



American Society of  
Radiologic Technologists

**RADIOLOGY DEPARTMENT/FACILITY  
STAFFING SURVEY  
2006**

**A Nationwide Survey of Radiology Department/Facility Managers and Directors  
Conducted by  
The American Society of Radiologic Technologists**

**Reported July 2006**

©Copyright 2006 by ASRT.  
All rights reserved.

Reproduction in any form is forbidden without written permission from publisher.

## TABLE OF CONTENTS

<b>Executive Summary</b> .....	<b>3</b>
Respondents and Their Facilities .....	3
Staffing of the Facilities .....	3
Recruitment and Retention of R.T.s .....	3
<b>Introduction</b> .....	<b>5</b>
Background .....	5
Sample Design .....	5
Response Rates .....	5
Margin of Error.....	5
Definitions of Statistics .....	6
Calculation of Percent Vacancy Rates .....	6
<b>Detailed Results</b> .....	<b>8</b>
<b>Facility Demographics</b> .....	<b>8</b>
<b>Staffing of the Facility</b> .....	<b>15</b>
<b>Recruitment and Retention</b> .....	<b>24</b>
<b>Verbatim Comments</b> .....	<b>36</b>
<b>Appendix</b> .....	<b>45</b>

## EXECUTIVE SUMMARY

A Radiology Department/Facility Staffing Survey questionnaire was sent via mail or e-mail in the first quarter of 2006 to every person listed in a database as the manager or director of a U.S. hospital-based radiology department or facility. The database was rented from SK&A Information Services Inc. of Irvine, Calif. An accompanying letter offered each invitee the option of completing the questionnaire online or by return mail. The following is a summary of respondents' results:

### Respondents and Their Facilities

- Almost 90% of the respondents chose "Department/Facility Manager or Director" as closest to their job titles, and 6% chose "Chief Technologist."
- More than 80% of the respondents indicated that their facilities are located in a community hospital, 6% in a government hospital and 2.5% in a university medical center.
- Almost all (99.4%) of the facilities reported that they provide radiography services and 88% provide computed tomography (CT) services. An additional 89% report providing sonography, 79% provide mammography and 69% provide nuclear medicine services. A total of 74% provide MR services and about 20% provide positron emission tomography (PET). By far the most common service listed by those who checked "Other" was bone densitometry services (dual energy x-ray absorptiometry, or DXA), which was mentioned by 12.5% of all respondents who answered the question and accounted for more than two-thirds of the "Other" services mentioned.
- About 61% of the respondents considered their facilities to be in rural locations, 16% suburban and 22% urban. However, rural locations accounted for only 17% of the cardiovascular-interventional FTEs reported, 25% of magnetic resonance (MR) FTEs, 34% of radiographer FTEs and 40% of mammographer FTEs reported by the sample of managers and directors.

### Staffing of the Facilities

- The typical (median) facility reported having a 2006 budget that provided for 6.3 FTE radiographers, 2.8 CT technologists, 2.1 sonographers, 2 mammographers, 2 MR technologists, 1.9 nuclear medicine technologists, 1.4 cardiovascular/interventional technologists and 0.9 staff with other specialties. The medians for all specialties other than radiography, CT and "other" are statistically significantly higher than those reported in the 2004 Radiology Staffing Survey.
- The number of budgeted FTEs in each specialty reported currently vacant and recruiting produces estimates that 7.9% of all FTEs budgeted for cardiovascular interventional technologists, 9.1% of sonographer positions and 4.5% of radiographer positions in U.S. hospital-based radiology facilities are unfilled. Vacancy estimates are 5.7% for nuclear medicine technologists, 6.2% for MR technologists, 5.1% for CT technologists and 4.9% for mammographers.
- Those respondents who provided their facilities' 2005 and 2006 staffing figures indicated that the percent of unfilled radiographer positions declined by .1% (5.0% vs. 4.9%) in that period. This decline was not statistically significant, nor were reported differences between 2005 and 2006 in the vacancy rates for any of the other specialties (change from .04% increase to 2.1% decrease).

### Recruitment and Retention of R.T.s

- When asked whether recruiting for each specialty in 2006 was more difficult, less difficult, or equally as difficult as it had been in 2005, from 58% to 68% of the respondents (across the seven named specialties) chose "same." The percentage reporting that more effort has been expended in 2006 than in 2005 was substantially higher than those reporting the reverse for sonography, cardiovascular-interventional and nuclear medicine, while predominant opinion (among those who

perceived a difference) was that recruiting for radiography, mammography and CT has become substantially less difficult.

- Only about one-sixth of the respondents reported a decrease in budgeted FTEs for any of the specialties in which their facilities provide service. Of these 122 respondents, slightly more than one-half (53%) checked one or more of the six suggested reasons (including "Other") for the decline. Of those 65 respondents, 37% checked "Overall department or facility budget declined, forcing downsizing." Another 31% checked "Patient demand declined," while 22% cited an increase in number of patients processed per hour by each R.T., leading to fewer FTEs being required to handle the workload.
- A majority (52% to 65%) of the respondents reported that average length of employment and employee turnover rate have remained about the same since January 2005 for each of the specialties. However, with respect to each of these areas, at least four times as many said these two indicators have improved than said the indicators have gotten worse since January 2005.
- A significantly lower percentage of radiography (14% vs.20%), CT (12% vs. 15%), MR (9% vs.12%), and mammography (9% vs. 11%) facilities paid sign-on bonuses in 2006 than in 2005. The mean size of the bonus was not significantly different in 2006 than it was reported to have been in 2005 for any of these four specialties.
- The mean reported percentage of the FTEs in each of the four specialties that are filled with temps/travelers was quite low (from 0.6% of mammographers to 1.5% of radiographers). The mean reported percentage above average wages for a given specialty paid to temps/travelers was 8.8% for mammographers, 8.4% for MR technologists, 12.3% for CT technologists and 17.0% for radiographers. However, 86% to 97% of the facilities reported that they pay no more to temps/travelers than to their average technologist in that specialty.
- From 12% to 22% of respondents indicated that their facility has experienced increased wait times for procedures, cancelled procedures, decreased patient satisfaction and increased patient complaints as a consequence of a work force shortage. Fewer than 9% reported that their facility has had to curtail plans for facility expansion, curtail plans for acquiring new technology, reduce the number of staffed diagnostic units or discontinue R.T. educational programs.
- About three-tenths of the respondents accepted the invitation to "Please add any comments you feel are necessary to clarify your responses to the preceding seven questions and/or any additional comments you wish to share on your perceptions of the supply of radiologic technologists." These responses are reported verbatim (except for portions that might identify individuals or their facilities) toward the end of this report.

## INTRODUCTION

### Background

Few things could be more important for the profession – R.T.s, their managers and R.T. educators alike – than an accurate assessment of the current supply and demand for radiologic technologists. A 2001 American Hospital Association survey of managers and directors of hospital-based radiology facilities found that more than 15% of budgeted positions for radiologic technologists were at that time unfilled. A more recent survey by the Hodes Group found a 12% vacancy rate in fall 2003, but there were enough differences between those two surveys to raise some doubt as to whether this truly represented a decrease in vacancy rates. ASRT's Radiology Department/Facility Staffing Survey 2004 answered that question in the affirmative and provided more detailed information about particular specialties, as well as what directors and managers believed to be the reasons behind unfilled vacancies. This year's survey was intended to be the second in a biennial series of radiology facility staffing surveys and to thereby provide information regarding whether the downward trend in vacancy rates and the consequences of a shortage of radiologic technologists have continued.

### Sample Design

A total of 7,125 Radiology Department/Facility Staffing Survey questionnaires were sent via mail or e-mail in mid-March, 2006, to every person identified by a commercial list provider as a director or manager of a U.S. hospital-based radiology facility, with a request for a response "within the next two weeks." Questionnaires were mailed to about 5,540 separate facilities. To reduce return postage costs and minimize the labor involved in verifying handwritten responses, recipients of the hardcopy questionnaire were encouraged to respond to an online version if they had Internet access. However, nearly one-half of the invitations sent via e-mail were returned as undeliverable. A second wave of invitations was sent in early April 2006 to the postal addresses of all individuals whose e-mail invitations had been returned. At about the same time postal and e-mail reminders to participate were sent to those whose first-wave invitations had not been returned undelivered.

### Response Rates

As of June 2, 2006, a total of 693 completed questionnaires had been received (411 of them online). The overall response rate for the survey is approximately 10% of potential respondents and approximately 12.5% of facilities. However, an e-mail survey of all ASRT members for whom e-mail addresses were available and who were included in the 2004 Staffing Survey mail-out indicated that about one-third of the mailed questionnaire packets never reached their intended recipients. It is estimated that about 15% of the facilities who received the 2006 questionnaire completed and returned the questionnaire.

### Margin of Error

The sample size of 693 returns yields a margin of error for overall percentages (width of the 95% confidence interval for the population percentage) of a maximum plus or minus 3.8%.

For percentages computed on subsets of respondents, the margin of error increases as the square root of the size of the subset. Thus, the margin of error for percentages based on a subset of 100 respondents would be plus or minus 10% or less, and for a subset of 30 respondents plus or minus 18.3% or less.

(The “or less” comes from the fact that the margin of error for percentages is greatest for percentages in the 40% to 60% range and is less than one-half as wide for percentages below 5% or above 95%.)

## Definitions of Statistics

The statistics reported in the question summaries include:

- **Frequency.** The number of responses given for each variable.
- **Percent.** The number of responses for each variable divided by the total number of usable surveys, including missing values.
- **Valid Percent.** The number of responses for each variable divided by the total number of usable surveys, excluding missing values.
- **Missing.** The number of respondents who either did not answer the question or who gave an unusable response.
- **Mean.** The arithmetic average; sum of the values of all observations divided by the number of observations.
- **Median.** The value above and below which one-half of the observations fall; 50th percentile. Usually, because of rounding, no number precisely satisfying the definition of the median exists. In such cases linear interpolation is used to estimate what the median in the population of unrounded scores would be.
- **Mode.** The figure that more respondents report than any other figure.
- **Standard deviation.** The square root of the average squared difference between each score in the set and the mean score. Subsets of respondents who have nearly identical responses on a given variable will have a near-zero standard deviation, while subsets of respondents with very different responses will have a high standard deviation. The major reason for using this relatively complex measure of variation is its close relationship to percentiles: For most sets of scores about 95% of the individual scores will fall within 2 standard deviations of the mean, and the mean of the set of scores will have a 95% chance of falling within 2 “standard errors” of the corresponding population mean, where the standard error is simply the standard deviation divided by the square root of the number of scores in the set.
- **t.** Sample statistic of which the value is used to test the null hypothesis that the difference between two means observed in the sample is due entirely to chance fluctuation around corresponding means that do *not* differ from one another in the population to which results will be generalized (in this case, all managers of hospital-based radiology facilities). The larger the absolute value of *t*, the more implausible the null hypothesis is and thus the more confidence that the direction of the difference observed in the sample matches the directions of the corresponding population difference. Because differences based on large samples more closely approximate the differences in the population from which they were sampled, *t* has a degree of freedom parameter [usually listed in parentheses immediately after the *t*, as in “*t*(571)”] associated with it.
- **P-value.** The probability that a *t* as large as or even larger in absolute value than the one observed in the sample would occur in random sampling from a population in which the null hypothesis of a zero population difference is true. If this value is smaller than some preselected value (often .05, but in the present report usually .01) called the alpha level (or just “level”) of the test, the observed sample difference is discussed as though it is representative of (perfectly matches) the corresponding population difference.

## Calculation of Percent Vacancy Rates

The individual-facility vacancy rate for a particular specialty at a facility type was computed as the number of FTEs reported as budgeted for that specialty, divided into the number of FTEs for the specialty reported as “vacant and recruiting,” with some exceptions. The major exception to this calculation arose when both the number of budgeted FTEs and the number of vacant-and-recruiting FTEs were zero. In that case the individual-facility vacancy rate was assigned a missing-value code and did not enter into the

## Radiology Department/Facility Staffing Survey

calculation of descriptive statistics for that specialty's vacancy rates. The zero values for budgeted FTE and for vacant-and-recruiting FTE were, however, retained in calculation of descriptive statistics, with the result that the N on which descriptive statistics for budgeted FTE and vacant-and-recruiting FTE were based was always larger than the N on which the "percent vacant and recruiting" statistics were based.

Another major exception was the case where a nonzero budgeted FTE was entered but the space for vacant-and-recruiting FTE was left blank and the "Don't know" box next to vacant-and-recruiting FTE was not checked. In such cases the "missing" vacant-and-recruiting FTE was treated as zero in all subsequent calculations.

The estimated proportion of unfilled positions for a given specialty for the population of U.S. hospital-based radiology facilities is defined as:

$$\frac{(\text{total \# of FTEs vacant and recruiting})}{(\text{total \# of FTEs budgeted}) \text{ for that specialty}}$$

which equals:

$$\frac{(\text{mean \# of vacant-and-recruiting FTEs per facility}) \times (\text{total \# of facilities})}{(\text{mean \# of budgeted FTEs per facility}) \times (\text{total \# of facilities})}$$

The total number of facilities that offer a given specialty is unknown, but drops out of the above equation, which thereby reduces to:

$$\frac{(\text{mean \# of vacant-and-recruiting FTEs per facility})}{(\text{mean \# of budgeted FTEs per facility})}$$

Percentage unfilled positions equals proportion unfilled times 100%.

Only facility/specialty combinations for which both the number of budgeted FTEs and the number of vacant and recruiting FTEs were reported (or, in the case of missing vacant and recruiting but nonzero budgeted and "don't know" not checked, implied to be zero) were included in the calculation of vacancy rates.

## DETAILED RESULTS

### Facility Demographics

Title of individual completing the questionnaire:

		Frequency	Percent	Valid Percent
Valid	Department/Facility Manager or Director	610	88.0	89.4
	Chief Technologist	41	5.9	6.0
	Other	31	4.5	4.5
Missing	System	11	1.6	
<b>Total</b>		693	100.0	

Other Title:

		Frequency	Percent
	BLANK	603	87.0
	Administrative Director	1	.1
	Administrative director medical imaging	1	.1
	Administrative Director of Imaging Services	1	.1
	Administrative Director of Radiology	3	.4
	Administrative Director, Radiology	1	.1
	Administrator, Medical Imaging	1	.1
	Also do Radiologic and CT	1	.1
	Asst. adm. diagnostics	1	.1
	Bariatric Hospital	1	.1
	Co-supervisor	1	.1
	CT Lead Technologist	1	.1
	Department Director	1	.1
	Department Head	1	.1
	Department Manager	1	.1
	Department Manager for CT, Mammography, Nuclear Medicine, Radiology, MR and Ultrasound for Community Hospital, part of a hospital system.	1	.1
	Dept Manager	1	.1
	Dept. Supervisor	1	.1
	Diagnostic Imaging Manager	1	.1
	Diagnostic supervisor	1	.1
	Director	1	.1
	Director	2	.3
	Director Imaging Services	1	.1
	Director of Ancillary Services	1	.1
	Director of Ancillary Services	1	.1
	Director of Clinical Operations, Radiology	1	.1
	Director of Diagnostic Imaging and Cardiology Services	1	.1
	Director of Diagnostic Services (radiology and lab)	1	.1
	Director of Diagnostic Services/Medical Records	1	.1
	Director of Diagnostic Imaging	1	.1
	Director of Imaging	2	.3
	Director of imaging	1	.1
	Director of Imaging Services	2	.3
	Director of Medical Imaging	3	.4
	Director of medical imaging department	1	.1
	Director of radiology	1	.1
	Director of Radiology	6	.9
	Director of Radiology Services	2	.3



Radiology Department/Facility Staffing Survey

Director of Radiology/PACS Administrator	1	.1
Divisional Director	1	.1
Education Director - Department of Radiology	1	.1
[name]	1	.1
Executive Director Radiology	1	.1
HR manager	1	.1
I am supervisor/technologist of our small 2 person department. Each of us works part-time.	1	.1
I am the staff technologist, Dept. Director/Manager and Chief technologist. I work at a long-term care facility serving the developmentally disable. We have 1.5 technologists staffing our department.	1	.1
Lead Technologist	2	.3
Manager	2	.3
Manager of Radiology	1	.1
Manager, Radiology and Mammography	1	.1
Manager/Director/Supervisor/Chief Tech/CT Tech	1	.1
Medical Imaging Manager	1	.1
Note: The network connection failed during the first survey submitted. This is a re-do (respondent initials)	1	.1
Radiologist	1	.1
Radiologist	1	.1
Radiology Director	1	.1
Radiology Director for multiple facilities	1	.1
Radiology Manager	1	.1
Radiology Operations Administrator	1	.1
Regional director	1	.1
R.T.	1	.1
Staff Tech	1	.1
Staff Tech/Clinical Instructor	1	.1
Staff technologist	1	.1
Staff Technologist	2	.3
Supervisor	2	.3
Supervisor	3	.4
Supervisory Diagnostic Radiologic Technologist	1	.1
Taking over for departing Director of Imaging. Assumed duties 4/28/06	1	.1
Team Leader Radiology	1	.1
The title is Director of Medical Imaging	1	.1
Total	693	100.0

**Type of Facility:**

		Frequency	Percent	Valid Percent
Valid	Community Hospital	553	79.8	81.3
	Government Hospital	43	6.2	6.3
	University Medical Center	17	2.5	2.5
	Freestanding Clinic	6	.9	.9
	Teaching Facility	9	1.3	1.3
	Other	52	7.5	7.6
Missing	System	13	1.9	
<b>Total</b>		693	100.0	

Radiology Department/Facility Staffing Survey

**Other Facility:**

Response	Frequency	Percent
Blank	605	87.3
1 of 16 of a Health care Organization covering 3 states	1	.1
2 hospital health system (589 beds)	1	.1
236 Bed Community Hospital	1	.1
52 bed	1	.1
And teaching facility	2	.3
approx. 80 beds	1	.1
Cancer care center (hospital)	1	.1
Children's Hospital	1	.1
Clinic associated with the university of Montana	1	.1
Compacted tribal facility	1	.1
Complex Medical and Rehabilitation Hospital.	1	.1
Country Hospital	1	.1
County Hospital	2	.3
County Hospital, not state	1	.1
Critical Access Hospital	2	.3
Dept. Of corrections - health	1	.1
District	1	.1
District Hospital	1	.1
Faith based hospital Licensed 260 beds.	1	.1
Freestanding academic pediatric hospital	1	.1
Freestanding Diagnostic Testing Facility	1	.1
Government; University Medical Center, teaching facility	1	.1
Govt. Clinic	1	.1
HMO Hospital [Name]	1	.1
Hospital - Part of the [Name] Healthcare System	1	.1
Hospital and Clinic	1	.1
Long-term Acute Care (Specialty) Hospital (64 beds)	1	.1
Long Term Acute Care Hospital (LTAC)	5	.71
Long term care(ltc)	1	.1
LTAC Facility	1	.1
Mental health	1	.1
Multihospital IMMC and ILH	1	.1
[Name]	1	.1
[Name] Community Hospital	2	.3
[Name] Hospital	1	.1
[Name] Hospital is a non-profit organization	1	.1
[Name] Hospitals	1	.1
[Name] Hospital and Medical Center	1	.1
[Name] Hospitals Inc.	1	.1
[Name] Medical Center	2	.3
[Name] Medical School, [Name] General Hospital, [City], MA	1	.1
[Name] Resource Center- a long term care facility serving the developmentally disabled- run by the state of [Name] under Dept of Human Services	1	.1
[Name] State Hospital,[City], IN	1	.1
Nonprofit hospital	1	.1
Nonprofit	1	.1
Not for profit Health System	1	.1
Not for Profit Hospital	1	.1
Ortho Hospital	1	.1
Orthopedic hospital	1	.1
Orthopedic Office	1	.1
Part of a larger system	1	.1
Prison	1	.1
Prison hospital	1	.1
Private psych/ms hospital	1	.1

Radiology Department/Facility Staffing Survey

Radiation therapy	1	.1
Radiology services are more on the lines of a clinic setting	1	.1
Regional Medical Center	2	.3
Rehabilitation Hospital 75%	1	.1
Rehabilitation hospital	1	.1
Rehabilitation Hospital	3	.4
Research Center	1	.1
Rural Access Hospital	1	.1
Rural Community Hospital	1	.1
Sisters of Charity, Providence Hospitals	1	.1
Staffing Agency	1	.1
Surgical hospital	1	.1
Surgical specialty hospital	1	.1
System	2	.3
System hospital and freestanding	1	.1
The [Name] Resource Center is a long-term care facility for the mentally retarded in the state of [Name].	1	.1
Tribal Run Hospital and outpt. clinic	1	.1
USPHS Indian Health Service	1	.1
[Name] Hospital 160 beds	1	.1
We are a community hospital that is part of a University medical center	1	.1
<b>Total</b>	<b>693</b>	<b>100.0</b>

**Radiology Services Provided:**

	Service	Frequency*	Percent*	Valid Percent*
Valid	Radiography	680	98.1	99.4%
	CT	603	87.0	88.2%
	MR	508	73.3	74.3%
	Mammography	541	78.1	79.1%
	Nuclear Medicine	472	68.1	69.0%
	Cardio/Intervent (CVIT)	149	21.5	21.8%
	PET	137	19.8	20.0%
	Sonography	610	88.0	89.2%
	Other	130	18.8	19.0%
Missing	None of above checked	9	1.3	
<b>Total*</b>		<b>693</b>	<b>100.0</b>	

\*Base = number of respondents.

---

\* Frequencies sum to more than 693 and percents, to more than 100% because most facilities provide multiple radiology services. The most common combination of services (159, or 22.9%, of the facilities and more than twice as common as the second ranked combination) was in accord with the above overall percentages, namely, providing radiography, CT, MR, sonography, mammography and nuclear medicine (but not interventional, PET, or "other") services. The second most common combination (9.4% of the facilities) was all nine explicitly listed services, but not "other."

Radiology Department/Facility Staffing Survey

**Other Radiology Services Provided:**

	Frequency	Percent
BLANK	532	76.8
4 radiographers are cross trained for CT, Mammography.	1	.1
All others are sent to nearest Acute care facility.	1	.1
All services except for Radiography and Mammography are mobile services	1	.1
Angio	1	.1
Audiogram, Spirometry, Breath Alcohol Testing and EKG	1	.1
BMA, special procedures	1	.1
BMD	3	.4
Bone Densitometry	10	1.4
Bone Densitometry, Oncology, Vascular Sonography (As a specialty)	1	.1
Bone Density	20	2.9
Bone Density Echocardiology	1	.1
Bone density radiology RN	1	.1
Bone Density The MR, Mammo, Nuc Med, Sonography and Bone Density are provided on site by a contracted company - we do not employ the staff.	1	.1
Bone Density (Mobile)	1	.1
Bone Density (QCT)	1	.1
Bone Density /Radiation Oncology /Vascular Laboratory	1	.1
Bone density scan	1	.1
Bone Density Study	1	.1
Bone Density Vascular US	1	.1
Bone density, MR is done at a facility own by the Radiologists across from the hospital	1	.1
Bone Density, Non CVIT,	1	.1
Bone Density, Interventional	1	.1
Bone DEXA	1	.1
Bone Mineral Density	1	.1
C-arm fluoroscopy	1	.1
C-Arm	1	.1
Cardiac Cath - diagnostic and intervention	1	.1
Cardiac cath	1	.1
Cardiac vasculars;	1	.1
Cardiology	1	.1
Cardiovascular	1	.1
CT, Mammo, and Sonography - Mobile services	1	.1
CT, mammo, and sonography are mobile services	1	.1
DEXA - bone density/sp. Procedure	1	.1
DEXA	22	3.2
DEXA (Nuclear Med, ultrasound, & MR are provided by a mobile service)	1	.1
DEXA (Bone Density Scan)	1	.1
DEXA Bone Density	2	.3
DEXA PET/CT	1	.1
Dexa Scans	3	.4
DEXA Sonography in mid to late 06	1	.1
DEXA Vascular US	1	.1
DEXA via vendor	1	.1
DEXA, Interventional	1	.1
DEXA, Vascular Sonography	1	.1
DEXA	1	.1
Diagnostic Cardiac Cath; Echocardiography	1	.1
DXA	2	.3
Echo	2	.3
Echocardiogram ultrasound, bone density	1	.1
Echo/vascular, mobile radiology	1	.1
Echocardiography	2	.3
Echocardiography, Bone Densitometry	1	.1
Echocardiography, bone density (DEXA)	1	.1

Radiology Department/Facility Staffing Survey

Echocardiography, DEXA	1	.1
EEG, Mobile Mammography	1	.1
Fluoro for Swallow studies, all other exams are sent out.	1	.1
Interventional Radiography Radiation Oncology	1	.1
Interventional Radiology-Special Procedures	1	.1
Interventional Radiology	2	.3
Lithotripsy	1	.1
Mammography is provided on site by a mobile mammography unit.	1	.1
Mobile CT, MR Nuclear	1	.1
Mobile MR, CT, Sonography, Mammo	1	.1
Mobile MR Mobile Mammography Mobile Echocardiography/ Vascular ultrasound	1	.1
Mobile Services CT, Mammo, Sonography	1	.1
MR mobile unit biweekly	1	.1
Neuro and vascular interventional radiology	1	.1
Nuclear Cardiology, PET/CT	1	.1
Nuclear medicine is provided by a mobile service	1	.1
Pain Management	1	.1
PET is mobile 1 day per week	1	.1
PET/CT	1	.1
PET/CT, DEXA, Echo	1	.1
PET/CT.. not plain PET	1	.1
QCT, BMD	1	.1
Radiation Oncology	1	.1
Radiation Therapy	4	.6
Radiation therapy	1	.1
Scheduling for all other types of radiologic exams	1	.1
Several of these are mobile services that I do not staff.	1	.1
Sonography is done by a contract company Video swallowing studies are done under fluoro, on site	1	.1
Special procedures	2	.3
Stereo/interventional	1	.1
Stereotactic Breast Biopsy, Vascular Ultrasound	1	.1
Ultrasound	1	.1
Ultrasound is provided in-house via a mobile company--staffing is not an issue for us, but the service provider	1	.1
Ultrasound	1	.1
Vascular Sonography/Doppler	1	.1
Vascular, ECHO, Bone Density	1	.1
We are a nursing home/drug alcohol, Alzheimer, mentally disabled etc. facility- county govt. operated.	1	.1
Total	693	100.0

By far the most commonly specified "Other" service provided was DXA/bone densitometry, which was cited by 87 (12.5%) of the facilities (66.9% of the services who mentioned one or more "Other" services).

**State in which facility is located:**

All 50 states and the District of Columbia were represented in the returns.

Radiology Department/Facility Staffing Survey

**Facility Location:**

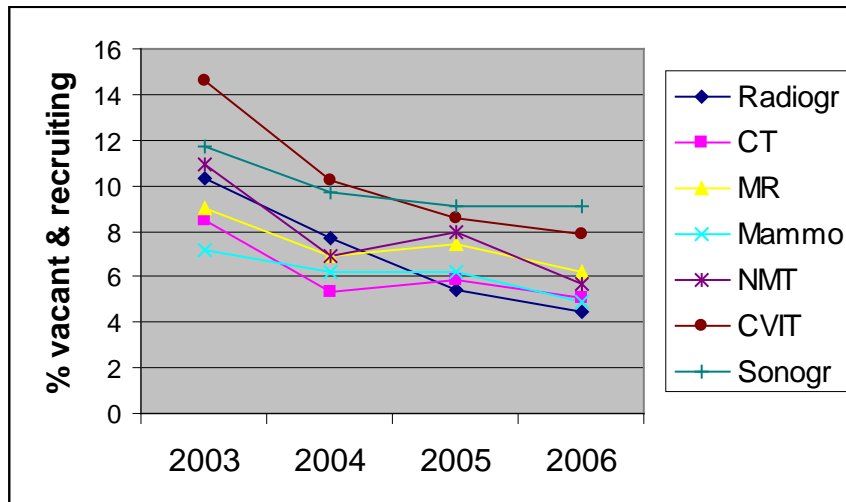
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Urban	151	21.8	22.4	22.4
	Suburban	108	15.6	16.0	38.5
	Rural	414	59.7	61.5	100.0
Missing	System	20	2.9		
<b>Total</b>		693	100.0		

More than 60% of the facilities are located in rural areas. However, rural facilities tend to have fewer FTEs than suburban and urban facilities, so the percentage of total FTEs in a given specialty/modality accounted for by the 61.5% of facilities with rural locations varies from a high of 40% of mammographer FTEs to a low of 17% of cardiovascular-interventional FTEs, as shown below:

**Location by Specialty FTE**

Facility Location	Statistic	Budgeted FTE Radiography 2006	Budgeted FTE CT 2006	Budgeted FTE MR 2006	Budgeted FTE Mammography 2006	Budgeted FTE NMT 2006	Budgeted FTE CVIT 2006	Budgeted FTE Sonography 2006
Urban	N	138	115	103	88	102	76	122
	Mean	21.0923	8.6010	5.7670	4.8205	4.9211	5.095	5.8128
	Sum	2910.74	989.12	594.00	424.20	501.95	387.2	709.16
	% of total FTE	43.39%	43.99%	52.15%	34.99%	46.39%	62.38%	41.36%
Suburban	N	100	95	83	83	86	57	94
	Mean	15.0880	6.0835	3.1349	3.5988	3.2050	2.286	4.7090
	Sum	1508.80	577.93	260.20	298.70	275.63	130.3	442.65
	% of total FTE	22.49%	25.70%	22.84%	24.64%	25.47%	20.99%	25.82%
Rural	N	384	300	199	281	225	138	301
	Mean	5.9616	2.2710	1.4315	1.7413	1.3535	.748	1.8693
	Sum	2289.27	681.31	284.86	489.31	304.54	103.2	562.67
	% of total FTE	34.12%	30.30%	25.01%	40.37%	28.14%	16.63%	32.82%

## STAFFING OF THE FACILITY



- For each of the following specialties within radiologic technology, please provide the budgeted and vacant FTEs for your organization in 2005 and today. (Leave blank the rows for any services not performed at your facility.)

**Radiography:**

		Budgeted FTE 2005	FTE Vacant and recruiting 2005	Percent vacant and recruiting 2005	Budgeted FTE 2006	FTE vacant and recruiting 2006	Percent Vacant and recruiting 2006
N	Valid	639	639	637	633	633	624
	Missing	54	54	56	60	60	69
Mean		10.3733	.5565	5.1835	10.8277	.4913	4.9515
Median <sup>a</sup>		6.1024	.0706	.5909	6.2846	.0369	.2897
Std. Deviation		12.38987	1.38237	12.83921	12.98858	1.05872	11.97346
Minimum		.00	.00	.00	.00	.00	0
Maximum		118.00	13.00	100.00	125.00	7.00	100
Percent zeroes		0.3%	73.9%	73.8%	1.4%	73.0%	72.6%

<sup>a</sup> Calculated from grouped data. Estimated percentage of all U.S. hospital-based radiography positions unfilled =  $100 \cdot (.5619 / 10.3727) = 5.4\%$  in 2005,  $4.5\%$  in 2006

Radiology Department/Facility Staffing Survey

**Computed Tomography:**

		Budgeted FTE 2005	FTE Vacant and recruiting 2005	Percent vacant and recruiting 2005	Budgeted FTE 2006	FTE vacant and recruiting 2006	Percent Vacant and recruiting 2006
N	Valid	509	509	481	520	520	493
	Missing	184	184	212	173	173	200
Mean		4.2923	.2540	4.5134	4.4303	.2262	4.3851
Median <sup>a</sup>		2.8000	.0469	.2278	2.8250	.0171	.2491
Std. Deviation		5.68765	.91062	15.06821	5.39946	.81141	16.64583
Minimum		.00	.00	.00	.00	.00	.00
Maximum		64.00	10.00	105.26	45.00	11.00	200.00
Percent zeroes		5.5%	86.4%	85.7%	5.2%	85.4%	84.6%

**Magnetic Resonance Imaging:**

		Budgeted FTE 2005	FTE Vacant and recruiting 2005	Percent vacant and recruiting 2005	Budgeted FTE 2006	FTE vacant and recruiting 2006	Percent Vacant and recruiting 2006
N	Valid	380	380	304	389	389	323
	Missing	313	313	389	304	304	370
Mean		2.8166	.2097	5.2353	3.0032	.1870	6.5584
Median <sup>b</sup>		1.8803	.0121	.5205	2.0108	.0168	.7205
Std. Deviation		3.81699	.98003	17.93541	3.97136	.55689	19.46326
Minimum		.00	.00	.00	.00	.00	.00
Maximum		37.00	15.00	100.00	37.00	4.00	100.00
Percent zeroes		20.0%	89.2%	86.0%	17.0%	85.6%	82.7%

**Mammography:**

		Budgeted FTE 2005	FTE Vacant and recruiting 2005	Percent vacant and recruiting 2005	Budgeted FTE 2006	FTE vacant and recruiting 2006	Percent Vacant and recruiting 2006
N	Valid	458	458	423	461	461	425
	Missing	235	235	270	232	232	268
Mean		2.6375	.1639	5.2682	2.7228	.1330	4.0806
Median <sup>c</sup>		1.9827	.0556	1.0002	1.9953	.0308	.3302
Std. Deviation		2.79553	.61992	18.62916	3.02130	.52120	15.45889
Minimum		.00	.00	.00	.00	.00	.00
Maximum		30.00	6.00	100.00	34.00	4.00	100.00
Percent zeroes		7.6%	90.0%	89.1%	7.8%	90.7%	89.9%

<sup>a</sup>Calculated from grouped data. Estimated percent unfilled CT positions = 5.9% in 2005, 5.1% in 2006.

<sup>b</sup>Calculated from grouped data. Estimated percent unfilled MR positions = 7.4% in 2005, 6.2% in 2006.

<sup>c</sup>Calculated from grouped data. Estimated percent unfilled mammography positions = 6.2% in 2005, 4.9% in 2006.



Radiology Department/Facility Staffing Survey

**Nuclear Medicine Technology:**

		Budgeted FTE 2005	FTE Vacant and recruiting 2005	Percent vacant and recruiting 2005	Budgeted FTE 2006	FTE vacant and recruiting 2006	Percent Vacant and recruiting 2006
N	Valid	415	415	359	419	419	358
	Missing	278	278	334	274	274	335
Mean		2.5887	.2080	6.9706	2.6304	.1496	5.7583
Median <sup>a</sup>		1.8361	.0476	.3684	1.8967	.0234	.1814
Std. Deviation		3.48941	.74578	20.84403	3.17749	.62086	20.78336
Minimum		.00	.00	.00	.00	.00	.00
Maximum		45.00	8.00	100.00	33.00	7.00	150.00
Percent zeroes		13.5%	86.3%	84.4%	14.6%	89.5%	88.0%

**Cardiovascular Interventional Technology:**

		Budgeted FTE 2005	FTE Vacant and recruiting 2005	Percent vacant and recruiting 2005	Budgeted FTE 2006	FTE vacant and recruiting 2006	Percent Vacant and recruiting 2006
N	Valid	260	260	149	267	267	158
	Missing	433	433	544	436	436	535
Mean		2.2427	.1923	9.3857	2.4034	.1891	8.3118
Median <sup>b</sup>		1.2083	.1486	1.8576	1.4000	.0776	2.0737
Std. Deviation		3.32436	.52866	22.43828	3.45534	.55080	19.60432
Minimum		.00	.00	.00	.00	.00	.00
Maximum		22.00	4.00	100.00	23.00	4.00	100.00
Percent zeroes		42.7%	85.8%	75.8%	40.8%	86.5%	77.2%

**Sonography:**

		Budgeted FTE 2005	FTE Vacant and recruiting 2005	Percent vacant and recruiting 2005	Budgeted FTE 2006	FTE vacant and recruiting 2006	Percent Vacant and recruiting 2006
N	Valid	529	529	502	527	527	496
	Missing	164	164	191	166	166	197
Mean		3.2320	.2938	8.9656	3.3205	.3013	8.4504
Median <sup>c</sup>		2.0943	.0965	1.3205	2.0864	.0489	.6616
Std. Deviation		3.33048	.78062	23.17580	3.37213	.88092	22.55935
Minimum		.00	.00	.00	.00	.00	.00
Maximum		30.00	7.00	100.00	26.00	9.50	143.48
Percent zeroes		5.1%	80.5%	79.5%	5.9%	80.3%	79.0%

<sup>a</sup>Calculated from grouped data. Estimated percent unfilled NMT positions = 8.0% in 2005, 5.7% in 2006.

<sup>b</sup>Calculated from grouped data. Estimated percent unfilled CVIT positions = 8.6% in 2005, 7.9% in 2006.

<sup>c</sup>Calculated from grouped data. Estimated percent unfilled sonography positions = 9.1% in 2005, 9.1% in 2006.

Radiology Department/Facility Staffing Survey

**“Other” (Please specify)**

		Budgeted FTE 2005	FTE Vacant and recruiting 2005	Percent vacant and recruiting 2005	Budgeted FTE 2006	FTE vacant and recruiting 2006	Percent Vacant and recruiting 2006
N	Valid	88	88	53	92	92	53
	Missing	605	605	640	601	601	640
Mean		1.8984	.1545	6.4529	1.8821	.1620	8.0683
Median <sup>a</sup>		.9550	.1084	1.9222	.9433	.1124	2.8571
Std. Deviation		3.99639	.48611	20.63748	3.80038	.55268	23.82429
Minimum		.00	.00	.00	.00	.00	.00
Maximum		28.00	2.10	100.00	26.00	4.00	100.00
Percent zeroes		39.8%	89.8%	84.9%	42.4%	89.1%	83.0%

---

<sup>a</sup>Calculated from grouped data. Estimated percent unfilled “Other” positions = 8.1% in 2005, 8.6% in 2006.

**Change in mean percent vacant and recruiting from 2005 to 2006:**

		Mean	N	Std. Deviation	t(N-1) for change from '05 to '06	P-value
Pair 1: Radiography	Percent vacant and recruiting 2006	4.8834	602	12.06933	-.334	.738
	Percent vacant and recruiting 2005	5.0396	602	11.89079		
Pair 2: CT	Percent vacant and recruiting 2006	3.7777	461	13.70692	-1.324	.186
	Percent vacant and recruiting 2005	4.6473	461	15.32335		
Pair 3: MR	Percent vacant and recruiting 2006	5.5512	289	17.48266	.043	.966
	Percent vacant and recruiting 2005	5.5071	289	18.35569		
Pair 4: Mammo	Percent vacant and recruiting 2006	4.0168	403	15.52557	-1.519	.130
	Percent vacant and recruiting 2005	5.1370	403	18.32479		
Pair 5: NMT	Percent vacant and recruiting 2006	5.3594	338	19.93072	-1.782	.076
	Percent vacant and recruiting 2005	7.4036	338	21.40868		
Pair 6: CVIT	Percent vacant and recruiting 2006	7.8434	143	18.69153	-.993	.323
	Percent vacant and recruiting 2005	9.7795	143	22.82261		
Pair 7: Sonography	Percent vacant and recruiting 2006	8.0832	472	21.75298	-.883	.378
	Percent vacant and recruiting 2005	8.8928	472	22.95154		
Pair 8: None of the above	Percent vacant and recruiting 2006	8.5524	50	24.45656	.465	.644
	Percent vacant and recruiting 2005	6.8401	50	21.19620		

Radiology Department/Facility Staffing Survey

**Other Specialties for Which FTEs Were Reported:**

Response	Frequency	Percent
BLANK	581	83.8
Community rural hospital . Budgeted FTEs are 4 full time they are cross trained and work in all areas ct, mammo, rad.	1	.1
1 Full time RT, 2 part-time LPH, and 1 part-time U/S	1	.1
1/2 part-time ojt also works here	1	.1
Admin	1	.1
Aides, Transporters, Student Techs, etc.	1	.1
All FTEs are hired for radiography with, if male=CT crosstraining, if female=mammo crosstraining.	1	.1
All of the radiographers are able to do CT. 5 of the radiographers perform Mammography. 2 Radiographers are sonographers and vascular technologist.	1	.1
All Radiographers cross-train in CT	1	.1
All R.T.(R) are cross-trained in other modalities and rotate on a monthly basis excluding mr	1	.1
All tech do both x-ray and ct	1	.1
All techs are crossed trained in CT,U/S, Mammo, and DEXA.	1	.1
All technologists are multi modality trained.	1	.1
All Techs can perform CT exams	1	.1
All Techs cover all fields CT/RAD/US	1	.1
All techs cross-trained, all do ct and 2 do US, 2 do Mammo	1	.1
All techs cross-trained and used in diff areas	1	.1
All techs cross-train CT/rad with two more also US/CT/rad	1	.1
BMD -- Also, MR Tech = mobile service	1	.1
BMD	1	.1
Bone Density	2	.3
Bone density and specialty clinic	1	.1
Cardiovascular techs are budgeted in another department	1	.1
Cardiovascular US Technologist	1	.1
CASML	1	.1
Clinical Coordinator	1	.1
Contract for Sonographer	1	.1
Contract Service for Nuclear Medicine	1	.1
Cross-trained after Radiology Registry	1	.1
CT and Rad covered by one FTE	1	.1
CT in house, all other modalities are mobile with Technologist supplied.	1	.1
CT/MR	1	.1
Department Manager	1	.1
Dept. only has 7 FTEs	1	.1
DEXA	1	.1
DI Assts.- 3 FTE for weekends and off-shifts	1	.1
Director of radiology	1	.1
DXA	1	.1
Echo	1	.1
Echo and vascular techs	1	.1
Echo tech	1	.1
Echo tech	1	.1
Echo ultrasound technologist	1	.1
Echocardiology Tech	1	.1
Except for radiology all other modalities are outsourced	1	.1
File room .5 and receptionist 1.0	1	.1
For MR, Nuc. Med, US and DEXA, those services are provided to us by a mobile/contract service.	1	.1
Fully staffed - yay!	1	.1
I am a full time tech, but I use 2 part time techs.	1	.1
I am the only Tech, Manager, Sonographer with on-call 24/hr/day, with only relief every other Fri, Sat, Sun off.	1	.1
I have been working for a staffing agency for the last 6 months and do not know previous statistics.	1	.1

Radiology Department/Facility Staffing Survey

I lumped together Nuc Med (8), PET (9) and Nuc Card (16) under Nuclear Medicine	1	.1
I wasn't here in 2005 and can't answer for that time period	1	.1
Interventional	1	.1
Interventional Radiology (Special Procedures)	1	.1
Lead techs Ct(1) MR(1) Mammo(1) NM(1), US(1), Rad(3)	1	.1
Machine Operator	1	.1
Mammo, Ultrasound, and Nuclear Med is a mobile service	1	.1
Mammography and Nuc Med are not under my dept.	1	.1
Manager	1	.1
Many of our RAD Techs are cross trained, but do not taken advanced registry or just assist part time in the CT/US/MR/Mammo depts.	1	.1
Mobile service for MR. Mammography and CT are crosstrained staff Are using PRN staff for RAD	1	.1
Most of our techs are crosstrained in at least 2 areas, most 3. (9FTE, 1PTE and 1PRN)	1	.1
MR and Nuc Med are mobile	1	.1
MR, Mammo, and Sonography all mobile.	1	.1
MR, Nuc Med, and US are contracted services. They are not figured as a FTE.	1	.1
Need contingent radiologic and ultrasound techs	1	.1
Neuro Interventional	1	.1
Other category reflects Radiation Therapists	1	.1
Our facility is Budgeted with an FTE of 9.74. Our staff have a variety of skill sets as we are a rural hosp. and do not have specialists in certain areas.	1	.1
Our Rad techs perform CT, US, and Mammo along with general.	1	.1
Our Techs do all modalities. We have 4 full-time techs	1	.1
PACS	1	.1
PACS/RIS team	1	.1
Permit machine operator	1	.1
PET	1	.1
PET tech (2)	1	.1
PET/CT	2	.3
PRN covers weekends - schedule is covered presently	1	.1
Program Director School of Radiography	1	.1
Pt Transport	1	.1
Rad Techs do CT as well as rad procedures.	1	.1
Rad Therapy	2	.3
Radiation Therapist	1	.1
Radiographers are cross-trained in CT and/or mammo.	1	.1
Radiology Admin to include PACS Admin, Managers and Directors, Support Staff	1	.1
Radiology RN 1.5 FTE	1	.1
Radiology Secretary	1	.1
Radiology Services Only	1	.1
Receptionist	1	.1
REGULAR PER DIEM WILL ALSO BE FILLING TEMP SUMMER FOR MATERNITY LEAVE (1.0 FOR 3MONTHS)	1	.1
Sonographer position is also a registered Radiologic Technologist.	1	.1
Supervisor	1	.1
Support staff - clerical, RIS/PACS, Transcription	1	.1
Techs perform mammo, CT and X-ray.	1	.1
The 2 radiographers do CT, 1 does mammo. We outsource for MR, Sonography, and Nuke med	1	.1
The 2.5 FTEs also cover CT, Sonography, and Mammo	1	.1
Three second year student techs work float pool	1	.1
Two of our radiographers do CT and one on staff does ultrasound.	1	.1
Ultrasound, MR, nuclear medicine are provided by mobile service	1	.1
Vascular Tech	1	.1
Vascular Technologist	1	.1
Vascular ultrasound non-interventional	1	.1
We are a 25 bed Critical Access Hospital. We have 3 full-time employees and 1 part time employee. We staff our department 24 hours a day/7 days a week. We cover for Radiology/CT/Mammography/Dexa Scanning/and Ultrasound.	1	.1

Radiology Department/Facility Staffing Survey

We contract for Nuc Med and MR services and the vendor supplies the technologist	1	.1
We have 2 technologists employed, R.T., CT certified.	1	.1
We have 4 techs total all 4 do rad and CT and 2 do mammo also.	1	.1
We have filled all our current budgeted positions.	1	.1
We typically hire Radiologic Technologists to fill positions and cross-train them. We were unable to locate a Radiographer, so we hired a Sonographer.	1	.1
X-ray operator	1	.1
Total	693	100.0

Please briefly explain any instances in which you entered more “vacant and recruiting” FTEs for a given position than the total FTEs budgeted for that position.

	Frequency	Percent
BLANK	636	91.8
1 FTE in NM decreased to PT; 1 FTE recruited to fill position; resulting in decrease in OT.	1	.1
1)All specialty staff cover Radiology when not busy 2)5 of the staff members do CT other than 1 FTE, all Rad techs do head CT 3)Each modality has a back up tech to cover for PTO 4)5 Techs can do Mammo 5)Sonographers do vascular sonography/Doppler, Manager does back up for sonographers 6)Have PRN pool to help cover PTO	1	.1
All FTEs are placed under Radiology. They are not broken down by different departments.	1	.1
An attempt to compete with non hospital facility, we are trying to recruit to staff for 24x7-no call for the staff	1	.1
Budget of facility has not allowed hiring of another radiographer to share the 24-7 call.	1	.1
Can't fill night shift 11pm-7am	1	.1
Cardiovascular Interventionalist-since adding services this year we have expanded faster than we thought so we are adding another FTE that we did not expect.	1	.1
FY 06 patient volumes have been lower than FY 05	1	.1
Have one RT moving to another town and we are actively looking for a replacement.	1	.1
Have only been able to hire a part time echo tech.	1	.1
I am swamped with students looking for jobs	1	.1
I have 4 fulltime employees. there are three girls trained or certified in mammography. everyone does CT and x-ray.	1	.1
I have an open 1.0 FTE, I have a student that my staff wants to wait for; she graduates in July 2006.	1	.1
in need of full time days RT w/call	1	.1
Increase in procedures	1	.1
Just about impossible to fill positions. Keep in mind this is a state run correctional facility, wages very low too.	1	.1
Mammographers and MR also do CT-Xray	1	.1
MR is outside company cardio - we don't do	1	.1
MR over-hire to add additional appointments.	1	.1
MR is a mobile service	1	.1
MR is done mobile	1	.1
Multi-skilled techs - mammo	1	.1
My facility is not looking for someone to help me, until my relief tech retires Dec. 1, 2006. He is 70 years old!	1	.1
N/A	2	.3
Need increased FTEs for volumes	1	.1
New business in MR and mammo	1	.1
New cardiology office M-F , no call. Ultrasonographers recruited away from hospital.	1	.1
NO position at time.	1	.1
None	1	.1
Nontechs cover calls and my day off.	1	.1
Not currently recruiting -- gave up.	1	.1
Nuc Med. is outsourced	1	.1
Our techs will be cross-trained into CT. They don't just do diagnostic or just CT. Everything else is either done by mobile people or those that are specialized in their field	1	.1
Position not filled yet for tech who retired	1	.1
Positions all stable	1	.1

Radiology Department/Facility Staffing Survey

Promotion from diagnostic tech to CT. CT tech left or retired.	1	.1
Recruiting now for all part time and PRN positions.	1	.1
SCH is Overstaffed at this time!	1	.1
Since we have so many vacancies, we have the ability to overhire, but we do not get qualified apps.	1	.1
Some of the technologists are cross-trained.	1	.1
Technologists cross-train for MR/CT/mammography	1	.1
VA salaries significantly below the community	1	.1
Vacant, but not recruiting to fill due to workload is down.	1	.1
Volumes have increased dramatically over the last 3 months, requiring the addition of a 2nd shift in Diagnostic. CT will continue to increase once OP services opens in May 06, requiring a FT CT tech.	1	.1
We are a cross-trained facility	1	.1
We are expanding our MR coverage to include evenings and weekends	1	.1
We are fully staffed and not recruiting	1	.1
We are fully staffed.	1	.1
We currently have a .2FTE mammography position available for which we have an R.T. under permit training for.	1	.1
We do not do the studies in house	1	.1
We have a Rad Tech School, so we usually stay fully staffed.	1	.1
We have been bought out by a "For-Profit" corporation in Oct. 05 and staff has been realigned.	1	.1
We have been looking for an Echo tech for 4-5 years and we will not be setting up an echo program until we find one.	1	.1
We have no vacant positions	1	.1
We need to add Technologists to accommodate growing demand for services.	1	.1
We stay staffed here with no problem. We're a really small hospital in a pretty small town.	1	.1
Total	693	100.0

## RECRUITMENT AND RETENTION

**2. Describe how the recruitment effort for each specialty so far in 2006 compares to the effort expended during 2005.**

		Radiographer			CT Technologist		
		Frequency	Percent	Valid Percent	Frequency	Percent	Valid Percent
Valid	More Difficult	44	6.3	8.1	58	8.4	13.4
	Same	320	46.2	58.9	281	40.5	64.9
	Less Difficult	179	25.8	33.0	94	13.6	21.7
Missing	Don't Know	66	9.5		98	14.1	
	System	84	12.1		162	23.4	
<b>Total</b>		693	100.0	100.0	693	100.0	100.0

		MR Technologist			Mammographer		
		Frequency	Percent	Valid Percent	Frequency	Percent	Valid Percent
Valid	More Difficult	50	7.2	15.9	51	7.4	13.7
	Same	219	31.6	69.5	252	36.4	67.9
	Less Difficult	46	6.6	14.6	68	9.8	18.3
Missing	Don't Know	239	34.5		118	17.0	
	System	378	54.5		204	29.4	
<b>Total</b>		693	100.0	100.0	693	100.0	100.0

		Nuclear Medicine Technologist			Cardiovascular Interventional Technologist		
		Frequency	Percent	Valid Percent	Frequency	Percent	Valid Percent
Valid	More Difficult	78	11.3	23.8	37	5.3	19.8
	Same	198	28.6	60.4	127	18.3	67.9
	Less Difficult	52	7.5	15.9	23	3.3	12.3
Missing	Don't Know	131	18.9		182	26.3	
	System	234	33.8		324	46.8	
<b>Total</b>		693	100.0	100.0	693	100.0	100.0

		Sonographer			Other R.T. Specialty		
		Frequency	Percent	Valid Percent	Frequency	Percent	Valid Percent
Valid	More Difficult	134	19.3	30.2	9	1.3	15.8
	Same	257	37.1	58.0	37	5.3	64.9
	Less Difficult	52	7.5	11.7	11	1.6	19.3
Missing	Don't Know	84	12.1		59	8.5	
	System	166	24.0		577	83.3	
<b>Total</b>		693	100.0	100.0	693	100.0	100.0



Radiology Department/Facility Staffing Survey

**Other R.T. Specialty for Which FTE Provided:**

	Frequency	Percent
BLANK	605	87.3
Administrator indicates there is a need for only 1.5 techs at this time.	1	.1
All positions filled for last 4 years.	1	.1
BMD	1	.1
Bone Density	2	.3
CT and mammo are cross trained-from x-ray	1	.1
CT now needs 16+ slice experience, MR needs 3T experience, NM are in short supply, no one will get registered in U/S.	1	.1
Depends on time of year	1	.1
Did not have a need to recruit any new technologists	1	.1
Didn't need to recruit	1	.1
Echo	1	.1
Echo and vascular techs	1	.1
Finding someone to come to a rural area is very difficult	1	.1
Have actually had calls inquiring this time - in 2005 there weren't even any phone calls.	1	.1
Have had influx of resumes lately and no positions to offer. Usually difficult to recruit in rural setting unless applicant is from immediate area. Seeing applications come from further away	1	.1
Have new online application process. Seems to be more staff available. Not sure why	1	.1
Have not had any turnover in 5 years	1	.1
Have not had to recruit in the past 2 years	1	.1
Have not looked for additional techs. for 16 months.	1	.1
Have not recruited	1	.1
Have not recruited in the last few years.	1	.1
Have only radiographer	1	.1
Haven't been doing any	1	.1
Haven't been recruiting any techs	1	.1
Haven't had to recruit since 99, when we began NM.	1	.1
I have had several people approach me asking if I have jobs in radiography. I would probably hire a sonographer if one was available, but I am not actively recruiting.	1	.1
I have more candidates for open positions than I have in the past.	1	.1
Interventional Radiology (Specials)	1	.1
It has always been difficult to recruit.	1	.1
It is always difficult to find applicants with US.	1	.1
It seems to be extremely difficult to find US tech to crosstrain	1	.1
Just trying to find someone who can cover call time	1	.1
Last year we searched for an ultrasound tech that would be the right tech for the job for about 9 months before finding her.	1	.1
Many of the diagnostic technologists are working for registry groups rather than the hospital facility. Wages are higher with the registry than the hospital.	1	.1
[Name], part of the [Name] Network, has worked with local colleges to provide a loan forgiveness program for technologists who go to work in the Partners Network. This has existed since 2000 and provides a pipeline of talent to the hospitals. Huge aid to recruitment and retention.	1	.1
MR and US seem to be the hardest to recruit. We are saving our two positions for x-ray when the students graduate.	1	.1
MR, Nuc Med, Ultrasound services are contracted to facility	1	.1
MR techs are very scarce.	1	.1
My facility has not recruited Radiology personnel since the 1940s, I happened to inquire about a possible job in 1977 when my husband secured at job at this facility. The technologist that was then the Chief Technologist was 72 yrs of age & going to retire the following November, so I was hired in Sept. '77 & have remained at this facility ever since. No recruitment efforts are usually made until after a position becomes vacant at our facility.	1	.1
My only need is more relief help, which is very difficult to find.	1	.1

Radiology Department/Facility Staffing Survey

N/A	1	.1
N/A. I think it would be less difficult as I have many applications now compared to fewer in the past few years.	1	.1
NA	1	.1
Need an RVT not an RDMS - endangered species.	1	.1
Neurointerventional	1	.1
No recruiting	1	.1
No recruiting done, no vacant positions.	1	.1
No Recruitment	1	.1
No change in staff	1	.1
Not difficult because we use NCT's	1	.1
Not recruiting	2	.3
Other services performed by mobile, with Technologist provided.	1	.1
Other specifies Radiation Therapists	1	.1
PACS Administration	1	.1
People beg for jobs here	1	.1
PET/CT	1	.1
Preference is given to candidates who are CT & Ultrasound experienced. However, we have cross trained 2 of our techs into CT and the Director does x-ray, CT & US.	1	.1
Radiation therapist	2	.3
Recruitment efforts have been virtually the same as we have not had any turnover. However, efforts to obtain a registered sonographer over the last 4 years have forced us to train 2 technologists on the job. They are currently registry eligible, but are not yet registered and we continue to invest in their education to retain them and to assist them in the registry process.	1	.1
Registered Vascular Technologists	1	.1
Skilled clerical positions.	1	.1
The other fields are done by mobile units	1	.1
There is no recruitment effort, since there is only one radiographer FTE at our institution & that position has been held by me since 1977	1	.1
There seems to be a shortage of Nuclear Medicine Technologists for my geographical area. The techs available only want fulltime also. Diagnostic Mammography in my hospital system is performed at one central site and not at my facility. Mammographers performing screening only quickly burn out and feel like there is no longer a challenge.	1	.1
They had PRN personnel here before I came. Myself and 1 other employee plus weekend techs only persons at this facility	1	.1
Ultrasound more difficult to recruit due to on call duties	1	.1
Ultrasound program in community fills most positions.	1	.1
US Techs are hardest to find (esp. per-diem)	1	.1
We're filling open position with Temporary help.	1	.1
We are a rural facility that has had no attrition since 2004 We pay a generous salary and benefits package to our employees. We have a completely digital environment (X6 years) Digital mammo X 2 years) All techs are very happy	1	.1
We are a small 25 bed critical access hospital that needs a sonographer who can do echo and vascular studies. It seems that most U/S techs are competent at one or the other specialties and not usually both cardiac and vascular. Also the salary ranges requested by them are very high.	1	.1
We are fully staffed	1	.1
We are not recruiting	1	.1
We are not recruiting at this time.	2	.3
We did not have to recruit any staff in '05	1	.1
We do not recruit	1	.1
We don't have to recruit	1	.1
We had been recruiting for an R.T. to cover weekends for a long time and finally hired one.	1	.1
We have a full staff, even more than enough. We are actually losing techs and not replacing them	1	.1
We have a Radiologic Technology program within 40 miles, so we usually have new students looking for jobs.	1	.1

Radiology Department/Facility Staffing Survey

We have had no need to recruit technologist since we are staffed completely with no near future changes.	1	.1
We have had no need to recruit staff in 2 yrs. we train about 8 students each year and they fill any vacancies	1	.1
We Have not recruited any new staff since 2005 due to being fully staffed.	1	.1
We have recently expanded our imaging technology schools that now include MR, CT, Ultrasound, Nuc Med and Gen Rad	1	.1
We hire staff technologists that are multi-trained. Have been full staff for 5 yrs. No recent recruitment.	1	.1
Total	693	100.0

**3. If budgeted FTEs in any of these modalities have decreased over the past year, what do you believe is the reason for this decrease?**

First, what proportion of the facilities offering services in each modality showed decreases in budgeted FTEs, and what proportion of the facilities showed a decrease in budgeted FTEs for one or more modalities from 2005 to 2006?

	N	Sum	Proportion "Yes"
Did FTEs for any specialty decrease?	649	122.00	.1880
Did radiography FTEs decrease?	647	56.00	.0866
Did CT FTEs decrease?	647	29.00	.0448
Did MR FTEs decrease?	647	25.00	.0386
Did mammography FTEs decrease?	648	29.00	.0448
Did Nuc Med FTEs decrease?	647	30.00	.0464
Did Cardio/Interv (CVIT) FTEs decrease?	647	11.00	.0170
Did sonography FTEs decrease?	648	43.00	.0664
Did FTEs for another specialty decrease?	647	5.00	.0077

Quite a few of the respondents checked one or more reasons for a decline in budgeted FTEs, even though the FTEs they reported did not indicate a decrease had occurred for any specialty, or if they had not reported any FTEs. These managers and directors probably interpreted the question to more generally mean their perceived causes of decreases in FTEs, when and if such decreases occur. The percentage of respondents mentioning different reasons is therefore reported separately for each of these subgroups in the following table. One column lists the reasons checked by those who reported no FTEs; a second column gives the reasons checked by those whose reported FTEs showed no decrease in any specialty from 2005 to 2006, and a third column is for those whose FTEs showed a decrease for at least one specialty from 2005 to 2006.

Radiology Department/Facility Staffing Survey

Reason for decline in budgeted FTE		Did FTEs for any specialty decrease?*			Total*
		Missing	No	Yes	
No reason given		30 49.18%	437 70.48%	57 28.50%	524 59.48%
One or More Reasons Given	Patient demand declined	5 8.20%	23 3.71%	20 10.00%	48 5.45%
	Overall department or facility budget declined, forcing downsize.	7 11.48%	26 4.19%	24 12.00%	57 6.47%
	Formerly budgeted FTEs were so difficult to fill they were dropped from the budget.	1 1.64%	4 0.65%	4 2.00%	9 1.02%
	Number of patients processed per hour by each R.T. increased, so number of FTEs required to handle the workload declined.	2 3.28%	6 0.97%	14 7.00%	22 2.50%
	Average number of hours worked per week by our R.T.s increased, so number of R.T.s required to handle the workload declined.	0 0.00%	4 0.65%	3 1.50%	7 0.79%
	Other	2 3.28%	30 4.84%	13 6.50%	45 5.11%
	Respondents giving one or more reasons	14 22.95%	90 14.52%	65 32.50%	169 19.18%
<b>Total Responses</b>		61	620	200	881

**Other Reasons:**

	Frequency	Percent
BLANK	608	87.7
Becoming a digital department	1	.1
Benchmarking to standard	1	.1
Budget was held same from 2005 to 2006	1	.1
Budgeted FTEs have not decreased.	1	.1
Buy-out by corporation	1	.1
CAH facility - love volume - able to retain present stall.	1	.1
Competition for patients and staff	1	.1
Cross-trained rad/ct techs changed to ct tech.	1	.1
Decline in nuclear cardiology due to imaging in cardiologists' offices	1	.1
Divided workload into two (.8)FTEs	1	.1
Does not apply	1	.1
Faster CT Scanners	1	.1
FTE did not decrease	1	.1
FTEs have not decreased	1	.1
FTEs have remained the same for the past 8 years.	1	.1
FTEs remained the same	1	.1
Has not changed	1	.1
Has not decreased but also more efficient thru technology.	1	.1
Have not decreased.	1	.1
Holding same pt. workload same # of employees	1	.1
Hurricane Katrina hit us hard	1	.1

\* Percents add to more than 100% because some respondents gave multiple reasons for declines.

Radiology Department/Facility Staffing Survey

I have eliminated one part time position due to 2 physicians leaving our area. That position will be reinstated when additional physicians are added.	1	.1
I need another RT to move to our area, who would like to be my relief tech?!!!	1	.1
In nuclear med for example, pt volume has declined.	1	.1
MR - downsized work force slightly - more efficient.	1	.1
N/A or NA	7	1.0
N/A We are a very busy facility	1	.1
N/A ONLY ONE TECH	1	.1
need replacement for leaving RT, unable to fill this position for lack of applicants.	1	.1
No change	2	.3
No changes, other than increase in part-time technologist's hours when full-time tech was off on maternity leave.	1	.1
No decline in FTEs	1	.1
No Decrease	8	1.1
No decrease in FTEs	1	.1
No hrs. needed.	1	.1
None of the Above	1	.1
Nuc Med FTE decline because we were overstaffed.	1	.1
Nuclear is declining, have not decreased FTEs as of yet.	1	.1
Our budgeted FTEs have not decreased. In fact, we have recently added an FTE due to changing dynamics of our staff and potential loss of technologists due to evening and on call shifts.	1	.1
Our budgeted positions increased because we eliminated evening and weekend Contract Labor Coverage. Two of our techs work 3-12's M-F overlapping on Wednesdays. Our Weekend Tech is scheduled for Fri 4pm-12, Sat 8am-MN, Sun 8am-10 pm. We alternate call	1	.1
Our FTEs have increased from 4 to 6 techs	1	.1
Our students fill our open position	1	.1
Outpatient, ie, x-rays, sono, echo being performed at practitioners office	1	.1
Overstaffed	1	.1
PACS has increased the workload per tech.	1	.1
PACS install reduced need for staff	1	.1
Patient demand same as last year.	1	.1
People do not want to move to a small town and get paid less money than a bigger hospital will pay.	1	.1
Personnel reasons	1	.1
Rad Tech education position	1	.1
Radiologic Technologist position was filled by a less technical position that now performs the administrative (nontechnical) duties that were formerly performed by the technologist.	1	.1
Renovated dept and streamlined work flow.	1	.1
Retirement absorbed by current staff	1	.1
Rural Hospital	1	.1
Same	1	.1
Shift from radiology to CT	1	.1
Some of our clinics closed. OB/GYN clinic affected Sonography.	1	.1
Something that has evolved over the last several years is how my budget is geared toward flexing. If not busy, someone flexes or leaves work. We are expected to staff according to business. My full-time staff are scheduled to work only 36 hrs per week or 72 hrs per pay cycle.	1	.1
Stayed the same	1	.1
The hospital felt that we didn't need another person therefore did not pursue hiring one. Our work increased but they felt we didn't do enough exams to warrant more people...Wrong	1	.1
There was no decrease	1	.1
This is a small facility only requiring one technologist.	1	.1
We've been low for several years -- can't go any lower and provide coverage	1	.1
We are at correct level of staffing based on AHRA 2004 report for community hospitals utilizing 2004 statistics; Statistics for our facility have dropped 2006 compared to 2005 due to fewer patient admissions	1	.1
We are the same	1	.1
We have 4 budgeted FTEs radiographer, however we have one vacancy and have not, at this time, been approved to fill it.	1	.1
We have not had a need to increase our FTE's in the past two years nor have we had any	1	.1

Radiology Department/Facility Staffing Survey

turnovers in the past 2 years.		
We have not hired or lost techs since Jan 05	1	.1
We will be starting digital CT within the next year so will need more help.	1	.1
Work load decrease increase in computer input	1	.1
Total	693	100.0

**4. For each specialty area, how have the following staffing indicators changed since January 2005?**

	Radiography Employees' average length of employment at your facility	Radiography Turnover rate	CT Employees' average length of employment at your facility	CT Turnover rate	MR Employees' average length of employment at your facility	MR Turnover rate	Mammography Employees' average length of employment at your facility	Mammography Turnover rate
Valid	604	549	509	465	344	318	447	402
Missing	89	144	184	228	349	375	246	291
Mean	3.31	2.50	3.39	2.53	3.31	2.56	3.33	2.50
Median	3.19	2.56	3.23	2.60	3.17	2.65	3.29	2.59
Std. Deviation	.834	.919	.817	.913	.774	.860	.835	.916
% Much Lower	2.3	19.5	1.0	19.1	1.2	17.6	2.2	20.9
% Lower	6.1	20.6	5.3	18.1	5.2	14.8	4.9	15.4
% About the Same	60.6	51.9	60.1	54.8	65.4	61.9	62.2	57.7
% Higher	20.0	6.9	20.4	6.9	17.7	5.0	18.6	4.7
% Much Higher	10.9	1.1	13.2	1.1	10.5	.6	12.1	1.2

**5. Were you paying sign-on bonuses for R.T.s in 2005? Are you paying them currently? If yes, please indicate amount typically paid.**

Measure		Percent paying bonus	N	Std. Deviation	Statistical Significance of Difference	
					t (N-2)	P
Pair 1: CT	January 2005	15%	527	.355	-2.907	.004
	Currently (2006)	12%	527	.325		
Pair 2: CT	2005 Bonus Amount	\$3146.00	50	\$1676.51	.682	.498
	2006 Bonus Amount	\$3106.00	50	\$1712.67		
Pair 3: Radiography	January 2005	20%	599	.397	-5.465	.000
	Currently (2006)	14%	599	.344		
Pair 4: Radiography	2005 Bonus Amount	\$2942.42	66	\$1641.21	.825	.413
	2006 Bonus Amount	\$2915.15	66	\$1665.32		
Pair 5: MR	January 2005	12%	446	.329	-3.646	.000
	Currently (2006)	9%	446	.287		
Pair 6: MR	2005 Bonus Amount	\$3328.57	35	\$1666.90	-.858	.397
	2006 Bonus Amount	\$3500.00	35	\$2029.20		
Pair 7: Mammography	January 2005	11%	495	.310	-2.908	.004
	Currently (2006)	9%	495	.282		
Pair 8: Mammography	2005 Bonus Amount	\$3540.63	32	\$1925.53	1.000	.325
	2006 Bonus Amount	\$3478.13	32	\$1975.45		



**Indicate the percentage range you estimate for the following radiologic technology coverage situations:**

Respondents could select from 0%, 1-6%, 7-13%, 14-20%, 21+%, or write in a specific percentage. For purposes of this analysis, each range selection was replaced with the midpoint of that range – e.g., if the respondent checked “1-6%” it was scored as 3.5%.

		Percent of radiographer FTEs filled w/ temps/travelers	Percent above average temp/traveling radiographers are paid	Percent of CT FTEs filled w/ temps/travelers	Percent above average temp/traveling CT techs are paid
N	Valid	674	537	623	489
	Missing	19	156	70	204
Mean		1.4401	16.9944	.7689	12.2658
Median <sup>a</sup>		.0971	1.3503	.1909	.8117
Std. Deviation		6.21472	35.24037	5.41014	30.98264
Minimum		.00	.00	.00	.00
Maximum		60.00	200.00	99.00	100.00
Percent zeroes		86.1%	71.7%	94.7%	81.0%

		Percent of MR FTEs filled w/ temps/travelers	Percent above average temp/traveling MRs are paid	Percent of mammographer FTEs filled w/ temps/travelers	Percent above average temp/traveling mammographers are paid
N	Valid	541	439	588	473
	Missing	152	254	105	220
Mean		1.4667	8.3542	.6420	8.8351
Median <sup>a</sup>		.1856	.5818	.1209	.5791
Std. Deviation		10.00934	25.61992	4.99529	26.92628
Minimum		.00	.00	.00	.00
Maximum		100.00	100.00	50.00	100.00
Percent zeroes		94.8%	85.6%	96.6%	85.6%

---

<sup>a</sup> Calculated from grouped data.

Radiology Department/Facility Staffing Survey

7. Has your facility experienced any of the following consequences of a work force shortage?

Consequence	Valid N	Yes	No	Unknown
Curtailed plans for facility expansion.	637	4.9%	95.1%	4.5%
Curtailed plans for acquiring new technology.	640	8.4%	91.6%	3.9%
Reduced number of staffed diagnostic units.	645	6.5%	93.5%	2.7%
Discontinued R.T. educational programs.	630	3.0%	97.0%	4.3%
Increased wait times for procedures.	645	21.6%	78.4%	2.9%
Cancelled procedures.	647	11.6%	88.4%	2.9%
Decreased patient satisfaction.	629	15.7%	84.3%	5.3%
Increased patient complaints.	631	14.6%	85.4%	4.8%
Other	157	7.0%	93.0%	19.1%

**Other consequence:**

Response	Frequency	Percent
BLANK	665	96.0
Blocked off some slots for procedure	1	.1
Creates a we / they environment. We have had too many bad experiences with temp employees - poor quality and many social issues.	1	.1
Decreasing volumes	1	.1
Dept is continually expanding, with present staff, one complaint in 12 months	1	.1
Extended hours of operation	1	.1
In the past 2 years we have been blessed to attract registered technologists. 2 stayed for 1 year while we awaited our sponsored local student's graduation. By eliminating contract technologists, we have vastly improved services to our community. Prior to that, NCTs filled positions causing decrease in quality of exams provided and service to the community.	1	.1
Increase in patient safety issues and procedural errors. Increase opportunity for workplace injuries.	1	.1
Increased call hours due to understaffing	1	.1
Increased provider complaints	1	.1
May get a CT scan. Concerned about staffing for it.	1	.1
My main concern is covering call time after hours	1	.1
N/A no turnover	1	.1
No only because we use travelers	1	.1
No work shortage!	1	.1
Only area affected by Staffing is Ultrasound. Scheduled appointments were reduced	1	.1
Only shortage area is Mammography, we have had to extend time for exam and in some cases, cancel out one room. Current staff did not want to continue doing mammograms	1	.1
Our numbers have increased, our services have increased, and FTEs have increased.	1	.1
Our regular R.T.s have had less time off	1	.1
Patient complaints and dissatisfaction have to do with shortages in nursing that we are experiencing--none have been related to Radiology. We have actually increased services offered and brought in new technology even with staffing shortages. Agency was brought into Radiology in Feb. 06 to relieve burnout and stress on current Radiology staff. My Administrative workload seems increased, but is due to the fact that I am working as a staff technologist in addition to my regular duties.	1	.1
Patients sent to other facilities for exams.	1	.1
Since I am the only tech here, except for my relief tech (traveler) a lot of your questions in this survey do not apply.	1	.1
Staffing shortages resulting in burnout of current staff by having to work extra hours in providing coverage for open shifts.	1	.1
The biggest need is registered ultrasound techs. We have experienced increased wait times - up to 2 weeks to get on the ultrasound schedule	1	.1
To cover vacations we sometimes close rooms.	1	.1
We've had no shortage	1	.1
We are a pretty static operation here. Not much has changed. Coverage from 8-5 Mon-Fri and not on holidays or university vacations	1	.1
We are fortunate enough not to have a shortage in any field.	1	.1
You didn't inquire about Nuclear Medicine above. NM is the only modality I have utilized	1	.1

Radiology Department/Facility Staffing Survey

contract setting for and they were paid approximately 40% higher than my dedicated staff.		
Total	693	100.0

## VERBATIM COMMENTS

8. Please add any comments you feel are necessary to clarify any of your responses to the preceding seven questions and/or any additional comments you wish to share on your perceptions of the supply of radiologic technologists.

Response	Frequency	Percent
BLANK	492	71.0
#6 We are currently using a traveler for Nuc Med and have for 2 years now. He is paid by his company and the exact wage is difficult to validate but I feel that it is probably 30% higher than the average salary in my dept.	1	.1
1 man/woman department per diem difficult to find that actually are flexible enough to come in.	1	.1
2005 looks good, but we changed complete staff except for one tech in 2004.	1	.1
6 new radiology programs started within the last 3 years in the Northwest. 2007 there will be a glut of R.T.s	1	.1
All areas are completely staffed. There is a list of casual part time techs waiting for hours at our hospital.	1	.1
All of our technologists are cross-trained in one or more modalities. With a school 45 minutes South of us and one 30 minutes North of us, we don't have a shortage here in NW Ga. Our turnover rate is 0 and my average length of employment at this time is 6.42 years.	1	.1
As mentioned earlier, we are a small, diagnostic, one room department with two part-time technologists. At present we are staffed fully and see no changes upcoming. Our department is limited because of government budgeting cuts- we have no need for expansion	1	.1
As physician-based and private outpatient centers continue to open due to better reimbursement, the hospital volumes are decreasing and reimbursement is declining on the input side. This is creating difficulties in hospital staffing.	1	.1
At our Department there are many staff that have been here for over 15 years. In the 23 years I have been at this facility, I have seen a definite increase in the number of applicants I believe due in part to our student program. We would pay a sign on bonus if we needed to. At this time it has not been necessary.	1	.1
At this time we are most plagued by outdated, inefficient technology and limited radiologist availability. Although grant programs are available, our administrator is resistant to apply because our facility has money in the bank awaiting Medicare overpayment penalties. If we invested in 21st century technology, we might be able to retain our technologists longer than 18 months because it would eliminate an enormous amount of frustration.	1	.1
Because of all of the schools in this area we have not experienced any difficulties in obtaining staff.	1	.1
Because we are a small facility, on a tight budget. We could use contingent personnel who are familiar with our procedures, as opposed to temp help that are more costly and who are unfamiliar with our routine.	1	.1
Being a clinical training site for RTs has helped our recruitment and retention. We also have a nuc med and ultrasound school here.	1	.1
Being a hospital in a rural setting makes it hard to replace technologists, plus technologists are multimodality and finding replacement is extremely hard.	1	.1
Being a rural area it is difficult to draw new grads to a small community. Getting them to stay longer than 1-2 years is a bigger challenge. Small rural hospitals have to cross train their techs into several modalities as we can not afford to have 1 or 2 techs per modality. In our facility we are cross-trained in the following areas: Radiography, mammography, CT, diagnostic ultrasound and vascular ultrasound. This way only one tech has to be "on call" for the department at nights/weekends.	1	.1
Being a rural hospital, we tend to find only new graduates interested, which we hire. Our wage is below average. We require all of our techs to learn CT and US.	1	.1
Biggest factor is salary rates between new techs and those with 10 plus years of experience (not good).	1	.1

Radiology Department/Facility Staffing Survey

Compared to 5 years ago, I now have multiple applicants from which to make my hiring selection.	1	.1
CT and MR modalities are new services starting - MR 7/2005 and CT pending staff.	1	.1
CT and sonography are performed by crosstrained techs and are not filled by specialized personnel. MR is currently being done by a portable service that supplies its own tech.	1	.1
CT position is filled but using a temp until new person begins. Radiology techs are in abundance. Constantly getting resumes though no positions open. Specialty areas need more recruitment/training. That is were our shortage is.	1	.1
Decrease in tech shortage. Increase in resumes I receive even if no opening posted.	1	.1
Due to reduction in budgeted FTEs, I do feel some day we have greater wait times. We do have a good per diem pool that help fill shortages.	1	.1
Even in our rural area, there are more RTs available for hire AND the number of licensed limited operators has greatly increased to staff rural hospitals and clinics.	1	.1
Expanding the facility and acquiring new technology has helped us attract R.T.s and retain them. We are reducing number of rad units because we have moved to an almost completely digital environment.	1	.1
Finding a qualified sonographer has proven extremely challenging.	1	.1
For the last couple of years I have been fortunate not to have problems staffing like I had in the past.	1	.1
For the past two years students in our area are having a difficult time acquiring full time positions. I feel we have over filled the need of imaging technologist. In our small county hospital, we employ one CT tech and one US tech prn that can't find full-time positions.	1	.1
Four years ago, we were short 3 technologists. All of our Technologist are cross trained in more then one modality. We use temp. techs at that time. It was very expensive. We are very lucky to have a very low turnover rate.	1	.1
Fully staffed with no turnover since Jan 2005	1	.1
Have had to use temp workers to continue our standard of care.	1	.1
Have not seen much difference from previous year.	1	.1
Here in central northern ca, we now have more entry-level techs than jobs.	1	.1
I'd like to receive a copy of the completed survey if possible; please note, ultrasound travelers are paid at 1 and 1/2 rate of onsite sonographer	1	.1
I am in a rural hospital setting and have been at this job for 24 yrs. The average time spent in this facility by new recruits is 2 years and that is probably because at that time we did give a \$2,000 sign on bonus, for the last 15 years it has been very difficult to keep staff here at our 22 bed hospital, our turnover is terrible but do not know what to do about it. The new RTs coming out of school seem to want everything served to them and not have to work for the money they receive.	1	.1
I am new in this position, so I may not know all of the answers. However, I did answer to the best of my ability.	1	.1
I am the 5th director in 5 years. I have been a tech here since 1993, then supervisor, manager, PACS admin, and now director. Now that we have management under control, it has helped control the turnover. We are a medium hospital with great technology that helps us recruit better.	1	.1
I am the only Radiology RT working for the State Hospital doing only Radiography. I do the scheduling for all outside imaging appointments for 690 resident patients.	1	.1
I am the Ultrasound Section Coordinator and only could answer the questions concerning Ultrasound	1	.1
I believe creating a team environment and focusing on employee satisfaction is the key to having and keeping staff.	1	.1
I find that it's not all about the money, it's how you treat the person, how you show interest in them both in the workplace and outside the workplace. I show appreciation for my staff in numerous ways. Make them feel good about themselves and they do good jobs for you.	1	.1
I have a small department, 2 FTE, 2 PRN . NO turnover in the past 3 years.	1	.1

Radiology Department/Facility Staffing Survey

I have a very difficult time filling my per diem spots in radiology. I use local registry to fill weekend, temporary vacancies.	1	.1
I have had very good luck retaining staff and hiring additional staff or replacements from my student program. WE currently have 4 student techs from 2 different programs which have entirely different schedules, so we rarely have all new students.	1	.1
I have several that are cross-trained and able to function although most have not taken additional certification exams beyond the R.T.	1	.1
I truly feel it would be wrong to cease Hospital-based R.T. programs whereby I feel these programs for one puts out the best techs and have more of a feel of what radiology is all about. Degrees aren't everything and also classes not related to the radiology profession are a waste when with the job we have. I have been in the Profession 30-plus years and why change now..... You really need to think about this.....	1	.1
I use PRN techs when i need more help. Our work load is seasonal being a surgery hospital	1	.1
I utilize permit techs (2 part-time) because I cannot acquire an R.T. on the wages offered here. We are quite rural and unable to offer much as far as incentives. R.T.s do not want coverage.	1	.1
In 2002-2004 I was using many traveling techs, as many as 6 at one time, we have had a community college start a 2 year radiologic technology program with financial support from area hospitals and this has eased our tech shortage	1	.1
In 2005 I had 2 travelers that did CT/or and rad. a majority of the technologist are crosstrained and cover several modalities.	1	.1
In our area we have more R.T.s than jobs - we have three rad schools within 40 to 60 miles. We have year round students doing clinicals.	1	.1
It is now a lot easier to find technologists than what we experienced within the last couple of years.	1	.1
More and more staff technologists (especially CT, NM, and MR) are going to travel agencies for their work. They get to pick and choose where they want to work and for how long. Benefits are good. Hospitals are paying the price of travel technologist vs. nonhospital imaging centers.	1	.1
More Radiologic Technology programs in this area.	1	.1
MR is outsourced, U/S is outsourced - mobile	1	.1
MR is provided by a mobile company with a tech provided	1	.1
MR, mammography, NM and US are contracted services.	1	.1
MR contracted out. No unfilled openings here for over four years. Local supply of rad techs exceeds demand.	1	.1
MR, nuclear medicine, ultrasound are provided by mobile companies	1	.1
My geographic location has two community colleges with Rad Tech programs and one hospital based program. The student trend seems to be for additional training after graduation. Training in CT, MR, Mammography and Ultrasound are available. On line classes are available also. One school provided a one year limited R.T. training for physician offices also. My hospital system will hire second year students but not the limited R.T.	1	.1
My hospital is part of a six hospital system. we support the local college program and serve on the Advisory Council. Class size was increase years ago based on the shortage. We offer opportunities for cross-training to back fill positions. We as a system are not experiencing any technologist shortage.	1	.1
My perception is that the shortage of radiologic technologists is no longer happening	1	.1
My rad techs are multimodality technologists. So we don't hire specific technologists for CT, MR is mobile. All female rad techs can perform mammos. I have a rad tech, that has a job description as a sonographer she is registered w ARDMS, but can perform mammography, limited body CT. I as the manager am registered as a radiographer, mammographer as well as ARDMS registered, So I function in any role except NM or MR. We only have one NM tech that works 64 hours pay. Strictly in NM.	1	.1
My technologists perform more than one modality.	1	.1

Radiology Department/Facility Staffing Survey

Need multimodality technologists willing to work PRN basis.	1	.1
Need to increase the size of programs by increasing the number of qualified instructors	1	.1
New grads are easy to find. When an experienced technologist is needed they are more difficult to find	1	.1
No current issues with finding staff.	1	.1
No sign-on bonuses given. Retention bonuses given annually over 3 year period. 10% of annual wages.	1	.1
None.	1	.1
Nuc. Med. and MR are staffed by contract service techs in our facility.	1	.1
Nuclear medicine techs are the most difficult to hire, survey did not address this question. Was willing to use a sign on bonus for nuclear tech opening which lasted 6 months.	1	.1
One- two years ago we have high turnover and many open positions in MR, CT and nuclear medicine. We started our own hospital based educational programs and now have a continual supply of qualified technologists. We have students in every department either through affiliation with a college program or our own program. We do not offer sign-on bonuses but we do offer scholarship packages in exchange for 6months to 1 year of employment. We have done this in Radiography, MR,CT and nuclear.	1	.1
Our facility has been blessed with good return and the acquisition of a new facility and technology. This has contributed to the technologist's interest of working at a small rural facility, greatly eliminating our turnover rate.	1	.1
Our facility has been very fortunate to have very stable staffing and we use minimal local temp coverage.	1	.1
Our facility is going into a joint venture to build a new 400 bed facility.	1	.1
Our facility is in a special situation. We are fully staffed with student techs waiting to fill positions. We are not feeling the effect of the shortage and our wages and bonuses reflect that. :-(	1	.1
Our facility is small therefore I am the director, Rad Tech, and bone density person.	1	.1
Our FTEs have remained constant due to the facility paying the techs a fair wage and working with them to provide time off for them to spend with their families.	1	.1
Our hospital has expanded in the past two years and we have been hiring with the expansion without difficulty. Because of the new digital equipment tech that lives in this town had to travel and now they don't.	1	.1
Our local community college provides all the Imaging programs. In FYs 2001, 2002, and 2003 several hospitals in our community provided financial assistance to the college for the purpose of increasing student enrollment in each of the imaging modalities.	1	.1
Our pay scale is government controlled. Even though we make less than our private counterparts we have great job satisfaction and all the vacations the students get throughout the year	1	.1
Our Radiologic techs also perform CT.	1	.1
Our techs are not staffed in one modality, they rotate thru all areas, with the exception of the one male tech we have; he does not rotate thru mammos.	1	.1
PACS technology has increased efficiency and reduced patient wait times and dissatisfaction.	1	.1
Paid \$10,000 sign-on bonuses with ultrasound.	1	.1
Presently, we have a glut of Technologists in our area driving salaries down.	1	.1
Quality general radiographers seem to be more difficult to find. R.T.s seem to want more specialized jobs, ex CT, MR< CATH Lab	1	.1
Rad techs are easy to find but most are w/o experience - new grads. Experienced techs are harder to find.	1	.1
Radiographic Techs are getting harder to find. Everyone wants a specialty area, such a CT, MR or mammography.	1	.1
Radiologic technologist shortage is not near as bad as the nuc med tech shortage in Florida.	1	.1

Radiology Department/Facility Staffing Survey

Ready supply of qualified individuals is greatly improved compared to 5 years ago	1	.1
Recruitment not currently a problem	1	.1
Recruitment to rural area has historically been difficult. Also difficult to recruit students to enroll in radiology programs due to extended waiting lists at local colleges.	1	.1
Rural technologists perform all modalities and can not be pigeon holed in one modality.	1	.1
Salary and work environment are critical to maintaining staff.	1	.1
Shortage has occurred in ultrasound.	1	.1
Small community hospital. Very low turnover and no problem recruiting.	1	.1
Stable staff -- low turnover rate	1	.1
Techs like working at [name of facility], virtually no turnover and no vacancies.	1	.1
Temp/travel question #6 - I am the only radiographer on call 24-7, but I try to find money to get temps on at least 2 weekends a month	1	.1
Thank God! I have not had to hire any travelers or temps for 5 years. I'm glad I have been able to keep our school open.	1	.1
The attrition rate here was horrible before I came on as director. I know, because I was a staff tech. I feel that the biggest reason was because of lack of solid orientation and the fact that the previous director did not lead by example. We have a wonderful department with the staff taking ownership of their duties as well as of their department.	1	.1
The facility would allow me to hire a part time employee but out here you can not find part time help. So as usual we make do. Hopefully the quality of care does not decrease!!!!	1	.1
The increased wait time is for mammography only - increased backlogs due to equipment/staff shortage	1	.1
The problem on the Gulf Coast is available housing.	1	.1
The salaries need to be increased. There is a definite decrease due to schools closing. It's hard to recruit when registry techs get more money than our full time.	1	.1
The State of Hawaii only has one AMA approved entry level Radiologic Technology program sponsored by The UH aka KCC. Program growth in terms of increased students is determined by legislative funding and university budget prioritization. Also by JRCERT based upon inaccurate survey. The survey used by UH/KCC depends on census of open RT jobs but does not account for how many R.T.s work two and three jobs as RFT, RPT, and CI's. This facility supplements needed FTEs with RPT & CIs which = 40% of need.	1	.1
The supply of rad techs is much improved over 5 years ago.	1	.1
The supply of radiographers is not that critical but the ultrasound technologists are very hard to find.	1	.1
The work force is getting older, we are experiencing more time off due to personal injuries, chronic conditions and health.	1	.1
There are more techs than jobs in this area. The area schools are flooding the field.	1	.1
There is a glut of techs in MN. Too many students are being trained in relation the number of jobs. Students that graduated 2 years ago still have not found jobs.	1	.1
There is a real shortage of techs that can cover for relief help in a small rural community. Full time techs like me have a hard time finding help so you can take vacations, or time off, even weekends. Help is difficult to find with the new laws taking effect, and cross training once done with lab is no longer an option. ASRT and the state governments may have thought this was a great idea to create a mandatory license, but it has created great problems for the small hospitals.	1	.1
There is no shortage.	1	.1
There were no comments on the use of permanent placement companies. [Facility] has always preferred to get a permanent (average cost = 20% of yearly salary) employee over using a temp (average cost of \$12,000-\$15,000/month). [Facility] continues to use perm placement companies as an adjunct to Web searches. This is much less expensive than temp companies.	1	.1



Radiology Department/Facility Staffing Survey

This hospital on requires 1 FTE so I am not very helpful with your survey. Sorry	1	.1
This is a small rural community hospital with multi-talented technologists committed to improving the health and well-being of the people they serve; we are a very luck facility and community to have this group.	1	.1
This is a small rural hospital with low occupancy. Revenue streams are scanty and often borrowing operational funds is necessary. Recruitment if very difficult because techs see no long term future for upward mobility/significant salary increases.	1	.1
This is a small rural hospital with only a 2300 population. Techs are disinclined to relocate here and if they do, the length of stay is short. The 24/7 call requirement is a serious challenge and p/t techs who work elsewhere are assisting significantly,	1	.1
This is a very small facility and staffed by local employees who are well trained.	1	.1
Today's radiology supervisor/management skill sets are suboptimal. I have extreme trouble hiring experienced managers/supervisors. And when I do, I have to train them myself, which takes over one year.	1	.1
U/S techs are not taking their registry exams, making it very difficult to get qualified techs. U/S techs registered in vascular are difficult to get, even through agencies. They aren't out there. This is my biggest problem. MR 3T techs are a close second problem.	1	.1
Ultrasound is the only area where staffing shortages have caused a reduction in the patient schedule.	1	.1
Ultrasound services are provided by PRN traveling sonographers. 2 days a week only.	1	.1
Unable to determine length of employment and turnover rate because of new employees.	1	.1
Until hospital administrators/CEO's recognize that R.T.s have as much education as RNs and adjust pay scales accordingly, there will continue to be staffing difficulties. R.T.s can make more money and have more flexible schedules with no overtime or holidays if desired by working for agency than for a hospital. Thank you.	1	.1
Ultrasound techs are the hardest to fill. Takes us an average of 8 months to find an US tech.	1	.1
Use MR regional van until new facility built to accommodate future MR in building	1	.1
Very small facility here....would love to have one extra tech, however, CEO does not see the need at this time.	1	.1
Wages must increase by 25% in order to retain the staff I presently employ. This is a high risk job, no raises for about 8-10 years now. The lack of raises affects retirement down the road.	1	.1
We are a 26 bed rural hospital. We have a mobile MR, hence no technologist FTE. It was very difficult finding a full time mammographer and sonographer. We have a local [name of city] agency that we get our techs from and they charge about 25% over our current wages. Most of our diagnostic technologists are from this locale and do not want to travel to other cities so there is a low turnover rate.	1	.1
We are a clinical site for a rad training program and my experience is that the students need to travel out of the area to find work. My staff is extremely stable with no turnover in over 2 years.	1	.1
We are a small 110 bed facility. We have 2 weekday techs, who have been here an average of 17 years. We have 2 weekend techs that have been here an average of 3 years.	1	.1
We are a small 54 bed rural hospital staffed with local people. Our turnover rate is extremely low.	1	.1
We are a small hospital - 1 full-time employee -1 part time - but after hour call is difficult to find - and vacation coverage is very difficult.	1	.1
We are a small hospital so our turnover rate is low. weekends are when we are the shortest in finding techs to work.	1	.1
We are a small hospital. Our techs do x-ray as well as the CT. We have one person to do mammograms. We have a mobile MR unit that comes every other Tuesday.	1	.1

Radiology Department/Facility Staffing Survey

We are a small rural hospital, encounter some difficulties recruiting, but with 2 techs and 1 ltd scope tech we manage the workload ok, however we have to take almost constantly on-call assignment	1	.1
We are a small rural hospital. All of our modalities are done with 2 FTE and 1 part-time. Both FTE have worked here for 20+years. I believe it would be hard to recruit when the time comes. It is difficult to find someone that does 4 modalities.	1	.1
We are a small rural hospital. I am the only R.T. on staff. The admin. wants to add CT to the dept, but not increase staff.	1	.1
We are a very small critical access hospital, privately owned. We all are like family here. We have one employee that has been here in the Radiology department for 36 years. Another one 18 years. I have been an employee here for 13 years. I have been the Director here for 3 years.	1	.1
We are a very small hospital and all 3 techs have been here for 5-30 yrs.	1	.1
We are at full-staff and believe making your hospital a "best place to work" has proven our success with recruitment and retention. Employees want to be valued for the work they perform and feel rewarded for a job well done.	1	.1
We are clinical site for all areas of rad staffing -- not an issue.	1	.1
We are currently planning for the baby boomers, we have feast and fathom and it hits different modalities	1	.1
We are fully staffed and have been for over a year now	1	.1
We are fully staffed and have had no problems for many years	1	.1
We are fully staffed at our facility. As stated above we are cross-trained in different modalities, and cover call at night to provide radiology services to our community. This works well for our hospital and the staff in Radiology.	1	.1
We are just a small facility that has a 1st and 2nd shift -- 1 tech per shift, everything else is covered by call and per diem workers.	1	.1
We are located in a rural area and so I think do experience a great difficulty filling a position when one becomes available.	1	.1
We are luckily fully staffed by R.T.s who are all cross-trained or willing to be, which is a bonus for us. At this time, we only have a need for a registered sonographer.	1	.1
We are not having any staffing issues	1	.1
We are part of a 3 hospital group. There are chief techs over mammo/CVIT/MR/nuc med apart from my area.	1	.1
We are presently not experiencing a technologist shortage with the addition of digital equipment technologist have been reluctant. Basically they enjoy working with the equipment, we have a good group to work with.	1	.1
We are seeing more physician based imaging centers who may recruit techs from hospitals. This decreases OP volume for hospitals and will eventually decrease FTE's.	1	.1
We are very fortunate that we have a stable staff. Also there is a nearby site providing RT training, which uses us as a clinical site.	1	.1
We continue to expand our types of service provided and have been adding new locations that provide service. The demand at our facility continues to increase due to expansion.	1	.1
We contract MR/Nuclear Medicine/ and ultrasound services	1	.1
We currently have a temp working in US	1	.1
We currently have one LPN trained as an x-ray operator for 2 days per week. Four lab techs are also cross-trained as x-ray operators and take all the call.	1	.1
We do not have a very big turnover here, and there is a large radiology program about 25 miles from us, that turns out lots of new students every year.	1	.1
We don't use temps. I have had most of my techs for over 10 years -- 2 for 15 and one for 20 years. Very low turnover rate. VERY Fortunate	1	.1
We had issues covering 2.0 FTE in CT Dec-Jan- we used a traveler for that for 6 weeks. We have been lucky this past year. I most worry about Ultrasound and losing one of those techs.	1	.1

Radiology Department/Facility Staffing Survey

We have a hospital based education program, and are a clinical site for several schools, we offer our graduates scholarships for employment. New hires from other schools, or health care facilities - 10,000 employment contract for 3 years of service. In addition we set up apprentice programs for CT, MR, and US, reducing the orientation time for a new modality technologist. For Radiation Oncology, Nuc Med, and Ultrasound we are a clinical site for various schools. EDUCATION IS EVERYTHING	1	.1
We have a hospital based in house radiologic tech program.	1	.1
WE have a low vacancy rate for the following reason: We have students and we pick the best during clinical rotation, we offer \$15,000 scholarship money and they are obligated to work for us for 2 years. We offer technologists who express an interest, training in a modality (if vacancies) and we keep our promise to have them work in that modality with the stipulation that they must become registered in the modality within one year. We have a good PRN pool also a source of FT employees.	1	.1
We have a sign on bonus for interventional/cardiology techs. This is our shortage at this time. CT/MR and Ultrasound have openings due to growth in services, however no sign-on bonus offered.	1	.1
We have a training program here and are able to fill in vacancies with these graduated students. We also take our diagnostic techs and cross-train interested techs in mammography, interventional/cardiac cath. and CT. We can offer our MR techs a chance to train in MR when an opening occurs. Our ultrasound department takes on externs from ultrasound schools, most of these techs desire employment here after graduation. In nuc. med. we have sponsored a tech to train in anticipation of need.	1	.1
We have a two year training school 20 miles from here. This keeps our needs met in this area.	1	.1
We have all of the technologists we need and then some. We fortunately have two schools of radiography within 60 mi. We also have an ultrasound program about 80 mi. away. We do not use temps or staffing agencies.	1	.1
We have an average daily census of 60 patients. Staffing is no longer an issue. Last year a Radiology Tech program at the local community college graduated its first class. Our area has been flooded with radiology techs.	1	.1
We have an outreach program for women patients who never had a mammogram. We hired a temp/traveler for this reason. We have a new in-house MR, which we are in the process of staffing.	1	.1
We have been lucky the past few years and not had any vacancies but have had great difficulties in the past because of poor benefits paid by this facility and the lack of technologists.	1	.1
We have been very fortunate in maintaining staff. I attribute this to having students here and they like it here.	1	.1
We have consistently had very low staffing and cross trained the staff in all modalities except MR, sonography, nuc. Our culture tends to maintain longevity in our department and many other hospital departments. Students are eager to be employed by us after they graduate.	1	.1
We have had a reliable, steady workforce with minimal turnover for the past several years. We did use a recruiter in a search for a cardiovascular sonographer in Jan. 2004 (new position). I was able to interview three excellent entry level candidates for one .8 FTE radiographer position that I added in Aug. 05. Our students tell us that they do not see the job openings available just 2 years ago. They seem worried. We are in west central Illinois.	1	.1
We have had no hiring issues for the past 3 years. We have 3 radiology programs within 100 mile radius. One is 50 miles away that also includes an ultrasound program. No jobs available for some techs in our area. If classes are reduced we will see a tech shortage again in 3 years as previous 15 yrs has proven. I have tenured staff that have cross-training in other areas.	1	.1
We have had to utilize laboratory staff to perform x-rays.	1	.1
We have increased our school to 2 graduations a year starting this year	2	.3
We have no problems getting staffing for the last two years. Staff turnover is not a huge problem for our facility	1	.1

Radiology Department/Facility Staffing Survey

We have not had 100% permanent FTE's since 1998. We therefore, initiated our own training program in conjunction with a university.	1	.1
We have not had any recruitment or Radiologic Technologist vacancy issues and concerns for 3 years now. The shortage of available technologists is over in my market in [City], AR.	1	.1
We have not seen a shortage over the past year as more new techs are graduating and FT and PT openings have dramatically decreased in the region. Most facilities are now advertising only for per diem or weekend relief.	1	.1
We have two radiology schools that supply our demand for technologists.	1	.1
We in the VA have adequate staff.	1	.1
We just recently have filled all positions	1	.1
We need to expand hrs of operation in CT to add more appts evenings and Sat.; however, without a radiologist in house to oversee IV contrast injections, I refuse to do so. Need radiologist or RA. We are a cancer hospital and, as such, don't have ER to respond to adverse contrast reactions.	1	.1
We only employ 2 people part time to cover the dept. During regular hours. We have 4 people that share call duties. We are a 16 bed rural access facility.	1	.1
WE provide only biopsy and wire localization mammography procedures	1	.1
We reimburse college education for ultrasound and radiography	1	.1
We seem to have a stable and content staff. Our facility works hard to retain staff. Full-time staff has been here for 4 years to 20 years.	1	.1
We still have come up against the aspect that management thinks we are being overpaid here, and they have the attitude that people will show up here anyway to do the job. They evidently feel that there is not a shortage of techs out there, but since we have been trying to hire one for over a year, I would think they would see that there aren't 3 techs just waiting out there to jump at the jobs. It is very depressing to think that management is stating rad techs are basically overpaid...	1	.1
We were always full staff whether it was FTEs or travelers - agency or direct hire.	1	.1
We will be incorporating the LPN and RN at 2 separate clinics into the hospital x-ray dept when we enlarge our clinic.	1	.1
We won the Kansas Award for Excellence / Patient and Employee satisfaction have been our drivers for success	1	.1
Western Michigan seems to have a glut of graduates every spring due to the number of schools turning out techs. Most of the graduates want to stay near "home" and are unwilling to relocate even for employment	1	.1
While our sign-on bonus is listed as \$5000, it is negotiable for the right candidate. We are currently paying over 100% more for radiographer travelers.	1	.1
While the shortage of radiologic technologists has eased up considerably in our region, the need to continue training new techs is crucial in order to maintain our staffing levels due to normal outward migration, retirement and our increasing volume in all diagnostic imaging modalities.	1	.1
With the amount of staff we have for a small hospital, our patients are done very timely, no complaints	1	.1
Total	693	100.0

## **APPENDIX**

### **THE QUESTIONNAIRE**

Radiology Department/Facility Staffing Survey

February 2006

Dear Radiology Facility Manager:

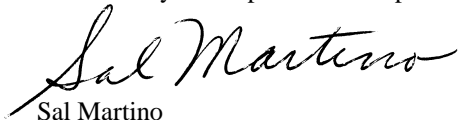
We would appreciate your helping the ASRT gauge the current status of the unmet demand for radiologic technologists. Few things could be more important for the profession – R.T.s, their managers and R.T. educators alike – than an accurate assessment of the current supply and demand for radiologic technologists.

As you know, a fall 2001 American Hospital Association survey of managers and directors of hospital-based radiology facilities found that more than 15 percent of budgeted positions for radiologic technologists were unfilled. A more recent survey by the Hodes Group found a 12 percent vacancy rate in fall 2003, but there were enough differences between those two surveys to raise some doubt as to whether this truly represented a decrease in vacancy rates. The ASRT’s first *Radiology Staffing Survey* in 2004 answered that question, finding vacancy rates of from 5.3 percent (mammographers) to 10.2 percent (interventional technologists) as well as providing information about what directors/managers thought to be the reasons behind unfilled positions.

This year’s survey is intended to be the next in a biennial series of staffing surveys that will provide updates on vacancy rates as well as factors responsible for any changes in those vacancy rates. This information will be shared with the radiologic technology community via a report posted on the ASRT Web site. The report’s accuracy will depend on your willingness to complete the Radiology Department and Facility Staffing Survey by sharing your facility’s staffing data and views on staffing issues.

There are two ways for you to participate in this survey. Our preference, because of its lower cost and greater ease of data entry, is for you to complete the questionnaire online by going to [www.asrt.org](http://www.asrt.org) and clicking on “Radiology Staffing Survey” in the Education and Research” section of that page. Please enter the survey code, “RadStaf” as your response to the first question on the online form. Alternatively, you can complete the enclosed hard copy questionnaire and return it to ASRT’s Research Department in the postage-paid reply envelope. Please respond within the next two weeks.

Thanks for your help with this important survey.



Sal Martino  
Executive Vice President and Chief Academic Officer

\*\*\*\*\*  
Contact Information\*

Name \_\_\_\_\_

Title \_\_\_\_\_

Mailing address \_\_\_\_\_

Telephone \_\_\_\_\_ E-mail address \_\_\_\_\_

\*This form will be separated from the questionnaire upon receipt; your responses to the questionnaire will remain anonymous. This information will be used only for purposes of sharing information between radiology department/facility managers and the ASRT. It will not be sold or otherwise provided to any commercial enterprise.

Radiology Department/Facility Staffing Survey

5436471729

ASRT



**Radiology Department/Facility Staffing Survey**

Logo

Thank you for completing this important survey. Please return the completed questionnaire in the enclosed postage-paid reply envelope within the next two weeks, or go to [\[link to survey\]](#) to provide your data online. (You'll need to provide the survey code, RadStaf.)

Facility Demographics	
Your title	<input type="checkbox"/> Department/facility manager or director <input type="checkbox"/> Chief technologist <input type="checkbox"/> Other ( <i>please specify</i> _____ )
Type of facility	<input type="checkbox"/> Community hospital <input type="checkbox"/> Government hospital <input type="checkbox"/> University medical center <input type="checkbox"/> Freestanding clinic <input type="checkbox"/> Teaching facility <input type="checkbox"/> Other ( <i>please specify</i> _____ )
Radiology services provided in your facility	<input type="checkbox"/> Radiography <input type="checkbox"/> CT <input type="checkbox"/> MR <input type="checkbox"/> Mammography <input type="checkbox"/> Nuclear medicine <input type="checkbox"/> CVIT <input type="checkbox"/> PET <input type="checkbox"/> Sonography <input type="checkbox"/> Other ( <i>please specify</i> _____ )
Teaching status	<input type="checkbox"/> Involved in education of R.T.s <input type="checkbox"/> Non-teaching facility
Location	<input type="checkbox"/> Urban <input type="checkbox"/> Suburban <input type="checkbox"/> Rural    State (two-letter abbreviation) ____ ____

**Staffing**

- For each of the following job titles within radiologic technology, please provide the number of budgeted and vacant FTEs your organization had on Jan. 1, 2005, and the number it has today (current). Leave blank the rows for any job titles not represented at your facility. For any job title for which you enter nonzero budgeted FTEs **and** for which there is or was no recruitment effort, please also enter a zero in the "vacant and recruiting" column, rather than simply leaving it blank. Check "DK" ("don't know") and leave the number of FTEs blank for any item for which you feel you cannot provide a reasonably accurate estimate.

Job Title	Staffing, in Full-time Equivalents (FTEs)			
	On Jan. 1, 2005		2006 (Current)	
	Budgeted FTEs	Vacant and Recruiting	Budgeted FTEs	Vacant and Recruiting
Radiographer	___ FTEs or <input type="checkbox"/> DK	___ FTEs or <input type="checkbox"/> DK	___ FTEs or <input type="checkbox"/> DK	___ FTEs or <input type="checkbox"/> DK
CT technologist	___ FTEs or <input type="checkbox"/> DK	___ FTEs or <input type="checkbox"/> DK	___ FTEs or <input type="checkbox"/> DK	___ FTEs or <input type="checkbox"/> DK
MR technologist	___ FTEs or <input type="checkbox"/> DK	___ FTEs or <input type="checkbox"/> DK	___ FTEs or <input type="checkbox"/> DK	___ FTEs or <input type="checkbox"/> DK
Mammographer	___ FTEs or <input type="checkbox"/> DK	___ FTEs or <input type="checkbox"/> DK	___ FTEs or <input type="checkbox"/> DK	___ FTEs or <input type="checkbox"/> DK
Nuclear medicine technologist	___ FTEs or <input type="checkbox"/> DK	___ FTEs or <input type="checkbox"/> DK	___ FTEs or <input type="checkbox"/> DK	___ FTEs or <input type="checkbox"/> DK
Cardiovascular-interventional technologist	___ FTEs or <input type="checkbox"/> DK	___ FTEs or <input type="checkbox"/> DK	___ FTEs or <input type="checkbox"/> DK	___ FTEs or <input type="checkbox"/> DK
Sonographer	___ FTEs or <input type="checkbox"/> DK	___ FTEs or <input type="checkbox"/> DK	___ FTEs or <input type="checkbox"/> DK	___ FTEs or <input type="checkbox"/> DK
Other (specify below)	___ FTEs or <input type="checkbox"/> DK	___ FTEs or <input type="checkbox"/> DK	___ FTEs or <input type="checkbox"/> DK	___ FTEs or <input type="checkbox"/> DK
<i>(Please specify</i> _____ )				

Please briefly explain any instances in which you entered more "vacant and recruiting" FTEs for a given position than the total FTEs budgeted for that position. \_\_\_\_\_

\_\_\_\_\_

Radiology Department/Facility Staffing Survey

0222471828

2. Describe how your facility's recruitment effort for each discipline or specialty in the past few months compares to the effort being expended at the beginning of calendar year 2005.

Job Title	Recruitment Effort – Current vs. 2005
Radiographer	<input type="checkbox"/> More difficult <input type="checkbox"/> Same <input type="checkbox"/> Less difficult <input type="checkbox"/> Don't know
CT technologist	<input type="checkbox"/> More difficult <input type="checkbox"/> Same <input type="checkbox"/> Less difficult <input type="checkbox"/> Don't know
MR technologist	<input type="checkbox"/> More difficult <input type="checkbox"/> Same <input type="checkbox"/> Less difficult <input type="checkbox"/> Don't know
Mammographer	<input type="checkbox"/> More difficult <input type="checkbox"/> Same <input type="checkbox"/> Less difficult <input type="checkbox"/> Don't know
Nuclear medicine technologist	<input type="checkbox"/> More difficult <input type="checkbox"/> Same <input type="checkbox"/> Less difficult <input type="checkbox"/> Don't know
Cardiovascular-interventional technologist	<input type="checkbox"/> More difficult <input type="checkbox"/> Same <input type="checkbox"/> Less difficult <input type="checkbox"/> Don't know
Sonographer	<input type="checkbox"/> More difficult <input type="checkbox"/> Same <input type="checkbox"/> Less difficult <input type="checkbox"/> Don't know
Other (specify below)	<input type="checkbox"/> More difficult <input type="checkbox"/> Same <input type="checkbox"/> Less difficult <input type="checkbox"/> Don't know
<i>(Please specify _____)</i>	

3. If budgeted FTEs in any of these disciplines or specialties have decreased over the past year, what do you believe is the reason for this decrease? (Check all that apply.)

- Patient demand declined.
- Overall department or facility budget declined, forcing downsizing.
- Formerly budgeted FTEs were so difficult to fill that they were dropped from the budget.
- Number of patients processed per day by each R.T. increased, so number of FTEs required to handle the workload declined.
- Average number of hours worked per week by our R.T.s increased, so number of R.T.s required to handle the workload declined.
- Other *(please specify \_\_\_\_\_)*

**R.T. Recruitment and Retention**

4. For each discipline or specialty, how have the following staffing indicators changed since January 2005?

	Radiography					CT					MR					Mammography								
	ML	L	S	H	MH	NA	ML	L	S	H	MH	NA	ML	L	S	H	MH	NA	ML	L	S	H	MH	NA
Employees' average length of employment at your facility	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Turnover rate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**ML:** Much lower    **L:** Lower    **S:** About the same    **H:** Higher    **MH:** Much higher    **NA:** Not applicable

5. Were you paying sign-on bonuses for R.T.s in 2005? Are you paying them currently? If yes, please indicate amount typically paid.

	Radiography		CT		MR		Mammography	
	Paid sign-on bonuses?	Amount of bonus*	Paid sign-on bonuses?	Amount of bonus*	Paid sign-on bonuses?	Amount of bonus*	Paid sign-on bonuses?	Amount of bonus*
In January 2005	<input type="checkbox"/> Yes <input type="checkbox"/> No	\$	<input type="checkbox"/> Yes <input type="checkbox"/> No	\$	<input type="checkbox"/> Yes <input type="checkbox"/> No	\$	<input type="checkbox"/> Yes <input type="checkbox"/> No	\$
Currently (2006)	<input type="checkbox"/> Yes <input type="checkbox"/> No	\$	<input type="checkbox"/> Yes <input type="checkbox"/> No	\$	<input type="checkbox"/> Yes <input type="checkbox"/> No	\$	<input type="checkbox"/> Yes <input type="checkbox"/> No	\$

\*Amount of bonus to nearest \$500.



Radiology Department/Facility Staffing Survey

1502471820

6. Estimate the percentage range for each of the following:

	0%	1%-6%	7%-13%	14%-20%	21%+	Or Specify %
What percentage of your <i>radiographer</i> FTEs are you currently filling with temps/travelers?*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	%
How much more (%) above average <i>radiographer</i> wages and benefits do you pay for temp/traveling radiographers?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	%
What percentage of your <i>CT technologist</i> FTEs are you currently filling with temps/travelers?*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	%
How much more (%) above average <i>CT technologist</i> wages and benefits do you pay for temp/traveling CT specialists?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	%
What percentage of your <i>MR technologist</i> FTEs are you currently filling with temps/travelers?*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	%
How much more (%) above average <i>MR technologist</i> wages and benefits do you pay for temp/traveling MR specialists?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	%
What percentage of your <i>mammographer</i> vacancies are you currently filling with temps/travelers?*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	%
How much more (%) above average <i>mammographer</i> wages and benefits do you pay for temp/traveling mammography specialists?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	%

\*Temps/travelers = traveling R.T.s, locum tenens and R.T.s provided by temporary staffing agencies.

7. Has your facility experienced any of the following consequences of a work force shortage?

Consequence	Experienced as a result of shortage of R.T.s?
Curtailed plans for facility expansion	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown
Curtailed plans for acquiring new technology	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown
Reduced number of staffed diagnostic units	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown
Discontinued R.T. educational program(s)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown
Increased patient wait times for procedures	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown
Canceled procedures	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown
Decreased patient satisfaction	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown
Increased patient complaints	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown
Other (please specify _____)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown

8. Please add here any comments you feel are necessary to clarify any of your responses and/or any additional comments you wish to share on your perceptions of the supply of radiologic technologists.

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Thank you for completing this important survey. Please return the completed questionnaire or respond online within the next two weeks. Call or e-mail John Culbertson, ASRT research manager, at [jculbertson@asrt.org](mailto:jculbertson@asrt.org) or 800-444-2778, Ext. 1297, if you have questions about the survey. All responses will be kept strictly confidential.