

Radiology Staffing Survey 2010

A Nationwide Survey of Registered Radiologic Technologists
Conducted by the American Society of Radiologic Technologists

Reported June 2010

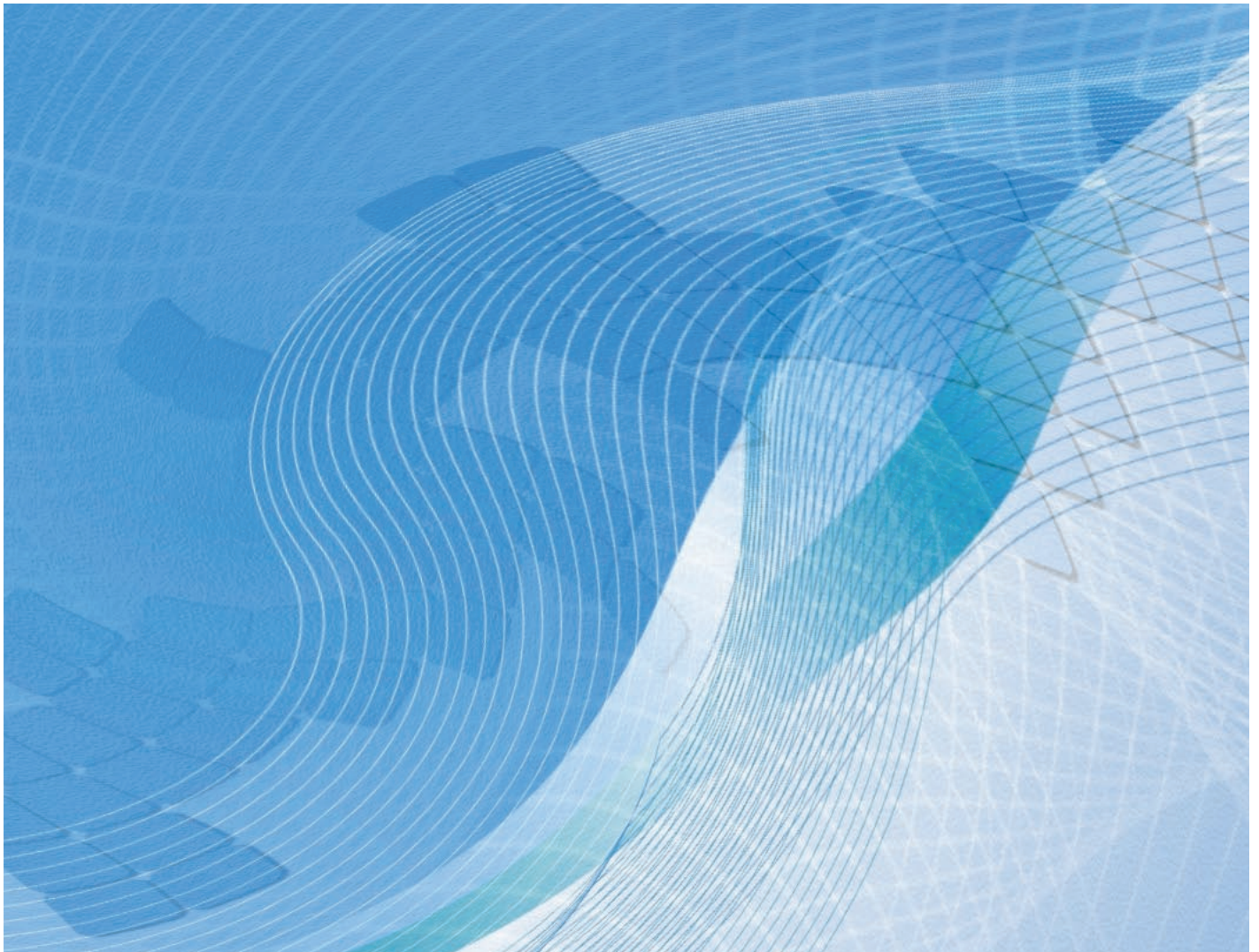


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Executive Summary

A Radiology Staffing Survey questionnaire was e-mailed on June 1, 2010, to 12,604 managers/directors/chiefs of U.S. radiology facilities. At the close of the survey on July 6, 2010, a total of 1,654 completed questionnaires had been submitted resulting in a response rate of 13.1%.

The sample size of 1,654 yields a margin of error for overall percentages (at the 95% confidence interval for the population percentage) of a maximum $\pm 2.4\%$.

To keep the report at a minimal length, questions 2 through 4 and verbatim responses to open-ended questions were not included, but can be provided upon request.

Staffing of the Facilities

Facilities reported their 2010 mean budgeted full-time employees (FTEs) as:

- R (10.6).
- CT (5.0).
- CVIT (4.6).
- S (4.1).
- M (3.9).
- MR (3.8).
- NMT (2.9).
- Staff with other specialties (4.6).

The 2010 budgeted FTEs in each specialty, along with vacant and recruiting figures, produces estimated percent unfilled positions as:

- S (4.6%).
- CVIT (3.5%).
- MR (3.4%).
- CT (2.6%).
- NMT (2.1%).
- R (2.1%).
- M (1.8%).
- Staff with other specialties (3.9%).
- Radiography has experienced a decline of 8.2% when tracked longitudinally over the past seven years, with the estimated percent unfilled FTE positions at 10.3% in 2003 down to 2.1% in 2010.
- The mountain geographic region (ID, MT, WY, NV, UT, CO, AZ, NM) has the highest overall vacancy rate across all disciplines at 3.9%, with the east south central region (KY, TN, MS, AL) having the lowest at 1.3%.
- Exactly 71.2% of the respondents reported no increase in budgeted FTEs for any of the specialties in which their facilities provide services.

- About 62% of the respondents reported no decrease in budgeted FTEs.

Demographics

The services provided at facilities were reported as:

- R (87.3%).
- S (69.5%).
- CT (66.0%).
- MR (66.0%).
- M (60.1%).
- NMT (50.7%).
- CVIT (30.2%).
- Exactly 42.4% of the respondents chose "Department/facility manager or director" as closest to their job titles and 33.5% chose "Chief technologist."
- Approximately 30% of the respondents considered their facilities to be in rural locations, 40% suburban and 30% urban.

Recruitment and Retention

- A majority (54.4%) of the respondents indicated that their facility is "currently not recruiting" new FTEs.
- When asked about their facility's employee turnover rate, 46.5% indicated "there has been no turnover."

Calculation of Percent Vacancy Rates

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

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

which is equivalent to:

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

The percentage of unfilled positions equals the proportion of unfilled positions times 100%.

For example, in radiography the mean for budgeted FTE is equal to 10, when divided by the mean for vacant and recruiting FTE positions (.25), this yields a percent of unfilled FTE positions of 2.5%.

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 implied to be zero) were included in the calculation of vacancy rates.

Staffing of the Facilities

For each of the following job titles, please provide the budgeted and vacant full-time employees (FTEs) for your organization in January 2009 and today. Please use decimals for fractional FTEs.

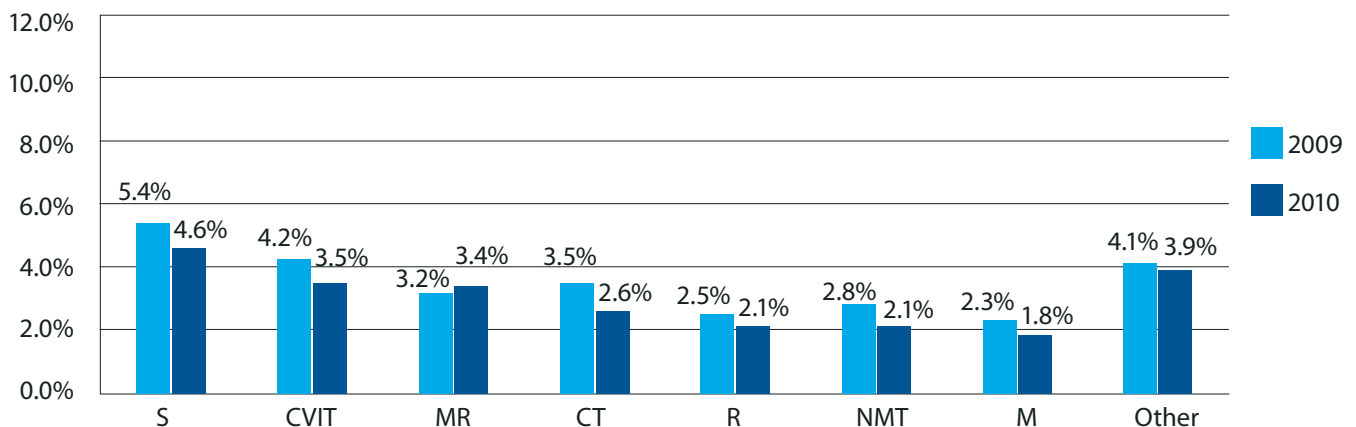
2009

Discipline	N	Mean Budgeted FTEs	N	Mean Vacant and Recruiting FTEs	Estimated Percent Unfilled FTE Positions
S	696	3.9	698	0.21	5.4%
CVIT	224	4.5	225	0.19	4.2%
MR	644	3.8	649	0.12	3.2%
CT	672	4.8	674	0.17	3.5%
R	1,015	10.0	1,015	0.25	2.5%
NMT	457	2.9	457	0.08	2.8%
M	620	4.0	618	0.09	2.3%
Other	136	4.2	137	0.17	4.1%

2010

Discipline	N	Mean Budgeted FTEs	N	Mean Vacant and Recruiting FTEs	Estimated Percent Unfilled FTE Positions
S	661	4.1	665	0.19	4.6%
CVIT	227	4.6	230	0.16	3.5%
MR	616	3.8	621	0.13	3.4%
CT	632	5.0	637	0.13	2.6%
R	929	10.6	923	0.23	2.1%
NMT	442	2.9	443	0.06	2.1%
M	586	3.9	587	0.07	1.8%
Other	122	4.6	124	0.18	3.9%

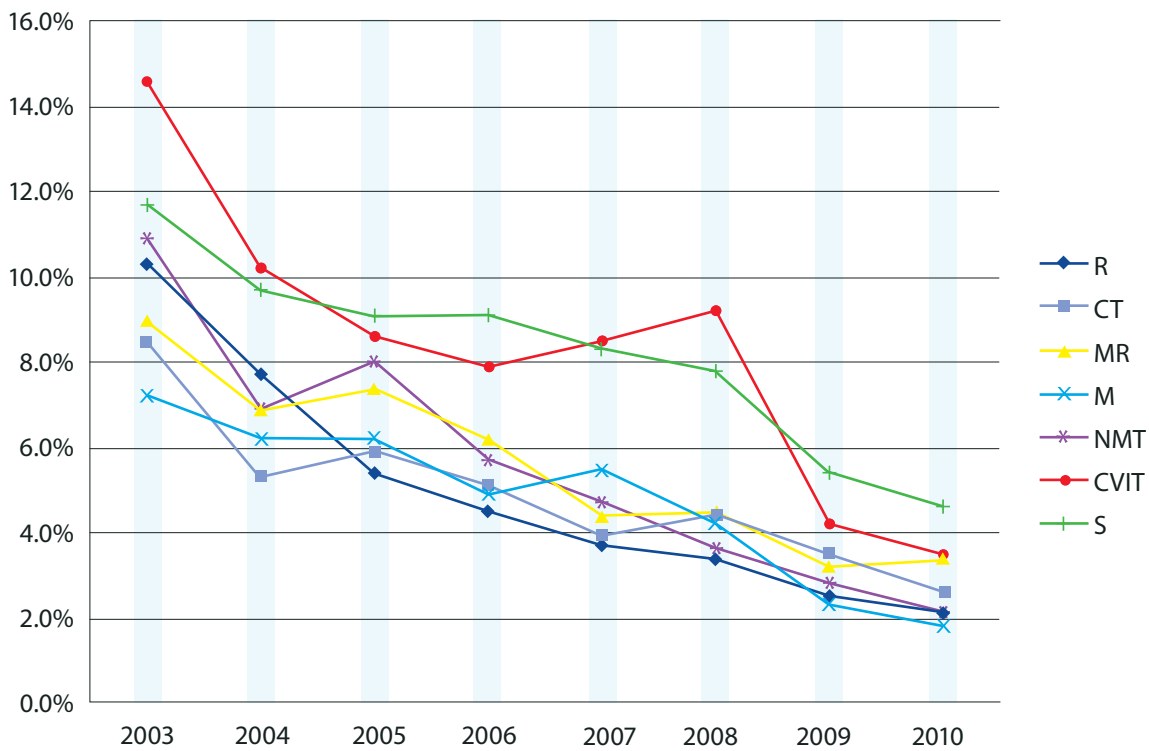
Estimated Percent Unfilled FTE Positions



Longitudinal Tracking of Estimated Percent of Unfilled FTE Positions

	2003	2004	2005	2006	2007	2008	2009	2010
R	10.3%	7.7%	5.4%	4.5%	3.7%	3.4%	2.5%	2.1%
CT	8.5%	5.3%	5.9%	5.1%	3.9%	4.4%	3.5%	2.6%
MR	9.0%	6.9%	7.4%	6.2%	4.4%	4.5%	3.2%	3.4%
M	7.2%	6.2%	6.2%	4.9%	5.5%	4.2%	2.3%	1.8%
NMT	10.9%	6.9%	8.0%	5.7%	4.7%	3.6%	2.8%	2.1%
CVIT	14.6%	10.2%	8.6%	7.9%	8.5%	9.2%	4.2%	3.5%
S	11.7%	9.7%	9.1%	9.1%	8.3%	7.8%	5.4%	4.6%

Longitudinal Tracking of Estimated Percent of Unfilled FTE Positions

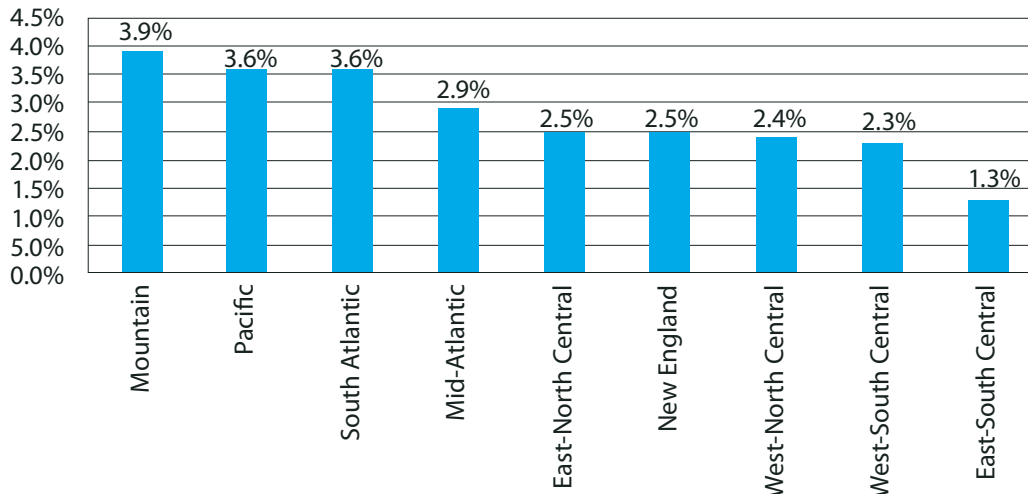


2010 Estimated Percent of Unfilled FTE Positions by Geographic Region ^a

Discipline	Statistic	Mountain	Pacific	South Atlantic	Mid-Atlantic	East-North Central	New England	West-North Central	West-South Central	East-South Central
R	N	77	93	170	96	150	57	109	100	64
	%	1.6%	2.9%	2.5%	2.4%	3.0%	2.2%	1.1%	1.1%	1.3%
CT	N	50	71	122	73	94	39	62	69	40
	%	3.8%	3.5%	3.4%	3.4%	1.5%	2.0%	2.1%	1.3%	1.0%
MR	N	53	75	109	74	102	35	55	65	38
	%	3.8%	4.8%	5.8%	3.2%	1.7%	0.7%	4.4%	2.3%	1.6%
M	N	42	68	109	78	85	42	59	56	36
	%	0.9%	2.9%	2.3%	1.4%	1.6%	2.0%	1.1%	3.2%	0.6%
NMT	N	33	50	85	61	64	28	30	49	33
	%	2.0%	2.6%	2.9%	1.2%	0.0%	0.0%	3.8%	5.9%	0.0%
CVIT	N	15	27	49	32	33	9	17	27	12
	%	17.5%	3.4%	2.0%	4.7%	0.6%	3.6%	4.0%	2.0%	1.4%
S	N	52	80	117	80	95	42	64	73	45
	%	7.2%	5.0%	5.6%	5.1%	6.0%	5.5%	2.4%	2.0%	3.0%
Other	N	8	15	24	18	17	9	14	10	7
	%	4.6%	1.2%	3.3%	2.3%	6.1%	8.9%	5.6%	0.0%	0.0%
Overall Mean		3.9%	3.6%	3.6%	2.9%	2.5%	2.5%	2.4%	2.3%	1.3%

^a Mountain: Idaho, Montana, Wyoming, Nevada, Utah, Colorado, Arizona, and New Mexico
 Pacific: Alaska, Washington, Oregon, California and Hawaii
 South Atlantic: Delaware, Maryland, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina and Georgia.
 Mid-Atlantic: New York, Pennsylvania and New Jersey.
 East-North Central: Wisconsin, Michigan, Illinois, Indiana and Ohio.
 New England: Maine, New Hampshire, Vermont, Massachusetts, Rhode Island and Connecticut.
 West-North Central: Missouri, North Dakota, South Dakota, Nebraska, Kansas, Minnesota and Iowa.
 West-South Central: Oklahoma, Texas, Arkansas and Louisiana.
 East-South Central: Kentucky, Tennessee, Mississippi and Alabama.

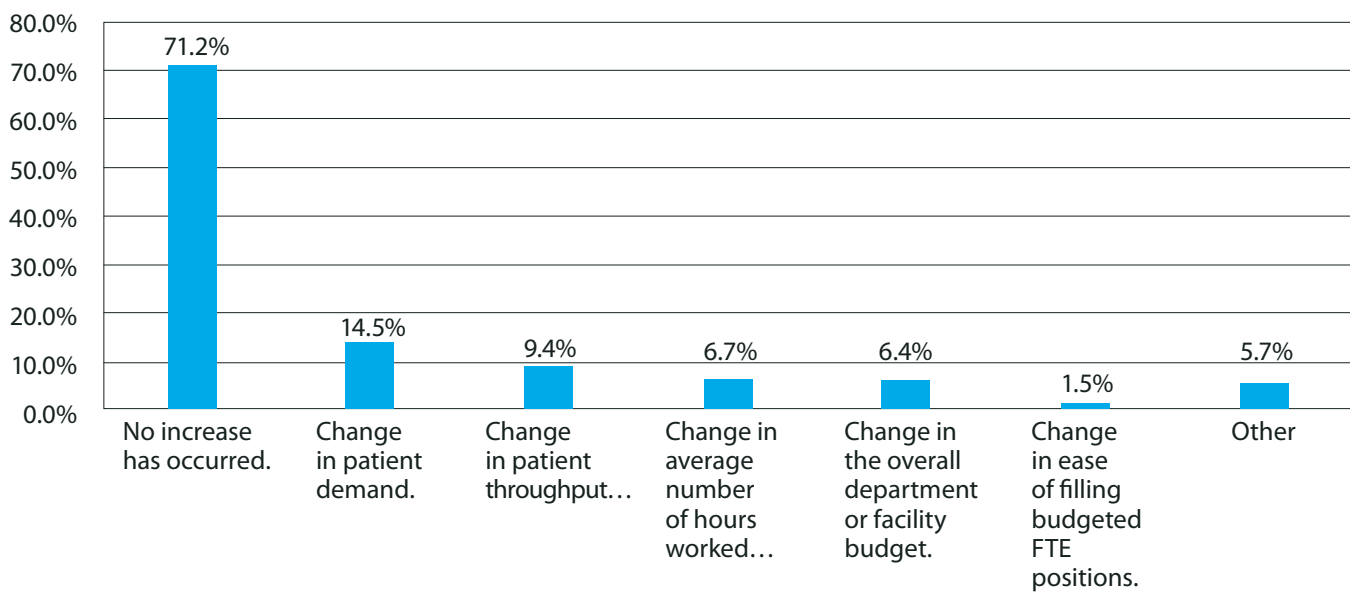
Overall Mean Estimated Percent of Unfilled FTE Positions by Geographic Region



If budgeted FTEs in any of these disciplines have increased over the past year, what do you believe is the reason (or reasons) for this change?

Reasons	Responses		Percent of Cases
	N	Percent	
No increase has occurred.	921	61.6%	71.2%
Change in patient demand.	188	12.6%	14.5%
Change in patient throughput per day, per R.T., leading to change in the number of FTEs required to handle the workload.	122	8.2%	9.4%
Change in average number of hours worked per week by our R.T.s, leading to a change in number of R.T.s required to handle the workload.	87	5.8%	6.7%
Change in overall department or facility budget.	83	5.6%	6.4%
Change in ease of filling budgeted FTE positions.	19	1.3%	1.5%
Other	74	5.0%	5.7%
Total	1,494	100.0%	115.5%

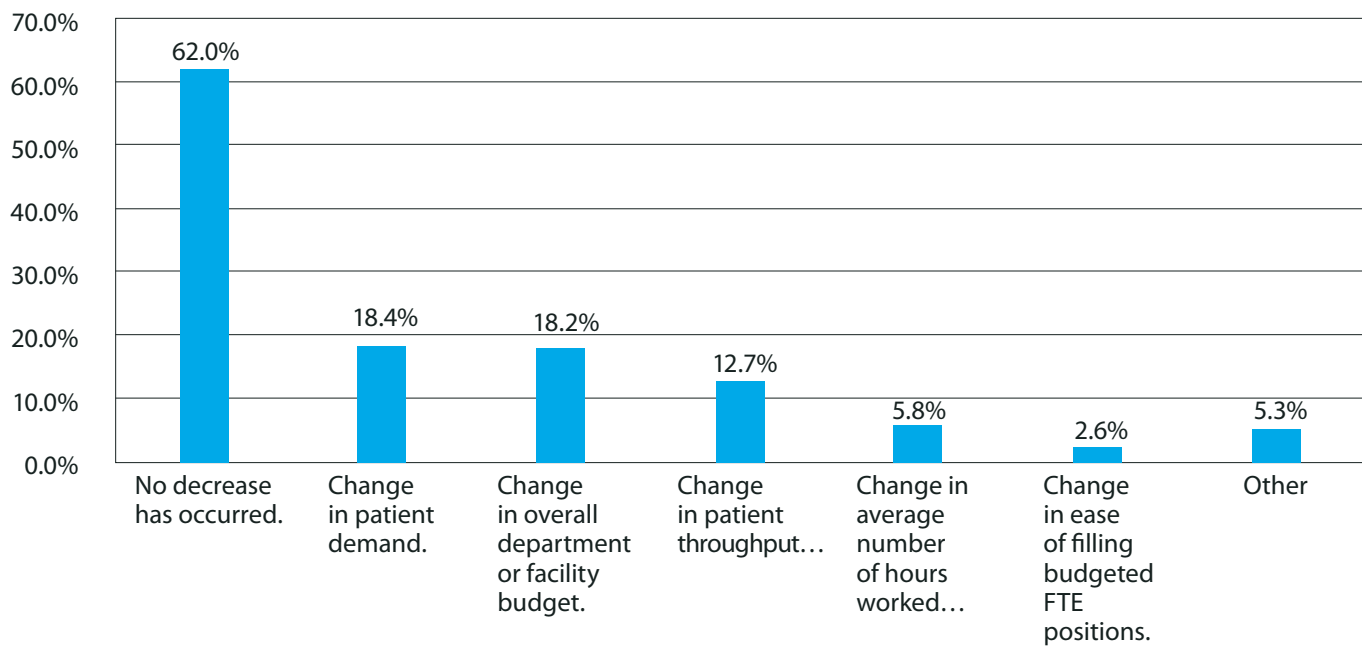
Reasons for Increase in FTEs



If budgeted FTEs in any of these disciplines have decreased over the past year, what do you believe is the reason (or reasons) for this change?

Reasons	Responses		Percent of Cases
	N	Percent	
No decrease has occurred.	808	49.6%	62.0%
Change in patient demand.	240	14.7%	18.4%
Change in overall department or facility budget.	237	14.5%	18.2%
Change in patient throughput per day, per R.T., leading to change in the number of FTEs required to handle the workload.	166	10.2%	12.7%
Change in average number of hours worked per week by our R.T.s, leading to a change in number of R.T.s required to handle the workload.	75	4.6%	5.8%
Change in ease of filling budgeted FTE positions.	34	2.1%	2.6%
Other	69	4.2%	5.3%
Total	1,629	100.0%	125.0%

Reasons for decrease in FTEs

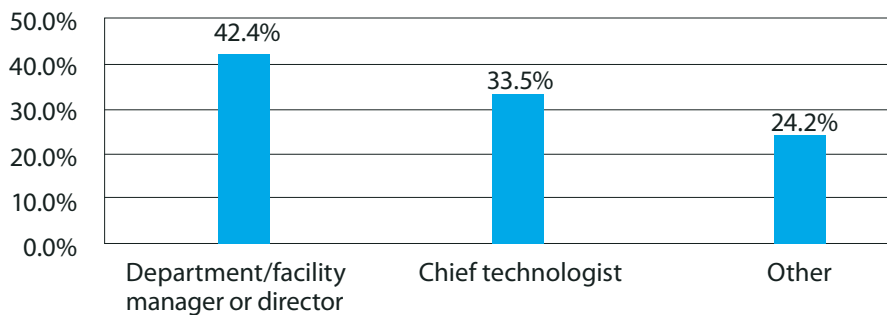


Demographics

Job Title

Job Title	Frequency	Percent	Valid Percent
Department/facility manager or director	687	41.5%	42.4%
Chief technologist	543	32.8%	33.5%
Other	392	23.7%	24.2%
Missing	32	1.9%	
Total	1,654	100.0%	100.0%

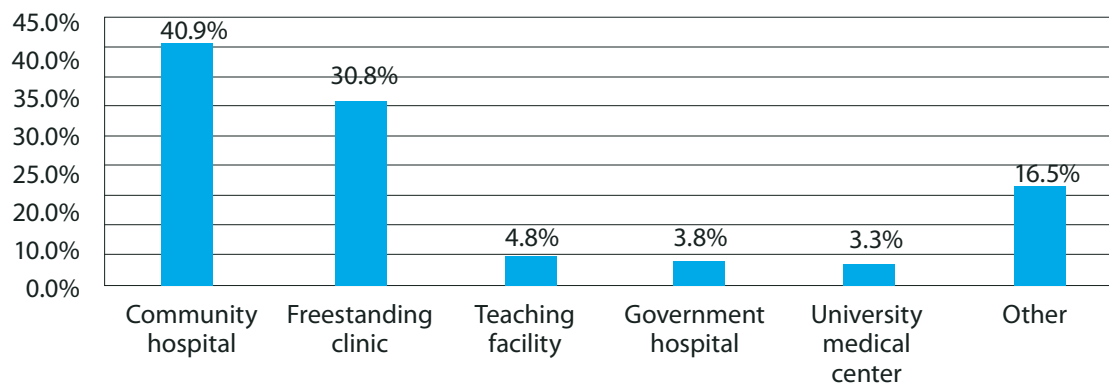
Job Title



Type of Facility

Type of Facility	Frequency	Percent	Valid Percent
Community hospital	652	39.4%	40.9%
Freestanding clinic	492	29.7%	30.8%
Teaching facility	77	4.7%	4.8%
Government hospital	60	3.6%	3.8%
University medical center	52	3.1%	3.3%
Other	263	15.9%	16.5%
Missing	58	3.5%	
Total	1,654	100.0%	100.0%

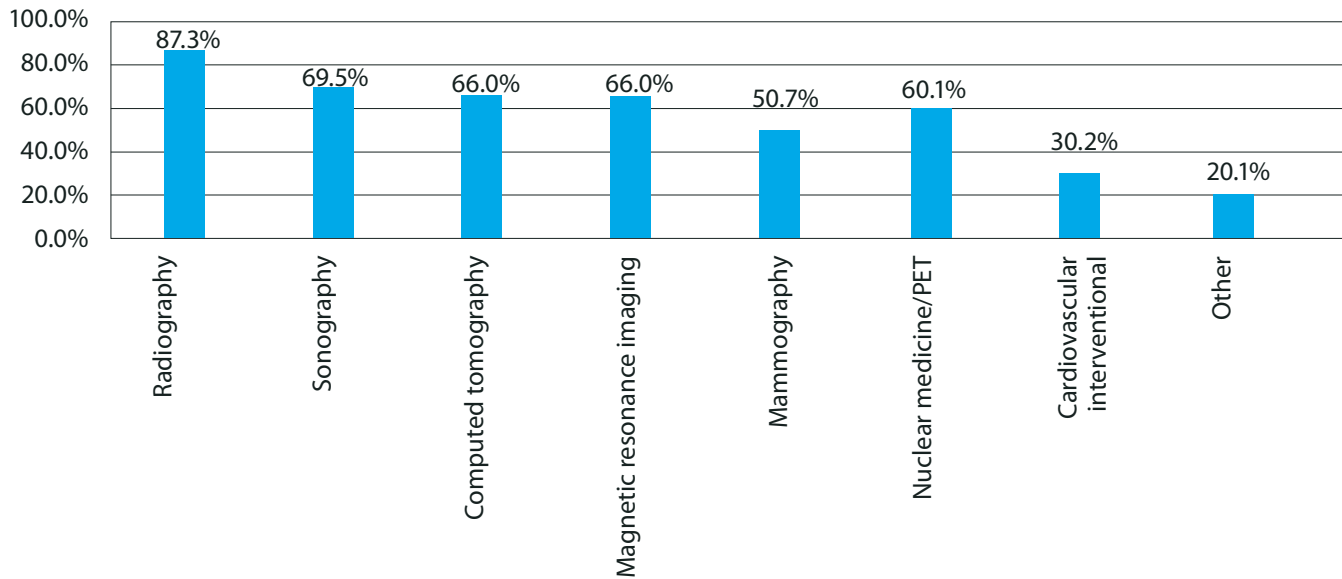
Type of Facility



Radiology Services Provided in Your Facility

Reasons	Responses		Percent of Cases
	N	Percent	
Radiography	1,422	19.4%	87.3%
Sonography	1,132	15.5%	69.5%
Computed tomography	1,074	14.7%	66.0%
Magnetic resonance imaging	1,074	14.7%	66.0%
Mammography	979	13.4%	60.1%
Nuclear medicine/PET	825	11.3%	50.7%
Cardiovascular interventional	491	6.7%	30.2%
Other	328	4.5%	20.1%
Total	7,325	100.0%	449.9%

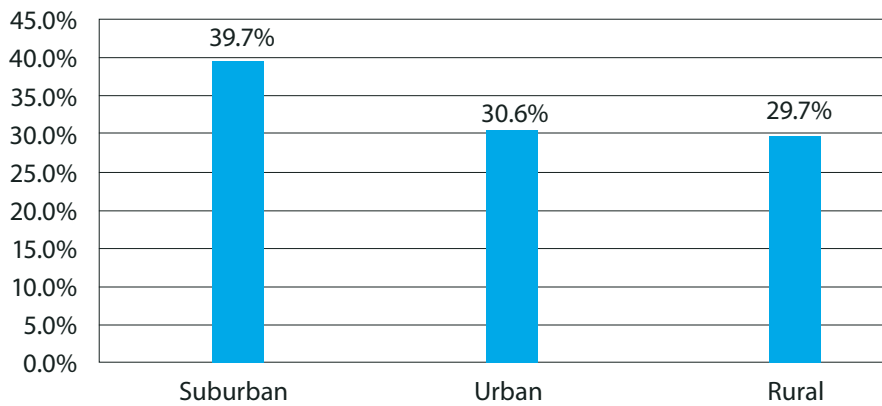
Radiology Services Provided in Your Facility



Location of Facility

Location of Facility	Frequency	Percent	Valid Percent
Suburban	647	39.1%	39.7%
Urban	499	30.2%	30.6%
Rural	483	29.2%	29.7%
Missing	25	1.5%	
Total	1,654	100.0%	100.0%

Location of Facility



State

State	N
AK	8
AL	29
AR	32
AZ	38
CA	94
CO	31
CT	23
DE	5
FL	63
GA	50

State	N
HI	7
IA	16
ID	11
IL	46
IN	34
KS	33
KY	20
LA	36
MA	46
MD/DC	28

State	N
ME	12
MI	44
MN	64
MO	40
MS	18
MT	10
NC	76
ND	8
NE	10
NH	17

State	N
NJ	40
NM	11
NV	10
NY	87
OH	67
OK	39
OR	22
PA	63
RI	13
SC	25

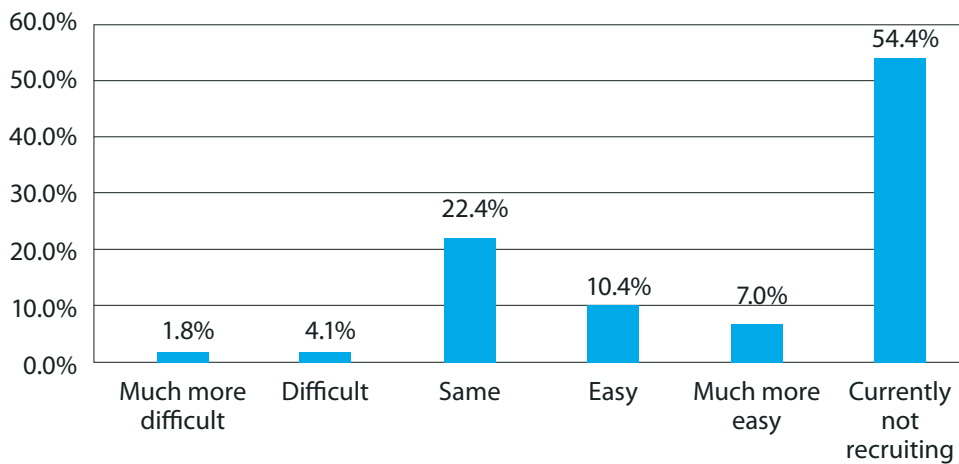
State	N
SD	10
TN	54
TX	60
UT	10
VA	45
VT	5
WA	37
WI	51
WV	9
WY	7

Recruitment and Retention

Describe how your facility's overall recruitment of R.T.s in the past few months compares to the recruitment at the beginning of calendar year 2009.

	Frequency	Percent	Valid Percent
Much more difficult	28	1.7%	1.8%
Difficult	65	3.9%	4.1%
Same	356	21.5%	22.4%
Easy	166	10.0%	10.4%
Much more easy	111	6.7%	7.0%
Currently not recruiting	865	52.3%	54.4%
Missing	63	3.8%	
Total	1,654	100.0%	100.0%

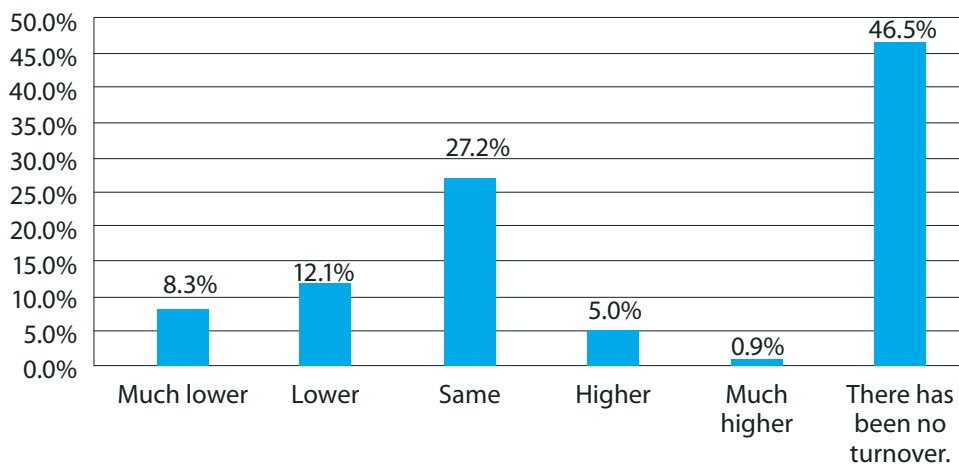
Recruitment of R.T.s



Describe how your facility's turnover rate of employees in the past few months compares to the turnover rate at the beginning of calendar year 2009.

	Frequency	Percent	Valid Percent
Much lower	82	5.0%	8.3%
Lower	120	7.3%	12.1%
Same	270	16.3%	27.2%
Higher	50	3.0%	5.0%
Much higher	9	0.5%	0.9%
There has been no turnover.	462	27.9%	46.5%
Missing	661	40.0%	
Total	1,654	100.0%	100.0%

Employee Turnover Rate



Appendix A

Cover Letter



Dear Radiology Facility Manager:

We would appreciate your help with the ASRT's effort to gauge the vacant and recruiting rates by participating in the 2010 Radiology Staffing Survey. This year's survey is the fourth in a longitudinal series of staffing surveys that will provide updates on vacant and recruiting rates, as well as factors responsible for any changes in those rates. This information will be shared with the radiologic technology community via a report posted on the ASRT website.

You will be asked for your current and January 2009 budgeted full-time employees (FTEs), as well as the number of budgeted FTEs that are vacant. You may find it useful to have those figures on hand before starting the questionnaire.

By participating in the survey, you will have the opportunity to enter your name in a drawing to win one of three \$100 Visa gift cards.

Please complete the questionnaire online by clicking on the following link:
<http://asrt.checkboxonline.com/radstaff2010.aspx>.

If you have any questions, please contact ASRT Director of Research John Culbertson at jculbertson@asrt.org.

Thank you for your help with this important survey.

Sincerely,

A handwritten signature in black ink, appearing to read 'Myke Kudlas'.

Myke Kudlas
Vice President of Research and Education

Survey Instrument

1. Your title:

Department/facility manager or director
Chief technologist
Other (please specify below.)

Please specify "other" title:

2. Are you a certified radiology administrator (CRA)?

Yes
No

3. Are you or any of your employees a certified imaging informatics professional (CIIP)?

Yes
No

4. Please select any of the following managerial professional development opportunities you would be interested in. (Check all that apply.)

Human resources
Budgeting
Time management
Quality management
Billing
Other (please specify below)

Please specify "other" professional development areas that you would be interested in:

5. Type of facility:
Community hospital
Government hospital
University medical center
Freestanding clinic
Teaching facility
Other (please specify below.)

Please specify "other" facility:

6. Radiology services provided in your facility: (check all that apply.)

Radiography
Computed tomography
Magnetic resonance imaging
Mammography
Nuclear medicine/PET
Cardiovascular interventional
Sonography
Other (please specify below.)

Please specify "other" radiology services provided in your facility:

7. Location of facility:

Rural
Suburban
Urban

8. State:
(two-letter abbreviation)

9. For each of the following job titles, please provide the budgeted and vacant full-time employees (FTEs) for your organization in January 2009 and today. Please use decimals for fractional FTEs. Leave rows blank for any job titles not available at your facility.

Radiographer
CT technologist
MR technologist
Mammographer
Nuclear medicine/PET technologist
Cardiovascular interventionalist technologist
Sonographer
Other (please specify below)

Please specify "other" job title(s):

10. If budgeted FTEs in any of these disciplines have increased over the past year, what do you believe is the reason (or reasons) for this change? (check all that apply.)

Change in patient demand.
Change in overall department or facility budget.
Change in ease of filling budgeted FTE positions.
Change in patient throughput per day, per R.T., leading to change in the number of FTEs required to handle the workload.
Change in average number of hours worked per week by our R.T.s, leading to a change in number of R.T.s required to handle the workload.
No increase has occurred.
Other (please specify below.)

Please specify "other" reason(s) why FTEs have increased:

11. If budgeted FTEs in any of these disciplines have decreased over the past year, what do you believe is the reason (or reasons) for this change? (check all that apply.)

- Change in patient demand.
- Change in overall department or facility budget.
- Change in ease of filling budgeted FTE positions.
- Change in patient throughput per day, per R.T., leading to change in the number of FTEs required to handle the workload.
- Change in average number of hours worked per week by our R.T.s, leading to a change in number of R.T.s required to handle the workload.
- Other (please specify below.)
- No decrease has occurred.

Please specify "other" reason(s) why FTEs have decreased:

12. Describe how your facility's overall recruitment of R.T.s in the past few months compares to the recruitment at the beginning of calendar year 2009.

- Much more difficult
- Difficult
- Same
- Easy
- Much easier
- Currently not recruiting

13. Describe how your facility's turnover rate of employees in the past few months compares to the turnover rate at the beginning of calendar year 2009.

- Much lower
- Lower
- Same
- Higher
- Much higher
- There has been no turnover between the two dates.

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