

# 2005 MLA Annual Meeting

Symposium “The Role of Information Services in  
Emergency Preparedness Planning”

Information Needs Panel – What Are the Information  
Needs of First Responders?

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# Abstract

- Report a Survey of Practices in Six Selected Libraries that Represent Significant Contributors of Information Services to Fire Professionals, Including Fire Service Personnel as First Responders and Researchers in the United States
- Entitled “A Survey to Support ‘Evidence-Based Practice’ in Special Libraries Serving Fire Service Personnel and Researchers in Public Safety and Homeland Security Areas”
- Funded by the 2003 SLA Steven I. Goldspiel Memorial Research Grant and Campus Research Board Award, University of Illinois at Urbana-Champaign
- Focused on Evidence-Based Research
- Expanded Our Knowledge About the Value and Impact of Information Services Provided by Special Libraries and the Special Librarians Who Manage Them for Firefighters and Researchers in the Fire Service
- Used the Chicago, Rochester and SLA Study Instruments as the Basis for Designing Questionnaires to Measure the Impact of Library-Supplied Information on Practical Decision-making and Applied Research
- Built the Knowledge Base of Special Librarianship, Particularly Demonstrating the Library's Critical Roles in Public Safety and Homeland Security

# Statement of the Problem

- Efficient Management of Information: An Important Component of Public Safety and Homeland Security
- How Do Special Libraries Serving Fire Professionals Fit into This Component?
- Are They Used?
- Valued?
- Are They Efficiently Organized to Give Maximum Access to Their Resource Collections?
- What Impact Have Special Libraries Made on Information Use by Fire Professionals in Their Decision-Making?

# Participating Fire Libraries

<b>Fire Library-<i>Training</i></b>	<b>Fire Library-<i>Research</i></b>
1) New York State Department of State's Office of Fire Prevention and Control, Academy of Fire Science	1) National Fire Protection Association (NFPA)
2) Illinois Fire Service Institute, University of Illinois at Urbana-Champaign	2) Fire Protection Publications/Oklahoma State University
3) Fire/EMS/ Safety Center-Minnesota State Colleges and Universities	3) Oklahoma City National Memorial Institute for the Prevention of Terrorism

# Participating Fire Libraries

- Differed somewhat by Site, But Remarkably Consistent in Many Areas
- Three of Them: State Fire Academy Libraries (the Only Three in the Nation), Supporting Statewide Training in Many Areas, Including Hazardous Materials, Arson and Fire Investigation, Firefighting Operations, Technical Rescue, Incident Command, Fire Instructor and Officer Development, Emergency Medical Technician, Unified Command, Environmental Health and Safety Training and Education Leadership, and State Sponsored National Fire Academy (NFA) Courses
- The Remaining Three Libraries: Unique Collections on Research

# ILLINOIS FIRE SERVICE REALITIES

**1,293**

**Fire Departments**

**42,675** Firefighters  
(Paramedics)

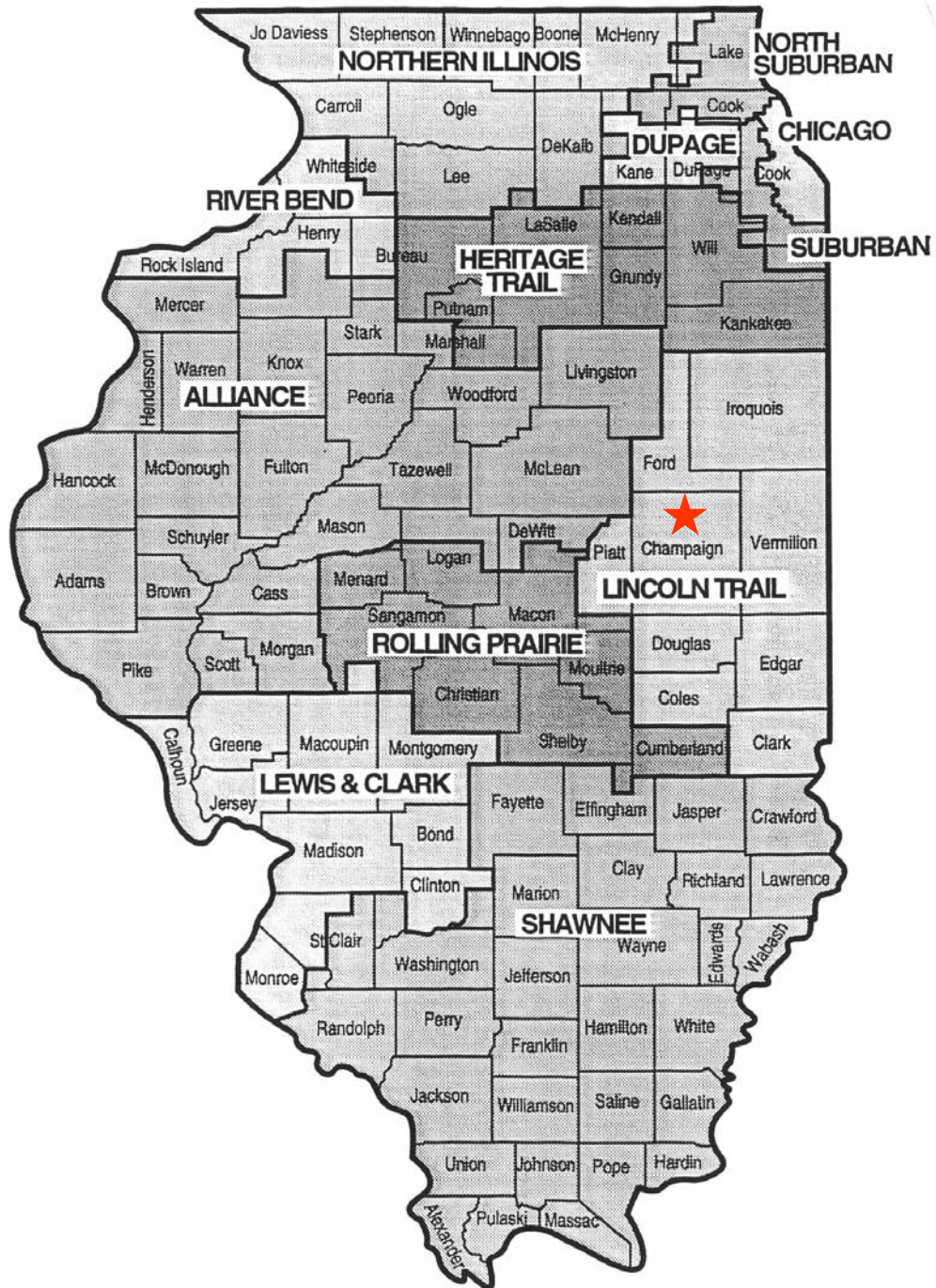
- 8,600 Officers
- 13,300 Paid

**70%**

of all Departments  
are **VOLUNTEER /  
PAID ON CALL**

**20%**

**Turnover Rate**



Archives Search - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites History Print W W

Address <http://128.174.100.91/dbtw-wpd/newWeb/archives-re.htm> Go Links >>



**Make Request** ▶▶ Request New Search Help

Done Internet

## 50<sup>th</sup> Fire College – Parade

## Characteristics of Participating Libraries

Organization	Number of Titles					FTE staff		Facilities	
	Monographs	Serials	Non-print <sup>1</sup>	E-resources	Archives	Librarians	Support staff	Square feet	Budget
A	5,100	95	3,070	No Answer	No Answer	1	0	3,000	10,517
B	4,165	385	3,115	307	218	2	4	1,193	55,763
C	4,065	153	648	8,077 <sup>2</sup>	202	1	1	1,500	20,000
D	10,923	230	334	No Answer	Historical archives	1	2	2,412	141,500
E	9,000	150	3,000	No Answer	Manuscripts & photographs	1	1	5,000	36,000
F	2,724	22	93	494	No Answer	1	4	285	No Answer

Note: 1. Non-print materials include videotapes, CD-ROMs, DVDs, slides, and transparencies. 2. Netlibrary ebooks.

# Methodology

## Questionnaire Development

- Designed the Questionnaire to Measure the Impact of Information Provided by the Special Library on Fire Emergency Responses Related to Homeland Security and Public Safety
- Focus Specifically on the Impact of Information on Decision-making Behavior rather than Specific Time or Monetary Savings
- Collected a Combination of Quantitative and Qualitative Data

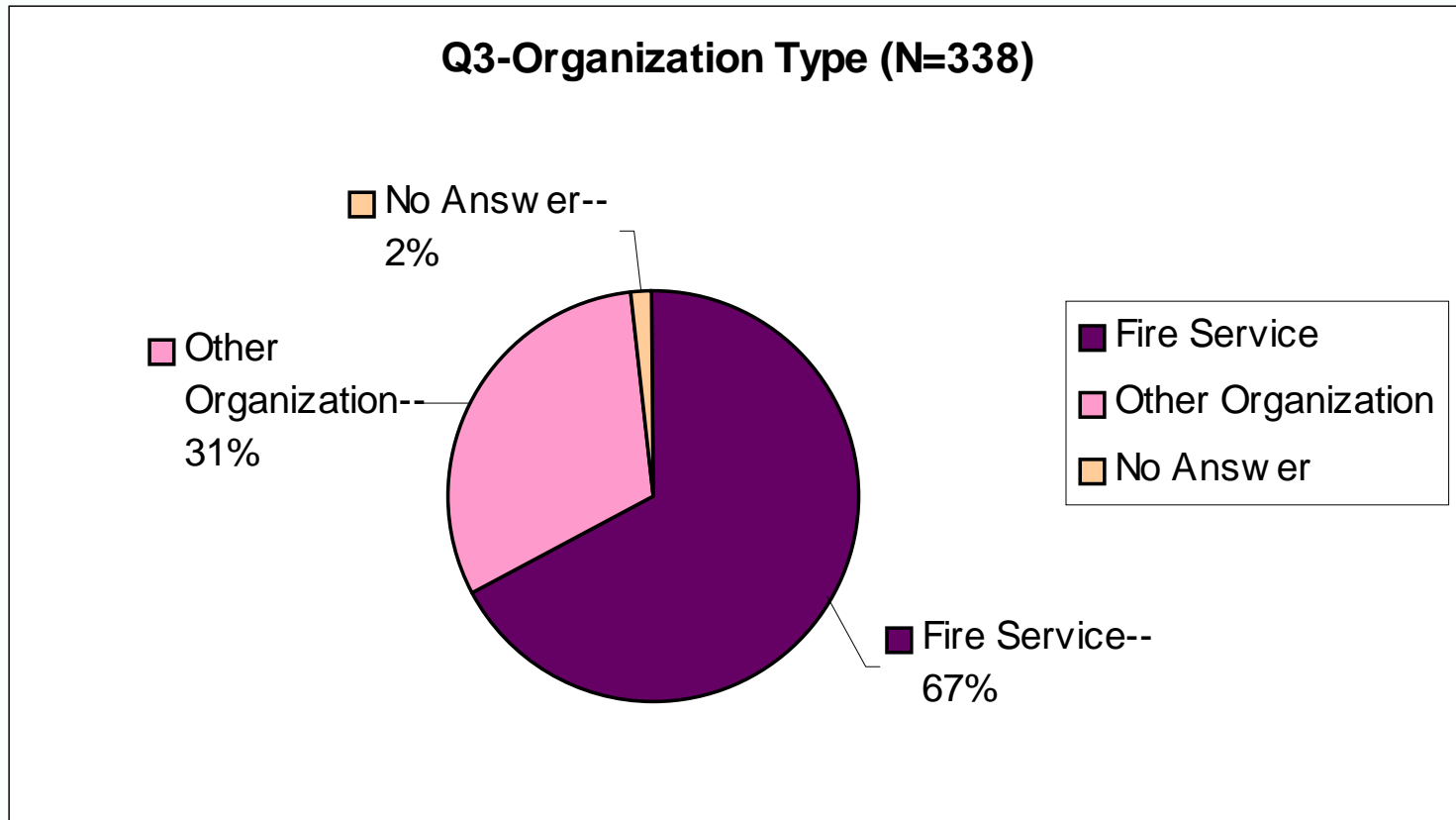
## Study Sample and Usable Returns

Organization	User Population	Total Response	Format	
			Hardcopy	Online
A	2000	59	39	20
B	2300	143	63	80
C	250	47	36	11
D	1440	53	43	10
E	152	28	26	2
F*	10	8	5	3
Unspecified (Through Web Responses)		5	-	5
<b>Summary Total</b>		<b>343</b>	<b>212</b>	<b>131</b>

**Note:** \*The Library F only has a few walk-in patrons. There are about 40,000 hits on the library website each month. Even though the survey questionnaire was linked to the website, no response was received from this channel.

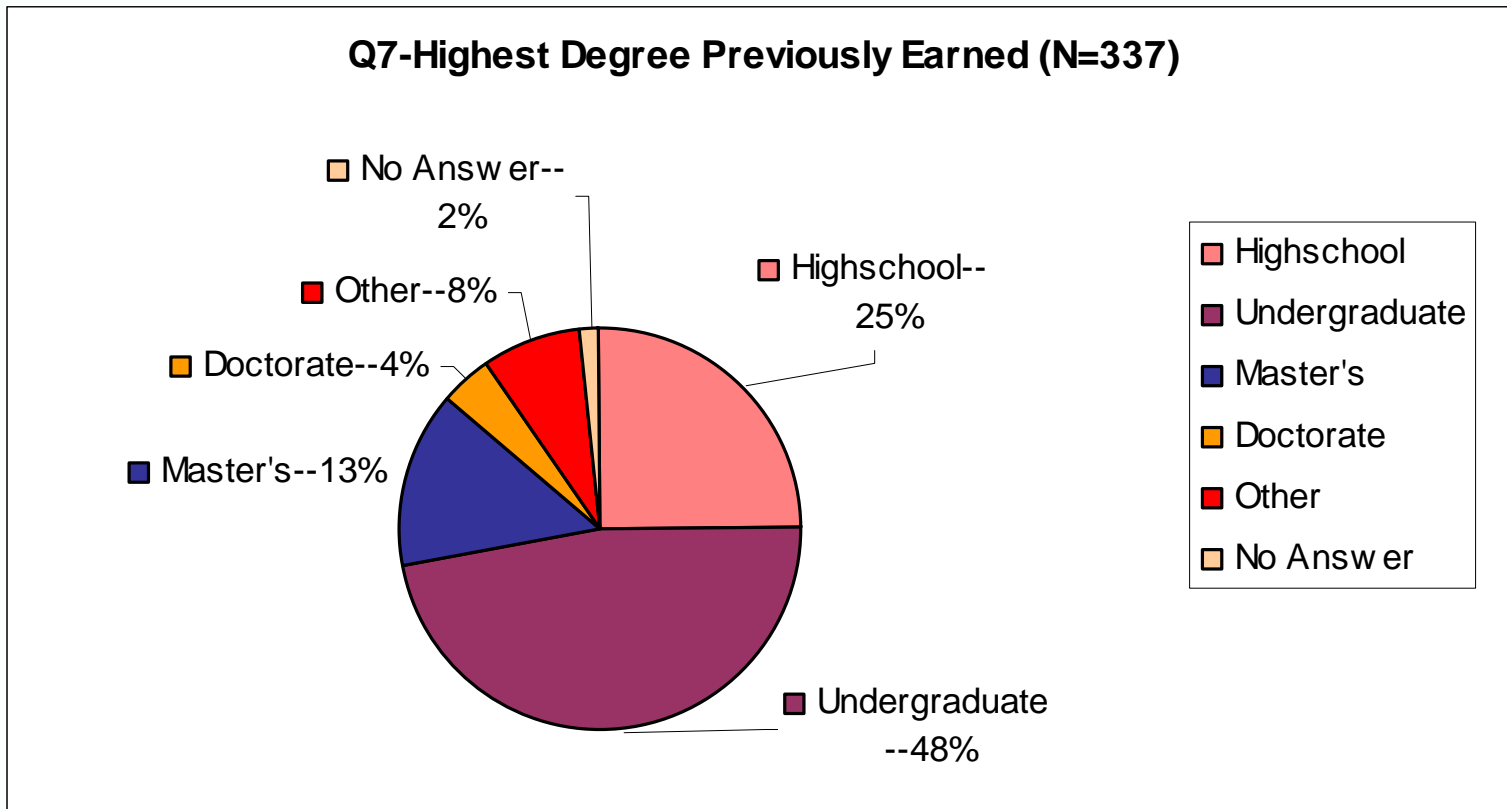
# Characteristics of Survey Respondents

## Organization Type



# Characteristics of Survey Respondents

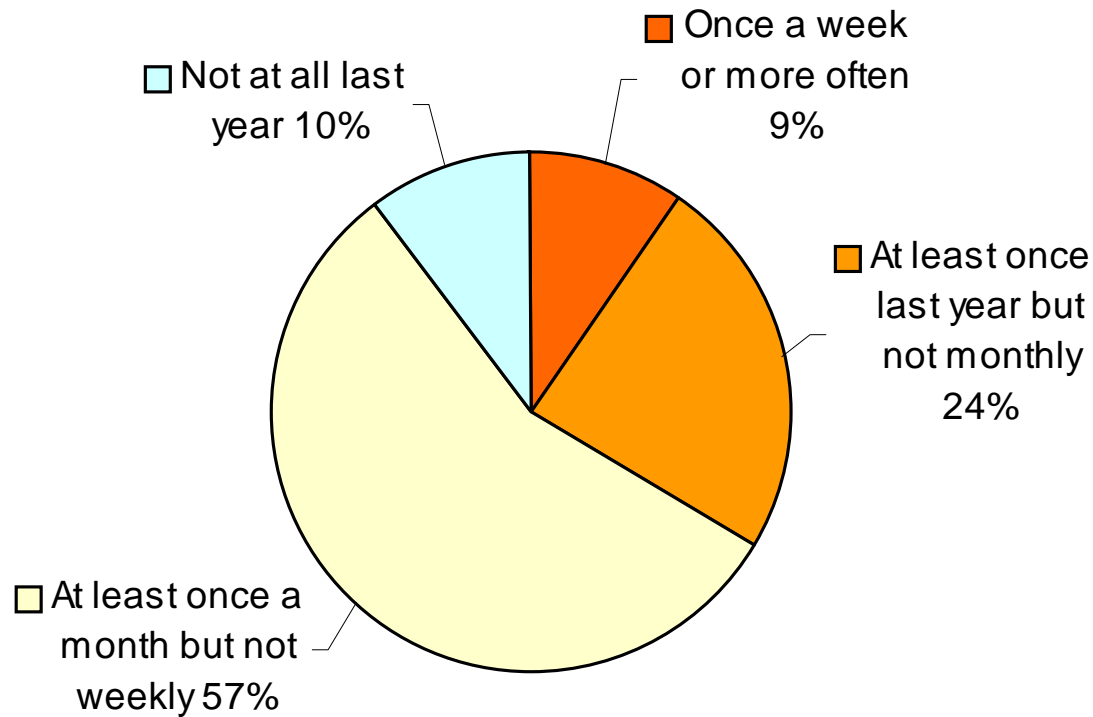
## Degrees Obtained



# Characteristics of Survey Respondents

## Usage of the Library

Q26-How often have you used the library in the past 12 months? (N=340)



# Identified Information Need: Selected Questions Survey

## Respondents Asked in the Current and Previous 12 Months

1) <b>Research</b> information for classes I was <b>teaching</b> .
2) <b>Training information</b> to present to a college class on the chemistry and physics of fire.
3) I had a list of books needed for a [n] upcoming Lt. <b>Test</b> .
4) A <b>literature review</b> for a project designed to <b>mitigate behaviors</b> associated with fatal smoking fires.
5) Information on the <b>heat stress</b> study.
6) Requested use of <b>emergency response to terrorism</b> instructor materials.
7) Materials on <b>copyright laws</b> and standard forms used.
8) What programs are out there on <b>confined space training</b> ?
9) Information regarding <b>volunteer fire department retention and recruitment</b> .
10) How does the <b>fire/EMS distinction in career fire departments</b> affect operations?
11) Material for <b>search &amp; rescue for interior fire operations</b> .
12) Sources on the pros and cons of <b>Quint apparatus</b> .
13) Physical fitness for firefighters. Different examples and exercises specific to fire.
14) Information linking <b>CAD</b> (Computer Aided Dispatch and Firehouse) systems to fire.
15) Materials on the subject of <b>structural fire fighting</b> ?
16) Historical data on <b>fires in places of assembly</b> .
17) Information on <b>protecting firefighters working on the road at a traffic accident</b> .
18) Looking for <b>firefighter fatalities information</b> .
19) Research material on the <b>ethics in a fire department</b> .
20) Information dealing with <b>citizen fire academies</b> .
21) I asked for information on obtaining <b>grants</b> for my department.
22) Reports on <b>high-piled storage fire testing</b> .
23) Which organizations are working with <b>health and safety problems in fire departments</b> ?
24) Test reports and publications on <b>suppression systems</b> .
25) Requested training videos on <b>pop-up roll bars and RIT [Rapid Interfacial Thermal Treatment]</b> .
26) Video case studies and material related to <b>FAST/RIT [Fire Attack Strategy/Rescue]</b> .
27) Information on <b>fire station construction</b> .
28) <b>Biomechanics of firefighting</b> (the effect of wearing SCBA [Self-Contained Breathing Apparatus]).
29) Information on policies and procedures related to performing <b>fire station construction</b> .
30) <b>Information</b> on the current threat of <b>domestic right-wings extremist</b> .
31) Reference materials on <b>fire department budget development</b> .

1) **Research** information for classes I was **teaching**.

2) **Training information** to present to a college class on the chemistry and physics of fire.

3) I had a list of books needed for a [n] upcoming Lt. **Test**.

4) A **literature review** for a project designed to **mitigate behaviors** associated with fatal smoking fires.

5) Information on the **heat stress** study.

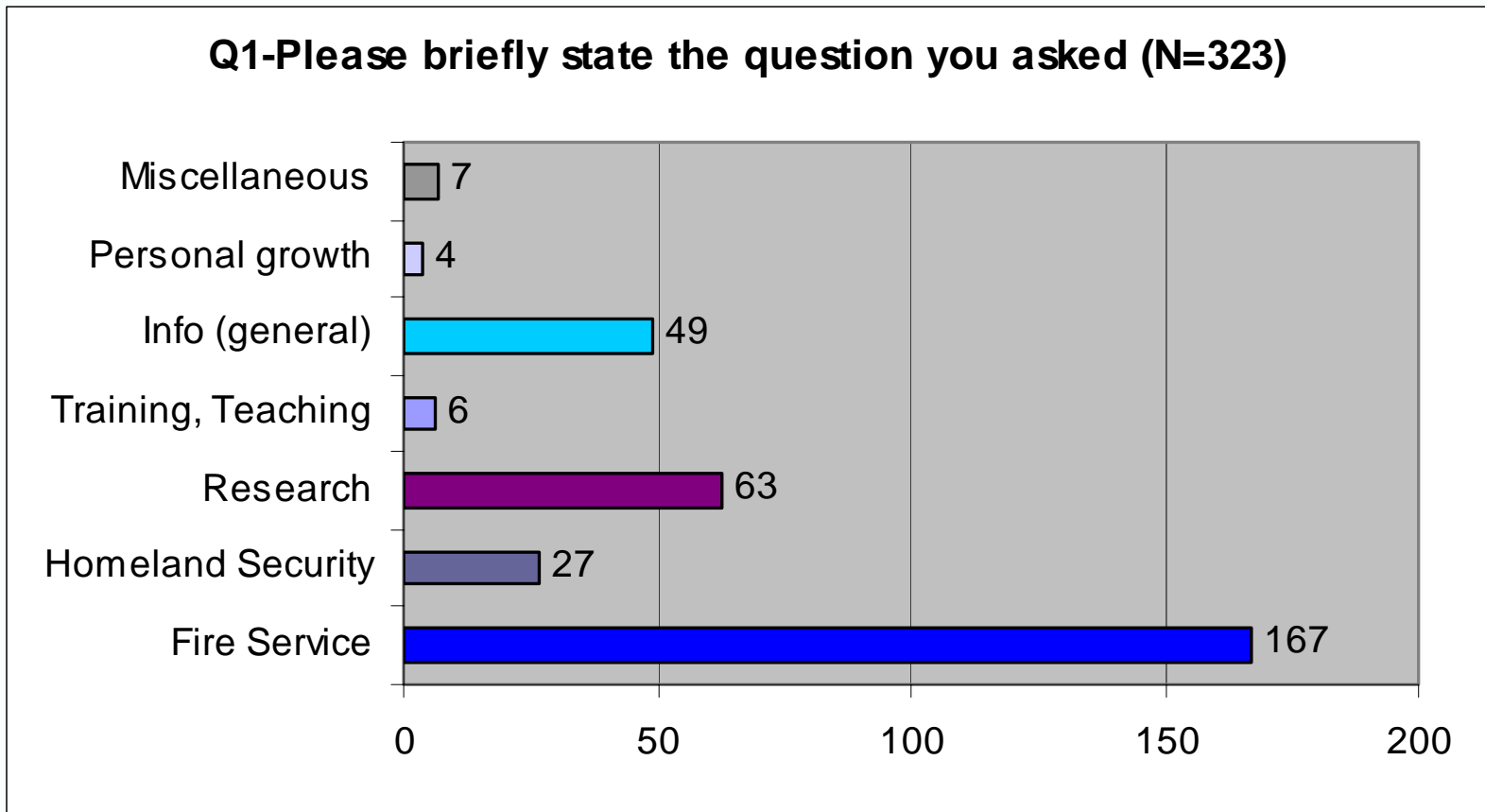
6) Requested use of **emergency response to terrorism** instructor materials.

## Identified Information Need:

### Sample Questions on Subject Areas

<b>Subject Areas</b>	<b>Sample Questions</b>
Personal Growth	<ol style="list-style-type: none"><li>1. Books to be used with the promotional process.</li><li>2. Books/video tapes for a promotional exam.</li></ol>
Info (General)	<ol style="list-style-type: none"><li>1. Information on copyright laws and standard forms used.</li><li>2. Assistance with overhead transparencies.</li></ol>
Training, Teaching	<ol style="list-style-type: none"><li>1. Reference books to students to use for classes.</li><li>2. Videos for a class. Research information for classes I was teaching.</li></ol>
Research	<ol style="list-style-type: none"><li>1. I need to research the history of the NFPA Standards Council.</li><li>2. What are various service levels for pedestrian movement as presented in J. Fruins research?</li></ol>
Homeland Security	<ol style="list-style-type: none"><li>1. Requested use of emergency response to terrorism instructor materials.</li><li>2. Information on how EMS [Emergency Medical Services] providers should respond to terrorism.</li></ol>
Fire Service	<ol style="list-style-type: none"><li>1. Information on arson.</li><li>2. Videotapes showing live fires.</li></ol>

# Identified Information Need: **Subject Areas Asked by the Respondents**

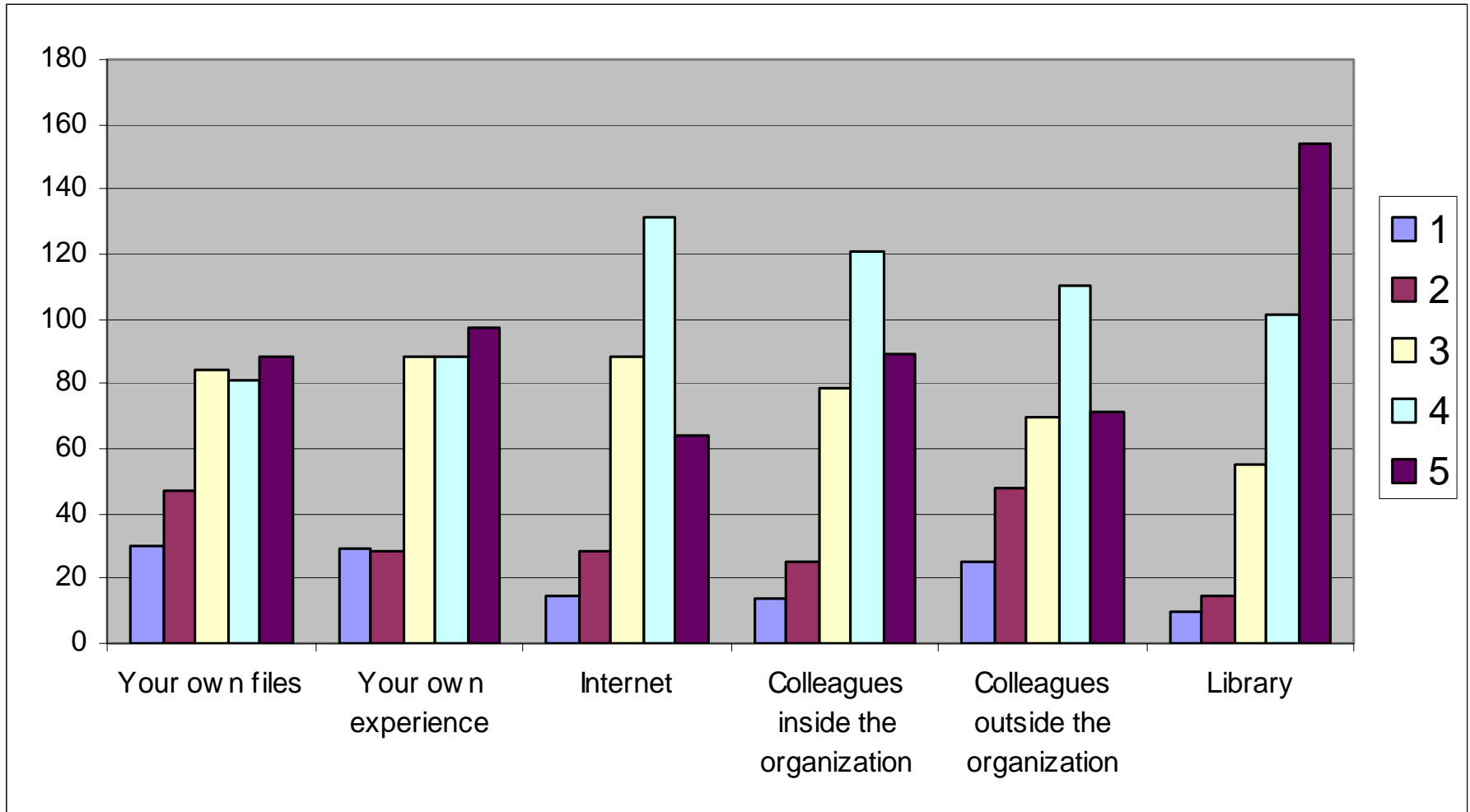


# Importance of Different Information Sources

(A scale of 1 to 5 where 1=not very important at all; 2=of some importance; 3=of considerable importance; 4=of great; 5=of greatest importance)

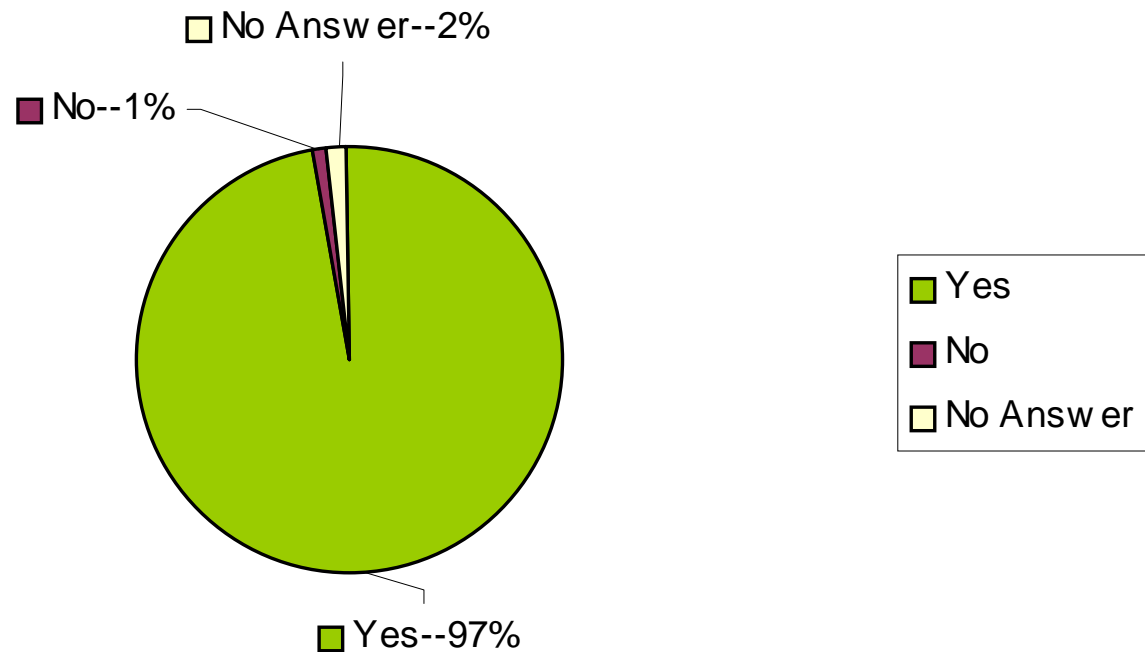
Sources	1	2	3	4	5	Number	Mean	Standard Deviation	Median
Your own files	30	47	84	81	88	330	3.45	1.27	4
Your own experience	29	28	88	88	97	330	3.59	1.24	4
Internet	15	28	88	131	64	326	3.62	1.04	4
Colleagues Inside the organization	14	25	79	121	89	328	3.75	1.07	4
Colleagues Outside the organization	25	48	70	110	71	324	3.48	1.20	4
Library	10	15	55	101	154	335	4.12	1.03	4

# Importance of Different Information Sources



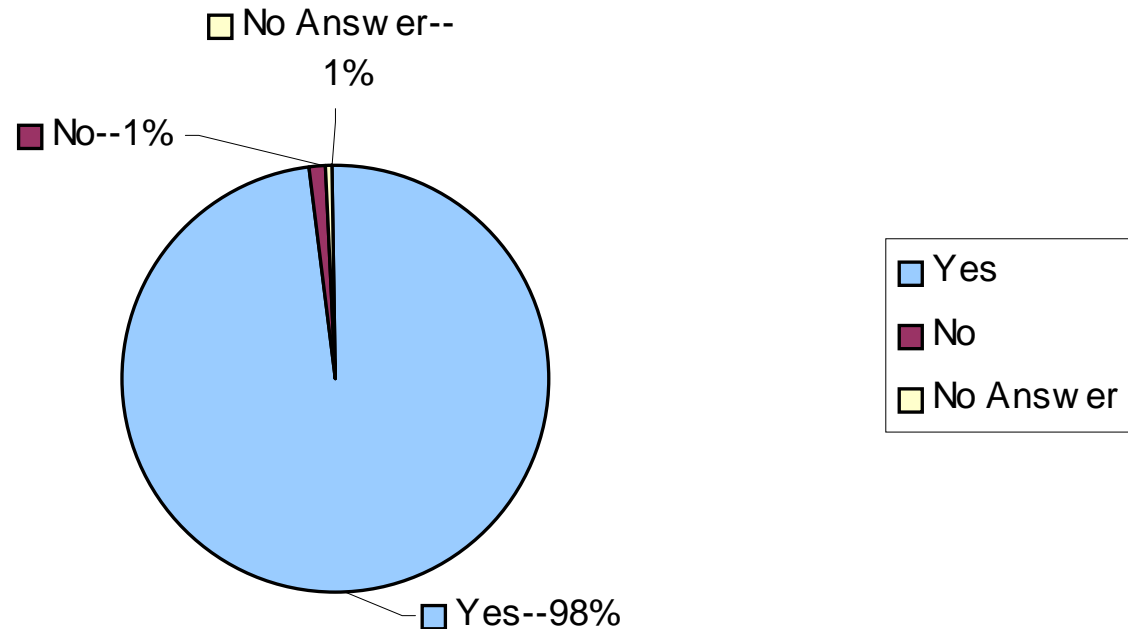
# How Did Libraries Respond to That Need? Library's Quick Response

Q29-Did the library respond to your request quickly enough? (N=343)

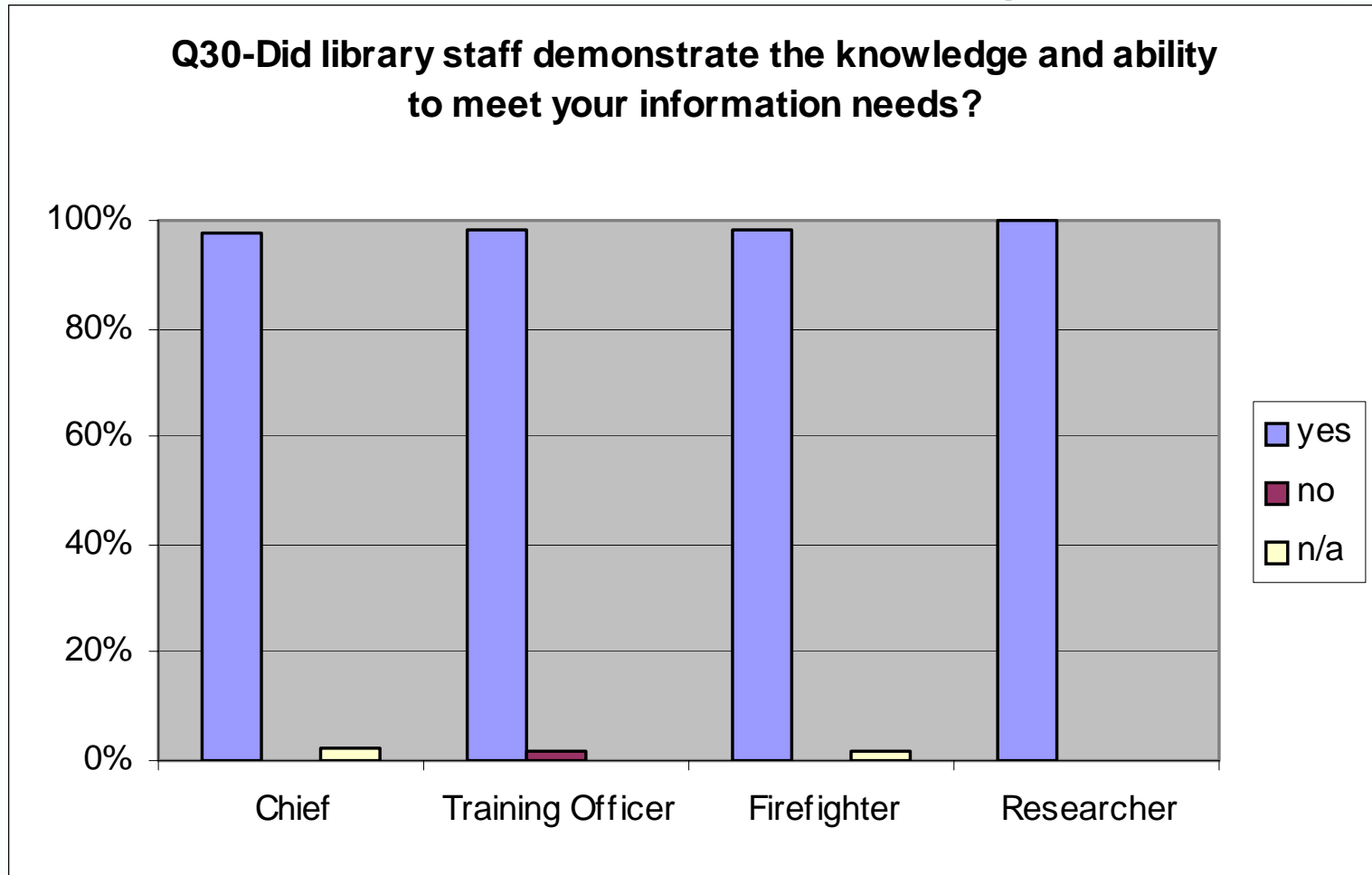


# How Did Libraries Respond to That Need? Library Staff's Knowledge and Ability

Q30-Did library staff demonstrate the knowledge and ability to meet your information needs? (N=341)

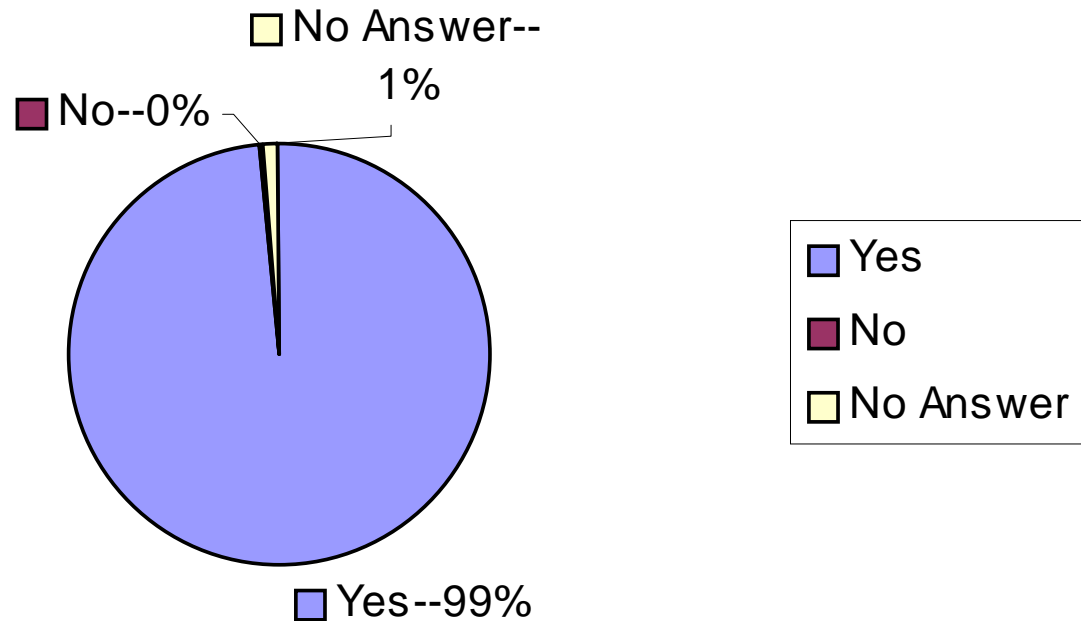


# How Did Libraries Respond to That Need? Different Groups and Library Staff's Knowledge and Ability



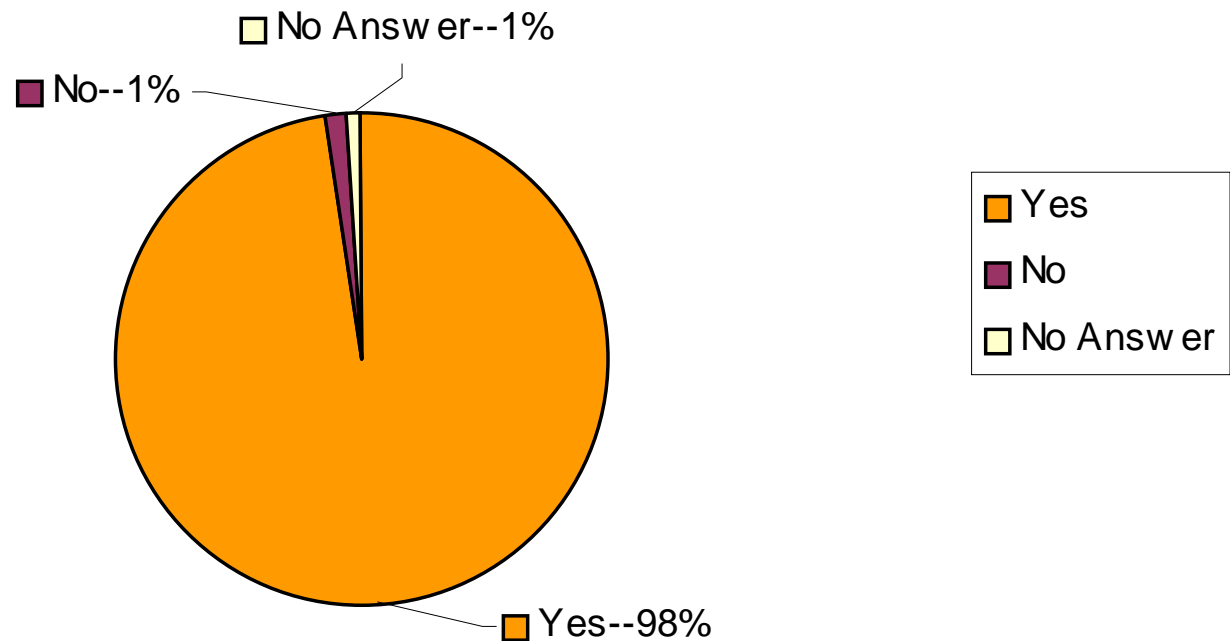
# How Did Libraries Respond to That Need? Cooperative Library Staff

Q31-Was library staff cooperative in working with you?  
(N=339)

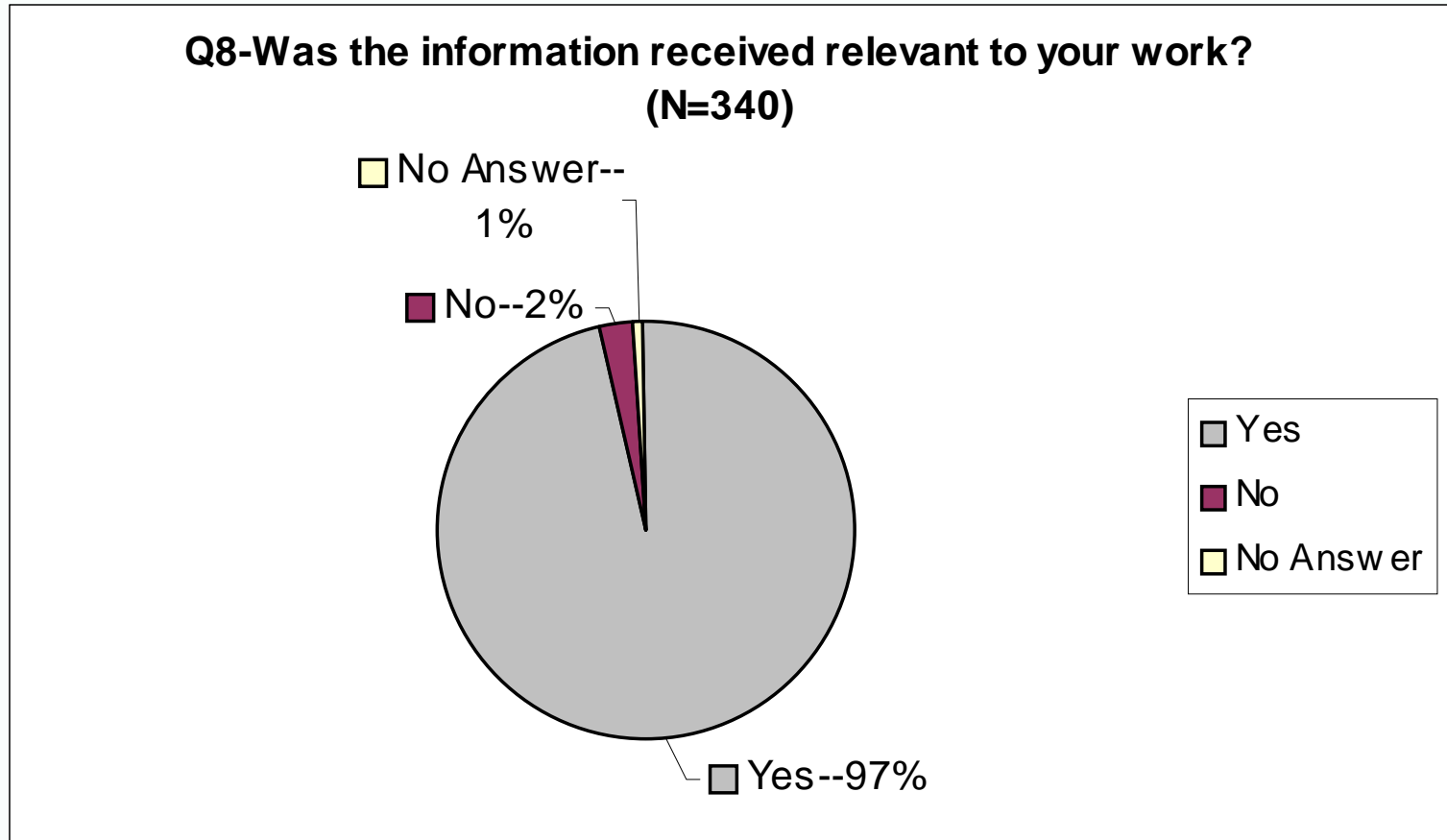


# How Did Libraries Respond to That Need? Library's Overall Performance

**Q32-Was the overall performance of the library in providing information-on-demand for you satisfactory? (N=340)**



# Effective in Supplying Information: Relevant Information

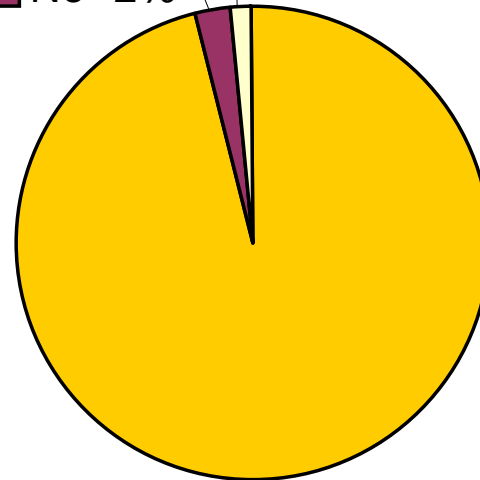


# Effective in Supplying Information: Practical Value

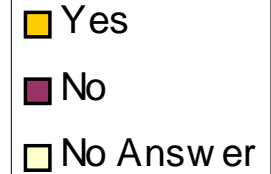
Q21-Was the information of practical value? (N=343)

□ No Answer--  
1%

■ No--2%

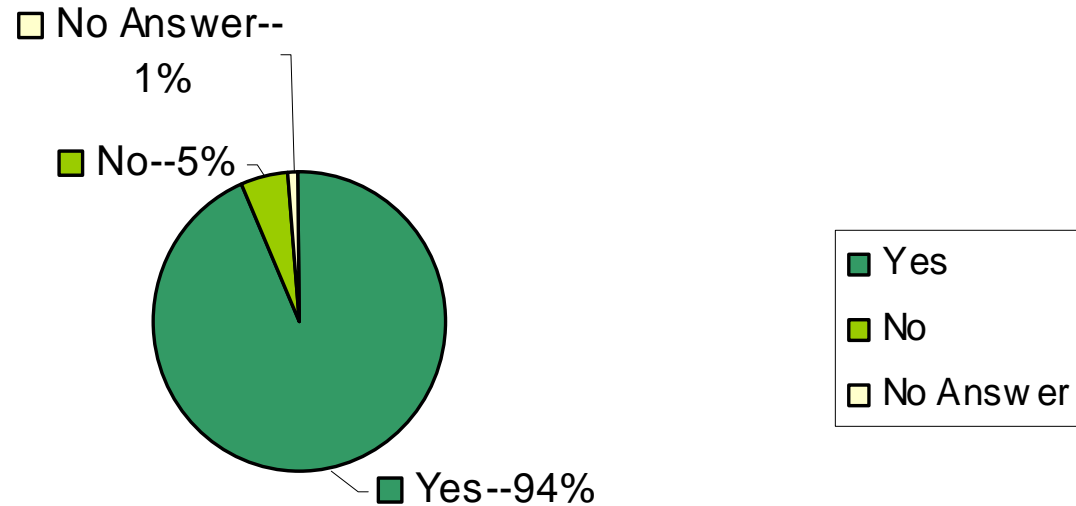


■ Yes--97%

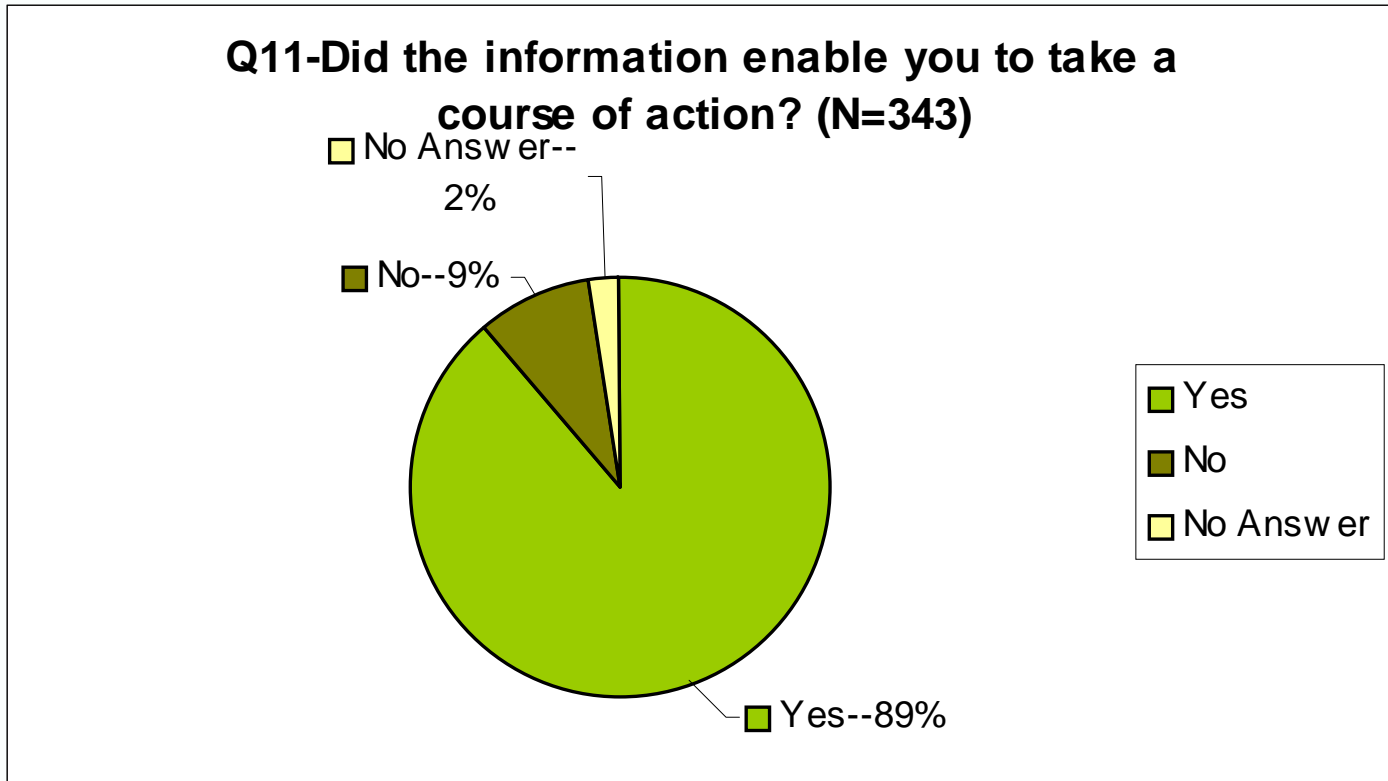


# Effective in Supplying Information: Better-Informed Decisions

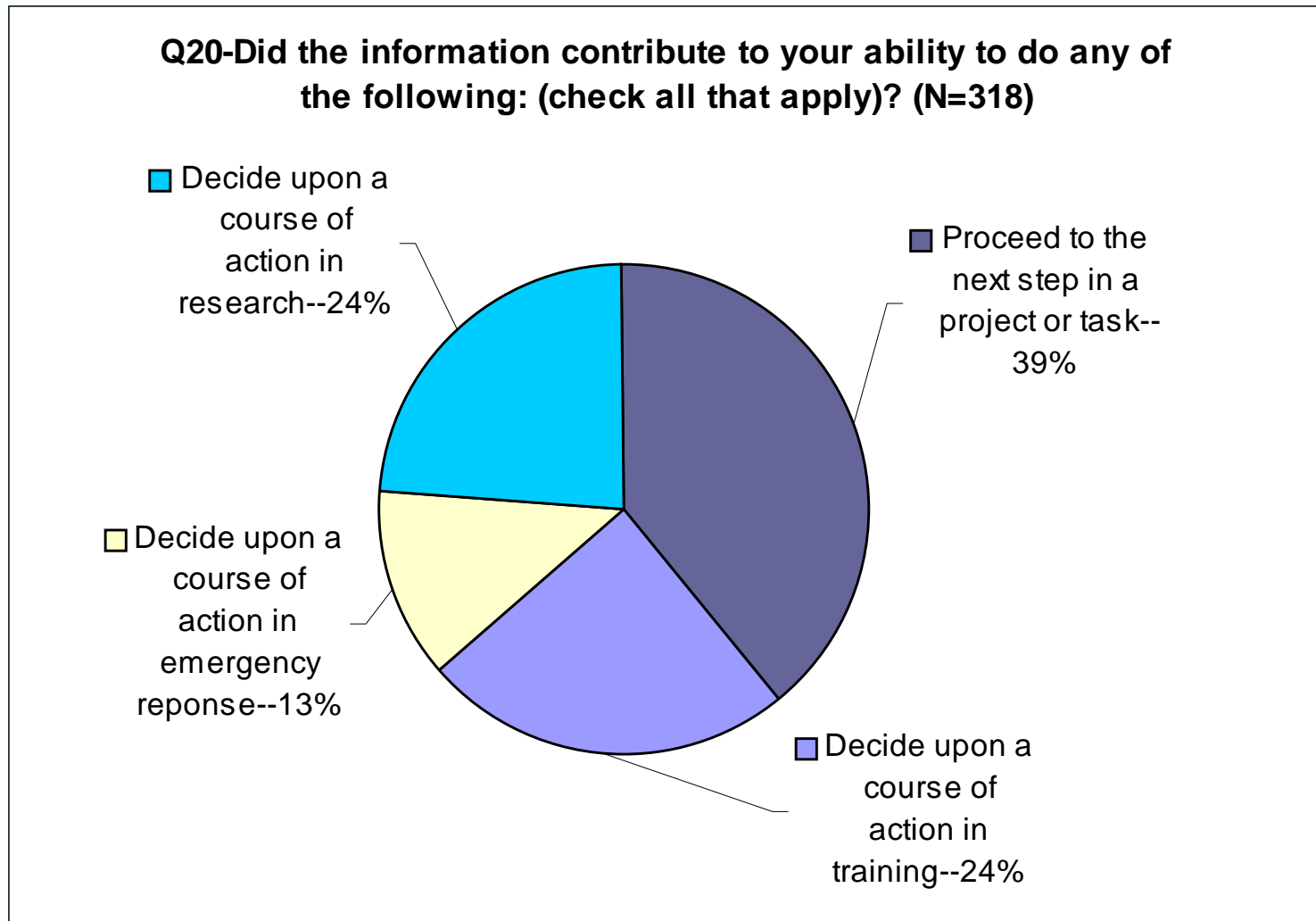
Q10-Did the information received lead to better-informed decisions? (N=343)



# Effective in Supplying Information: A Course of Action Taken

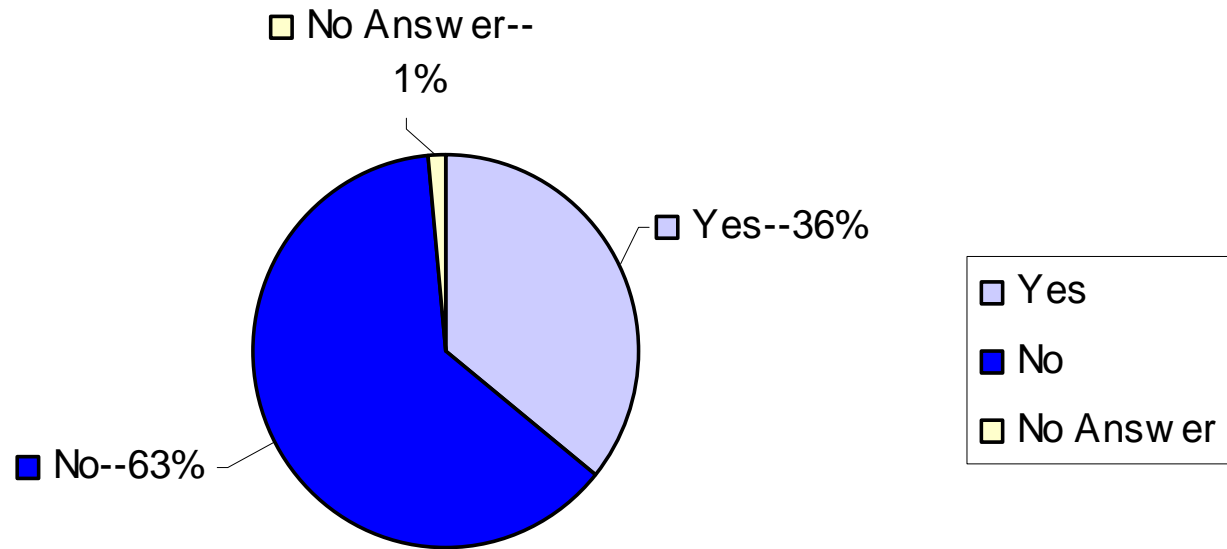


# Effective in Supplying Information: Specific Types of Decision-Making Situations



## What Take-away Message For the Group Unaware of Library Services

**Q28-Did the information about your library sent to you as part of this survey project make you aware of library service you did not previously know about? (N=338)**



# Lessons Learned

- The Challenge of Reaching Sufficient Respondents in Solo Libraries due to Limited Staff and Confidentiality Concerns
- The Challenge of Remote and Invisible Users

## Future Research

- Non-Users (including those eligible to access services but who do not know how, and others who would not have access at all because there is no library providing such specialized services, for example in the states of California and Florida)
- Virtual Users (accessing services via a library's web site, and others involved in public safety, such as emergency medical responders)
- Other Studies: examine and identify skills, attributes and subject knowledge for librarians and information professionals working in fire emergency services and homeland security

# The Role of Information Services in Emergency Preparedness

- Enhance Efficiency in Fire Fighting and Emergency Response
- Increase Safety, Both for Fire Emergency Service Professional and the Victims They are Assisting
- Enhance Planning and Training to Protect Both Fire Emergency Service Professional and the Communities They Serve

# The Full Report

- <http://www.sla.org/content/learn/scholarship/goldspiel/goldspiel2003.cfm>