory Surgery Center, LLC; and OrthoVirginia Medical Ventures, LLC. The proposed project is in Planning District (PD) 15 in Health Planning Region (HPR) IV.

Background

OrthoVirginia was established as a private practice group of orthopedic specialists based in Richmond and now has locations across Central Virginia, Northern Virginia, Lynchburg, Blacksburg, and Virginia Beach. In PD 15, OrthoVirginia has a staff of 66 physicians, 65 advanced care practitioners (physician assistants and nurse practitioners) and 69 therapists. **Figure 1** shows the OrthoVirginia practice and therapy locations in the PD 15 area from the OrthoVirginia website, with a circle around the Shrader Road site. OrthoVirginia has two MRI sites in PD 15, one on the campus of Henrico Doctors' Hospital-Parham and one on the campus of Johnston-Willis Medical Center that is to be relocated to a new site in the Watkins Center area of Midlothian and converted from a mobile to fixed site. This relocation project was authorized by COPN No. VA-04831 and is expected complete in August 2024. OrthoVirginia does not currently operate any CT scanners in PD 15.

Figure 1. OrthoVirginia sites in PD 15



Source: OrthoVirginia website

A CT scan is a diagnostic imaging tool that utilizes x-ray technology to produce imaging of the inside of the body and can show bones, muscles, organs, and blood vessels. CT scans are more detailed than plain film x-rays; rather than the standard straight-line x-ray beam, CT imaging uses an x-ray beam that moves in a circle around the body to show structures in much greater detail.¹ The scans can be done with or without contrast; contrast is a substance taken either orally or injected within the body, causing a particular organ or tissue to be seen more clearly.² MRI scans are typically the standard of care for orthopedic imaging, but CT is clinically preferred for specific conditions and applications, especially perioperative planning and guiding minimally invasive procedures.

¹ <https://www.hopkinsmedicine.org/health/treatment-tests-and-therapies/computed-tomography-ct-scan#:~:text=Computed%20tomography%20is%20commonly%20referred,fat%2C%20organs%20and%20blood%20vessels.>

² Ibid.

Table 1. PD 15 CT Scanners' Utilization, VHI 2022

Facility Name	Total Stationary Units	Total CT Procedures	Procedures by Scanner	% Utilization of Threshold
Acute Hospital				
Bon Secours Memorial Regional Medical Center	3	39,442	13,147	177.7%
Bon Secours Richmond Community Hospital	1	5,687	5,687	76.9%
Bon Secours St. Francis Medical Center	2	28,258	14,129	190.9%
Bon Secours St. Mary's Hospital	3	42,680	14,227	192.3%
Chippenham Hospital	3	42,059	14,020	189.5%
Henrico Doctor's Hospital - Parham Doctors' Hospital	1	12,741	12,741	172.2%
Henrico Doctor's Hospital - Retreat	1	4,633	4,633	62.6%
Henrico Doctors' Hospital - Forest	3	30,223	10,074	136.1%
Johnston-Willis Hospital	3	32,371	10,790	145.8%
VCU Medical Center	8	69,445	8,681	117.3%
Acute Hospital Total	28	307,539	10,984	148.4%
Freestanding				
Bon Secours Imaging Center at Reynolds Crossing	1	1,758	1,758	23.8%
Bon Secours Westchester Imaging Center	1	7,344	7,344	99.2%
Chesterfield Imaging	1	5,598	5,598	75.6%
MEDARVA Imaging	1	1,331	1,331	18.0%
NOW Neuroscience, Orthopaedic and Wellness Center	1	4,663	4,663	63.0%
Richmond Ear Nose and Throat	1	235	235	3.2%
Short Pump Imaging	1	4,016	4,016	54.3%
Urosurgical Center of Richmond	2	8,920	4,460	60.3%
VCU Medical Center at Stony Point Radiology	1	6,296	6,296	85.1%
Virginia Cancer Institute - Discovery Drive	1	6,340	6,340	85.7%
Virginia Cancer Institute - Harbourside	1	4,258	4,258	57.5%
Virginia Cardiovascular Specialists, PC	1	4,096	4,096	55.4%
Virginia Ear Nose & Throat - Henrico	1	553	553	7.5%
Freestanding Total	14	55,408	3,958	53.5%
PD 15 Totals and % of Threshold	42	362,947	8,642	116.8%

Source: DCOPN Records and VHI 2022 Data

Note: Table 1 lists those scanners that were operational and reporting data to VHI in 2022 while Table 2 shows the total authorized and diagnostic CT scanners in the DCOPN inventory.

VHI reported data on 42 CT scanners in PD 15 for 2022, the latest year for which such data are available. Twenty-eight of these were reported by acute care hospitals and 14 were in freestanding facilities. The hospital-based CT scanners averaged 10,984 procedures per CT scanner, 148.4% of the State Medical Facilities Plan (SMFP) threshold, and freestanding scanners averaged 3,958 procedures per scanner (53.5% of the SMFP threshold). In aggregate, CT scanners in PD 15 reported volumes equal to 116.8% of the SMFP standard in 2022 (Table 1).

There are a total of 61 CT scanners now authorized in PD 15. Five of these are used for CT simulation only and two are intraoperative scanners such that their restricted use should remove their volume from consideration. Only the 54 diagnostic scanners are included in this analysis (**Table 2**).

Table 2. Inventory of CT Scanners in PD 15

Facility Name	Authorized Diagnostic Scanners	Operational Diagnostic Scanners
Acute Hospitals		
Bon Secours Memorial Regional Medical Center	3	3
Bon Secours Richmond Community Hospital	1	1
Bon Secours St. Francis Medical Center	2	2
Bon Secours St. Mary's Hospital	3	3
Chippenham Hospital	3	3
Henrico Doctor's Hospital - Parham Doctors' Hospital	1	1
Henrico Doctor's Hospital - Retreat	1	1
Henrico Doctors' Hospital - Forest	2	2
Johnston-Willis Hospital	3	3
VCU Health System ³	8	7
Vibra Hospital of Richmond, LLC	1	1
West Creek Medical Center ⁴	0	0
Acute Hospital Total	28	27

³ COPN No. VA-04760; additional CT Scanner dedicated to pediatric care; not yet operational.

⁴ COPN No. VA-04179; relocating to Scott's Addition ER.

Table 2. Continued

Facility Name	Authorized Diagnostic Scanners	Operational Diagnostic Scanners
Freestanding		
Bon Secours Ashland Emergency and Imaging Center ⁵	1	0
Bon Secours Chester Emergency and Imaging Center ⁶	1	1
Bon Secours Imaging Center at Reynolds Crossing ⁷	1	1
Bon Secours Short Pump Emergency/Imaging Center	1	1
Bon Secours Westchester Imaging Center	1	1
Buford Road Imaging ⁸	1	1
Chester Imaging Center ⁹	1	0
Chesterfield ER ¹⁰	1	0
Chesterfield Imaging	1	1
Hanover Emergency Center	1	1
Virginia Cardiovascular Specialists	1	1
Richmond Ear, Nose & Throat	1	1
Richmond Eye & Ear Healthcare Alliance d/b/a Medarva Healthcare	1	1
Richmond Radiation Oncology Center	0	0
Scott's Addition ER ¹¹	1	0
Short Pump, LLC	1	1
Swift Creek ER ¹²	1	1
VCU Health Neuroscience, Orthopedic and Wellness Center	1	1
VCU Massey Cancer Center at Hanover Medical Park	0	0
VCU Medical Center Adult Outpatient Pavilion ¹³	0	0
VCU Medical Center at Stony Point Radiology	1	1
VCU Health Emergency Center at New Kent	1	1
Virginia Cancer Institute - Harbourside	1	1
Virginia Cancer Institute - Dominion Drive	1	1
Virginia Ear Nose & Throat - Chesterfield	1	1
Virginia Ear Nose & Throat - Henrico	1	1
Virginia Urology	2	2
Freestanding Total	26	21
Total CT Scanners in PD 15 Inventory	54	48

Source: DCOPN Records

Freestanding emergency departments report to VHI with the hospitals with which they are affiliated. Though this distinction is not of primary concern to the analysis of the proposed project, the eight authorized CT scanners in PD 15 (three not yet operational) are listed in (Table 3).

⁵ COPN No. VA-04864; additional CT Scanner not yet operational.

⁶ COPN No. VA-04656, operational May 2022.

⁷ COPN No. VA-04743, operational April 2022, relocated CT from Bon Secours Imaging Center Innsbrook.

⁸ Did not report data to VHI in 2022.

⁹ COPN No. VA-04655 not yet operational.

¹⁰ COPN No. VA-04840; not yet operational.

¹¹ COPN No. VA-04811; to relocate CT Scanner from West Creek Medical Center, not yet operational.

¹² COPN No. VA-04862 authorized the relocation of Swift Creek ER to a new site, Magnolia ER, not yet operational.

¹³ COPN No. VA-04717; not yet operational.

Table 3. CTs in Freestanding Emergency Departments

Facility	CT Scanners	COPN No.	Notes	Volumes reported with Affiliated Hospital
Bon Secours Ashland Emergency and Imaging Center	1	VA-04864	Expected complete October 2025	Bon Secours Memorial Regional Medical Center
Bon Secours Chester Emergency and Imaging Center	1	VA-04656	Opened May 2022	Bon Secours St. Francis
Bon Secours Short Pump Emergency/Imaging Center	1	VA-04496	Opened September 2018	Bon Secours St. Mary's
Chesterfield ER	1 after completion	VA-04840	Expected complete July 2025	Chippenham and Johnston-Willis Hospitals
Hanover Emergency Center	1	VA-04312	Opened June 2014	Henrico Doctor's Hospital
Scott's Addition ER	1 after completion	VA-04811	Relocating CT from West Creek; expected completion November 2024	Henrico Doctor's Hospital
Swift Creek ER	1	VA-04379	Opened March 2016, relocating to Magnolia ER	Chippenham & Johnston-Willis
VCU Health Emergency Center at New Kent	1	VA-04598	Opened June 2020	VCU Health System

Source: DCOPN Documentation

Proposed Project

OrthoVirginia proposes to establish a CT imaging site at 7858 Shrader Road, Richmond, Virginia in Henrico County within PD 15, exclusively for imaging of patients of OrthoVirginia, not for generalized use. The proposed project will require minor remodeling and expansion of a 990 square foot portion of OrthoVirginia’s space within the existing building, which can be accomplished without disruption of services. Projected capital costs of the proposed project are \$1,558,807 (**Table 4**). The proposal will be financed with accumulated reserves and so will not accrue financing expenses. Should the proposed project be approved, the target date to become operational is July 2025.

Table 4. Capital Costs, OrthoVirginia CT Scanner

Direct Construction Costs	\$955,000
Equipment not included in construction costs	\$237,000
Site acquisition Costs	\$231,807
Architectural and Engineering fees	\$135,000
TOTAL CAPITAL COST	\$1,558,807

Source: COPN Request No. VA-8737

Project Definition

Section 32.1-102.1:3 of the Code of Virginia defines a project, in part, as the “establishment of a medical care facility described in subsection A.” A medical care facility includes “[a]ny specialized center or clinic or that portion of a physician's office developed for the provision of ... computer tomography (CT) scanning.”

Required Considerations -- § 32.1-102.3, of the Code of Virginia

In determining whether a public need exists for a proposed project, the following factors shall be taken into account when applicable.

- 1. The extent to which the proposed service or facility will provide or increase access to needed services for residents of the area to be served, and the effects that the proposed service or facility will have on access to needed services in areas having distinct and unique geographic, socioeconomic, cultural, transportation, and other barriers to access to care.**

The proposal is to serve OrthoVirginia patients exclusively and the applicant projects that approximately 70% of its patients requiring a CT would seek that service at the proposed site. In 2023, approximately 4,478 CT scans were performed on OrthoVirginia's patients a 2.3% increase from the previous year. These patients currently get CT scans at multiple sites in PDs 15 and 19, primarily Bon Secours Mercy Health or HCA, or affiliated imaging centers. The applicant projects the proposed project would perform about 3,100 CT scans by its second year of operation.

PD 15 had a population over 1.1 million in 2020 and is projected to add nearly 100,000 to its population by 2030. Its projected growth of 8.6% by the end of the decade is a higher growth rate than that of Virginia's population, 5.6% (**Table 5**). Henrico County, where the proposed project is located, represents about 29% of the PD 15 population (**Chart 1**) and is projected to grow more slowly than PD15 as a whole at 6.5%, and add nearly 22,000 to its population between 2020 and 2030 (**Table 5**).

People aged 65 and older, have a higher utilization rate for advanced imaging services than younger individuals,¹⁴ so they are an important demographic in projects involving CT imaging. Though the population over age 65 is expected to grow at a higher rate in PD 15 (29.9%) than that of Virginia (27.4%), this age cohort is projected to grow in Henrico County at 27.7%, a rate consistent with Virginia's. Henrico County is projected to add nearly 15,000 people over age 65 between 2020 and 2030 through aging and in migration (**Table 5/Chart 2**). Accordingly, OrthoVirginia expects its patient population to grow from (currently) about 670,000 patients.

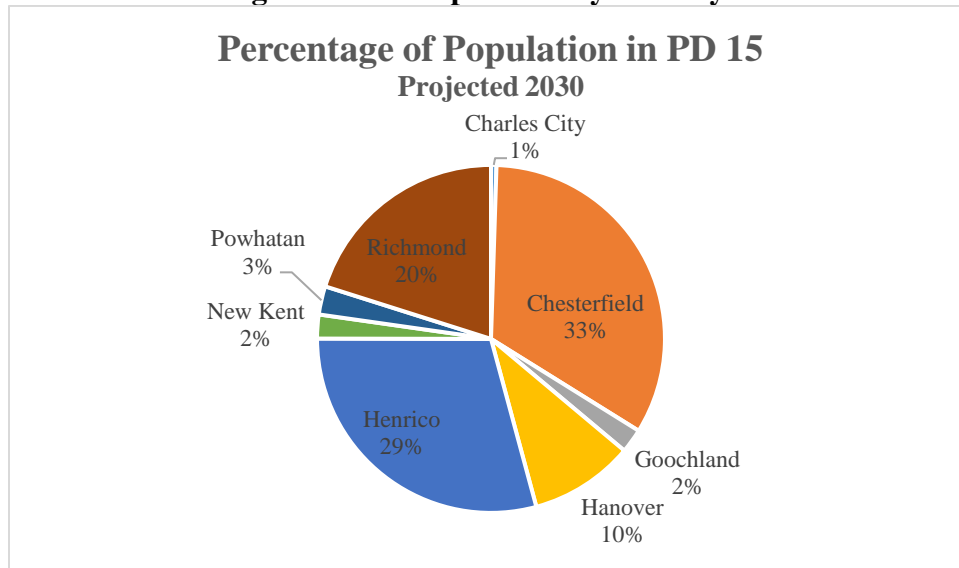
¹⁴ <https://jamanetwork.com/journals/jama/fullarticle/2749213>

Table 5. PD 15 Population Data

	2020 Population	2030 Projected Population	Proj. Population Change 2020-2030	Proj. Percent Change 2020-2030	2020 65+ Population	Proj. 2030 65+ Population	Proj. 65+ Population Change 2020-2030	Proj. 65+ Percent Change 2020-2030
Charles City	6,758	6,200	-558	-8.30%	1,773	2,189	416	23.40%
Chesterfield	365,627	406,942	41,315	11.30%	55,297	72,476	17,179	31.10%
Goochland	24,809	27,339	2,530	10.20%	5,420	7,421	2,001	36.90%
Hanover	110,164	118,374	8,210	7.50%	19,807	27,456	7,649	38.60%
Henrico	334,756	356,656	21,900	6.50%	53,255	68,003	14,748	27.70%
New Kent	23,069	27,067	3,998	17.30%	4,303	6,663	2,360	54.80%
Powhatan	30,355	32,152	1,797	5.90%	6,041	8,552	2,511	41.50%
Richmond	226,613	245,437	18,824	8.30%	26,352	31,657	5,305	20.10%
PD 15	1,140,301	1,238,825	98,524	8.60%	176,028	228,611	52,583	29.90%
<i>Virginia</i>	<i>8,646,905</i>	<i>9,129,002</i>	<i>482,097</i>	<i>5.60%</i>	<i>1,352,448</i>	<i>1,723,382</i>	<i>370,934</i>	<i>27.40%</i>

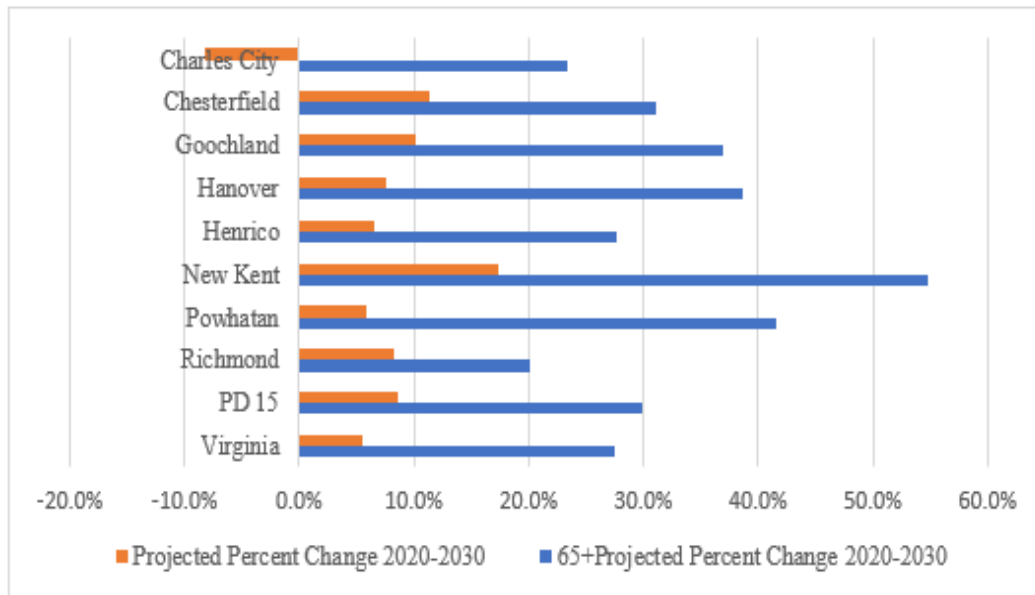
Source: Weldon Cooper Intercensal Estimates

Chart 1. Percentage of PD 15 Population by Locality



Source: Weldon Cooper Intercensal Estimates

Chart 2. Projected Growth Rates 2020 to 2030 & 65+ Projected Growth Rates



Source: Weldon Cooper Intercensal Estimates

Table 6 shows that PD 15 has a poverty rate just under that of Virginia (10.7%), but the poverty rate in Henrico County is lower at 9%. OrthoVirginia participates in Access Now, providing uncompensated care to uninsured patients. As to transportation barriers, none are identified. OrthoVirginia’s Shrader Road office is near the intersection of Route 250 and Hungary Spring Road with access to major roads and interstates, including I-64 and Route 33. Public transportation is available with two bus stops on Route 250/West Broad Street.

Table 6. PD 15 Poverty Rates

Geographic Name	Poverty Rate
Charles City County	12.30%
Chesterfield County	7.60%
Colonial Heights City	13.50%
Goochland County	6.70%
Hanover County	5.20%
<i>Henrico County</i>	<i>9.00%</i>
New Kent County	5.20%
Powhatan County	6.90%
Richmond City	24.50%
PD 15 Totals	10.10%
Virginia	10.70%

Source: Weldon-Cooper Census Data

2. The extent to which the project will meet the needs of the residents of the area to be served, as demonstrated by each of the following:

(i) The level of community support for the project demonstrated by citizens, businesses, and governmental leaders representing the area to be served.

DCOPN received a letter of commitment from the CEO of OrthoVirginia, Inc. to staff and supervise the CT service and provide physician services, and a letter of support from Access Now. Access Now was created by the Richmond Academy of Medicine to improve access to patients without health insurance to free specialty care through a coordinated referral program. The letter states that OrthoVirginia has “provided tens of thousands of dollars in uncompensated care for hundreds of Access Now patients requiring physician services, surgical care or diagnostic imaging, including specialty orthopedic MRI services.” DCOPN received no opposition to the proposed project.

Public Hearing

§32.1-102.6B of the Code of Virginia directs DCOPN to hold one public hearing on each application in the case of competing applications; or in response to a written request by an elected local government representative, a member of the General Assembly, the Commissioner, the applicant, or a member of the public. COPN Request No. VA-8737 is not competing with another project and DCOPN did not receive a request to conduct a public hearing for the proposed project. Thus, no public hearing was held.

DCOPN provided notice to the public regarding this project inviting public comment on November 9, 2023. The public comment period closed on December 26, 2023. No public comments were received other than the letter of support referenced.

(ii) The availability of reasonable alternatives to the proposed service or facility that would meet the needs of the population in a less costly, more efficient, or more effective manner.

The status quo is an alternative to the proposed project. The 2022 VHI data showed an overutilization of CT scanners (**Table 1**), but with CT scanners authorized since, several not yet operational, there is now a surplus of CT scanners in PD 15. The proposed project would improve efficiency and timeliness and reduce fragmentation for OrthoVirginia's patients requiring CT services, including uninsured patients the applicant serves. The proposal is more beneficial than the status quo and unlikely to impact volumes of any existing provider significantly.

(iii) Any recommendation or report of the regional health planning agency regarding an application for a certificate that is required to be submitted to the Commissioner pursuant to subsection B of § 32.1-102.6.

Currently there is no organization in HPR IV designated by the Virginia Department of Health to serve as the Health Planning Agency for PD 15. Therefore, this consideration is not applicable to the review of the proposed project.

(iv) Any costs and benefits of the project.

Total projected capital costs for the proposed project are \$1,558,807, funded entirely with accumulated reserves, so there are no financing costs involved in the proposed project. The estimated costs are reasonable and consistent with other recently approved projects to establish a CT site through renovation of an existing facility. Examples are COPN Nos. VA-04853 at \$1.3 million, VA-04826 at \$1.4 million and VA-04804 at \$2.3 million. The applicant has described benefits to the proposed project, such as increasing staff efficiency, improving patient flow and optimizing adjacencies within the Shrader Road site, as well as supporting its research efforts. The proposed project would contribute to improvements in continuity of care and immediate access to CT scans for OrthoVirginia's patients at costs lower than those of hospital-based CT sites.

(v) The financial accessibility of the project to the residents of the area to be served, including indigent residents.

The average charity as a percentage of gross patient revenue for HPR IV was 1% in 2021, the latest year for which such data are available (**Table 7**). The proforma provided by the applicant projects charity care for the proposed project at 1%, consistent with this average. As referenced above, OrthoVirginia participates in Access Now, providing uncompensated care to uninsured patients through a coordinated referral network.

In accordance with section 32.1-102.4.B of the Code of Virginia, should the proposed project receive approval, the project would be conditioned to provide a level of charity care based on gross patient revenues derived from CT imaging that is no less than the equivalent average for charity care contributions in HPR IV. Pursuant to Code of Virginia language any COPN issued for this project will also be conditioned on the applicant's agreement to accept patients who are the recipients of Medicare and Medicaid.

Table 7. 2021 Charity Care, HPR IV

Health Planning Region IV			
2021 Charity Care Contributions at or below 200% of Federal Poverty Level			
HPR IV	2021 at 200%		
	Gross Pt Rev	Adjusted Charity Care	%
Encompass Health Rehab Hosp of Petersburg	\$ 26,851,240	\$ 1,046,165	3.9%
Southern Virginia Regional Medical Center	\$ 193,424,382	\$ 6,462,541	3.3%
Sentara Halifax Regional Hospital	\$ 305,216,000	\$ 5,567,790	1.8%
Bon Secours St. Francis Medical Center	\$ 1,075,574,864	\$ 15,314,171	1.4%
Southside Regional Medical Center	\$ 2,000,593,397	\$ 27,695,403	1.4%
Bon Secours Richmond Community Hospital	\$ 991,036,257	\$ 11,039,087	1.1%
CJW Medical Center	\$ 8,975,939,621	\$ 87,710,457	1.0%
Henrico Doctors' Hospital	\$ 5,763,604,659	\$ 52,734,748	0.9%
VCU Health System	\$ 6,809,570,615	\$ 61,295,221	0.9%
Bon Secours St. Mary's Hospital	\$ 2,358,088,813	\$ 20,998,912	0.9%
TriCities Hospital	\$ 1,324,643,208	\$ 9,600,576	0.7%
Sheltering Arms Institute	\$ 137,252,572	\$ 970,918	0.7%
Bon Secours Memorial Regional Medical Center	\$ 1,614,325,924	\$ 9,753,218	0.6%
Community Memorial Hospital	\$ 343,583,756	\$ 1,572,169	0.5%
Encompass Health Rehab Hosp of Virginia	\$ 25,150,781	\$ 107,359	0.4%
Southside Community Hospital	\$ 383,098,711	\$ 1,431,006	0.4%
Cumberland Hospital for Children and Adolescents	\$ 39,513,361	\$ -	0.0%
Select Specialty Hospital - Richmond	\$ 141,742,321	\$ -	0.0%
Total Inpatient Hospitals:			18
HPR IV Inpatient Hospital Median			0.9%
HPR IV Total Inpatient \$ & Mean %	\$ 32,509,210,482	\$ 313,299,741	1.0%
Boulders Ambulatory Surgery Center	\$ 108,434,022	\$ 3,555,600	3.3%
St. Mary's Ambulatory Surgery Center	\$ 44,154,385	\$ 634,846	1.4%
Urosurgical Center of Richmond	\$ 41,571,274	\$ 544,435	1.3%
Virginia Eye Institute, Inc.	\$ 35,627,224	\$ 308,496	0.9%
MEDRVA Surgery Center @ West Creek	\$ 9,492,898	\$ 7,975	0.1%
American Access Care of Richmond	\$ 5,226,209	\$ -	0.0%
Cataract and Refractive Surgery Center	\$ 9,247,035	\$ -	0.0%
MEDRVA Stony Point Surgery Center	\$ 58,223,076	\$ -	0.0%
Skin Surgery Center of Virginia	\$ 1,454,451	\$ -	0.0%
Virginia Beach Health Center VLPP	\$ 2,651,434	\$ -	0.0%
Total Outpatient Hospitals:			10
HPR IV Total Outpatient Hospital \$ & Mean %	\$ 316,082,008	\$ 5,051,352	1.6%
Total Hospitals:			28
HPR IV Total Hospital \$ & Mean %	\$ 32,825,292,490	\$ 318,351,093	1.0%

Source: VHI

(vi) At the discretion of the Commissioner, any other factors as may be relevant to the determination of public need for a project.

There are no other factors, not addressed elsewhere in the analysis, relevant to the determination of a public need for either project.

3. The extent to which the application is consistent with the State Medical Facilities Plan.

Section 32.1-102.2:1 of the Code of Virginia calls for the State Health Services Plan Task Force to develop recommendations for a comprehensive State Health Services Plan (SHSP). In the interim, DCOPN will consider the consistency of the proposed project with the predecessor of the SHSP, the State Medical Facilities Plan (SMFP).

The State Medical Facilities Plan (SMFP) contains the criteria and standards for CT services. They are as follows:

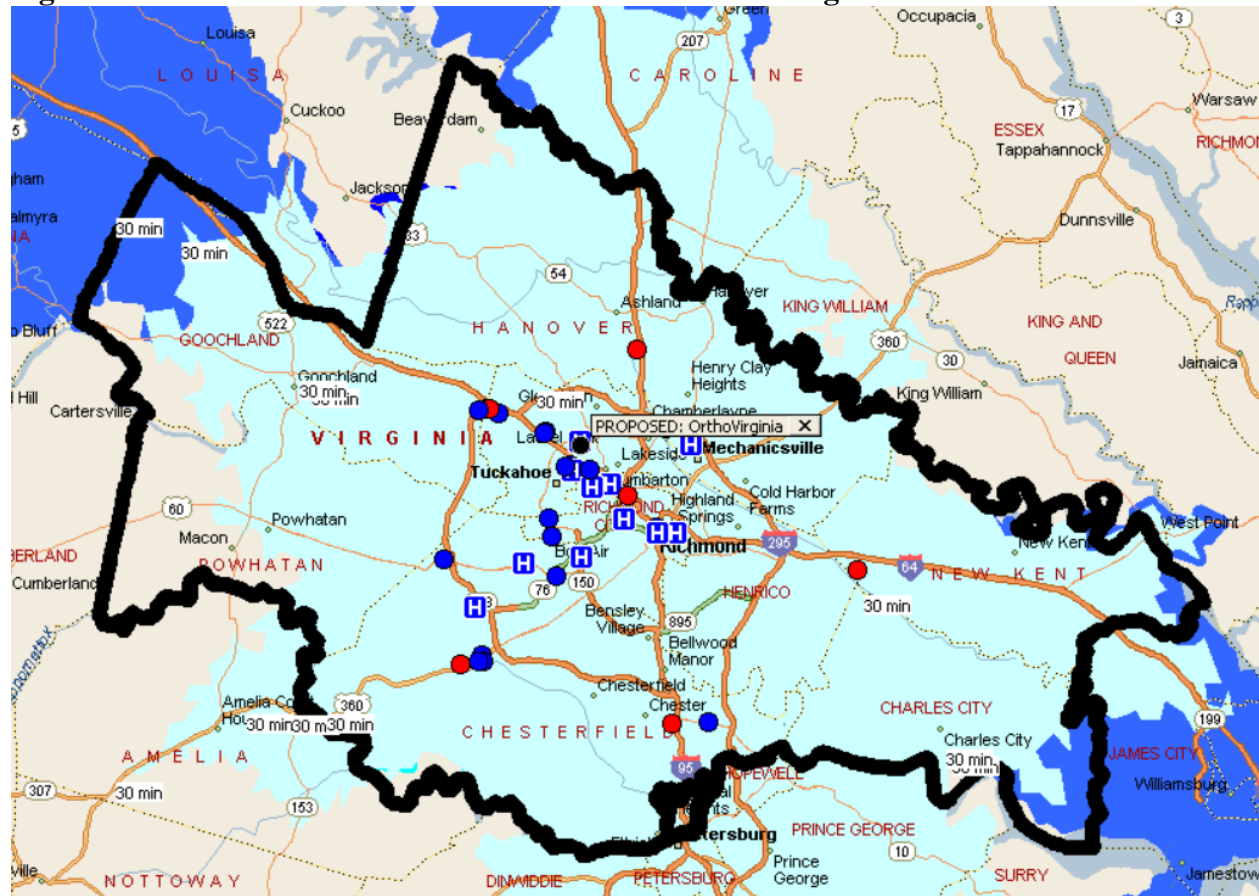
12VAC-5-230 Part I, Article 1
Criteria and Standards for Computed Tomography

12VAC5-230-90. Travel time.

CT services should be within 30 minutes driving time one way under normal conditions of 95% of the population of the health planning district using a mapping software as determined by the commissioner.

The light blue shaded area in **Figure 2** illustrates the areas in PD 15 that have CT services available within 30 minutes driving distance. The dark blue illustrates CT coverage within 30 minutes from providers outside of the PD. The three towns not within the shaded area include Cartersville (population 1,434 per 2020 Census), Beaverdam (population 14,374 per 2020 Census), and Macon (population 28,696 per 2020 Census), with a total population for the three being approximately 44,504 in 2020. The total PD 15 population was 1,140,301 in 2020, meaning the three towns not within 30 minutes driving distance from CT services make up approximately 3.9% of the PD population, or that 96.1% of the PD is within the appropriate driving time from CT services according to the SMFP standard. The black dot locates the proposed project, while “H” symbols with blue backgrounds are hospital-based CT scanners. Dots are freestanding CT sites and red dots are those in FSEDs.

Figure 2. PD15 CT Services Locations and 30 Minutes Driving Distance



Source: DCOPN Records and Microsoft Streets & Maps

*Note: The red dots indicate free-standing ERs, the blue dots are outpatient imaging centers, the blue “H”s are hospitals with CTs, and the black dot is the proposed site.

12VAC5-230-100. Need for new fixed site or mobile service.

- A. No new fixed site or mobile CT service should be approved unless fixed site CT services in the health planning district performed an average of 7,400 procedures per existing and approved CT scanner during the relevant reporting period and the proposed new service would not significantly reduce the utilization of existing providers in the health planning district. The utilization of existing scanners operated by a hospital and serving an area distinct from the proposed new service site may be disregarded in computing the average utilization of CT scanners in such health planning district.**
- B. Existing CT scanners used solely for simulation with radiation therapy treatment shall be exempt from the utilization criteria of this article when applying for a COPN. In addition, existing CT scanners used solely for simulation with radiation therapy treatment may be disregarded in computing the average utilization of CT scanners in such health planning district.**

According to 2022 VHI data, the most recent available, there were 42 CT scanners in PD 15 with an average utilization of 8,642 scans, 117% percent of the SMFP threshold (Table 1). Several CT scanners have been authorized in PD 15 since the latest VHI data were published. The current

DCOPN inventory accounts for 61 CT scanners, 54 of which are for diagnostic imaging use (see **Table 2**). The 362,947 scans performed in PD 15 in 2022 spread over the 54 diagnostic scanners now authorized would yield an average of 6,721 CT scans per unit, 91% of the SMFP threshold. At utilization of the SMFP standard of 7,400 scans per year, the 362,947 scans performed in 2022 would represent 49 fully utilized CT scanners, five fewer than are currently authorized.

Needed CT units = $362,947 \div 7,400 = 49$

Utilization Percentage in 2022: 117% (excludes dedicated intraoperative scanners)

Current number of PD 15 authorized CT units: 54 (excluding dedicated intraoperative scanners)

CT unit surplus = 5

Some of the CT scanners in PD 15 are for specialty-specific CT scans, as OrthoVirginia has described the proposed project, exclusively for its orthopedic patients and not for general use. Utilization at sites with the restricted use CT scanners were less than 10% of the SMFP threshold in 2022. OrthoVirginia has a large and growing orthopedic patient base, but it does not currently offer CT services, so its proposed new CT site would reduce volumes of existing providers in the area, some of which have not-yet operational CT scanners authorized to decant their volumes. Though the applicant does not have a regular or detailed tracking system for referrals, its personnel assists in scheduling and receives results. OrthoVirginia states that most often, patients receive scans at:

- Bon Secours St. Francis Medical Center
- Bon Secours St. Mary's Hospital
- Bon Secours Memorial Regional Medical Center
- HCA Henrico Doctors' Hospital-Parham
- HCA's Johnston-Willis Hospital
- HCA Chippenham Hospital
- Outpatient-focused services associated with these facilities

All of these hospitals had CT utilization over 100% of the SMFP threshold in 2022 (**Table 1**). The applicant further states that the top five to seven facilities that perform CT scans on its patients provide an average of 10% of its referrals.

The applicant projects over 3,100 CT scans (42.4% of the SMFP threshold) would be performed at its proposed site by its second year of operation. OrthoVirginia plans to refer CT patients from all eight of its physician practice locations in PD 15. It is unlikely that any one existing provider would be significantly impacted by the proposed project.

12VAC5-230-110. Expansion of fixed site service.

Proposals to expand an existing medical care facility's CT service through the addition of a CT scanner should be approved when the existing services performed an average of 7,400 procedures per scanner for the relevant reporting period. The commissioner may authorize placement of a new unit at the applicant's existing medical care facility or at a separate location within the applicant's primary service area for CT services, provided the proposed expansion is not likely to significantly reduce the utilization of existing providers in the health planning district.

This standard is not applicable as OrthoVirginia's proposed project does not represent an expansion of an existing service but a new service.

12VAC5-230-120. Adding or expanding mobile CT services.

- A. Proposals for mobile CT scanners shall demonstrate that, for the relevant reporting period, at least 4,800 procedures were performed and that the proposed mobile unit will not significantly reduce the utilization of existing CT providers in the health planning district.**
- B. Proposals to convert authorized mobile CT scanners to fixed site scanners shall demonstrate that, for the relevant reporting period, at least 6,000 procedures were performed by the mobile scanner and that the proposed conversion will not significantly reduce the utilization of existing CT providers in the health planning district.**

This provision is not applicable as the applicant is not proposing to add or expand mobile CT services.

12VAC5-230-130. Staffing.

The applicant provides assurances that the CT imaging service will be under the direct supervision of one or more qualified physicians.

Required Considerations Continued

- 4. The extent to which the proposed service or facility fosters institutional competition that benefits the area to be served while improving access to essential health care services for all persons in the area to be served.**

There are multiple providers of CT services in PD 15 such that there is no unhealthy market concentration of CT imaging services. OrthoVirginia would be a new entrant and an additional competitor in the market, a non-hospital provider with its own referral base. The proposal would create a more integrated provider model for orthopedic services.

- 5. The relationship of the project to the existing health care system of the area to be served, including the utilization and efficiency of existing services or facilities.**

The applicant had over 650,000 patient visits in Central Virginia in 2023 and referred nearly 4,500 CT scans to existing providers. It does not currently offer CT services and the proposed project would add a CT, a site and a non-hospital provider in PD 15.

- 6. The feasibility of the project, including the financial benefits of the project to the applicant, the cost of construction, the availability of financial and human resources, and the cost of capital.**

Capital costs of the proposal are reasonable and will be paid with accumulated reserves, accruing no financing costs. The proposed project is expected to have a positive net income in years one and two (**Table 8**). Additional staff required is a minimal 2 full time equivalents.

Table 8. Proforma OrthoVirginia Shrader Road CT Location

	Year 1	Year 2
Gross Revenue	\$2,646,000	\$2,744,000
Charity Care	\$26,460	\$27,440
Other Deductions	\$1,891,270	\$1,961,317
Net Revenue	\$728,270	\$755,243
Expenses	\$639,924	\$654,172
Net Income/Loss	\$88,346	\$101,071

Source: COPN Request No. VA-8737

- 7. The extent to which the project provides improvements or innovations in the financing and delivery of health services, as demonstrated by: (i) The introduction of new technology that promotes quality, cost effectiveness, or both in the delivery of health care services. (ii) The potential for provision of services on an outpatient basis. (iii) Any cooperative efforts to meet regional health care needs. (iv) At the discretion of the Commissioner, any other factors as may be appropriate.**

The proposal represents an integrated model of care delivery in which OrthoVirginia’s patients would have immediate on-site access to CT imaging. As the applicant asserts, this model would reduce fragmentation of care and streamline its patients’ care experience for just over 3,100 OrthoVirginia patients. The CT service proposed would be outpatient and offer a lower cost option than hospital-based CT services.

- 8. In the case of a project proposed by or affecting a teaching hospital associated with a public institution of higher education or a medical school in the area to be served.**
- (i) The unique research, training, and clinical mission of the teaching hospital or medical school. (ii) Any contribution the teaching hospital or medical school may provide in the delivery, innovation, and improvement of health care for citizens of the Commonwealth, including indigent or underserved populations.**

The applicant is not a teaching hospital associated with a public institution of higher education or a medical school, but it does participate in clinical trials and research that are opportunities to train newer physicians in innovative treatments. The proposed project specifically supports a clinical study related to lumbar interbody fusion procedures and stabilization interventions of the sacroiliac joint. CT scans are required for evaluation of treatment success.

DCOPN Staff Findings and Conclusions

The proposed project would add a CT scanner restricted to OrthoVirginia patients. Henrico County where the site is located has a population growth rate slightly above the Virginia growth rate. Projected utilization for years one and two of the proposed CT scanner is 42.4% of the SMFP threshold. The applicant states that OrthoVirginia patients wait one to 1.5 weeks for CT

scans. The proposed project does not improve geographic access but improves access to CT services for uninsured residents in the area. The proposed project is more beneficial than the status quo. DCOPN received no letters of opposition.

The projected costs of the proposal are reasonable, and it would increase efficiency of OrthoVirginia's operations and reduce or eliminate wait times of OrthoVirginia's patients requiring CT imaging. Costs to patients would be lower than hospital-based CT studies. The proposal is generally consistent with the applicable standards and criteria of the State Medical Facilities Plan and the 8 Required Considerations of the Code of Virginia. Because OrthoVirginia doesn't currently have a CT service, its proposal would impact existing providers, though likely no single provider significantly.

The proposed project is wholly feasible financially and with regard to human resource requirements. It would be an improved model of care for OrthoVirginia's patients that integrates diagnostic CT imaging services into an existing location and addresses fragmentation in patient care. The proposed CT would be used to support clinical trials and research in which OrthoVirginia participates.

DCOPN Staff Recommendations

The Division of Certificate of Public Need recommends **conditional approval** OrthoVirginia's COPN Request number VA-8737 to establish a specialized center for CT imaging, exclusive to OrthoVirginia's patients, at its Shrader Road location in Henrico County, Virginia for the following reasons:

1. The proposal to establish a specialized center for CT imaging is generally consistent with the applicable standards and criteria of the State Medical Facilities Plan and the 8 Required Considerations of the Code of Virginia.
2. The proposed project is more beneficial than the status quo.
3. The proposal improves access for uninsured residents of PD 15.
4. Projected costs are reasonable and the proposal is wholly feasible with regard to financial and human resources.
5. The proposed project supports clinical research.
6. There is no documented opposition to the proposed project.

DCOPN's recommendation is contingent upon OrthoVirginia, Inc.'s agreement to the following charity care condition:

OrthoVirginia, Inc. will provide CT imaging services to all persons in need of this service, regardless of their ability to pay, and will provide as charity care to all indigent persons free services or rate reductions in services and will facilitate the development and operation of

primary medical care services to medically underserved persons in PD 15 in an aggregate amount equal to at least 1.0% of OrthoVirginia, Inc.'s gross patient revenue derived from CT services. Compliance with this condition will be documented to the Division of Certificate of Public Need annually by providing audited or otherwise appropriately certified financial statements documenting compliance with the preceding requirement. OrthoVirginia, Inc. will accept the revised charity condition based on data valued under the provider reimbursement methodology utilized by the Centers for Medicare and Medicaid Services for reimbursement under Title XVIII of the Social Security Act, 42 U.S.C. § 1395 et seq. is available from Virginia Health Information. The value of charity care provided individuals pursuant to this condition shall be based on the provider reimbursement methodology utilized by the Centers for Medicare and Medicaid Services for reimbursement under Title XVIII of the Social Security Act, 42 U.S.C. § 1395 et seq.

OrthoVirginia, Inc. will provide CT services to individuals who are eligible for benefits under Title XVIII of the Social Security Act (42 U.S.C. § 1395 et seq.), Title XIX of the Social Security Act (42 U.S.C. § 1396 et seq.), and 10 U.S.C. § 1071 et seq. Additionally OrthoVirginia, Inc. will facilitate the development and operation of primary and specialty medical care services in designated medically underserved areas of the applicant's service area.