



Advisory Board on Radiological Technology

Virginia Board of Medicine

October 3, 2018

1:00 p.m.

Advisory Board on Radiologic Technology

Board of Medicine

Wednesday, October 3, 2018 @ 1:00 p.m.

**9960 Mayland Drive, Suite 201, Henrico, Virginia
Training Room 2**

Call to Order

Emergency Egress Procedures - William Harp, MD

i

Roll Call – Beulah Archer

Approval of Minutes of January 31, 2018

1-3

Adoption of the Agenda

Public Comment on Agenda Items (15 minutes)

New Business

1. Periodic review of regulations – Elaine Yeatts

4-19

**2. Virginia's Licensed Radiologic Technologist Workforce: 2017 –
Elizabeth Carter, PhD**

20-49

3. Board member badges

4. 2019 Meeting Calendar

50-51

5. Election of Officers

Announcements

Adjournment

Next meeting date: January 23, 2019 @ 1:00 p.m.

**PERIMETER CENTER CONFERENCE CENTER
EMERGENCY EVACUATION OF BOARD AND TRAINING ROOMS
(Script to be read at the beginning of each meeting.)**

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Training Room 2

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**ADVISORY BOARD ON RADIOLOGIC TECHNOLOGY
Virginia Board of Medicine
January 31, 2018, 1:00 p.m.**

The Advisory Board on Radiologic Technology met on Wednesday, January 31, 2018 at 1:00 p.m. at the Department of Health Professions, Perimeter Center, 9960 Mayland Drive, Richmond, Virginia.

MEMBERS PRESENT: Joyce O. Hawkins, RT, Chair
Jan Gillespie Clark, RT
Margaret Toxopeus, M.D.

MEMBERS ABSENT: Patti S. Hershey, RT
Citizen Member seat is vacant

STAFF PRESENT: Alan Heaberlin, Deputy Executive Director
Elaine Yeatts, DHP Senior Policy Analyst
Beulah Baptist Archer, Licensing Specialist
Colanthia Opher Morton, Operations Manager

GUESTS PRESENT: None

CALL TO ORDER

Joyce Hawkins called meeting to order at 1:08 p. m.

EMERGENCY EGRESS PROCEDURES – Joyce Hawkins read the emergency egress procedures.

ROLL CALL – Ms. Archer called the roll. A quorum was established.

APPROVAL OF MINUTES OF October 5, 2016 –

Dr. Toxopeus moved to approve the minutes. The motion was seconded and carried.

ADOPTION OF AGENDA

Ms. Gillespie moved to approve the agenda. The motion was seconded and carried.

PUBLIC COMMENT

There was no public comment.

NEW BUSINESS**1. Legislative Update**

Ms. Yeatts provided a legislative update for the 2018 Session. No action was required.

2. What Can Be Reported to the Board for Disciplinary Investigation?

Ms. Hawkins requested more information on what can be reported to the Board of Medicine for potential disciplinary action. Mr. Heaberlin explained that any member of the public can make a **complaint to the Board of Medicine regarding any person licensed by the Board.** Mr. Heaberlin reminded the Advisory Board that the Board of Medicine does not have jurisdiction over unlicensed radiologic technologists practicing in a hospital. He stated that unlicensed professionals who commit unprofessional acts could also be reported to the professional organization that certifies them. Lastly, he reminded the Advisory Board that while the Enforcement Division will accept anonymous complaints, but anonymity cannot be guaranteed.

3. Election of Officers

Dr. Toxopeus nominated Jan Gillespie as Chair. Jan Gillespie nominated Joyce Hawkins as Vice-Chair. The motions were seconded and carried unanimously.

ANNOUNCEMENTS

Alan Heaberlin provided Radiological Technology licensure statistics.

4,053 licensed Radiologic Technologists
11 licensed Radiologist Assistants
562 licensed Radiologic Technologists-Limited

For the current FY2018 beginning July 1, 2017, the Board has licensed 24 Limited Radiologic Technologists and 234 Radiologic Technologists.

Mr. Heaberlin informed the Advisory Board about a change that has been made in the application process regarding employment verifications and the National Practitioner Data Bank.

NEXT MEETING DATE

June 6, 2018, at 1:00 pm.

ADJOURNMENT

Ms. Hawkins adjourned the meeting.

Joyce Hawkins, RT Chair

William L. Harp, MD, Executive Director

Beulah Baptist Archer, Recording Secretary

Commonwealth of Virginia



REGULATIONS

GOVERNING THE PRACTICE OF Radiologic Technology

VIRGINIA BOARD OF MEDICINE

Title of Regulations: 18 VAC 85-101-10 et seq.

**Statutory Authority: § 54.1-2400 and Chapter 29
of Title 54.1 of the *Code of Virginia***

Revised Date: December 27, 2017

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Part I. General Provisions.

18VAC85-101-10. Definitions.

In addition to definitions in § 54.1-2900 of the Code of Virginia, the following words and terms when used in this chapter shall have the following meanings, unless the context clearly indicates otherwise:

"ACRRT" means the American Chiropractic Registry of Radiologic Technologists.

"ARRT" means the American Registry of Radiologic Technologists.

"Bone densitometry" means a process for measuring bone mineral density by utilization of single x-ray absorptiometry (SXA), dual x-ray absorptiometry (DXA) or other technology that is substantially equivalent as determined by the board.

"Direct supervision" means that a licensed radiologic technologist, doctor of medicine, osteopathy, chiropractic or podiatry is present and is fully responsible for the activities performed by radiologic personnel, with the exception of radiologist assistants.

"Direction" means the delegation of radiologic functions to be performed upon a patient from a licensed doctor of medicine, osteopathy, chiropractic, or podiatry, to a licensed radiologic technologist or a radiologic technologist-limited for a specific purpose and confined to a specific anatomical area, that will be performed under the direction of and in continuing communication with the delegating practitioner.

"ISCD" means the International Society for Clinical Densitometry.

"NMTCB" means Nuclear Medicine Technology Certification Board.

"Radiologist" means a doctor of medicine or osteopathic medicine specialized by training and practice in radiology.

"R.T.(R)" means a person who is currently certified by the ARRT as a radiologic technologist with certification in radiography.

"Traineeship" means a period of activity during which an applicant for licensure as a radiologic technologist works under the direct supervision of a practitioner approved by the board while waiting for the results of the licensure examination or an applicant for licensure as a radiologic technologist-limited working under direct supervision and observation to fulfill the practice requirements in 18VAC85-101-60.

18VAC85-101-20. Public Participation Guidelines.

A separate board regulation, [18VAC85-11](#), entitled Public Participation Guidelines, provides for involvement of the public in the development of all regulations of the Virginia Board of Medicine.

18VAC85-101-25. Fees.

A. Unless otherwise provided, fees listed in this section shall not be refundable.

B. Initial licensure fees.

1. The application fee for radiologic technologist or radiologist assistant licensure shall be \$130.
2. The application fee for the radiologic technologist-limited licensure shall be \$90.
3. All examination fees shall be determined by and made payable as designated by the board.

C. Licensure renewal and reinstatement for a radiologic technologist or a radiologist assistant.

1. The fee for active license renewal for a radiologic technologist shall be \$135, and the fee for inactive license renewal shall be \$70. For 2019, the fees for renewal shall be \$108 for an active license as a radiologic technologist and \$54 for an inactive license. If a radiologist assistant holds a current license as a radiologic technologist, the renewal fee shall be \$50. If a radiologist assistant does not hold a current license as a radiologic technologist, the renewal fee shall be \$150. For renewal of a radiologist assistant license in 2019, the fee shall be \$40 for a radiologist assistant with a current license as a radiologic technologist and \$120 for a radiologist assistant without a current license as a radiologic technologist.

2. An additional fee of \$50 to cover administrative costs for processing a late renewal application within one renewal cycle shall be imposed by the board.

3. The fee for reinstatement of a radiologic technologist or a radiologist assistant license that has lapsed for a period of two years or more shall be \$180 and shall be submitted with an application for licensure reinstatement.

4. The fee for reinstatement of a license pursuant to § 54.1-2408.2 of the Code of Virginia shall be \$2,000.

D. Licensure renewal and reinstatement for a radiologic technologist-limited.

1. The fee for active license renewal shall be \$70, and the fee for inactive license renewal shall be \$35. For 2019, the fees for renewal shall be \$54 for an active license as a radiologic technologist and \$28 for an inactive license.

2. An additional fee of \$25 to cover administrative costs for processing a late renewal application within one renewal cycle shall be imposed by the board.

3. The fee for reinstatement of a license that has lapsed for a period of two years or more shall be \$120 and shall be submitted with an application for licensure reinstatement.

4. The fee for reinstatement of a license pursuant to § 54.1-2408.2 of the Code of Virginia shall be \$2,000.

E. Other fees.

1. The application fee for a traineeship as a radiologic technologist or a radiologic technologist-limited shall be \$25.
2. The fee for a letter of good standing or verification to another state for licensure shall be \$10; the fee for certification of scores to another jurisdiction shall be \$25.
3. The fee for a returned check shall be \$35.
4. The fee for a duplicate license shall be \$5.00, and the fee for a duplicate wall certificate shall be \$15.

18VAC85-101-26. Current name and address.

Each licensee shall furnish the board his current name and address of record. All notices required by law or by this chapter given by the board to any such licensee shall be validly given when mailed to the latest address of record provided or served to the licensee. Any change of name or address of record or the public address, if different from the address of record, shall be furnished to the board within 30 days of such change.

Part II. Licensure Requirements - Radiologist Assistants.

18VAC85-101-27. Educational requirements for radiologist assistants.

An applicant for licensure as a radiologist assistant shall be a graduate of an educational program that is currently recognized by the ARRT for the purpose of allowing an applicant to sit for the ARRT certification examination leading to the Registered Radiologist Assistant credential.

18VAC85-101-28. Licensure requirements.

A. An applicant for licensure as a radiologist assistant shall:

1. Meet the educational requirements specified in 18VAC85-101-27;
2. Submit the required application, fee, and credentials to the board;
3. Hold certification by the ARRT as an R.T.(R) or be licensed in Virginia as a radiologic technologist;
4. Submit evidence of passage of an examination for radiologist assistants resulting in national certification as an Registered Radiologist Assistant by the ARRT; and
5. Hold current certification in Advanced Cardiac Life Support (ACLS).

B. If an applicant has been licensed or certified in another jurisdiction as a radiologist assistant or a radiologic technologist, he shall provide information on the status of each license or certificate held.

C. An applicant who fails the ARRT examination for radiologist assistants shall follow the policies and procedures of the ARRT for successive attempts.

Part III. Licensure Requirements - Radiologic Technologist.

18VAC85-101-30. Educational requirements for radiologic technologists.

An applicant for licensure as a radiologic technologist shall be a graduate of an educational program acceptable to the ARRT for the purpose of sitting for the ARRT certification examination.

18VAC85-101-40. Licensure requirements.

A. An applicant for board licensure shall:

1. Meet the educational requirements specified in 18VAC85-101-30;
2. Submit the required application, fee, and credentials to the board; and
3. Submit evidence of passage of an examination resulting in certification by the ARRT or the NMTCB.

B. If an applicant has been licensed or certified in another jurisdiction, he shall provide information on the status of each license or certificate held and verification from that jurisdiction of any current, unrestricted license.

C. An applicant who fails the ARRT or NMTCB examination shall follow the policies and procedures of the certifying body for successive attempts.

18VAC85-101-50. (Repealed).

Part IV. Licensure Requirements - Radiologic Technologist-Limited.

18VAC85-101-55. Educational requirements for radiologic technologists-limited.

A. An applicant for licensure as a radiologic technologist-limited shall be trained by one of the following:

1. Successful completion of educational coursework that is directed by a radiologic technologist with a bachelor's degree and current ARRT certification, has instructors who are licensed radiologic technologists or doctors of medicine or osteopathic medicine who are board-certified in radiology, and has a minimum of the following coursework:
 - a. Image production/equipment operation —25 clock hours;
 - b. Radiation protection —15 clock hours; and

c. Radiographic procedures in the anatomical area of the radiologic technologist-limited's practice—10 clock hours taught by a radiologic technologist with current ARRT certification or a licensed doctor of medicine, osteopathy, podiatry or chiropractic;

2. An ACRRT-approved program;

3. The ISCD certification course for bone densitometry; or

4. Any other program acceptable to the board.

B. A radiologic technologist-limited who has been trained through the ACRRT-approved program or the ISCD certification course and who also wishes to be authorized to perform x-rays in other anatomical areas shall meet the requirements of subdivision A 1 of this section.

18VAC85-101-60. Licensure requirements.

A. An applicant for licensure by examination as a radiologic technologist-limited shall submit:

1. The required application and fee as prescribed by the board;

2. Evidence of successful completion of an examination as required in this section; and

3. Evidence of completion of training as required in 18VAC85-101-55.

B. To qualify for limited licensure to practice under the direction of a doctor of medicine or osteopathic medicine with the exception of practice in bone densitometry, the applicant shall:

1. Provide evidence that he has received a passing score as determined by the board on the core section of the ARRT examination for Limited Scope of Practice in Radiography;

2. Meet one of the following requirements:

a. Provide evidence that he has received a passing score as determined by the board on the section of the ARRT examination on specific radiographic procedures, depending on the anatomical areas in which the applicant intends to practice; or

b. Until the ARRT offers an examination for limited licensure in the radiographic procedures of the abdomen and pelvis, the applicant may qualify for a limited license by submission of a notarized statement from a licensed radiologic technologist or doctor of medicine or osteopathy attesting to the applicant's training and competency to practice in that anatomical area as follows:

(1) To perform radiographic procedures on the abdomen or pelvis, the applicant shall have successfully performed during the traineeship at least 25 radiologic examinations on patients of the abdomen or pelvis under the direct supervision and observation of a licensed radiologic technologist or a doctor of medicine or osteopathy. The notarized statement shall further attest to the applicant's competency in the areas of radiation safety, positioning, patient instruction, anatomy, pathology and technical factors.

(2) When a section is added to the limited license examination by the ARRT that includes the abdomen and pelvis, the applicant shall provide evidence that he has received a passing score on that portion of the examination as determined by the board; and

3. Provide evidence of having successfully performed in a traineeship at least 10 radiologic examinations on patients in the anatomical area for which he is seeking licensure under the direct supervision and observation of a licensed radiologic technologist or a doctor of medicine or osteopathy. A notarized statement from the supervising practitioner shall attest to the applicant's competency in the areas of radiation safety, positioning, patient instruction, anatomy, pathology and technical factors.

C. To qualify for limited licensure to practice in bone densitometry under the direction of a doctor of medicine, osteopathy, or chiropractic, the applicant shall either:

1. Provide evidence that he has received a passing score as determined by the board on the core section of the ARRT examination for Limited Scope of Practice in Radiography; and

a. The applicant shall provide a notarized statement from a licensed radiologic technologist or doctor of medicine, osteopathy, or chiropractic attesting to the applicant's training and competency to practice in that anatomical area. The applicant shall have successfully performed at least 10 examinations on patients for bone density under the direct supervision and observation of a licensed radiologic technologist or a doctor of medicine or osteopathy; or

b. When a section is added to the limited license examination by the ARRT that includes bone densitometry, the applicant shall provide evidence that he has received a passing score on that portion of the examination as determined by the board; or

2. Provide evidence that he has taken and passed an examination resulting in certification in bone densitometry from the ISCD or any other substantially equivalent credential acceptable to the board.

D. To qualify for a limited license in the anatomical areas of the spine or extremities or in bone densitometry to practice under the direction of a doctor of chiropractic, the applicant shall provide evidence that he has met the appropriate requirements of subsection B, taken and passed the appropriate requirements of subsection C for bone densitometry only, or taken and passed an examination by the ACRRT.

E. To qualify for a limited license in the anatomical area of the foot and ankle to practice under the direction of a doctor of podiatry, the applicant shall provide evidence that he has taken and passed an examination acceptable to the board.

F. An applicant who fails the examination shall be allowed two more attempts to pass the examination after which he shall reapply and take additional educational hours which meet the criteria of 18VAC85-101-70.

18VAC85-101-61. (Repealed.)

18VAC85-101-70 to 18VAC85-101-90. (Repealed.)

Part V. Practice of Radiologist Assistants.

18VAC85-101-91. General requirements.

A. A licensed radiologist assistant is authorized to:

1. Assess and evaluate the physiological and psychological responsiveness of patients undergoing radiologic procedures;
2. Perform patient assessment, and assist in patient management and patient education;
3. Evaluate image quality, make initial observations, and communicate observations to the supervising radiologist;
4. Administer contrast media or other medications prescribed by the supervising radiologist; and
5. Perform, or assist the supervising radiologist in performing, imaging procedures consistent with the guidelines adopted by the American College of Radiology, the American Society of Radiologic Technologists, and the American Registry of Radiologic Technologists.

B. A licensed radiologist assistant is not authorized to:

1. Provide official interpretation of imaging studies; or
2. Dispense or prescribe medications.

18VAC85-101-92. Supervision of radiologist assistants.

A radiologist assistant shall practice under the direct supervision of a radiologist. Direct supervision shall mean that the radiologist is present in the facility and immediately available to assist and direct the performance of a procedure by a radiologist assistant. The supervising radiologist may determine that direct supervision requires his physical presence for the performance of certain procedures, based on factors such as the complexity or invasiveness of the procedure and the experience and expertise of the radiologist assistant.

Part VI. Practice of Radiologic Technologists.

18VAC85-101-100. General requirements.

A. All services rendered by a radiologic technologist shall be performed only upon direction of a licensed doctor of medicine, osteopathy, chiropractic, or podiatry.

B. Licensure as a radiologic technologist is not required for persons who are employed by a licensed hospital pursuant to §54.1-2956.8:1 of the Code of Virginia.

18VAC85-101-110. Individual responsibilities to patients and to licensed doctor of medicine, osteopathy, chiropractic, or podiatry.

A. The radiologic technologist's responsibilities are to administer and document procedures consistent with his education and certifying examination and within the limit of his professional knowledge, judgment and skills.

B. A radiologic technologist shall maintain continuing communication with the delegating practitioner.

18VAC85-101-120. Supervisory responsibilities.

A. A radiologic technologist shall supervise no more than four radiologic technologists-limited or three trainees at any one time.

B. A radiologic technologist shall be responsible for any action of persons performing radiologic functions under the radiologic technologist's supervision or direction.

C. A radiologic technologist may not delegate radiologic procedures to any unlicensed personnel except those activities that are available without prescription in the public domain to include but not limited to preparing the patient for radiologic procedures and post radiologic procedures. Such nonlicensed personnel shall not perform those patient care functions that require professional judgment or discretion.

Part VII. Practice of Radiologic Technologist-Limited.

18VAC85-101-130. General requirements.

A. A radiologic technologist-limited is permitted to perform radiologic functions within his capabilities and the anatomical limits of his training and examination. A radiologic technologist-limited is responsible for informing the board of the anatomical area or areas in which he is qualified by training and examination to practice.

B. A radiologic technologist-limited shall not administer contrast media or radiopharmaceuticals or perform mammography, fluoroscopic procedures, computerized tomography, or vascular-interventional procedures. The radiologic technologist-limited is responsible to a licensed radiologic technologist, or doctor of medicine, osteopathy, chiropractic, or podiatry.

18VAC85-101-140. Individual responsibilities to patients and licensed radiologic technologist, doctor of medicine, osteopathy, chiropractic, or podiatry.

A. The radiologic technologist-limited's procedure with the patient shall only be made after verbal or written communication, or both, with the licensed radiologic technologist, doctor of medicine, osteopathy, chiropractic, or podiatry.

B. The radiologic technologist-limited's procedures shall be made under direct supervision.

C. A radiologic technologist-limited, acting within the scope of his practice, may delegate nonradiologic procedures to an unlicensed person, including but not limited to preparing the patient for radiologic procedures and post radiologic procedures. Such nonlicensed personnel shall not perform those patient care functions that require professional judgment or discretion.

18VAC85-101-145. Registration for voluntary practice by out-of-state licensees.

Any radiologist assistant, radiologic technologist or radiologic technologist-limited who does not hold a license to practice in Virginia and who seeks registration to practice under subdivision 27 of §54.1-2901 of the Code of Virginia on a voluntary basis under the auspices of a publicly supported, all volunteer, nonprofit organization that sponsors the provision of health care to populations of underserved people shall:

1. File a complete application for registration on a form provided by the board at least five business days prior to engaging in such practice. An incomplete application will not be considered;
2. Provide a complete record of professional licensure in each state in which he has held a license and a copy of any current license;
3. Provide the name of the nonprofit organization, the dates and location of the voluntary provision of services;
4. Pay a registration fee of \$10; and
5. Provide a notarized statement from a representative of the nonprofit organization attesting to its compliance with provisions of subdivision 27 of §54.1-2901 of the Code of Virginia.

Part VIII. Renewal of Licensure.**18VAC85-101-150. Biennial renewal of license.**

A. A radiologist assistant, radiologic technologist or radiologic technologist-limited who intends to continue practice shall renew his license biennially during his birth month in each odd-numbered year and pay to the board the prescribed renewal fee.

B. A license that has not been renewed by the first day of the month following the month in which renewal is required shall be expired.

C. An additional fee as prescribed in 18VAC85-101-25 shall be imposed by the board.

D. In order to renew an active license as a radiologic technologist, a licensee shall attest to having completed 24 hours of continuing education as acceptable to the ARRT within the last biennium.

E. In order to renew an active license as a radiologic technologist-limited, a licensee shall attest to having completed 12 hours of continuing education within the last biennium that corresponds to the anatomical areas in which the limited licensee practices. Hours shall be acceptable to the ARRT, or by the ACRRT for limited licensees whose scope of practice is chiropractic, or by any other entity approved by the board for limited licensees whose scope of practice is podiatry or bone densitometry.

F. In order to renew an active license as a radiologist assistant, a licensee shall attest to having completed 50 hours of continuing education as acceptable to the ARRT within the last biennium. A minimum of 25 hours of continuing education shall be recognized by the ARRT as intended for

radiologist assistants or radiologists and shall be specific to the radiologist assistant's area of practice. Continuing education hours earned for renewal of a radiologist assistant license shall satisfy the requirements for renewal of a radiologic technologist license.

G. Up to two continuing education hours may be satisfied through delivery of radiological services, without compensation, to low-income individuals receiving services through a local health department or a free clinic organized in whole or primarily for the delivery of health services. One hour of continuing education may be credited for three hours of providing such volunteer services. For the purpose of continuing education credit for voluntary service, documentation by the health department or free clinic shall be acceptable.

H. Other provisions for continuing education shall be as follows:

1. A practitioner shall be exempt from the continuing education requirements for the first biennial renewal following the date of initial licensure in Virginia.
2. The practitioner shall retain in his records the Continued Competency Activity and Assessment Form available on the board's website with all supporting documentation for a period of four years following the renewal of an active license.
3. The board shall periodically conduct a random audit of its active licensees to determine compliance. The practitioners selected for the audit shall provide all supporting documentation within 30 days of receiving notification of the audit.
4. Failure to comply with these requirements may subject the licensee to disciplinary action by the board.
5. The board may grant an extension of the deadline for satisfying continuing competency requirements, for up to one year, for good cause shown upon a written request from the licensee prior to the renewal date.
6. The board may grant an exemption for all or part of the requirements for circumstances beyond the control of the licensee, such as temporary disability, mandatory military service, or officially declared disasters.

18VAC85-101-151. Reinstatement.

A. A licensee who allows his license to lapse for a period of two years or more and chooses to resume his practice shall submit to the board a new application, information on practice and licensure in other jurisdictions during the period in which the license was lapsed, evidence of completion of hours of continuing education equal to those required for a biennial renewal and the fees for reinstatement of his license as prescribed in 18VAC85-101-25.

B. A licensee whose license has been revoked by the board and who wishes to be reinstated shall submit a new application to the board, fulfill additional requirements as specified in the order from the board, and pay the fee for reinstatement of his license as prescribed in 18VAC85-101-25.

18VAC85-101-152. Inactive license.

A. A licensed radiologist assistant, radiologic technologist or radiologic technologist-limited who holds a current, unrestricted license in Virginia may, upon a request on the renewal application and submission of the required fee, be issued an inactive license. The holder of an inactive license shall not be required to maintain continuing education hours and shall not be entitled to perform any act requiring a license to practice radiography in Virginia.

B. To reactivate an inactive license, a licensee shall:

1. Submit the required application;
2. Pay a fee equal to the difference between the current renewal fee for inactive licensure and the renewal fee for active licensure; and
3. Verify that he has completed continuing education hours equal to those required for the period in which he held an inactive license in Virginia, not to exceed one biennium.

C. The board reserves the right to deny a request for reactivation to any licensee who has been determined to have committed an act in violation of §54.1-2915 of the Code of Virginia or any provisions of this chapter.

18VAC85-101-153. Restricted volunteer license.

A. A licensed radiologist assistant, radiologic technologist or a radiologic technologist-limited who held an unrestricted license issued by the Virginia Board of Medicine or by a board in another state as a licensee in good standing at the time the license expired or became inactive may be issued a restricted volunteer license to practice without compensation in a clinic that is organized in whole or in part for the delivery of health care services without charge in accordance with §54.1-106 of the Code of Virginia.

B. To be issued a restricted volunteer license, a licensee shall submit an application to the board that documents compliance with requirements of §54.1-2928.1 of the Code of Virginia and the application fee prescribed in 18VAC85-101-25.

C. The licensee who intends to continue practicing with a restricted volunteer license shall renew biennially during his birth month, meet the continued competency requirements prescribed in subsection D of this section, and pay to the board the renewal fee prescribed in 18VAC85-101-25.

D. The holder of a restricted volunteer license shall not be required to attest to hours of continuing education for the first renewal of such a license. For each renewal thereafter, a licensed radiologic technologist shall attest to having completed 12 hours of Category A continuing education as acceptable to and documented by the ARRT within the last biennium. A radiologic technologist-limited shall attest to having completed six hours of Category A continuing education within the last biennium that corresponds to the anatomical areas in which the limited licensee practices. Hours shall be acceptable to and documented by the ARRT or by any other entity approved by the board for limited licensees whose scope of practice is podiatry or bone densitometry.

18VAC85-101-160. [Repealed]

Part IX. Standards of Professional Conduct.

18VAC85-101-161. Confidentiality.

A practitioner shall not willfully or negligently breach the confidentiality between a practitioner and a patient. A breach of confidentiality that is required or permitted by applicable law or beyond the control of the practitioner shall not be considered negligent or willful.

18VAC85-101-162. Patient records.

A. Practitioners shall comply with provisions of § 32.1-127.1:03 related to the confidentiality and disclosure of patient records.

B. Practitioners shall properly manage patient records and shall maintain timely, accurate, legible and complete records.

C. Practitioners shall maintain a patient record in accordance with policies and procedures of the employing institution or entity.

18VAC85-101-163. Practitioner-patient communication.

A. Except as provided in § 32.1-127.1:03 F of the Code of Virginia, a practitioner shall accurately present information to a patient or his legally authorized representative in understandable terms and encourage participation in decisions regarding the patient's care.

B. A practitioner shall not deliberately make a false or misleading statement regarding the practitioner's skill or the efficacy or value of a medication, treatment, or procedure prescribed or directed by the practitioner in the treatment of any disease or condition.

C. A practitioner shall refer to or consult with other health care professionals, if so indicated.

D. Practitioners shall adhere to requirements of § 32.1-162.18 of the Code of Virginia for obtaining informed consent from patients prior to involving them as subjects in human research with the exception of retrospective chart reviews.

18VAC85-101-164. Practitioner responsibility.

A practitioner shall not:

1. Perform procedures or techniques or provide interpretations that are outside the scope of his practice or for which he is not trained and individually competent;
2. Knowingly allow subordinates to jeopardize patient safety or provide patient care outside of the subordinate's scope of practice or their area of responsibility. Practitioners shall delegate patient care only to subordinates who are properly trained and supervised;

3. Engage in an egregious pattern of disruptive behavior or interaction in a health care setting that interferes with patient care or could reasonably be expected to adversely impact the quality of care rendered to a patient; or

4. Exploit the practitioner/patient relationship for personal gain.

B. Advocating for patient safety or improvement in patient care within a health care entity shall not constitute disruptive behavior provided the practitioner does not engage in behavior prohibited in A 3 of this section.

18VAC85-101-165. Sexual contact.

A. For purposes of § 54.1-2915 A 12 and A 19 of the Code of Virginia and this section, sexual contact includes, but is not limited to, sexual behavior or verbal or physical behavior which:

1. May reasonably be interpreted as intended for the sexual arousal or gratification of the practitioner, the patient, or both; or

2. May reasonably be interpreted as romantic involvement with a patient regardless of whether such involvement occurs in the professional setting or outside of it.

B. Sexual contact with a patient.

1. The determination of when a person is a patient for purposes of § 54.1-2915 A 19 of the Code of Virginia is made on a case-by-case basis with consideration given to the nature, extent, and context of the professional relationship between the practitioner and the person. The fact that a person is not actively receiving treatment or professional services from a practitioner is not determinative of this issue. A person is presumed to remain a patient until the patient-practitioner relationship is terminated.

2. The consent to, initiation of, or participation in sexual behavior or involvement with a practitioner by a patient does not change the nature of the conduct nor negate the statutory prohibition.

C. Sexual contact between a practitioner and a former patient.

Sexual contact between a practitioner and a former patient after termination of the practitioner-patient relationship may still constitute unprofessional conduct if the sexual contact is a result of the exploitation of trust, knowledge, or influence of emotions derived from the professional relationship.

D. Sexual contact between a practitioner and a key third party shall constitute unprofessional conduct if the sexual contact is a result of the exploitation of trust, knowledge or influence derived from the professional relationship or if the contact has had or is likely to have an adverse effect on patient care. For purposes of this section, key third party of a patient shall mean: spouse or partner, parent or child, guardian, or legal representative of the patient.

E. Sexual contact between a practitioner and a supervisor and a trainee shall constitute unprofessional conduct if the sexual contact is a result of the exploitation of trust, knowledge or

influence derived from the professional relationship or if the contact has had or is likely to have an adverse effect on patient care.

18VAC85-101-166. Refusal to provide information.

A practitioner shall not willfully refuse to provide information or records as requested or required by the board or its representative pursuant to an investigation or to the enforcement of a statute or regulation.

Virginia's Radiologic Technologist Workforce: 2017

Healthcare Workforce Data Center

March 2018

Virginia Department of Health Professions
Healthcare Workforce Data Center
Perimeter Center
9960 Mayland Drive, Suite 300
Richmond, VA 23233
804-367-2115, 804-527-4466(fax)
E-mail: HWDC@dhp.virginia.gov

Follow us on Tumblr: www.vahwdc.tumblr.com

3,458 Radiologic Technologists voluntarily participated in this survey. Without their efforts the work of the Center would not be possible. The Department of Health Professions, the Healthcare Workforce Data Center, and the Board of Medicine express our sincerest appreciation for your ongoing cooperation.

Thank You!

Virginia Department of Health Professions

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The Radiologic Technologist Workforce: At a Glance:

The Workforce

Licensees:	5,622
Virginia's Workforce:	4,828
FTEs:	4,104

Survey Response Rate

All Licensees:	62%
Renewing Practitioners:	84%

Demographics

Female:	81%
Diversity Index:	38%
Median Age:	43

Background

Rural Childhood:	41%
HS Degree in VA:	60%
Prof. Degree in VA:	72%

Education

Associate:	54%
RT Certificate:	35%

Finances

Median Income: \$40k-\$50k:	51%
Health Benefits:	51%
Under 40 w/ Ed debt:	46%

Current Employment

Employed in Prof.:	90%
Hold a Full-time Job:	67%
Satisfied?:	96%

Job Turnover

Switched Jobs in 2017:	6%
Employed over 2 yrs:	66%

Primary Roles

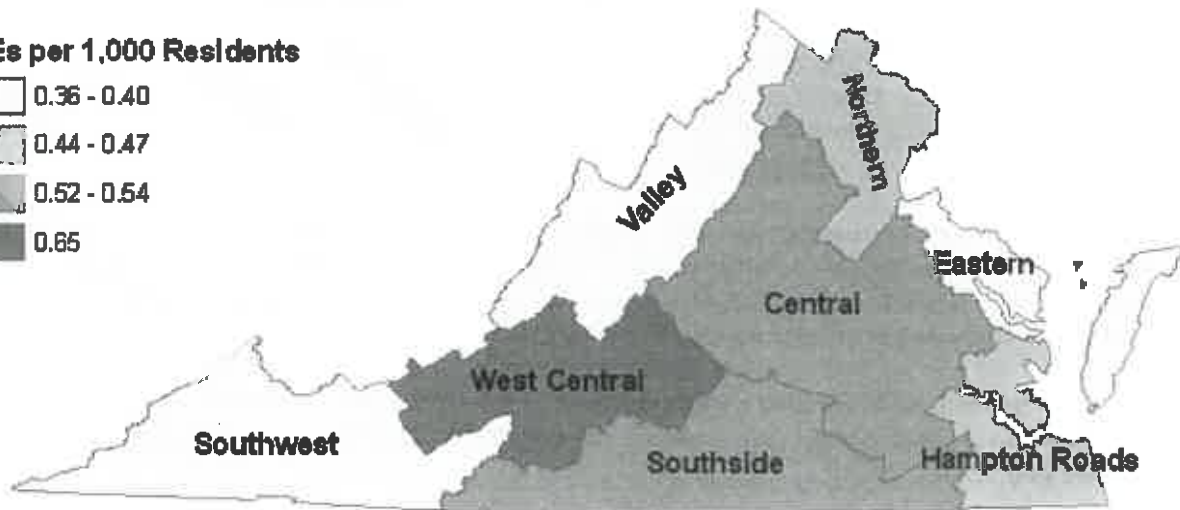
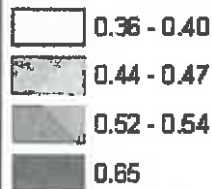
Client Care:	79%
Administration:	9%
Education:	1%

Source: Va HealthCare Workforce Data Center

Full Time Equivalency Units per 1,000 Residents by Council on Virginia's Future Region

Source: Va Healthcare Workforce Data Center

FTEs per 1,000 Residents



Annual Estimates of the Resident Population: July 1, 2015
Source: U.S. Census Bureau, Population Division



Results in Brief

3,458 radiologic technologists (RTs) voluntarily took part in the 2017 Radiologic Technologist Workforce Survey. The Virginia Department of Health Professions' Healthcare Workforce Data Center (HWDC) administers the survey during the license renewal process, which takes place every odd year on the birth month of each RT. These survey respondents represent 62% of the 5,622 radiologic technologists who are licensed in the state and 84% of renewing practitioners.

The HWDC estimates that 4,828 RTs participated in Virginia's workforce during the survey period, which is defined as those who worked at least a portion of the year in the state or who live in the state and intend to return to work as a RT at some point in the future. In 2017, Virginia's RT workforce provided 4,104 "full-time equivalency units", which the HWDC defines simply as working 2,000 hours a year (or 40 hours per week for 50 weeks with 2 weeks off).

81% of all RTs are female, including 84% of those RTs who are under the age of 40. The median age of Virginia's RT workforce is 43 years. In a random encounter between two RTs, there is a 38% chance that they would be of different races or ethnicities, a measure known as the diversity index. Among RTs who are under the age of 40, this diversity index increases to 40%. Regardless, Virginia's overall RT workforce is less diverse than the state's overall population, where there is a 56% chance that two randomly chosen people would be of different races or ethnicities.

41% of all RTs grew up in a rural area, and 20% of these professionals currently work in non-metro areas of the state. Overall, 11% of Virginia's RTs work in rural areas of Virginia. Meanwhile, 60% of Virginia's RTs graduated from high school in Virginia, and 72% earned their initial professional degree in the state. In total, 75% of Virginia's RTs have some educational background in the state, including 58% who received both their high school and initial professional degree in Virginia.

54% of all RTs hold an Associate degree as their highest professional degree, while another 30% hold a RT certificate. In addition, 69% of all RTs hold a certification in radiation therapy. 30% of RTs currently carry educational debt, including 46% of those under the age of 40. The median debt burden for those RT with educational debt is between \$10,000 and \$20,000.

90% of RTs are currently employed in the profession. 67% of Virginia's RT workforce currently holds one full-time job, and 51% work between 40 and 49 hours per week. Only 1% of Virginia's RTs were involuntarily unemployed at some point in the past year, while 4% were underemployed. At the same time, 6% of RTs switched jobs in 2017, while 66% of Virginia's RT workforce has been at the same primary work location for at least two years.

The typical RT earned between \$40,000 and \$50,000 in 2017. In addition, 85% of RTs who are compensated with either an hourly wage or salary at their primary work location received at least one employer-sponsored benefit, including 66% who received health insurance. 96% of all RTs are satisfied with their current employment situation, including 65% who indicate they are "very satisfied".

29% of RTs work in Northern Virginia, the most of any region in the state. Another 22% of RTs work in Central Virginia, while 20% of RTs are employed in Hampton Roads. Meanwhile, 69% of all RTs work in the for-profit sector, and another 24% work in the non-profit sector. 25% of Virginia's RTs are employed at a physician office. At the same time, another 18% of Virginia's RT work at an outpatient/community clinic.

A typical RT spends nearly all of her time treating patients. In fact, 79% of RTs serve a client care role, meaning that at least 60% of their time is spent in client care activities. Another 9% of RTs also serve an administrative role, while 1% serve an education role.

46% of all RTs expect to retire by the age of 65. Although just 5% of the current workforce expects to retire in the next two years, half of all RTs expect to retire by 2042. Over the next two years, 2% of Virginia's RTs workforce plan on leaving the state to practice elsewhere, and 3% plan on leaving the profession entirely. At the same time, 21% of RTs plan on pursuing additional educational opportunities, and 8% expect to increase patient care activities.

Summary of Trends

Over the past two years, the number of licensed radiologic technologists (RTs) in the state increased from 5,462 to 5,622. In addition, these licensed RTs were far more likely to respond to the HWDC Radiologic Technology survey. While only 37% of licensed RTs replied to the survey in 2015, 62% responded to the survey in 2017. At the same time, the size of the Virginia's RT workforce increased from 4,680 to 4,828. In addition, the Virginia RT workforce supplied more FTEs across the state. In 2015, 4,070 FTEs were furnished by Virginia's RTs, but this total increased to 4,104 FTEs in 2017.

In 2015, 42% of all RTs grew up in a rural area, but this percentage fell slightly in 2017 to 41%. In addition, those RTs who grew up in rural areas were less likely to work in non-metro areas of the state. While 23% of all RTs who were raised in a rural area chose to work in a non-metro area of Virginia in 2015, only 20% did the same in 2017. In fact, the overall percentage of RTs who work in non-metro areas of the state has decreased over the past two years from 13% to 11%.

In addition, Virginia's RTs were less likely to study in Virginia. Whereas 77% of all RTs received either a high school diploma or their initial professional degree in Virginia in 2015, only 75% received some educational background in the state in 2017. Virginia's RTs are also more likely to have earned more advanced degrees in 2017. 35% of all RTs earned an RT certificate as their highest professional degree in 2015, but this percentage fell to 30% in 2017. Instead, Virginia's RTs were more likely to have earned either an Associate or Bachelor's degree. The percentage of RTs with an Associate degree as their highest professional degree increased from 51% to 54%, while the percentage with a Bachelor's degree increased from 9% to 12%.

In general, the employment situation of Virginia's RT workforce has improved. For example, the percentage of RTs who are currently employed in the profession has increased from 85% in 2015 to 90% in 2017. In addition, Virginia's RTs were slightly more likely to hold one full-time position. Over the past two years, the percentage of RTs with one full-time job increased from 66% to 67%. Meanwhile, the rate of involuntary unemployment decreased from 2% in 2015 to 1% in 2017, and the rate of underemployment fell from 5% to 4% over the same time period.

Although there was no change in the median income of Virginia's RT workforce, these professionals were more likely to receive additional employer-sponsored benefits. While 82% of all RTs received at least one employer-sponsored benefit in 2015, 85% received such a benefit in 2017. This increase was even more pronounced with respect to certain specific benefits. For instance, the percentage of wage and salaried RTs who receive health insurance from their employer has increased over the past two years from 54% to 65%. At the same time, Virginia's RT workforce seems to be more satisfied with their present working environment. Since 2015, the percentage of RTs who indicated that they are satisfied with their job has increased from 94% to 96%. In addition, the percentage who indicates that they are "very satisfied" has increased from 62% in 2015 to 65% in 2017.

In 2015, 71% of all RTs worked in the for-profit sector, but this percentage fell to 69% in 2017. Instead, Virginia's RT workforce was more likely to work in the non-profit sector. Whereas 22% of all RTs work in the non-profit sector in 2015, 24% did so in 2017. Although a physician office remained the most common employer among Virginia's RT workforce, the percentage of RTs who worked in this establishment type fell from 29% in 2015 to 25% in 2017. On the other hand, the percentage of RTs who work at an outpatient/community clinic increased over the past two years from 15% to 18%.

In 2015, 46% of all RTs expected to retire by the age of 65, and this percentage did not change in 2017. However, among those RTs who are age 50 or over, the percentage who expects to retire by the age of 65 fell from 37% in 2015 to 32% in 2017. In addition, the percentage of RTs who expect to retire within the next ten years has fallen from 22% to 18%. Meanwhile, there was a small decrease in the percentage of RTs who expect to pursue additional educational opportunities over the next two years from 22% in 2015 to 21% in 2017.

Survey Response Rates

A Closer Look:

Licensee Counts		
License Status	#	%
Renewing Practitioners	4,116	73%
New Licensees	489	9%
Non-Renewals	1,017	18%
All Licensees	5,622	100%

Source: Va. Healthcare Workforce Data Center

HWDC surveys tend to achieve very high response rates. 84% of renewing RTs submitted a survey. These represent 62% of RTs who held a license at some point in 2017.

At a Glance:

Licensed RTs

Number:	5,622
New:	9%
Not Renewed:	18%

Survey Response Rates

All Licensees:	62%
Renewing Practitioners:	84%

Source: Va. Healthcare Workforce Data Center

Response Rates

Completed Surveys	3,458
Response Rate, all licensees	62%
Response Rate, Renewals	84%

Source: Va. Healthcare Workforce Data Center

Definitions

- 1. The Survey Period:** The survey was conducted throughout 2017 on the birth month of each practitioner.
- 2. Target Population:** All RTs who held a Virginia license at some point in 2017.
- 3. Survey Population:** The survey was available to those who renewed their licenses online. It was not available to those who did not renew, including some RTs newly licensed in 2017.

Statistic	Response Rates		
	Non Respondents	Respondent	Response Rate
By Age			
Under 30	463	369	44%
30 to 34	333	437	57%
35 to 39	277	411	60%
40 to 44	212	423	67%
45 to 49	214	511	71%
50 to 54	191	446	70%
55 to 59	172	404	70%
60 and Over	302	457	60%
Total	2,164	3,458	62%
New Licenses			
Issued in 2017	489	0	0%
Metro Status			
Non-Metro	211	382	64%
Metro	1489	2,573	63%
Not in Virginia	464	503	52%

Source: Va. Healthcare Workforce Data Center

The Workforce

At a Glance:

Workforce

2017 RTs Workforce: 4,828
 FTEs: 4,104

Utilization Ratios

Licensees in VA Workforce: 86%
 Licensees per FTE: 1.37
 Workers per FTE: 1.18

Source: Va. Healthcare Workforce Data Center

Definitions

- 1. Virginia's Workforce:** A licensee with a primary or secondary work site in Virginia at any time in the past year or who indicated intent to return to Virginia's workforce at any point in the future.
- 2. Full Time Equivalency Unit (FTE):** The HWDC uses 2,000 (40 hours for 50 weeks) as its baseline measure for FTEs.
- 3. Licensees in VA Workforce:** The proportion of licensees in Virginia's Workforce.
- 4. Licensees per FTE:** An indication of the number of licensees needed to create 1 FTE. Higher numbers indicate lower licensee participation.
- 5. Workers per FTE:** An indication of the number of workers in Virginia's workforce needed to create 1 FTE. Higher numbers indicate lower utilization of available workers.

Virginia's RTs Workforce

Status	#	%
Worked in Virginia In Past Year	4,719	98%
Looking for Work in Virginia	109	2%
Virginia's Workforce	4,828	100%
Total FTEs	4,104	
Licensees	5,622	

Source: Va. Healthcare Workforce Data Center

This report uses weighting to estimate the figures in this report. Unless otherwise noted, figures refer to the Virginia Workforce only. For more information on HWDC's methodology visit: www.dhp.virginia.gov/hwdc

Looking for Work in Virginia



Total FTEs

Source: Va. Healthcare Workforce Data Center

Demographics

A Closer Look:

Age & Gender						
Age	Male		Female		Total	
	#	% Male	#	% Female	#	% in Age Group
Under 30	78	11%	656	89%	734	16%
30 to 34	128	20%	508	80%	636	14%
35 to 39	100	18%	467	82%	567	13%
40 to 44	119	23%	391	77%	510	11%
45 to 49	115	21%	439	79%	554	12%
50 to 54	111	22%	406	79%	518	11%
55 to 59	80	18%	357	82%	437	10%
60 +	110	20%	452	80%	563	12%
Total	843	19%	3,677	81%	4,520	100%

Source: Va. Healthcare Workforce Data Center

Race & Ethnicity						
Race/Ethnicity	Virginia*		RTs		RTs Under 40	
	%	#	%	#	%	#
White	63%	3,574	78%	1,504	77%	1,504
Black	19%	482	10%	175	9%	175
Asian	6%	184	4%	90	5%	90
Other Race	< 1%	63	1%	12	1%	12
Two or more races	3%	125	3%	60	3%	60
Hispanic	9%	180	4%	119	6%	119
Total	100%	4,608	100%	1,960	100%	1,960

*Population data in this chart is from the US Census, Annual Estimates of the Resident Population by Sex, Race, and Hispanic Origin for the United States, States, and Counties: July 1, 2015.

Source: Va. Healthcare Workforce Data Center

43% of RTs are under the age of 40, and 84% of these professionals are female. In addition, the diversity index among RTs who are under the age of 40 is 40%.

At a Glance:

Gender

% Female: 81%
% Under 40 Female: 84%

Age

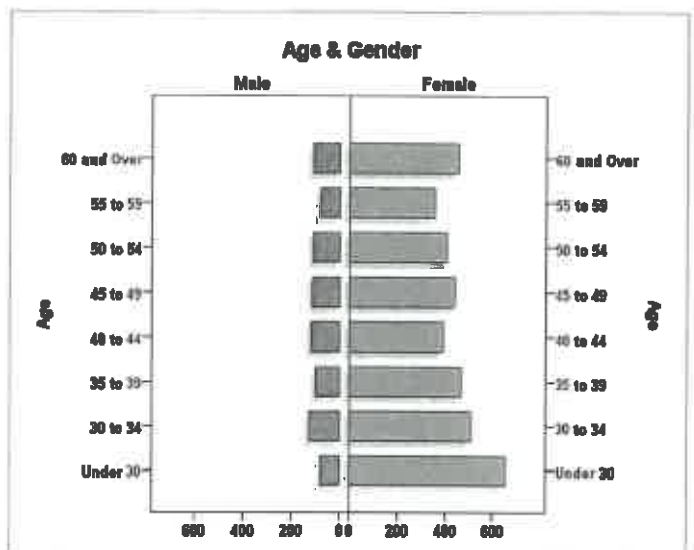
Median Age: 43
% Under 40: 43%
% 55+: 22%

Diversity

Diversity Index: 38%
Under 40 Div. Index: 40%

Source: Va. Healthcare Workforce Data Center

In a chance encounter between two RTs, there is a 38% chance that they would be of a different race/ethnicity (a measure known as the Diversity Index. For Virginia's population as a whole, the comparable number is 56%.



Source: Va. Healthcare Workforce Data Center

Background

At a Glance:

Childhood

Urban Childhood: 15%
Rural Childhood: 41%

Virginia Background

HS in Virginia: 60%
Prof. Education in VA: 72%
HS/Prof. Educ. in VA: 75%

Location Choice

% Rural to Non-Metro: 20%
% Urban/Suburban to Non-Metro: 4%

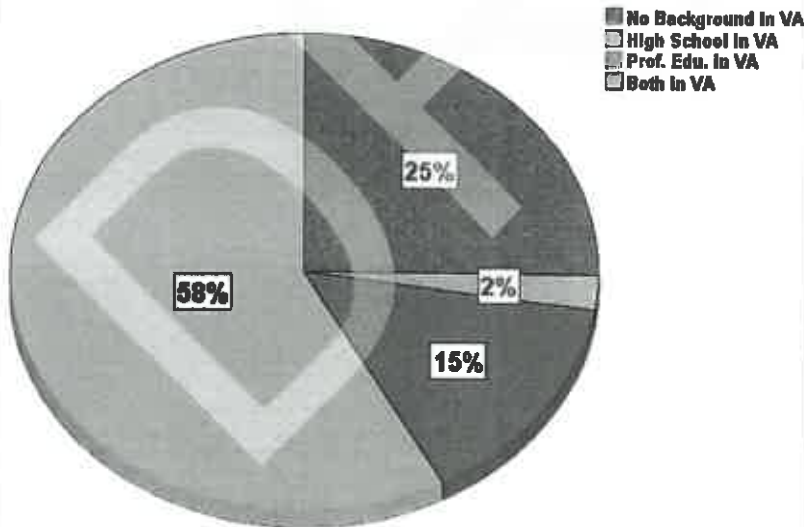
Source: Va. Healthcare Workforce Data Center

A Closer Look:

Primary Location:		Rural Status of Childhood Location		
USDA Rural Urban Continuum		Rural	Suburban	Urban
Code	Description			
Metro Counties				
1	Metro, 1 million+	29%	53%	18%
2	Metro, 250,000 to 1 million	60%	31%	9%
3	Metro, 250,000 or less	60%	30%	9%
Non-Metro Counties				
4	Urban pop 20,000+, Metro adj	59%	26%	15%
6	Urban pop, 2,500-19,999, Metro adj	83%	14%	4%
7	Urban pop, 2,500-19,999, nonadj	90%	7%	3%
8	Rural, Metro adj	85%	9%	6%
9	Rural, nonadj	63%	35%	3%
Overall		41%	44%	15%

Source: Va. Healthcare Workforce Data Center

Educational Background in Virginia



Source: Va. Healthcare Workforce Data Center

41% of RTs grew up in self-described rural areas, and 20% of these professionals currently work in non-metro counties. Overall, 11% of all RTs currently work in non-metro counties.

Top Ten States for Radiological Technologist Recruitment

Rank	All Professionals			
	High School	#	Professional School	#
1	Virginia	2,742	Virginia	3,276
2	Outside U.S./Canada	250	Maryland	191
3	Pennsylvania	196	Pennsylvania	123
4	New York	166	West Virginia	97
5	Maryland	165	New York	85
6	West Virginia	138	Florida	73
7	North Carolina	89	Texas	70
8	New Jersey	83	North Carolina	66
9	Florida	68	Washington, D.C.	56
10	California	65	Tennessee	46

Source: Va. Healthcare Workforce Data Center

60% of licensed RTs received their high school degree in Virginia, and 72% received their initial professional degree in the state.

Among RTs who received their license in the past five years, 61% received their high school degree in Virginia, while 73% received their initial professional degree in the state.

Rank	Licensed in the Past 5 Years			
	High School	#	Professional School	#
1	Virginia	849	Virginia	1,020
2	Outside U.S./Canada	77	Maryland	58
3	Maryland	51	Florida	29
4	Pennsylvania	37	Pennsylvania	26
5	West Virginia	35	West Virginia	23
6	New York	33	Tennessee	21
7	North Carolina	29	Texas	19
8	Florida	29	North Carolina	16
9	California	23	California	15
10	Tennessee	22	New York	15

Source: Va. Healthcare Workforce Data Center

14% of licensed RTs did not participate in Virginia's workforce in 2017. 88% of those RTs worked at some point in the past year, including 79% are currently employed as RTs.

At a Glance:

Not in VA Workforce

Total:	790
% of Licensees:	14%
Federal/Military:	4%
Va Border State/DC:	21%

Source: Va. Healthcare Workforce Data Center

Education

A Closer Look:

Highest Professional Degree		
Degree	#	%
RT Certificate	1,317	30%
Associate	2,396	54%
Baccalaureate Degree	511	12%
Post-Graduate Certificate	142	3%
Master's Degree	69	2%
Doctorate	7	< 1%
Total	4,442	100%

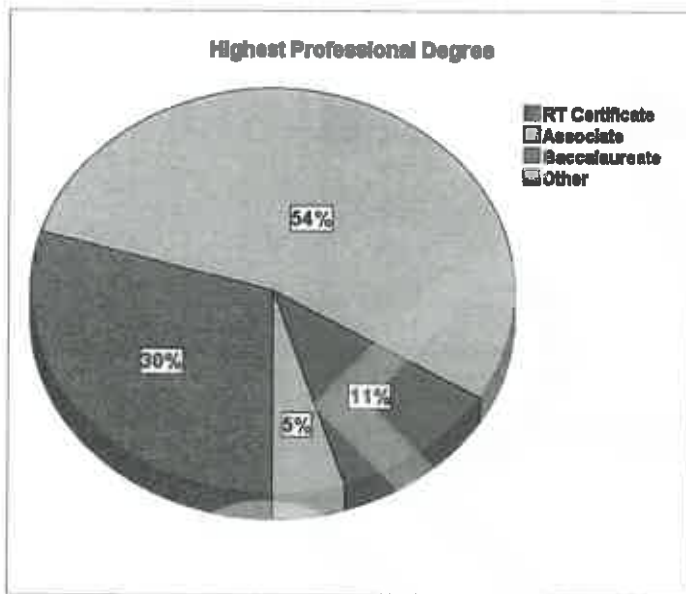
Source: Va. Healthcare Workforce Data Center

At a Glance:

Education
 Associate Degree: 54%
 Bachelor's Degree: 30%

Educational Debt
 Carry debt: 10%
 Under age 40 w/ debt: 46%
 Median debt: \$10k-\$20k

Source: Va. Healthcare Workforce Data Center



Source: Va. Healthcare Workforce Data Center

54% of all RTs have an Associate Degree as their highest professional degree.

30% of RTs currently have educational debt, including 46% of those under the age of 40. For those with educational debt, the median outstanding balance on their loans is between \$10,000 and \$20,000.

Amount Carried	All RTs		RTs Under 40	
	#	%	#	%
None	2,737	70%	924	54%
Less than \$10,000	331	8%	219	13%
\$10,000-\$19,999	296	8%	215	13%
\$20,000-\$29,999	206	5%	141	8%
\$30,000-\$39,999	140	4%	102	6%
\$40,000-\$49,999	57	1%	31	2%
\$50,000-\$59,999	51	1%	31	2%
\$60,000-\$69,999	29	1%	15	1%
\$70,000-\$79,999	14	< 1%	14	1%
\$80,000-\$89,999	9	< 1%	5	< 1%
\$90,000-\$99,999	9	< 1%	5	< 1%
\$100,000 or more	16	< 1%	4	< 1%
Total	3,897	100%	1,707	100%

Source: Va. Healthcare Workforce Data Center

At a Glance:

Top Certifications

Radiation Therapy:	69%
Mammography:	14%
Tomography:	12%

Source: Va. Healthcare Workforce Data Center

A Closer Look:

77% of all RTs have at least one certification. Radiation Therapy is the most common certification among Virginia's RT workforce.

Certifications		
Certification	#	% of Workforce
Radiation Therapy	3,310	69%
Mammography	698	14%
Tomography	602	12%
Magnetic Resonance Imaging	180	4%
Bone Densitometry	139	3%
Nuclear Medicine	102	2%
Diagnostic Medical Sonography	58	1%
Vascular Interventional	54	1%
Nuclear Medicine Technology	52	1%
Quality Management	29	1%
Breast Sonography	21	< 1%
Cardiac Interventional	20	< 1%
Registered Radiologic Assistant	13	< 1%
Sonography	12	< 1%
Vascular Technology	11	< 1%
Positron Emission Technology	10	< 1%
Medical Dosimetry	9	< 1%
Diagnostic Cardiac Sonography	3	< 1%
Vascular Sonography	4	< 1%
Nuclear Cardiology Technology	1	< 1%
At Least One Certification	3,722	77%

Source: Va. Healthcare Workforce Data Center

Current Employment Situation

At a Glance:

Employment

Employed in Profession:	90%
Involuntarily Unemployed:	1%

Positions Held

1 Full-time:	67%
2 or More Positions:	14%

Weekly Hours:

40 to 49:	51%
60 or more:	3%
Less than 30:	12%

Source: Va. Healthcare Workforce Data Center

A Closer Look:

Current Work Status		
Status	#	%
Employed, capacity unknown	2	< 1%
Employed in an RT-related capacity	4,096	90%
Employed, NOT in an RT-related capacity	312	7%
Not working, reason unknown	0	0%
Involuntarily unemployed	35	1%
Voluntarily unemployed	104	2%
Retired	20	< 1%
Total	4,569	100%

Source: Va. Healthcare Workforce Data Center

90% of Virginia's RTs are currently employed in the profession, and just 1% are involuntarily unemployed at the moment. 67% of all RTs have one full-time job, and 51% work between 40 and 49 hours per week.

Current Positions		
Positions	#	%
No Positions	159	4%
One Part-Time Position	691	15%
Two Part-Time Positions	100	2%
One Full-Time Position	3,027	67%
One Full-Time Position & One Part-Time Position	448	10%
Two Full-Time Positions	20	< 1%
More than Two Positions	43	1%
Total	4,488	100%

Source: Va. Healthcare Workforce Data Center

Current Weekly Hours		
Hours	#	%
0 hours	159	4%
1 to 9 hours	91	2%
10 to 19 hours	144	3%
20 to 29 hours	310	7%
30 to 39 hours	1,120	25%
40 to 49 hours	2,259	51%
50 to 59 hours	196	4%
60 to 69 hours	58	1%
70 to 79 hours	20	< 1%
80 or more hours	59	1%
Total	4,416	100%

Source: Va. Healthcare Workforce Data Center

Employment Quality

A Closer Look:

Income		
Hourly Wage	#	%
Volunteer Work Only	19	1%
Less than \$30,000	425	13%
\$30,000-\$39,999	621	18%
\$40,000-\$49,999	686	20%
\$50,000-\$59,999	578	17%
\$60,000-\$69,999	457	13%
\$70,000-\$79,999	282	8%
\$80,000-\$89,999	153	5%
\$90,000-\$99,999	83	2%
\$100,000-\$109,999	51	2%
\$110,000-\$119,999	23	1%
\$120,000 or more	30	1%
Total	3,406	100%

Source: Va. Healthcare Workforce Data Center

Job Satisfaction		
Level	#	%
Very Satisfied	2,898	65%
Somewhat Satisfied	1,372	31%
Somewhat Dissatisfied	145	3%
Very Dissatisfied	46	1%
Total	4,462	100%

Source: Va. Healthcare Workforce Data Center

At a Glance:

Hourly Earnings

Median Income: \$40k-50k

Benefits

Health Insurance: 66%

Retirement: 64%

Satisfaction

Satisfied: 96%

Very Satisfied: 65%

Source: Va. Healthcare Workforce Data Center

The typical RT earned between \$40,000 and \$50,000 in the past year. Among RTs who received either an hourly wage or salary as compensation at their primary work location, 85% also received at least one employee-sponsored benefit.

Employer-Sponsored Benefits			
Benefit	#	%	% of Wage/Salary Employees
Paid Vacation	3,239	79%	78%
Health Insurance	2,697	66%	65%
Retirement	2,639	64%	63%
Dental Insurance	2,484	61%	60%
Paid Sick Leave	2,407	59%	58%
Group Life Insurance	1,902	46%	46%
Signing/Retention Bonus	174	4%	4%
At Least One Benefit	3,525	86%	85%

*From any employer at time of survey.

Source: Va. Healthcare Workforce Data Center

2017 Labor Market

A Closer Look:

Underemployment in Past Year		
In the past year did you...?	#	%
Experience Involuntary Unemployment?	61	1%
Experience Voluntary Unemployment?	176	4%
Work Part-time or temporary positions, but would have preferred a full-time/permanent position?	212	4%
Work two or more positions at the same time?	853	18%
Switch employers or practices?	313	6%
Experienced at least 1	1,369	28%

Source: Va. Healthcare Workforce Data Center

Only 1% of Virginia's RTs were involuntarily unemployed at some point in 2017. For comparison, Virginia's average monthly unemployment rate was 3.8%.¹

Tenure	Primary		Secondary	
	#	%	#	%
Not Currently Working at this Location	75	2%	84	8%
Less than 6 Months	221	5%	93	9%
6 Months to 1 Year	325	8%	143	14%
1 to 2 Years	842	19%	218	21%
3 to 5 Years	934	22%	206	20%
6 to 10 Years	780	18%	127	12%
More than 10 Years	1,152	27%	146	14%
Subtotal	4,330	100%	1,017	100%
Did not have location	168		3,747	
Item Missing	330		63	
Total	4,828		4,828	

Source: Va. Healthcare Workforce Data Center

87% of RTs receive an hourly wage at their primary work location, while 11% either receive a salary or work on commission.

At a Glance:

Unemployment Experience

Involuntarily Unemployed: 1%
Underemployed: 4%

Turnover & Tenure

Switched: 6%
New Location: 85%
Over 2 years: 66%
Over 2 yrs, 2nd location: 47%

Employment Type

Hourly Wage: 87%
Salary/Commission: 11%

Source: Va. Healthcare Workforce Data Center

66% of RTs have worked at their primary location for more than 2 years—the job tenure normally required to get a conventional mortgage loan.

Employment Type		
Primary Work Site	#	%
Hourly Wage	2,941	87%
Salary/Commission	385	11%
By Contract/Per Diem	39	1%
Business/Practice Income	9	< 1%
Unpaid	3	< 1%
Subtotal	3,378	100%

Source: Va. Healthcare Workforce Data Center

¹ As reported by the US Bureau of Labor Statistics. The non-seasonally adjusted monthly unemployment rate ranged from 4.2% in January to 3.4% in December. At the time of publication, results from December were still preliminary.

Work Site Distribution

At a Glance:

Concentration

Top Region:	29%
Top 3 Regions:	71%
Lowest Region:	1%

Locations

2 or more (2017):	24%
2 or more (Now*):	22%

Source: Va. Healthcare Workforce Data Center

29% of RTs work in Northern Virginia, the most of any region in the state. In addition, another 22% of RTs work in Central Virginia, and 20% work in Hampton Roads.

A Closer Look:

Regional Distribution of Work Locations				
COVF Region	Primary Location		Secondary Location	
	#	%	#	%
Central	955	22%	232	22%
Eastern	59	1%	12	1%
Hampton Roads	845	20%	215	21%
Northern	1,266	29%	296	28%
Southside	222	5%	53	5%
Southwest	177	4%	39	4%
Valley	194	5%	22	2%
West Central	529	12%	103	10%
Virginia Border State/DC	23	1%	30	3%
Other US State	40	1%	34	3%
Outside of the US	0	0%	3	< 1%
Total	4,310	100%	1,039	100%
Item Missing	348		43	

Source: Va. Healthcare Workforce Data Center

Council On Virginia's Future Regions



22% of RTs currently have multiple work locations, while 24% have had multiple work locations in 2017.

Number of Work Locations				
Locations	Work Locations in 2017		Work Locations Now*	
	#	%	#	%
0	109	3%	160	4%
1	3,238	73%	3,303	75%
2	600	14%	561	13%
3	368	8%	328	7%
4	36	1%	18	0%
5	28	1%	22	1%
6 or More	43	1%	29	1%
Total	4,422	100%	4,421	100%

*At the time of survey completion, December 2017.

Source: Va. Healthcare Workforce Data Center

Establishment Type

A Closer Look:

Sector	Location Sector			
	Primary Location		Secondary Location	
	#	%	#	%
For-Profit	2,829	69%	698	72%
Non-Profit	992	24%	209	21%
State/Local Government	136	3%	37	4%
Veterans Administration	33	1%	3	0%
U.S. Military	73	2%	23	2%
Other Federal Gov't	36	1%	6	1%
Total	4,099	100%	976	100%
Did not have location	168		3747	
Item Missing	561		105	

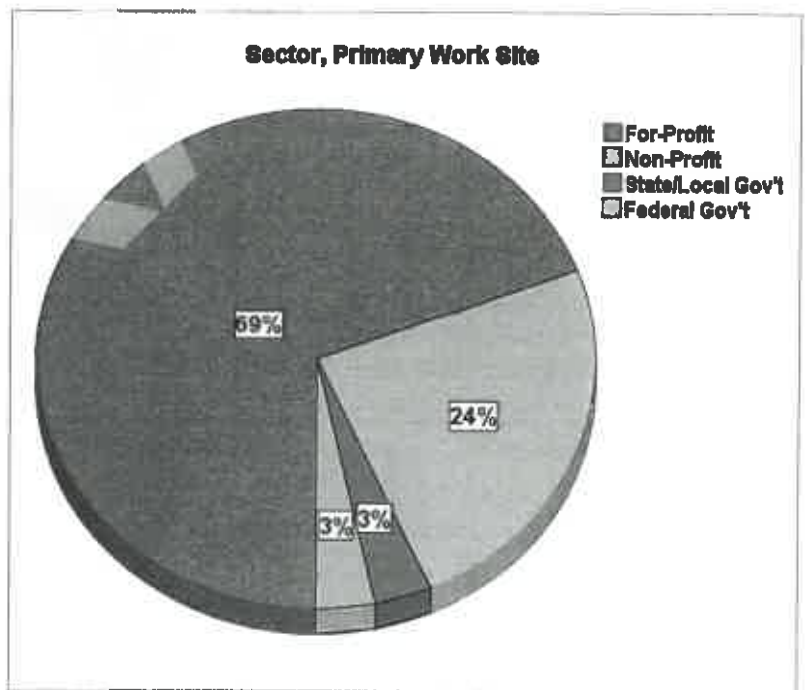
Source: Va. Healthcare Workforce Data Center

At a Glance: (Primary Locations)

Sector	
For Profit	69%
Federal	3%
Top Establishments	
Physician Office:	24%
Outpatient/Community Clinic:	18%
Diagnostic Imaging Center, Stationary:	17%

Source: Va. Healthcare Workforce Data Center

93% of Virginia's RTs work in the private sector, including 69% who work at non-profit establishments.



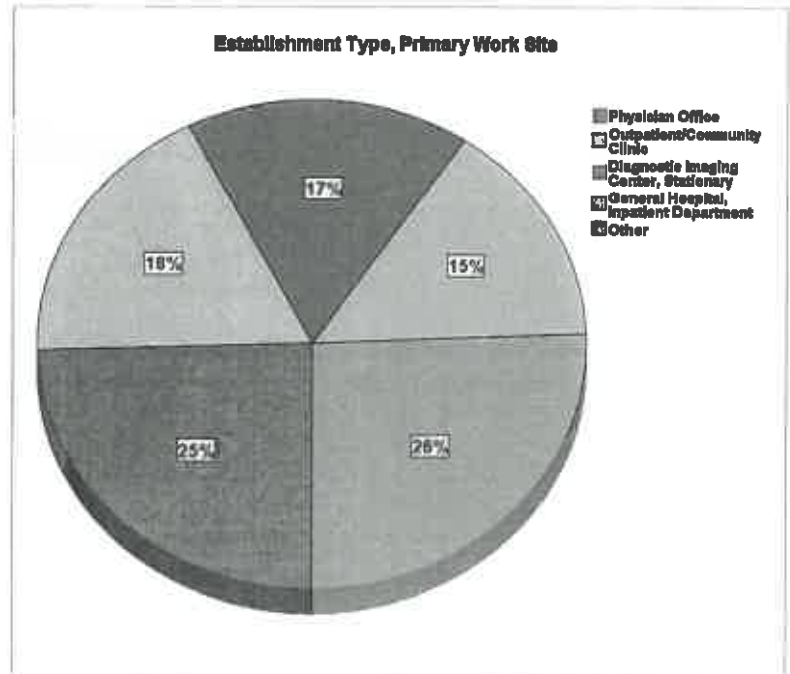
Source: Va. Healthcare Workforce Data Center

Top 10 Location Type				
Establishment Type	Primary Location		Secondary Location	
	#	%	#	%
Physician Office	986	25%	171	18%
Outpatient/Community Clinic	720	18%	195	20%
Diagnostic Imaging Center, Stationary	673	17%	121	13%
General Hospital, Inpatient Department	603	15%	174	18%
General Hospital, Outpatient Department	364	9%	108	11%
Diagnostic Imaging Center, Mobile	153	4%	45	5%
Academic Institution	97	2%	19	2%
Skilled Nursing Facility	19	< 1%	19	2%
Device manufacturer/distributor	4	< 1%	0	0%
Dentist Office	3	< 1%	1	< 1%
Other	388	10%	99	10%
Total	4,010	100%	952	100%
Did Not Have a Location	168		3747	

25% of all RTs in Virginia are employed at physician offices, the most of any establishment type in the state.

Source: Va. Healthcare Workforce Data Center

Among those RTs who also have a secondary work location, 20% were employed at an outpatient or community clinic.



Source: Va. Healthcare Workforce Data Center

Time Allocation

**At a Glance:
(Primary Locations)**

Typical Time Allocation

Client Care: 90%-99%
Education: 1%-9%

Roles

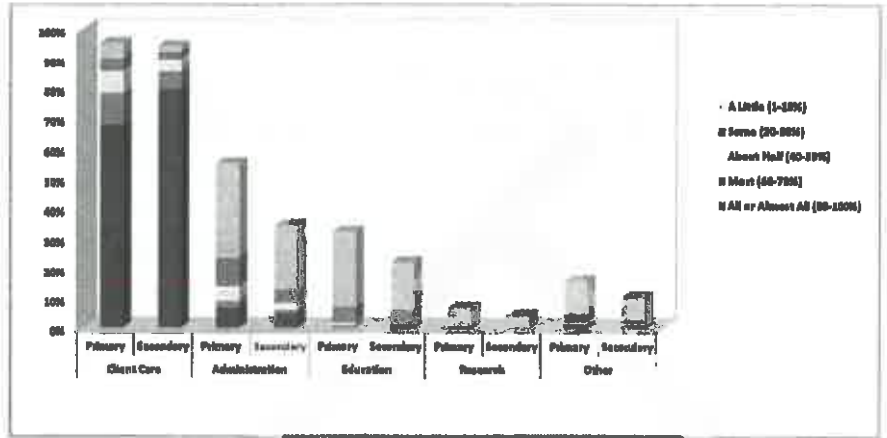
Patient Care: 79%
Administration: 9%
Education: 1%

Patient Care RTs

Median Admin Time: None
Ave. Admin Time: 1%-9%

Source: Va. Healthcare Workforce Data Center

A Closer Look:



Source: Va. Healthcare Workforce Data Center

A typical RT spends most of her time in client care activities. In fact, 79% of RTs fill a client care role, defined as spending at least 60% of their time in that activity.

Time Spent	Time Allocation									
	Client Care		Admin.		Education		Research		Other	
	Prim Site	Sec. Site	Prim Site	Sec. Site	Prim Site	Sec. Site	Prim Site	Sec. Site	Prim Site	Sec. Site
All or Almost All (80-100%)	68%	80%	7%	5%	1%	1%	0%	0%	1%	1%
Most (60-79%)	11%	6%	2%	1%	0%	0%	0%	0%	0%	0%
About Half (40-59%)	7%	4%	5%	2%	1%	0%	0%	0%	1%	1%
Some (20-39%)	4%	2%	9%	5%	5%	5%	0%	0%	2%	1%
A Little (1-19%)	5%	2%	32%	21%	25%	16%	7%	4%	11%	8%
None (0%)	5%	6%	45%	65%	68%	78%	93%	96%	84%	90%

Source: Va. Healthcare Workforce Data Center

Retirement & Future Plans

A Closer Look:

Retirement Expectations				
Expected Retirement Age	All		Over 50	
	#	%	#	%
Under age 50	135	4%	-	-
50 to 54	138	4%	9	1%
55 to 59	382	10%	68	6%
60 to 64	1,047	28%	302	25%
65 to 69	1,355	37%	544	45%
70 to 74	356	10%	187	16%
75 to 79	59	2%	20	2%
80 or over	46	1%	17	1%
I do not intend to retire	177	5%	55	5%
Total	3,694	100%	1,202	100%

Source: Va. Healthcare Workforce Data Center

At a Glance:

Retirement Expectations

All RTs	
Under 60:	46%
Under 65:	18%
RTs 50 and over	
Under 65:	32%
Under 60:	6%

Time until Retirement

Within 2 years:	5%
Within 10 years:	18%
Half the workforce:	By 2042

Source: Va. Healthcare Workforce Data Center

46% of all RTs expect to retire by the age of 65, including 18% who plan on retiring by the age of 60. Among RTs who are age 50 and over, 32% still expect to retire by the age of 65.

Within the next two years, 21% of RTs expect to pursue additional educational opportunities, and 8% plan on increasing client care hours.

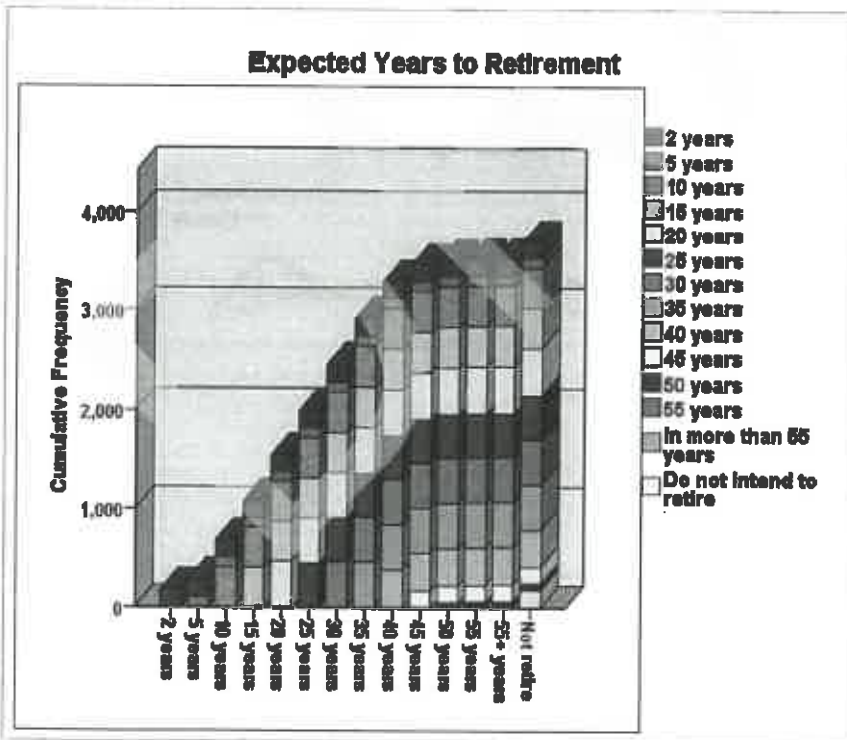
Future Plans		
2 Year Plans:	#	%
Decrease Participation		
Leave Profession	125	3%
Leave Virginia	100	2%
Decrease Client Care Hours	231	5%
Decrease Teaching Hours	29	1%
Increase Participation		
Increase Client Care Hours	371	8%
Increase Teaching Hours	136	3%
Pursue Additional Education	1,012	21%
Return to Virginia's Workforce	47	1%

Source: Va. Healthcare Workforce Data Center

By comparing retirement expectation to age, we can estimate the maximum years to retirement for RTs. Only 5% of RTs plan on retiring in the next two years, while 18% plan on retiring in the next ten years. Half of the current RT workforce expects to be retired by 2042.

Time to Retirement			
Expect to retire within . . .	#	%	Cumulative %
2 years	174	5%	5%
5 years	100	3%	7%
10 years	405	11%	18%
15 years	403	11%	29%
20 years	464	13%	42%
25 years	444	12%	54%
30 years	459	12%	66%
35 years	458	12%	79%
40 years	379	10%	89%
45 years	168	5%	94%
50 years	48	1%	95%
55 years	9	< 1%	95%
In more than 55 years	5	< 1%	95%
Do not intend to retire	177	5%	100%
Total	3,694	100%	

Source: Va. Healthcare Workforce Data Center



Source: Va. Healthcare Workforce Data Center

Using these estimates, retirements will begin to reach 10% of the current workforce every five years starting in 2027. Retirements will peak at 13% of the current workforce around 2037 before declining to under 10% of the current workforce again around 2062.

Full-Time Equivalency Units

At a Glance:

FTEs

Total: 4,104
 FTEs/1,000 Residents: 0.490
 Average: 0.88

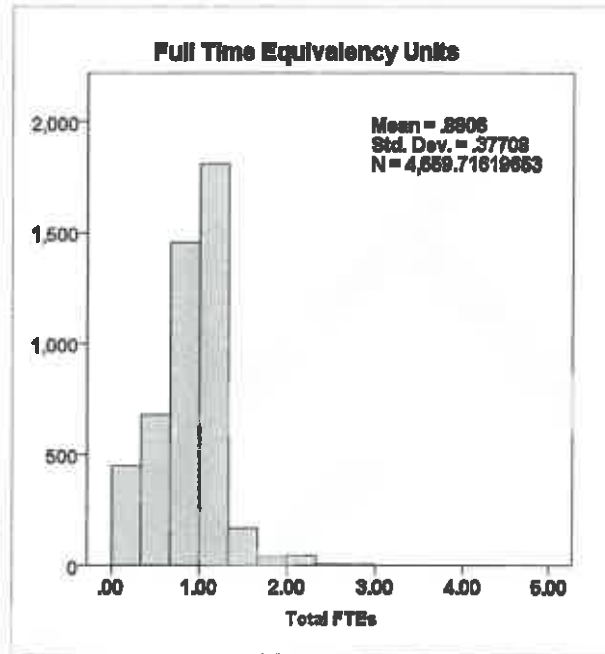
Age & Gender Effect

Age, Partial Eta²: Negligible
 Gender, Partial Eta²: Negligible

Partial Eta² Explained:
 Partial Eta² is a statistical measure of effect size.

Source: Va. Healthcare Workforce Data Center

A Closer Look:

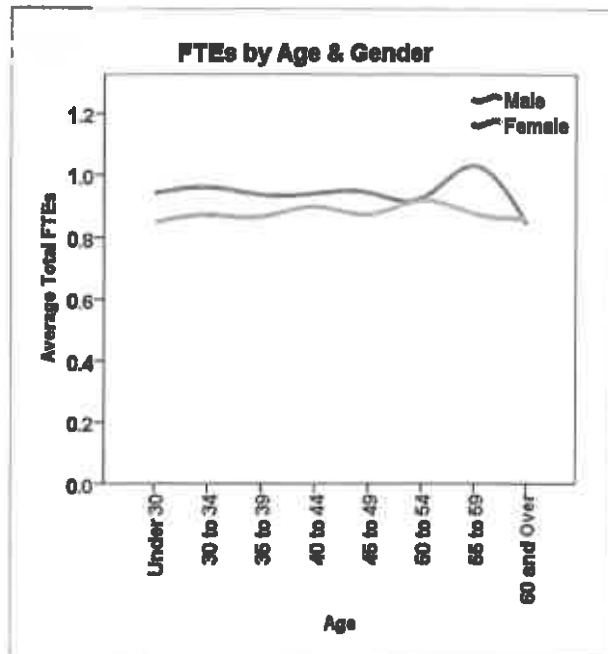


Source: Va. Healthcare Workforce Data Center

The typical RT provided 0.96 FTEs in 2017, or about 38 hours per week for 50 weeks. Although FTEs appear to vary by gender, statistical tests did not verify that a difference exists.²

Full-Time Equivalency Units		
	Average	Median
Age		
Under 30	0.86	0.95
30 to 34	0.89	0.94
35 to 39	0.88	0.96
40 to 44	0.90	0.96
45 to 49	0.90	1.01
50 to 54	0.90	0.96
55 to 59	0.89	0.99
60 and Over	0.83	0.91
Gender		
Male	0.94	1.03
Female	0.87	0.96

Source: Va. Healthcare Workforce Data Center

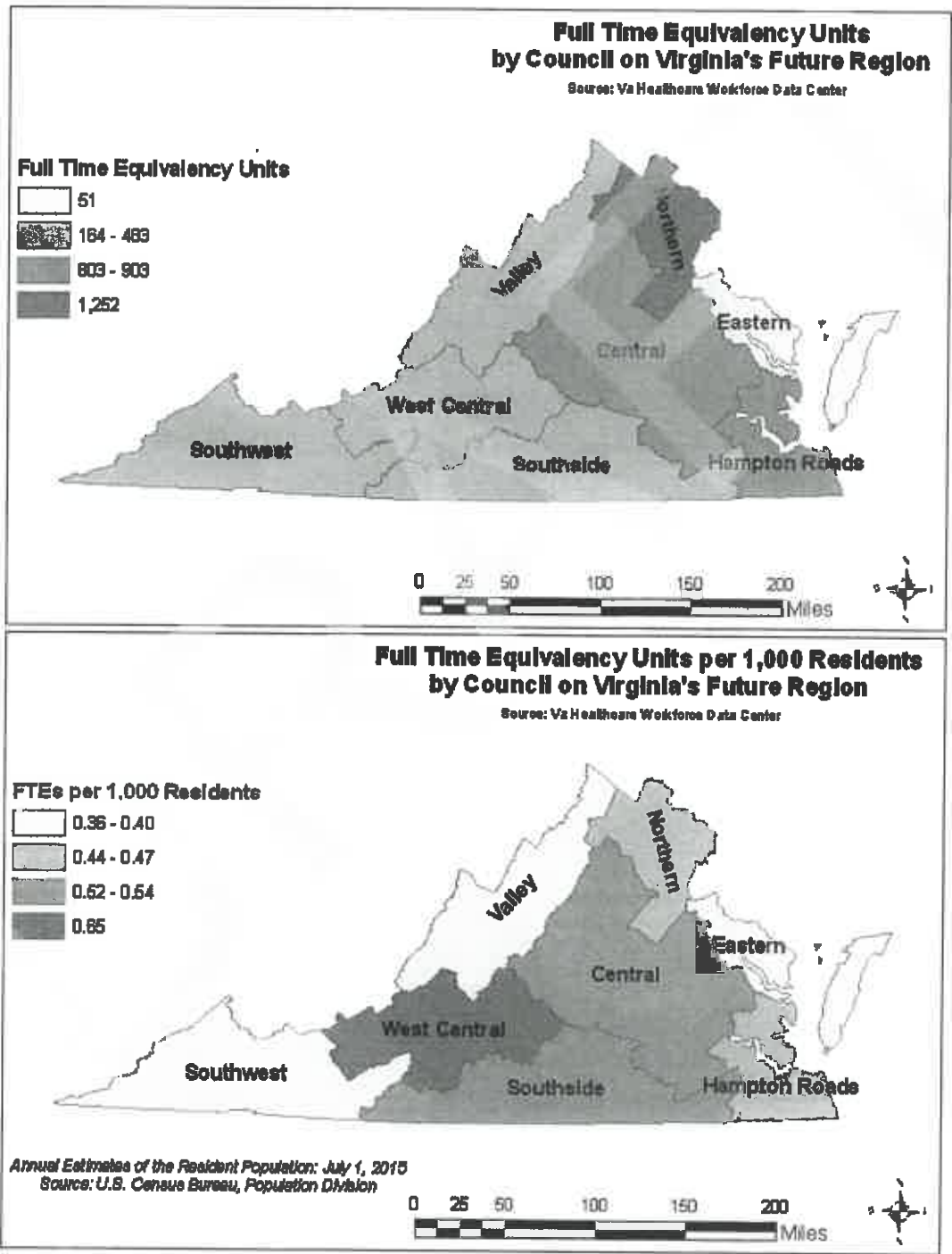


Source: Va. Healthcare Workforce Data Center

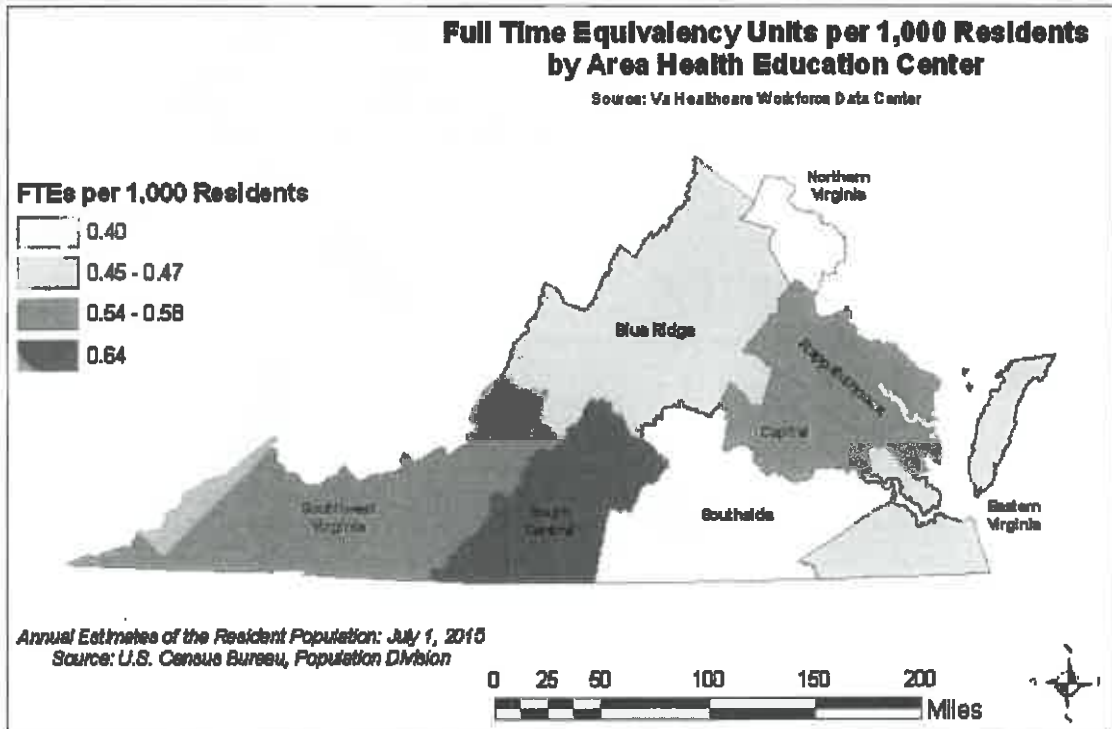
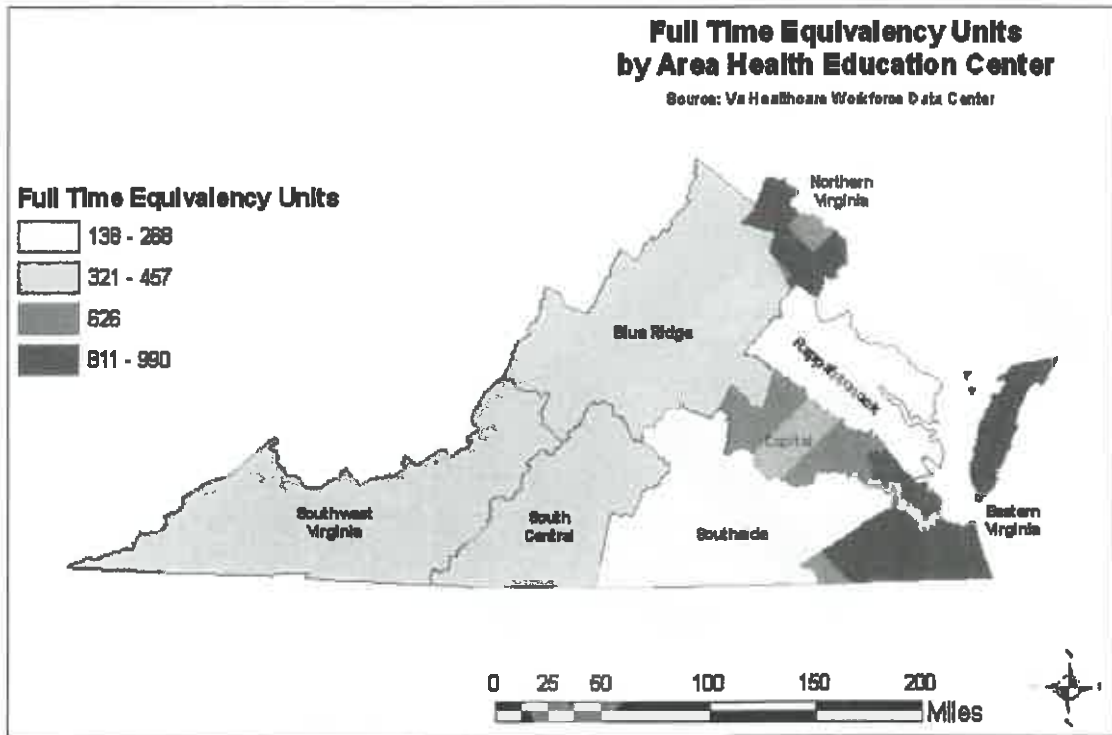
² Due to assumption violations in Mixed between-within ANOVA (Levene's Test was significant).

Maps

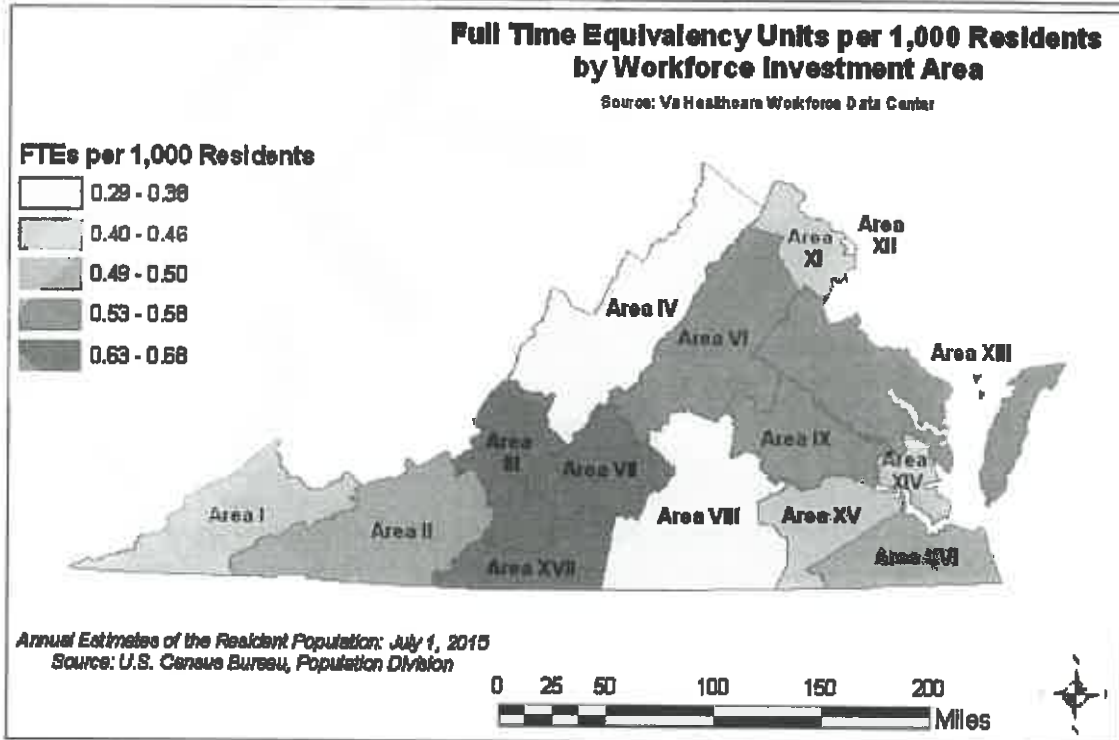
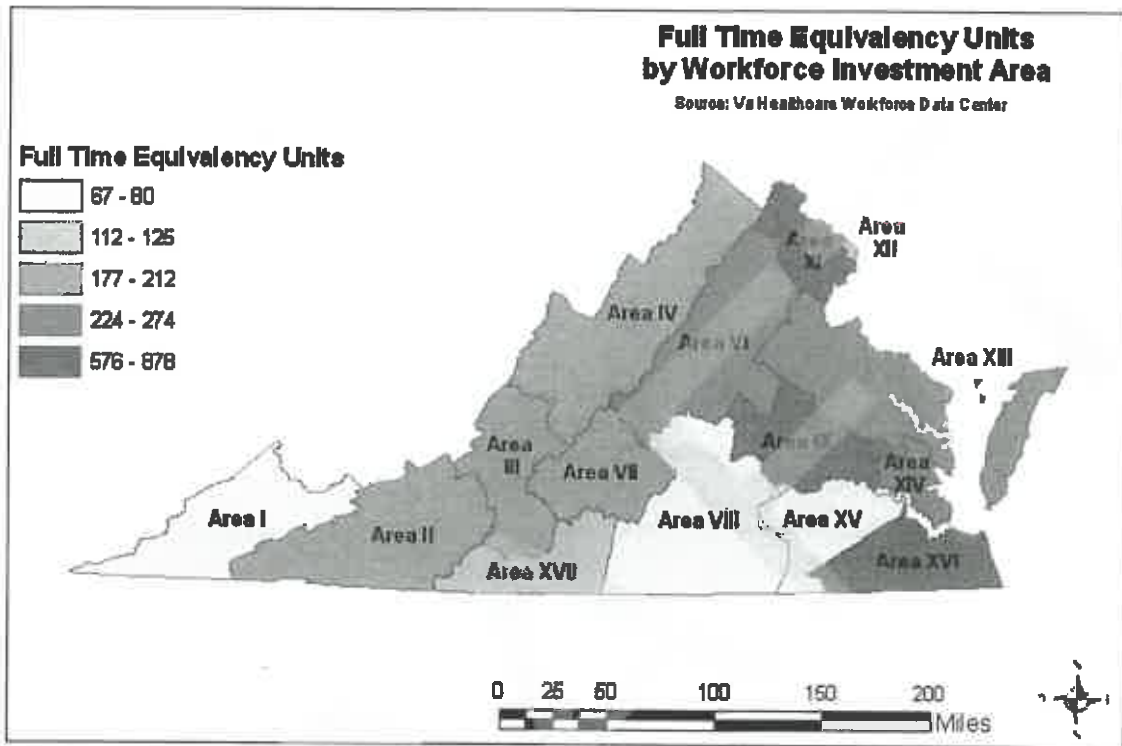
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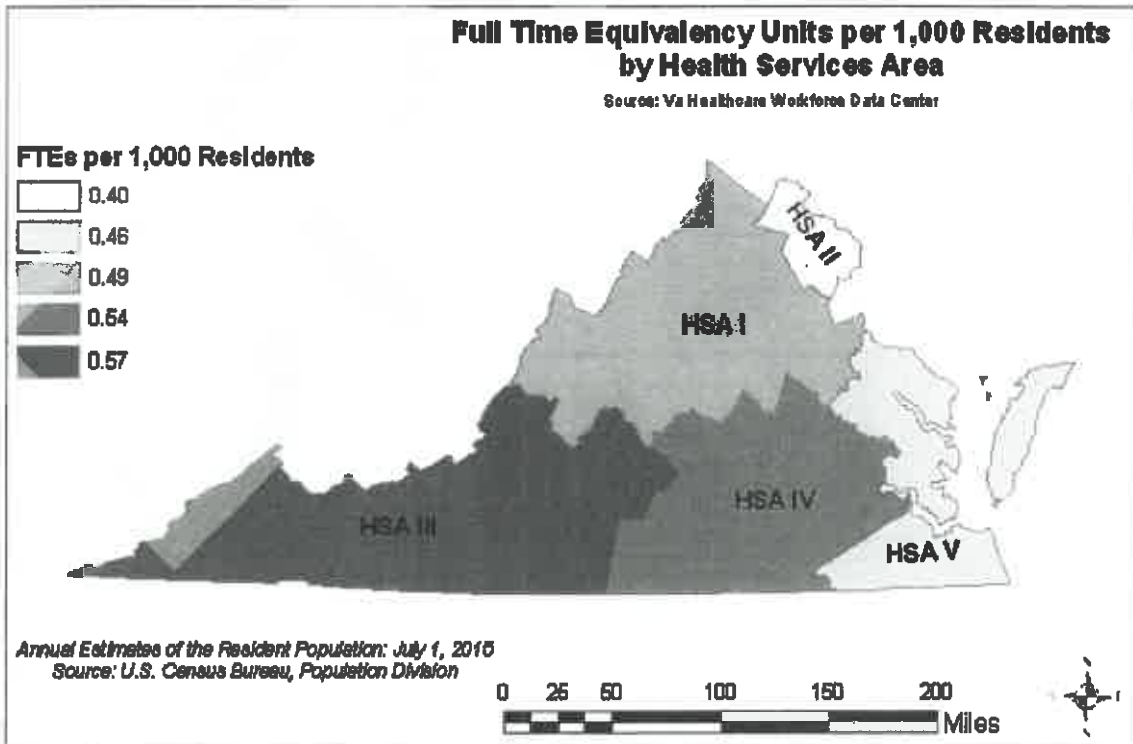
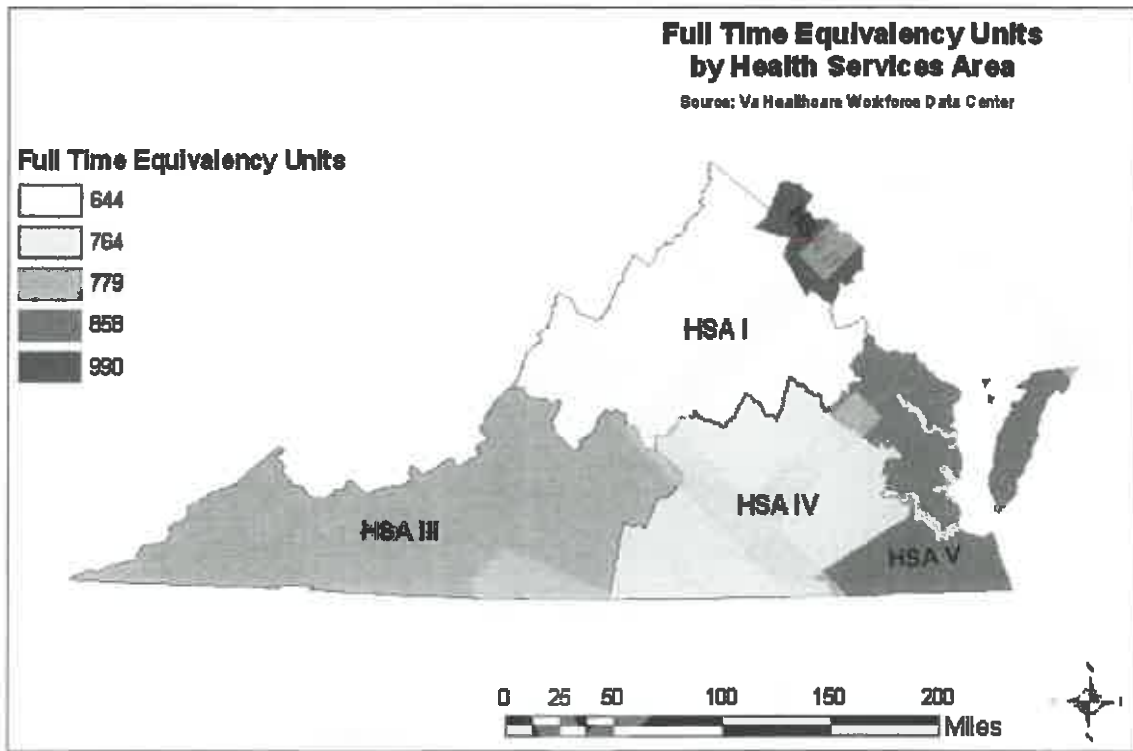
Area Health Education Center Regions



Workforce Investment Areas



Health Services Areas



Appendix

Weights

Rural Status	Location Weight			Total Weight	
	#	Rate	Weight	Min	Max
Metro, 1 million+	3,141	63.04%	1.586364	1.38438	2.20006
Metro, 250,000 to 1 million	469	62.90%	1.589831	1.3874	2.20487
Metro, 250,000 or less	452	65.93%	1.516779	1.32365	2.10355
Urban pop 20,000+, Metro adj	154	68.83%	1.45283	1.26785	2.01487
Urban pop 20,000+, nonadj	0	NA	NA	NA	NA
Urban pop, 2,500-19,999, Metro adj	169	60.36%	1.656863	1.4459	2.29783
Urban pop, 2,500-19,999, nonadj	108	67.59%	1.479452	1.29108	2.05179
Rural, Metro adj	118	59.32%	1.685714	1.47108	2.33784
Rural, nonadj	44	70.45%	1.419355	1.23863	1.53828
Virginia border state/DC	651	57.45%	1.740642	1.51901	2.41402
Other US State	316	40.82%	2.449612	2.13771	3.39726

Source: Va. Healthcare Workforce Data Center

Age	Age Weight			Total Weight	
	#	Rate	Weight	Min	Max
Under 30	832	44.35%	2.254743	2.01487	3.39726
30 to 34	770	56.75%	1.762014	1.53828	2.65486
35 to 39	688	59.74%	1.673966	1.46141	2.52219
40 to 44	635	66.61%	1.501182	1.31057	2.26186
45 to 49	725	70.48%	1.418787	1.23863	2.13771
50 to 54	637	70.02%	1.428251	1.24689	2.15197
55 to 59	576	70.14%	1.425743	1.2447	2.14819
60 and Over	759	60.21%	1.660832	1.44994	2.5024

Source: Va. Healthcare Workforce Data Center

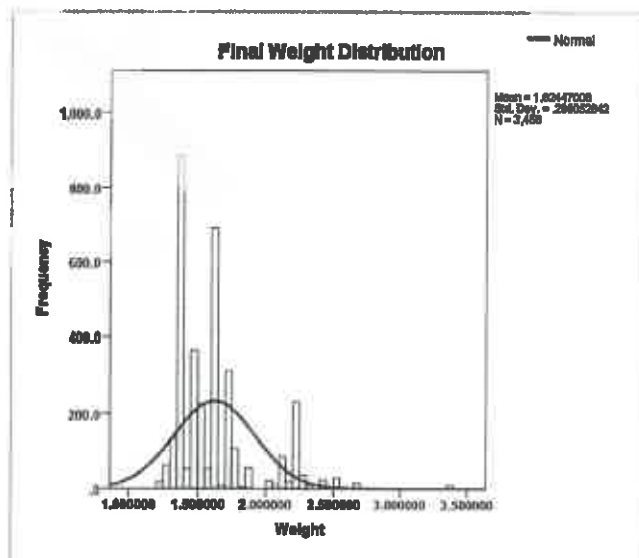
See the Methods section on the HWDC website for details on HWDC Methods:

www.data.virginia.gov/hwdc/

Final weights are calculated by multiplying the two weights and the overall response rate:

$$\text{Age Weight} \times \text{Rural Weight} \times \text{Response Rate} = \text{Final Weight}$$

Overall Response Rate: 0.615084



Source: Va. Healthcare Workforce Data Center

Virginia Board of Medicine

2019 Board Meeting Dates

Full Board Meetings

February 14-16, 2019	DHP/Richmond, VA	Board Rooms TBA
June 13-15, 2019	DHP/Richmond, VA	Board Rooms TBA
October 17-19, 2019	DHP/Richmond, VA	Board Rooms TBA

Times for the above meetings are 8:30 a.m. to 5:00 p.m.

Executive Committee Meetings

April 5, 2019	DHP/Richmond, VA	Board Rooms TBA
August 2, 2019	DHP/Richmond, VA	Board Rooms TBA
December 6, 2019	DHP/Richmond, VA	Board Rooms TBA

Times for the above meetings are 8:30 a.m. to 5:00 p.m.

Legislative Committee Meetings

January 11, 2019	DHP/Richmond, VA	Board Rooms TBA
May 17, 2019	DHP/Richmond, VA	Board Rooms TBA
September 6, 2019	DHP/Richmond, VA	Board Rooms TBA

Times for the above meetings are 8:30 a.m. to 1:00 p.m.

Credentials Committee Meetings

January 9, 2019	February 20, 2019	March 13, 2019
April 17, 2019	May 29, 2019	June 26, 2019
July 24, 2019	August 21, 2019	September 25, 2019
October 23, 2019	November 13, 2019	December (TBA), 2019

Times for the Credentials Committee meetings - TBA

