



*Bayer Center for  
Nonprofit Management*

Southwestern Pennsylvania  
**Nonprofit Technology Survey 2008**

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# About the Bayer Center for Nonprofit Management at Robert Morris University

Since our establishment in 1999, the Bayer Center for Nonprofit Management at Robert Morris University has strived to provide the guidance, tools and information necessary for nonprofit organizations to effectively fulfill their missions. The Bayer Center offers consulting services and non-credit classes in areas such as:

- Board Governance
- Business Planning
- Collaborations and Mergers
- Facilities Planning
- Financial Management
- Fund Development
- Human Resources
- Legal Issues
- Organizational Effectiveness
- Strategic Planning

#### Technology Services:

- Database Development and Enhancement
- Software Application Training
- Software Selection
- RFP Assistance
- Technology Planning
- Web Site Planning and Design

In partnership with the Robert Morris University School of Business, the Bayer Center offers a master's degree in nonprofit management. We also conduct research and provide information and referral to a broad range of resources.

For more information visit <http://www.rmu.edu/bcnm>

# Executive Summary

The IT landscape in area nonprofits has generally improved in the last two years. Some measures show clear plateaus as rates of progress slow to negligible.

## Technology Policy

- Technology planning holds steady at a 40% rate; large organizations are more likely to plan for technology than small organizations.
- More IT staff are technology decision-makers than in 2006. Fewer accidental techies and executive directors make “buy or pitch” decisions.
- Tech skills are in half of the region’s nonprofit job descriptions, a huge jump from prior years.
- More organization included tech costs in a foundation proposal in 2008 than in 2006.
  - Proposals with tech costs were even more successful (89%) in 2008 than 2006.
  - Majority-technology (but not 100% tech) proposals were the most successful.
- Larger organizations continue to adopt tech best practices at a higher rate than smaller ones.

## Computer Systems

- The aging of user workstations has halted but not reversed.
- Only 4% of computers in area nonprofits run Windows Vista.
- More than a third (38%) of all new computers are laptops.
- Wireless Internet jump from 3% in 2006 to 9% in 2008.
- The rate of Internet use by nonprofit employees for work has plateaued in the upper 50s.
- Email draws even with print and phone as a communication tool.
- About one in five nonprofits have upgraded to Office 2007.
- QuickBooks’s market share dipped from 62% to 53%.
- The majority of databases used for managing client information, fundraising, volunteer management and outcomes measurement are off-the-shelf solutions, a first in five surveys.
- Norton and Symantec make up more than half of the anti-virus software market.

## IT Adoption, Impact and Needs

- Human challenges are among the most-frequently-cited barriers to better IT adoption.
- IT dreams largely focus on web site improvements and gaining internal control of web updates.
- Pittsburgh area nonprofits consider themselves ahead of the curve (despite all evidence).
- Having full-time tech staff makes a strong positive impact on perception of IT adoption.
- A vast majority of nonprofits believe that technology has substantially changed how they operate.

# Introduction

On the one hand, it's hard to believe that the Bayer Center has reached its fifth biannual technology survey. On the other hand, our local and national audience looks to us for this analysis, and we would not gladly abandon the tradition we've started. And time has flown by. The survey allows us and our peers to pause and consider in quantitative and qualitative terms what the constant march of technology looks like on the ground in nonprofit organizations. Not to give anything away, but it looks like uneven progress.

Some of the findings have a certain "duh" quality. To express that more positively and articulately, it can be useful to confirm intuition with hard data. Numerical evidence forms a more secure foundation for persuasive arguments for change within individual organizations and across the sector as a whole.

Some results are more surprising. We do our best to explain counterintuitive results by incorporating the Bayer Center's "real life" experience in training and consulting with nonprofits.

We are especially grateful to have sponsorship support from three companies that have considerable interest and presence in the local nonprofit community. TowerCare, Inc., a growing local provider of fundraising software, is our lead sponsor for the 2008 survey project. Its product, called DonorPro, has many Pittsburgh area customers and an expanding national customer base. Allied Insurance Brokers, Inc. and Fifth Third Bank's Charitable Management Services group are supporting sponsors. Both offer products and services that are tailored specifically to nonprofits. All of our sponsors take a keen interest in the success of the nonprofit community and value quantitative measures of progress.

Eight years of data allow us to evaluate trends in the use of technology by nonprofits. If observation did not show you that this is a complex subject, our four pages of questions might signal that. In that complexity, we see a lot of progress. Taken in biannual steps, advances can seem small. Over eight years, the context has morphed unbelievably. Change doesn't always move in a positive direction. Upward trends occasionally reverse themselves. If there's one pattern that marks the 2008 data, it's the plateaus. Steady growth on some measures appears to have stagnated for now. We don't believe that's the last word, and we believe that the occasional technology mistake notwithstanding, backwards steps sector-wide over time aren't really possible.

In measuring technology use, the only constant is change; we alter the survey instrument slightly each year to examine emerging technologies and issues. The new parts of this year's survey focus on emerging communication technologies (web 2.0) and tools for mobile staff members. The complete survey instrument is an appendix to the report. You may find it helpful to review the survey instrument and the response options before reading the analysis. The Bayer Center welcomes the use of the survey instrument in other regions for the sake of comparison.

Finally, we owe a debt of gratitude to those who not only make IT work in their organizations but also take the time to tell us about it in deep detail. This year's sample of 330 organizations is 15% larger than 2006 and our largest ever. We appreciate the 11 "charter" survey organizations that have responded every year, the 193 organizations that have responded more than once and the 128 who participated for the first time this year.

## Lead Sponsor



TowerCare Technologies is pleased to serve as the lead sponsor for the Bayer Center for Nonprofit Management's 2008 Southwestern Pennsylvania Nonprofit Technology Survey. We believe that technology is key in helping nonprofits maximize operational efficiencies.

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# Responding Organizations

This year's survey drew the largest sample of our five surveys; 330 organizations responded. Responses were collected in summer 2008. The conclusions drawn in this report derive from a diverse and representative sample of the nonprofits in Southwestern Pennsylvania. The majority of organizations had responded in the past. Still, over a third are first timers. Before we delve into findings, this section of the report will summarize the organization type, size, location and age of respondents.

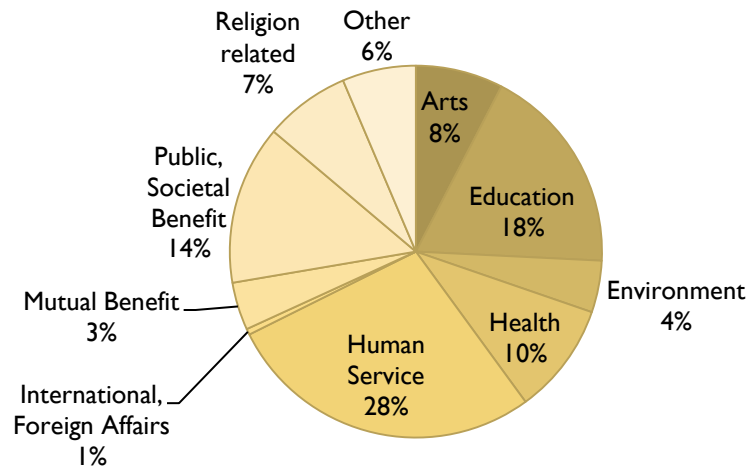
Repeat Status	Orgs	%
Five-Timers Club	11	3%
Four Surveys	47	14%
Three Surveys	73	22%
Two Surveys	71	22%
New in 2008	128	39%

## Organization Type

Respondents identify themselves according to the "major 10" categories from the National Taxonomy of Exempt Entities. Because some organizations work in multiple categories, they may choose multiple categories.

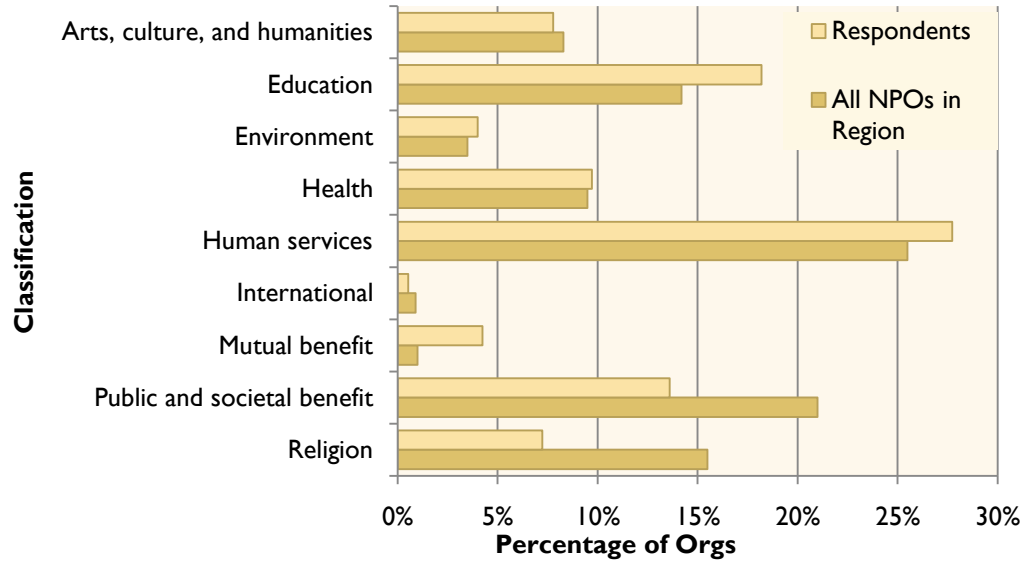
The 2008 survey pool breaks down by organization type in very similar proportions to past years. As in prior surveys, more than half of all survey respondents fall into three categories: Human Service, Education, and Public/Societal Benefit. Public/Societal Benefit – the least intuitive name among these three categories – includes advocacy, community development and philanthropy. The smallest categories include Environmental, Mutual Benefit, and International and Foreign Affairs.

**Respondents by Organization Type**



Survey respondents align closely with all of the nonprofits in the region.<sup>1</sup> The survey pool has slightly more Education and Human Services organizations and fewer Public benefit and Religion-related organizations.

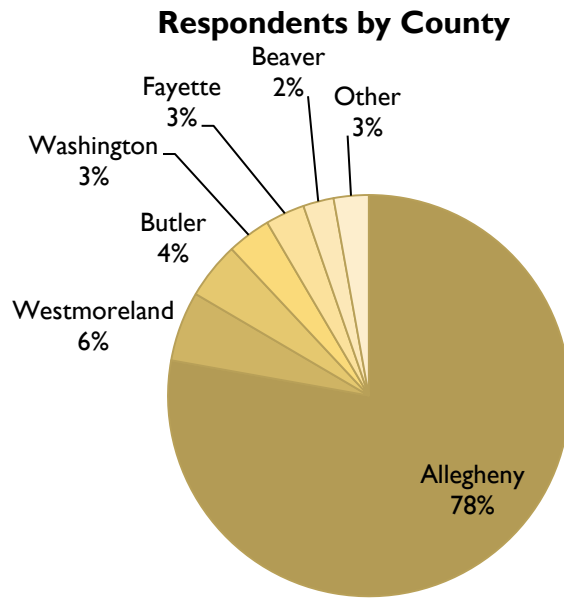
### Survey Respondents vs. Regional Organizations



<sup>1</sup> All references to the nonprofits in the region derive from the National Center for Charitable Statistics Business Master File from October 2008. The Business Master File contains all organizations all active organizations registered with the IRS. The region is defined as the following 10 counties: Allegheny, Armstrong, Beaver, Butler, Fayette, Greene, Indiana, Lawrence, Washington, and Westmoreland.

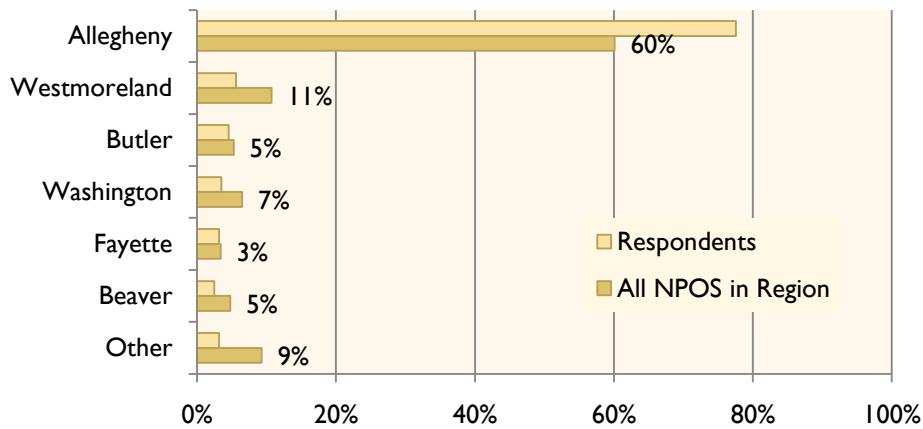
## Geography

The vast majority of 2008 respondents (78%) are located in Allegheny County, which falls within the range (69%-85%) of the Allegheny proportion in prior surveys. Of the remaining organizations, 18% are located in the adjacent counties of Beaver, Butler, Fayette, Washington and Westmoreland. The remaining three percent come from outside the immediate Pittsburgh metropolitan area.



The number of nonprofits in the Pittsburgh region is less dominated by Allegheny County than is our survey pool. Still, the central county in the region has far more nonprofits than any of the neighboring counties that make up the metropolitan area.

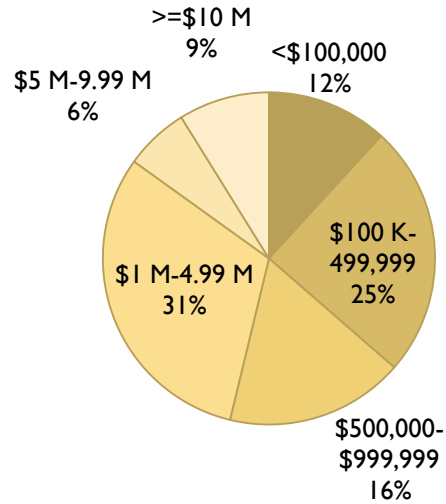
### Location: Survey Orgs vs. Regional Orgs



## Budget Size

Like nonprofits nationally, the organizations in the respondent pool tend to be small. More than half of the organizations have annual budgets of less than \$1 million, and 85% have annual budgets of less than \$5 million. The size of the organization definitely influences IT need and IT adoption. The survey pool's smallest budget (\$2000) has very different IT requirements and infrastructure from the largest (\$160,000,000).

### Survey Respondents by Budget Size



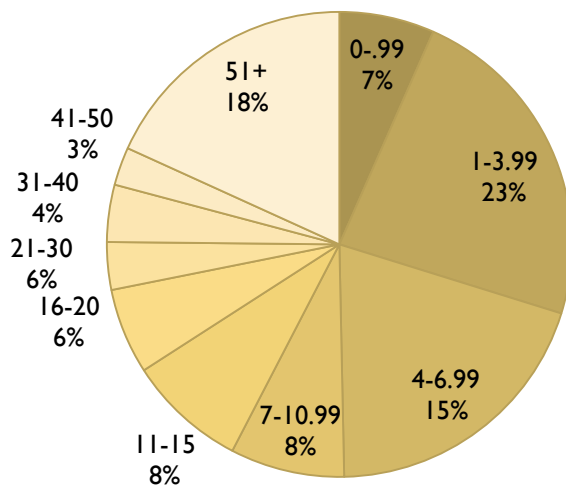
This kind of distribution fits within the pattern established in prior surveys. The 2008 median budget is the highest to date. This year's pool has more \$1-5 million budgets and more budgets over \$10 million than any previous survey. The growth in those brackets essentially offsets a decrease in the \$100,000-500,000 range. That exchange explains the median's skew upward.

Year	Median Budget
2000	\$500,000
2002	700,000
2004	645,000
2006	700,000
2008	815,000

## Staff Size

Just as the nonprofits represented in the survey are small in budget, they are small in number of employees as well. The small staff – users and IT people – may be an even more important resource constraint when it comes to IT adoption. Half of the respondents employ 7 or fewer full time equivalent (FTE) employees. An additional 16% of organizations have 7-15 employees. At the margins, some organizations are run entirely by volunteers, and the largest responding organization employs 2500 FTEs.

**Survey Respondents by Staff Size (FTEs)**



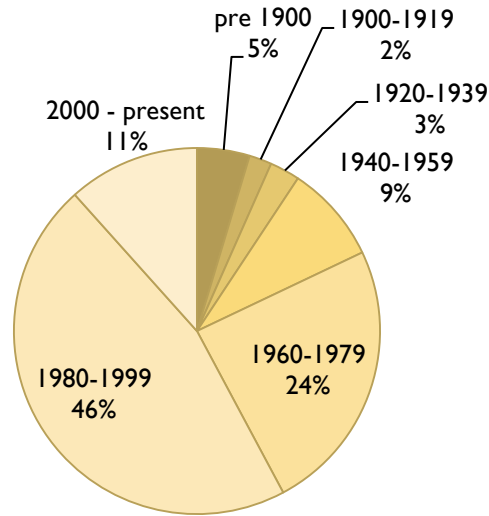
The median staff size is more in line with prior years than median budget size. The 18% proportion with staff sizes over 50 is above the norm. Only 2002 had that many organizations that large. Like in 2002, the 2008 pool has slightly fewer organizations in the three smallest brackets than is typical.

Year	Median Staff Size
2000	6
2002	10
2004	7
2006	6.5
2008	7

## Age of Organization

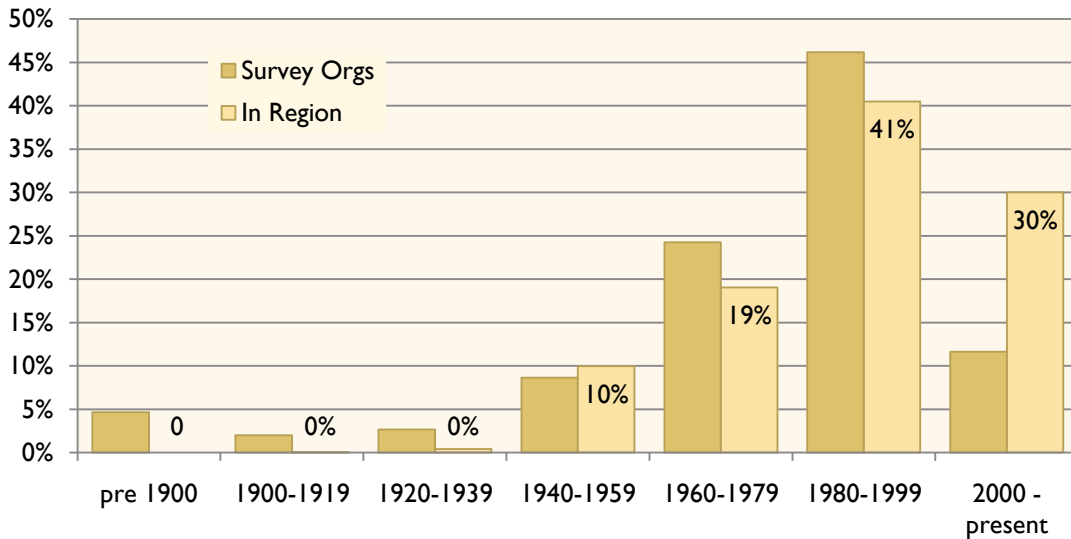
Age can cut both ways in its impact on use of technology. On the one hand, a younger organization has not existed without IT tools being available to it. Whether a new nonprofit adopts the tools is as open a question as whether an older one does, but the recently-founded organizations have developed in an online world. On the other hand, organizations tend to grow over the years, and scale creates efficiencies and critical mass for investment in IT solutions. The 2008 survey organizations mirror the national distribution of nonprofits by age, with the vast majority having been founded since 1960. Over half the organizations were founded since 1980. The median age of organizations is 24 years, up exactly two years from the 2006 survey.

### Respondents by Founding Year



Although the survey orgs are similar in age to the pool of all nonprofits in the region registered with the IRS, the surprising number of nonprofits founded this decade is underrepresented in the survey. The comparison data is based on the 501(c)(3) ruling year of organizations, which may be more recent than the widely accepted founding dates. This discrepancy between any given organization’s founding and 501(c)(3) ruling date partially explains the very small number of pre-1940 organizations in the regional comparison data set.

### Founding Year: Survey Orgs vs. Regional Orgs



The respondent profile is enumerated in this level of detail in order to reinforce that the snapshots produced by each survey derive from the attributes of similar organizations. More

detailed respondent profile data is available upon request. A complete list of this year's respondents appears as an appendix to this report.

# Technology Policy

The Bayer Center's technology initiative focuses, of course, on technology. We really view technology through the management lens, though. IT solutions allow nonprofits to do more with less, record their activities, make data-driven decisions and share their stories. In the words of one respondent "I want records I can use as a management tool." Before we examine "the stuff" nonprofits are using, we look at how they manage "the stuff".

## Technology Planning

People sometimes debate whether organizations need technology plans anymore. Detractors base their arguments on opportunity cost, the obsolescence of a plan document in the face of constant IT advances and the idea that the steps to take are so obvious that they don't require a planning process. Let's examine these arguments in the real-world context of today's nonprofits. That's a world in which most organizations are small (under 20 employees), lack a trained technology person, expect staff to wear many hats and run a very lean ship. In light of that, the arguments:

First, the opportunity cost is not negligible. What technology improvements could the planners make with the time and money spent on the plan? Instead of meetings and consulting fees, couldn't we have better hardware and software? Shouldn't the staff better spend that time getting trained? Possibly yes. In many organizations, however, all things being equal, the resources that might be devoted to a tech plan wouldn't necessarily be devoted to IT acquisition or training. Alternatively, if an organization does allocate money and time to tools and training, the probability of systematic improvement increases dramatically with planned and agreed-upon steps rather than a series of one-off decisions. Opportunity cost must be weighed, but for effectiveness and systematic improvement, we choose planned spending reduced by opportunity cost rather than unplanned spending.

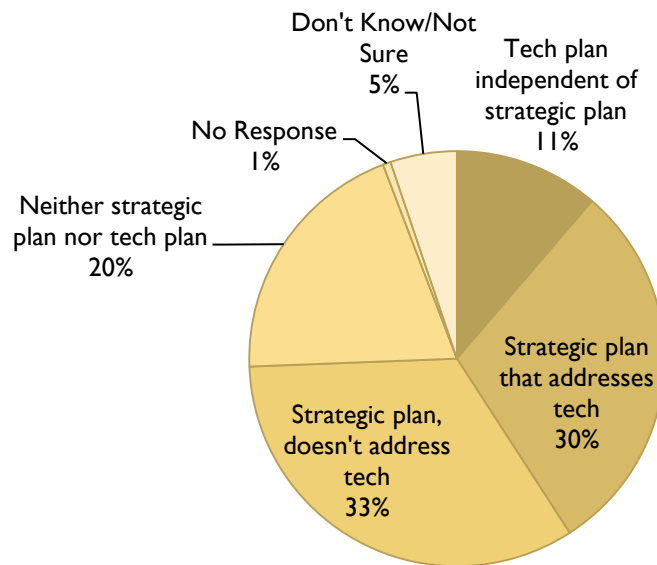
Second, IT solutions *do* evolve at a startling pace that does not tarry until the plan is written. New solutions appear all the time, especially in the age of cloud computing. By the logic that external change trumps internal planning, however, no strategic plan would ever get written. For that matter, no dinner reservations would ever get made. Constant flux, both outside and inside the organization, challenge any planning process to maintain currency while planning for a future that is difficult to pin down. We don't work ourselves out of this dilemma, however, by shelving the notion of planning. We work our way out by planning as quickly as possible and executing the plan with flexible decision points.

Third, there are times when the next step in IT growth seems obvious to a technology expert. If an organization lacks a network, they should not dump vast resources into database development yet. If an organization has just adopted a web site that serves as a service delivery tool in itself, efforts should clearly focus on public awareness, ensuring uptime and dynamic content. Too often, however, the decisions are not so clear cut. For one, multiple issues may present as "next step" barriers. Determining priorities by reading the marketing material of solution providers will make one cross-eyed. Returning to the nonprofit context, steps that may be obvious to an expert are less obvious to those who pick up the IT mantle and spend most of their IT time putting out fires. In organizations with an IT department composed of multiple people with varied expertise, project-to-project tactical planning may suffice. The

problem is that most organizations lack that resource internally and can only hope to come up with plans by composing a committee, maybe getting some outside help and working through a structured, agency-wide process.

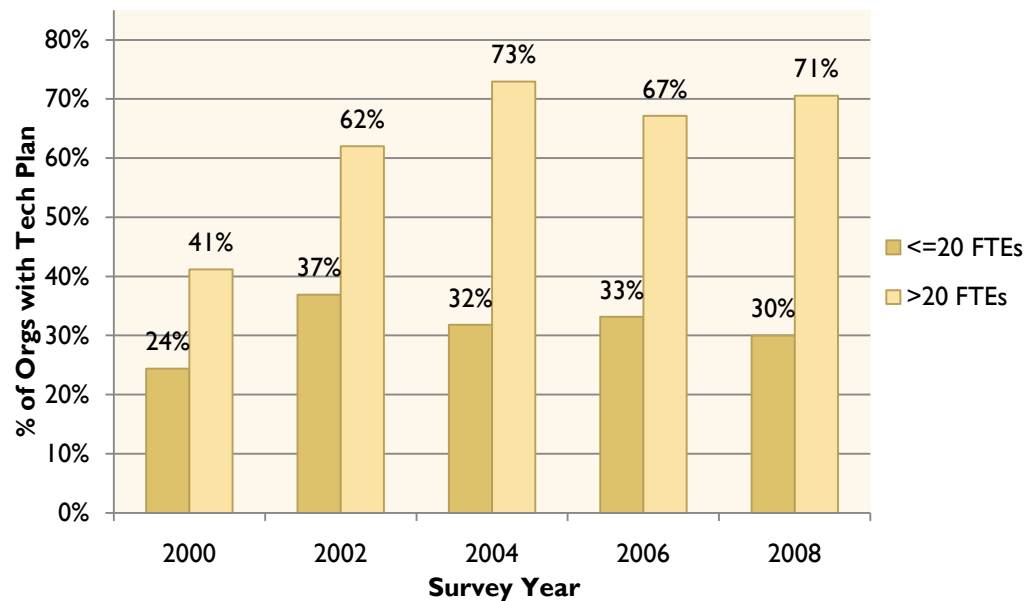
From a low in 2000 of 28%, the technology planning rate has hovered in the low 40% range from 2002-2008. The majority of technology plans are part of a broader technology planning process, which makes sense; appropriate technology solutions can only be determined when strategic direction is clear.

### Technology Planning



Among all organizations, 41% had a technology plan in 2008. The evidence grew steadily from the 2000 to 2004 surveys that larger organizations are more likely to plan for technology. To simplify “large and small”, we use a 20-employee threshold. Although higher than the median staff size, that number marks a place where organizations start to look different. Larger organizations plan at a much higher rate (71%) than smaller ones (30%). After a slight dip in the differential in 2006, the gap expands to the 2004 level this year. Organizations with a tech plan have nearly five times the median staff size (19 vs. 4.25) and seven times the average staff size (108 vs. 15) than those with no tech plan.

### Tech Plan by FTE Size

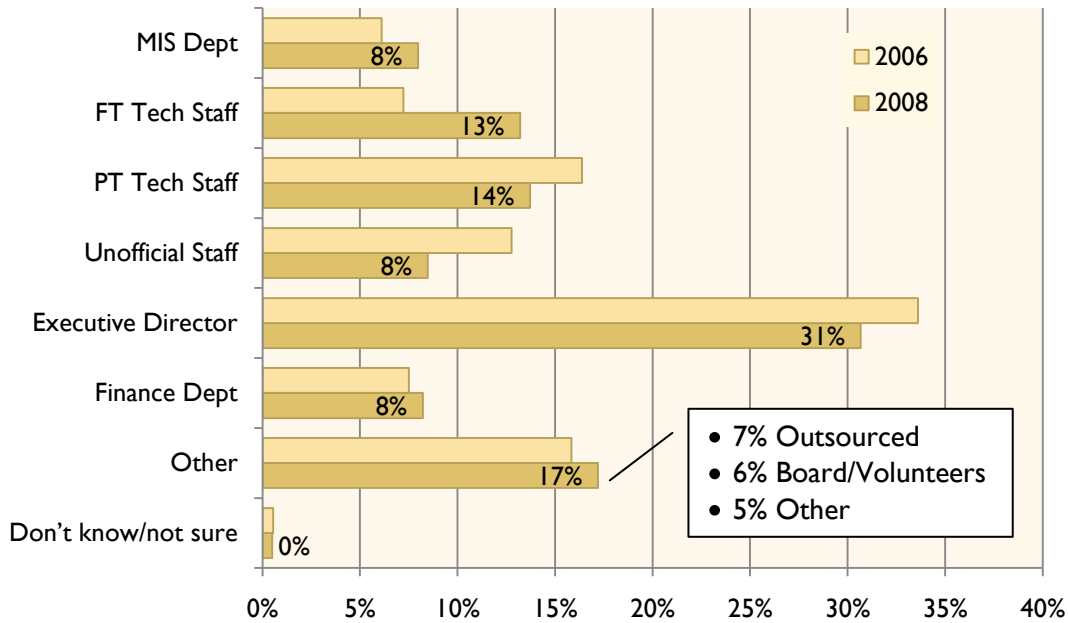


### Technology Management

There are a variety of roles and responsibilities in the techie realm. One important task is making the hard technology decisions. Respondents were asked to identify “the primary source of technology decision-making; who decides what gets purchased and what gets thrown away?”

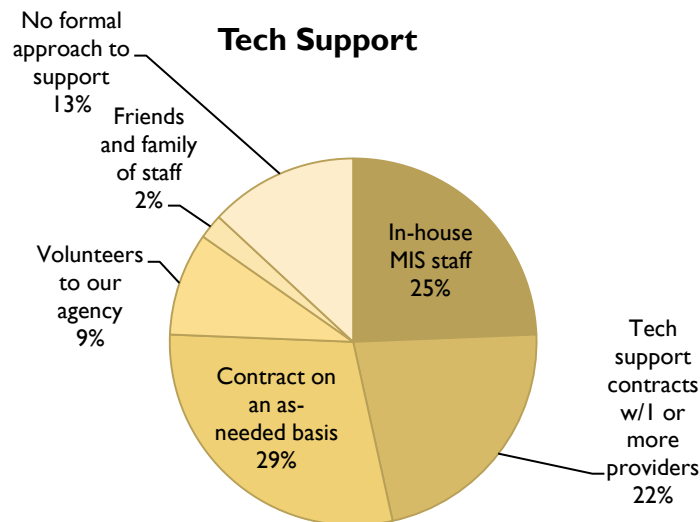
The 2006 survey indicated that tech staff were losing authority in decision-making to groups with less official responsibility. A decrease in staff decision-making was accompanied by an increase in board member and volunteer decision-making. That shift persists in 2008 but is accompanied by a shift away from accidental techies and executive directors making decisions toward IT staff making decisions. On the one hand, more board members, volunteers and consultants are making IT decisions than in earlier surveys. On the other hand, within staffs, full-time tech staff and MIS Department decision-making both increase in 2008.

## Technology Management



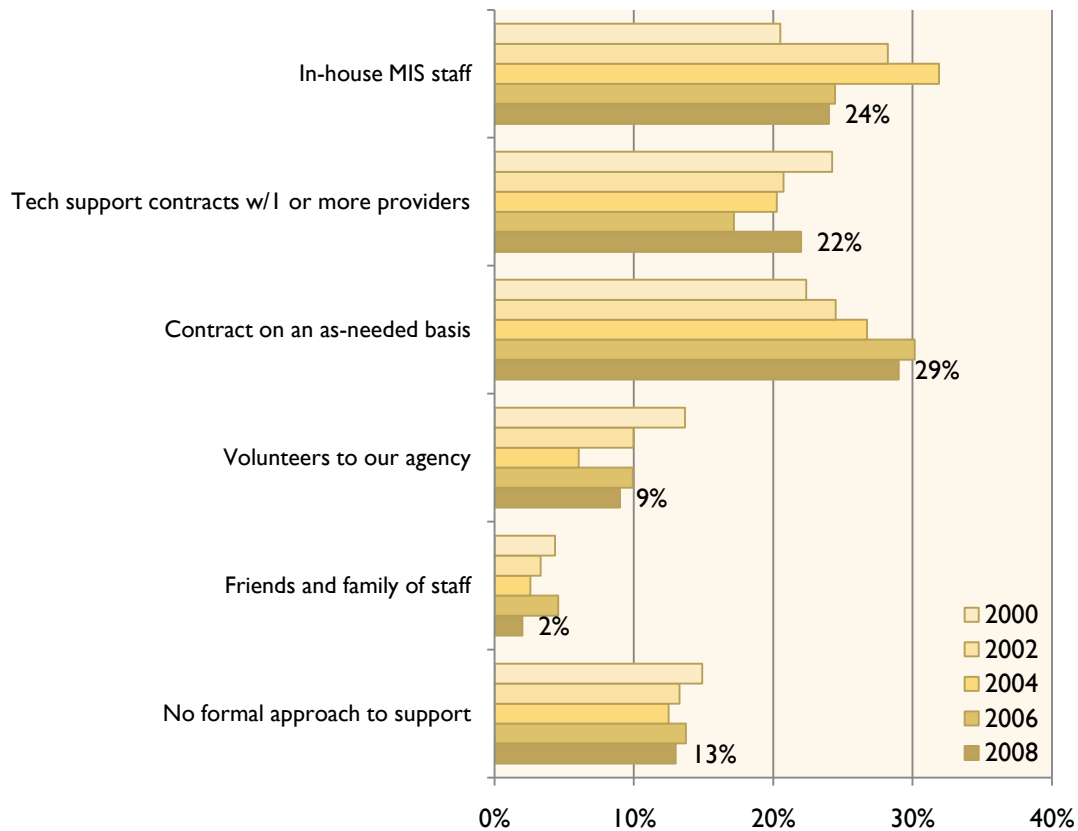
## Technology Support

Another key area of “techie” responsibility is support. In fact, the lack of support is one of the most strongly felt challenges to nonprofit IT success; more on that later. Support duties typically sort themselves into routine tasks done by staff and specialized tasks that require outside assistance. Many organizations, therefore, use more than one provider for support; for example, In-house MIS Staff supplemented by contracting for assistance in emergencies or for more technical tasks. Respondents can cite more than one type of tech support per organization in the chart below.



Support, like decision-making, has shifted increasingly to outsiders. The graph below shows the breakdown of primary providers of support<sup>2</sup> over the last eight years. The breakdown is very similar to the 2006 survey with a decrease in “friends of the nonprofit” support apparently offset by contract relationships. A return to the larger proportion of ongoing contracts vs. as-needed support suggests a more planned approach to these relationships. It may also suggest that – at least until the summer of 2008 – confidence in a brighter financial future was up enough to enter into a long-term support relationship rather than waiting for a crisis to call in help.

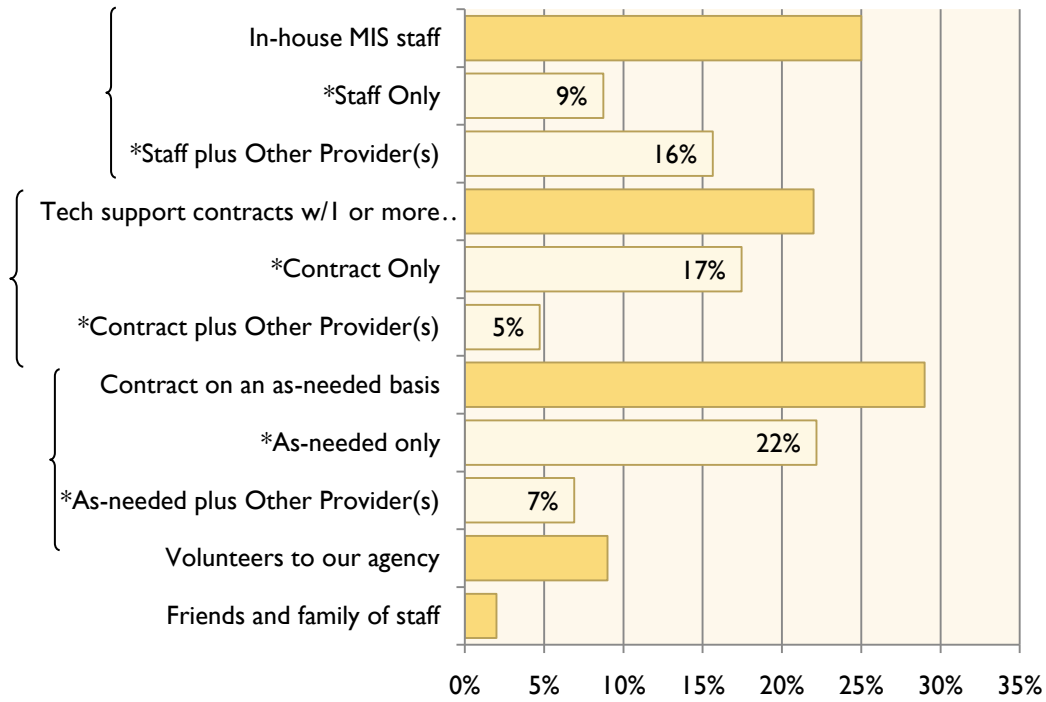
### Tech Support Provision



A more detailed examination indicates that the majority of organizations that identify staff as their primary support also use outside providers. This may include an ongoing tech support contract, as-needed consulting assistance or volunteers. Those who use outside support tend to use that source on its own, although some organizations combine their contract support with other providers.

<sup>2</sup> Primacy is determined in the following order: In-house MIS Staff, Tech Support Contracts, Contract on an as-needed basis, volunteers, friends, no formal approach. For example, an agency that lists both MIS staff and as-needed contracting is counted as MIS staff in the graph.

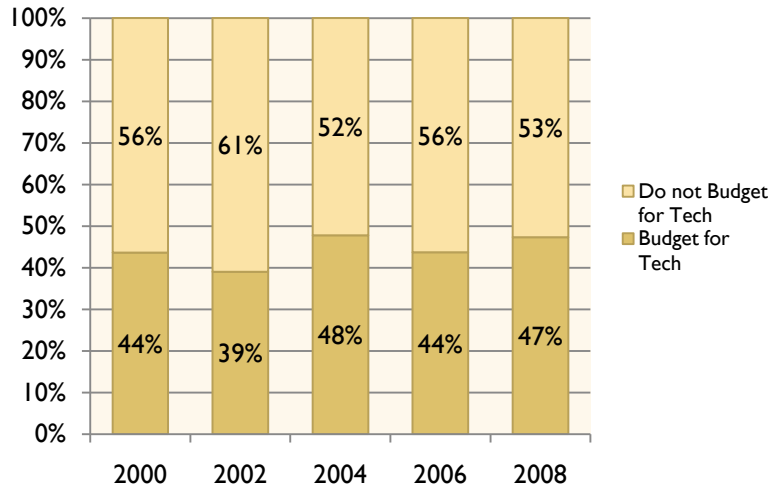
### Tech Support Provision - 2008 Detail



### Technology Spending

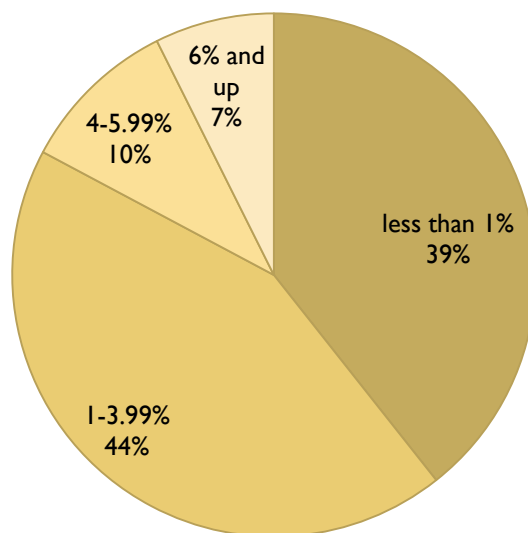
Aside from marginal changes in the rate survey to survey, the rate of tech budgeting remains near but below half. The organizations that do track and budget for technology expenses continue to be slightly larger than those that don't. Median staff size of the budget group is more than 2.5 times that of the non-budget group (13.5:5). Median budget size shows a similar gap (\$1.2M:\$500K)

### Technology Budgeting



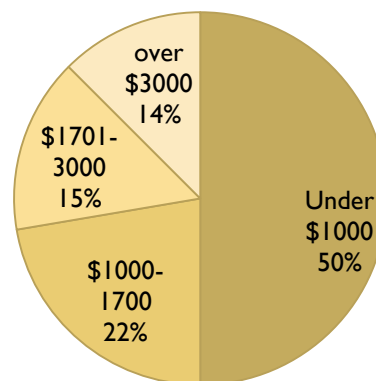
Survey respondents who budget for technology align similarly to technology spending benchmarks this year as in prior years. One benchmark is that technology spending should be 4-6% of overall annual spending. The good news is that the number of organizations in that range doubled from 2006 to 2008 to 10%. The bad news is that 83% of organizations remain below that ratio. Another guideline that ties technology to users is that the tech budget should equal 10% of payroll. Because we don't collect payroll figures in this survey, we are unable to make that comparison.

### Tech Budget as % of Total Budget



Guidelines for annual spending per machine vary, but experts say that organizations should budget \$1000 to \$1700 per year with some placing the top end of the range at \$3000 annually. The median survey organization spends just under \$1000 per computer, unchanged from 2006. The breakdown by ratio aligns pretty closely with past surveys, although it skews slightly lower than the 2004 and 2006 surveys.

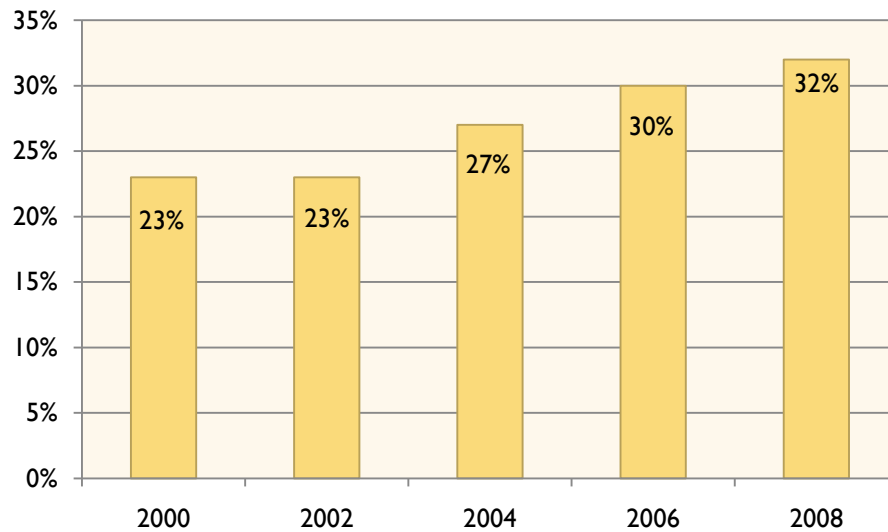
### Technology Spending per Computer



## Staff Training

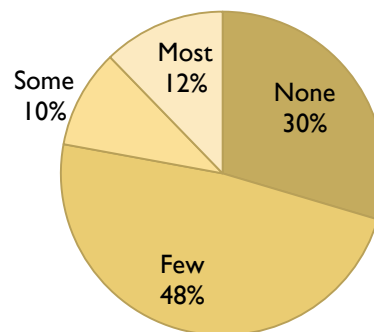
The steady increase in the overall number of nonprofit employees receiving formal technology training continues in this survey. At the organizational level, however, the trend is more ambiguous. First, the progress: a weighted average based on the employees and training rates represented in the sample estimates that 32% of employees in Pittsburgh area nonprofits received technology training in 2008. Because it's a weighted average, this overall number is heavily influenced by larger organizations sending a higher proportion of their employees to training.

**Overall Training Rate**



We arrive at this rate by asking what proportion of each organization's staff "received formal technology training" in the last year.<sup>3</sup> That breakdown for 2008 mirrors recent years pretty closely and shows a pattern of a few specialized staff members receiving technology training. Anecdotally, we have observed an increase in all-staff training with the adoption of Microsoft's latest operating system (Vista) and Office suite (2007).

**Staff Technology Training**



## Technology Skills in Job Descriptions

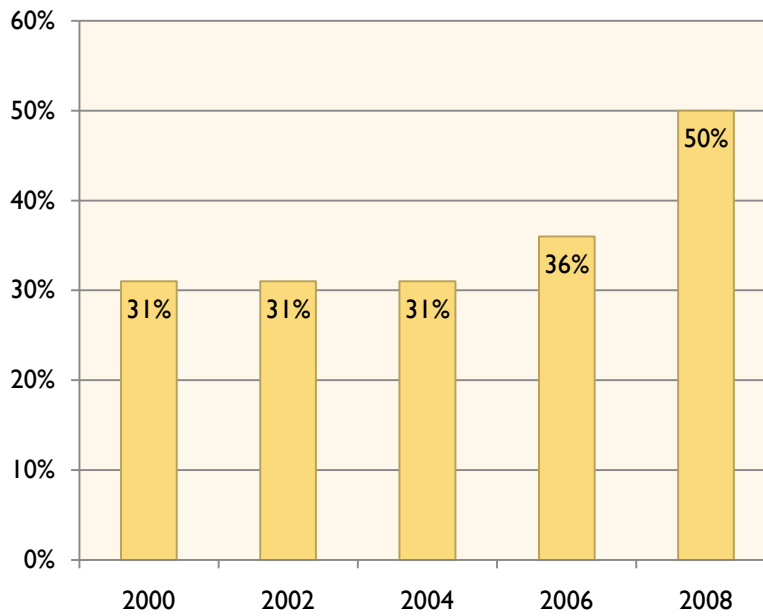
The rate of nonprofit jobs in the region that have tech skills in their job descriptions is clearly on the rise. After seeing a jump from 31% to 36% in 2006, we see a giant leap to 50% in 2008. Statistical anomalies in the sample may exaggerate the jump from 2006 to 2008, but the upward

<sup>3</sup> Options for this question were: none, 1-33% of staff, 34-66% and 67-100%

trend is unmistakable. Again, this measure derives from a weighted average of responses, and upticks in the job description rate or the staff size of the largest organizations can exert a large influence on the overall rate. Technology infuses so much of our work today that articulating the skills necessary to carry out all kinds of jobs makes for better hiring and performance.

### Tech Skills in Job Descriptions

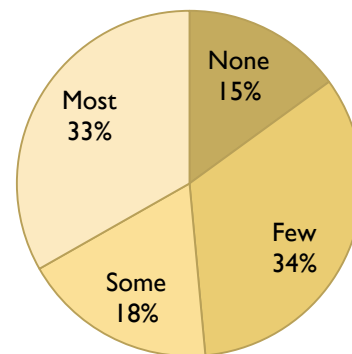
% of all NP Jobs with Tech Skills in Descriptions



Despite mixed trends in specific brackets (none, few, some, most), we can say again in 2008 that there are fewer organizations than in any prior survey with tech skills in *no* job descriptions and more organizations including them in most (67-100%) of their job descriptions.

When we drill further into the data, we see a discernible difference between the state of job descriptions based on staff size. The smallest organizations are the likelier than the larger ones to show the two extreme states. Nearly a quarter of staffs 10 and under have tech skills in no job descriptions. On the other hand, over 35% of them list tech skills in most job descriptions.

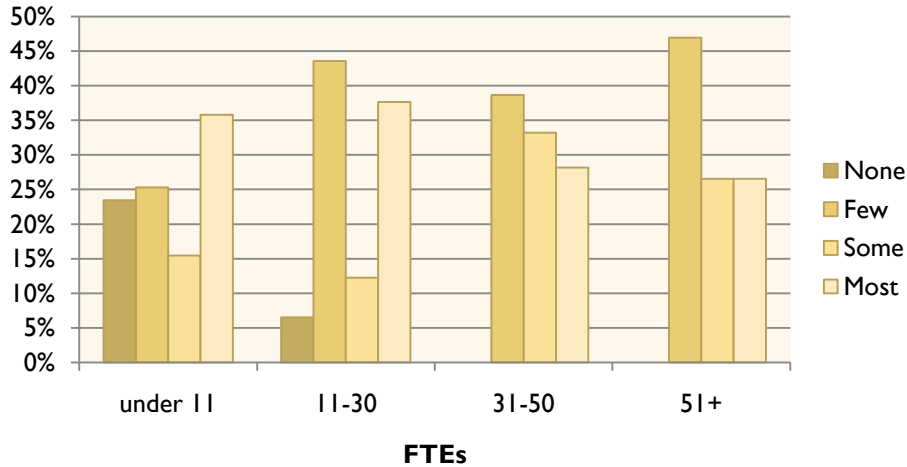
### Technology Skills in Job Descriptions



Two stories emerge. First, the smallest organizations may lack job descriptions altogether. Second, if they have job descriptions, they acknowledge that at that size, most everyone will be called upon to use technology in their jobs. At the other extreme in the largest organizations, we see a different profile. There are tech skills in someone's job description at all of the organizations over 30 employees.

The heaviest concentration is in the 1-33% bracket, though. Again, two stories can be told here. First, the larger the organization, the more likely it is to have positions that are consumed with program delivery and have little office time – think performing artists, residential facility staff and tutors. Someone is supporting the technology, and many people are using it, but not everybody. Second, as the org chart grows, the functions – including technology-demanding functions – sort themselves into bureaucratic order. A smaller proportion of people having tech skills in job descriptions would be consistent with more specialized positions that can only come with scale.

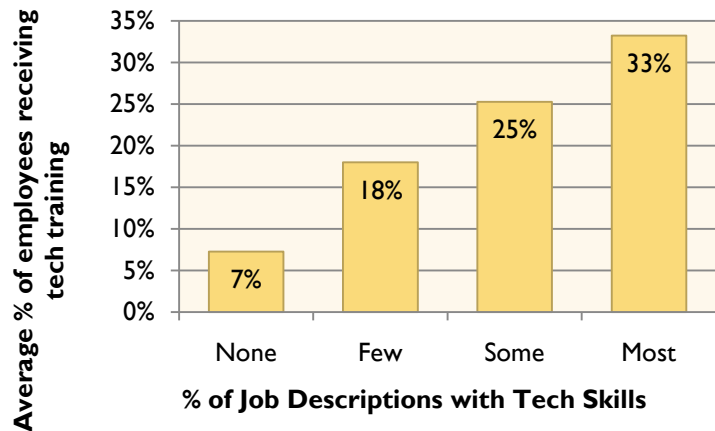
### Tech in Job Descriptions by Staff Size



### Tech Skills in Job Descriptions Related to Training Rate

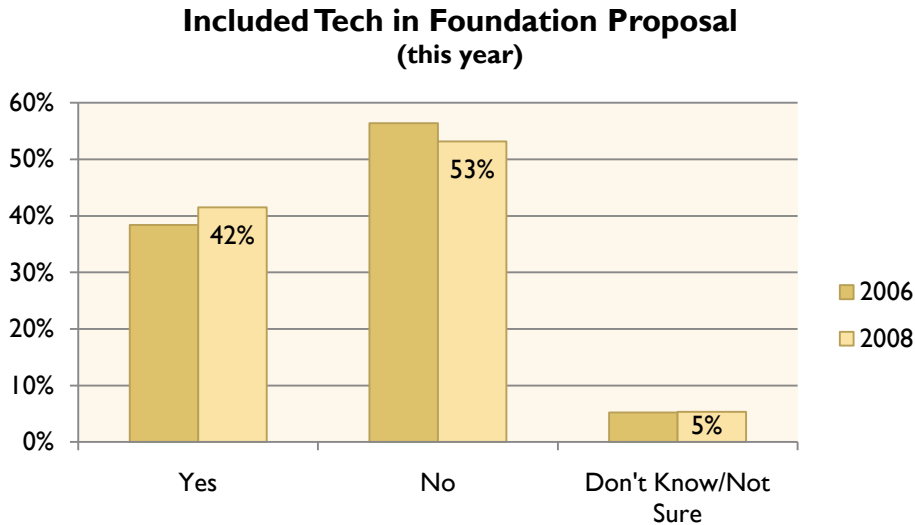
Although the majority of our findings are descriptive, some causal conclusions emerge. Again in 2008, the pattern clearly shows that organizations that list tech skills in job descriptions are more likely to send their employees to tech training. In organizations with tech skills in nobody's job description, only 7% of staff got IT training in the last year. In organizations in which most job descriptions articulate required tech skills, a third of employees got training.

### Tech Skills in Job Descriptions vs. Training



## Foundation Proposals

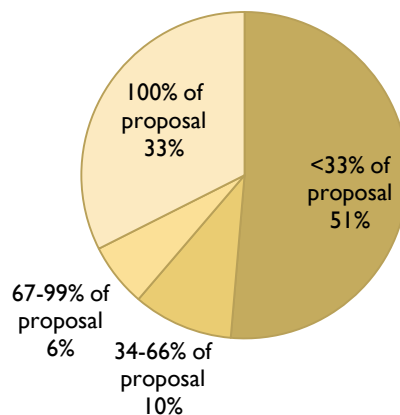
In 2006, we added questions to examine whether nonprofits include technology costs in their foundation proposals and what kind of success they have. The answers were very surprising in 2006, and 2008's answers indicate that this result did not derive from an anomalous sample.



Slightly more organizations included tech costs in foundation proposals in 2008 than 2006. This is not where the surprises lie. For one thing, this rate tracks closely with the rate of budgeting for technology. The 2008 data again confirm a hypothesis regarding the relationship between tech budgeting and tech in foundation proposals: that those that track tech spending are more likely to include tech costs in proposals. While not dramatic, the correlation between the two factors is significant: 54% of the organizations that include tech costs in foundation proposals have tech line items in their budgets vs. 43% among those that do not put tech costs in their proposals.

Beyond whether they'd included tech in a proposal, the survey asked how much of the proposal was for technology. We found concentrations at the two extremes. In just over half of the proposals, tech constituted less than a third of the budget. We would like to think that those proposals use something like the 4-6% benchmark referenced tech budgeting section. At the other extreme are the all-tech proposals (33%).

### Tech Proportion of Foundation Proposal

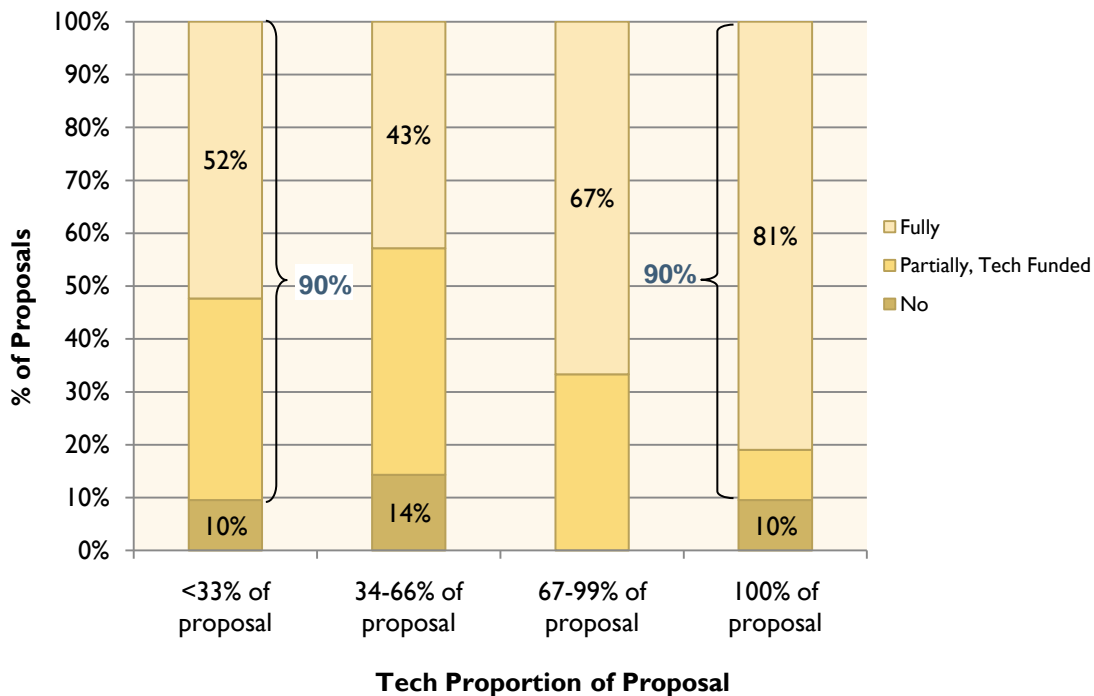


Finally, we asked about the success of these proposals. We thought 2006 was a good year for technology funding from foundations. It turns out 2008 was even better: 89% had the tech portion funded, up from 75% in 2006. The majority received the full amount requested.

Was Proposal Funded?	2006	2008
<b>Fully</b>	52%	60%
<b>Partially, Tech Funded</b>	23%	29%
<b>Partially, Tech Cut</b>	2%	1%
<b>No</b>	23%	10%

In considering the above two questions, we again had a hypothesis: the lower the size of the tech portion of a proposal, the more likely the tech portion was to be funded. Here, finally, was the surprise. According to both our 2006 and 2008 samples, 100% technology proposals get funded at least as often as small portion technology proposals. In 2008, the technology in proposals was funded in 90% of both minority-tech and all-tech proposals. The all-tech proposals were more likely to be funded completely by a dramatic margin (81% vs. 52%). Every proposal that devoted the majority (but not all) of the budget to technology got the tech funded. Finally, the least successful (and that's relative in this highly successful company) proposals were those that were about half tech. These outcomes run counter to the anecdotally-reported practices of program officers who say they don't intend to continue funding all-technology proposals.

### Tech Proportion of Proposal vs. Was Proposal Funded?



## Tech Costs in Contracts

Of course, nonprofits derive revenue from sources other than grants. Many offer services under contract, for instance to government agencies. We were also interested in whether nonprofits accounted for the cost of technology in these contracts.

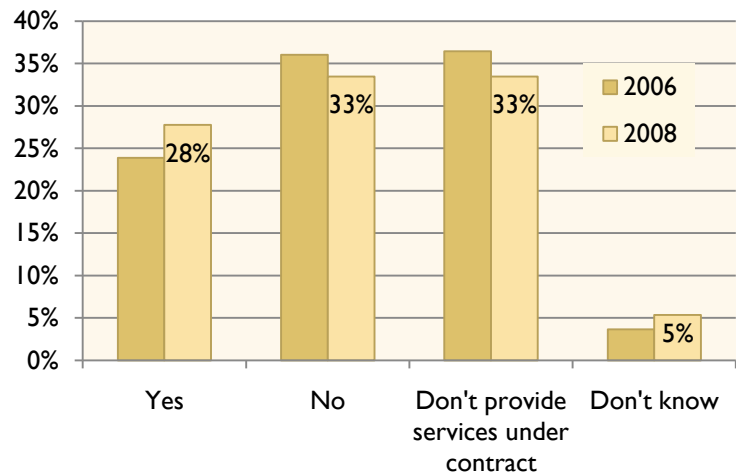
As the chart shows, many organizations do not provide services under contract. If we focus only on those that do (i.e. a Yes or No answer to the question), we find a similar rate to tech in foundation proposals:

45% of service-providing organizations include tech costs in those contracts. Again, budgeting for tech correlates with working costs into contracts: 58% of nonprofits that include tech costs in contracts have a tech budget, versus 47% of those that do not include tech costs in contracts.

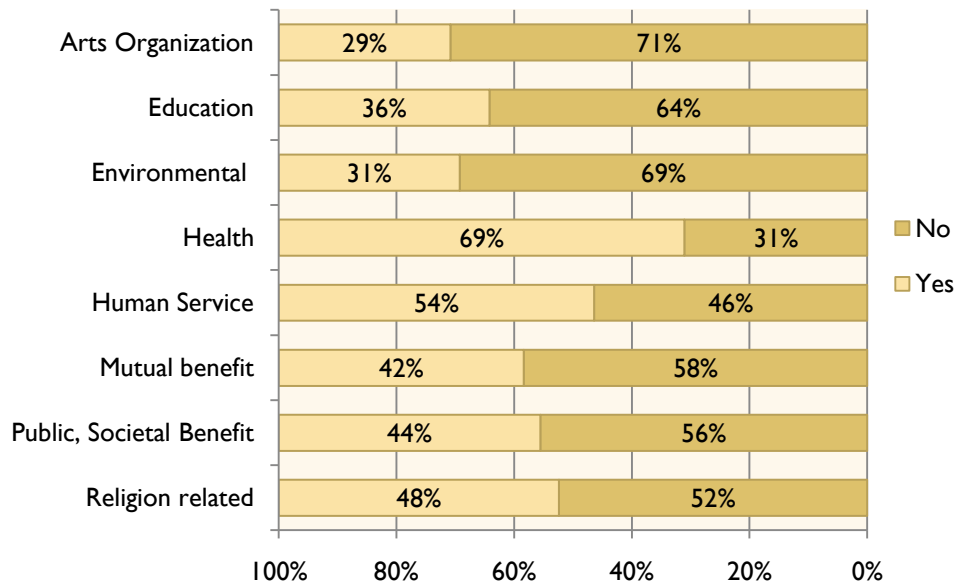
Although we examine links between the mission of the organization and many measures in the survey, very few of these crosstabs produce any interesting patterns. The comparison regarding tech costs in contracts does produce some intuition-confirming correlations.

First of all, health and human service organizations are most likely to include tech costs in contracts. Nearly half of faith-based organizations do so. Arts and environmental groups are least likely to include tech costs in contracts.

**Tech Costs in Contracts**



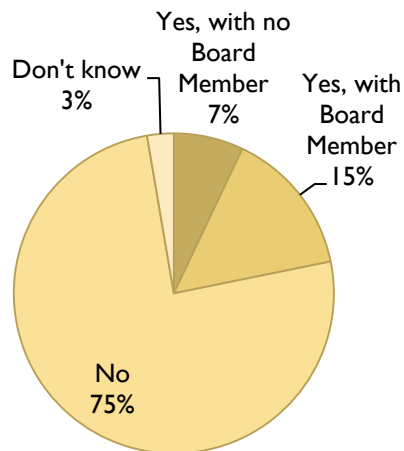
**Tech Costs in Contracts by Org Type**



## Technology Committee

Past surveys have shown an important link between having a technology committee and adopting best practices in technology management. Tech committees can draw expertise and opinion from across the staff and from board members. Still, having a tech committee remains a distinctly minority practice. Tech committees declined slightly from an eight-year high of 24% of respondents in 2006 to 22% in 2008. The balance shifted nominally toward committees with at least one board member.

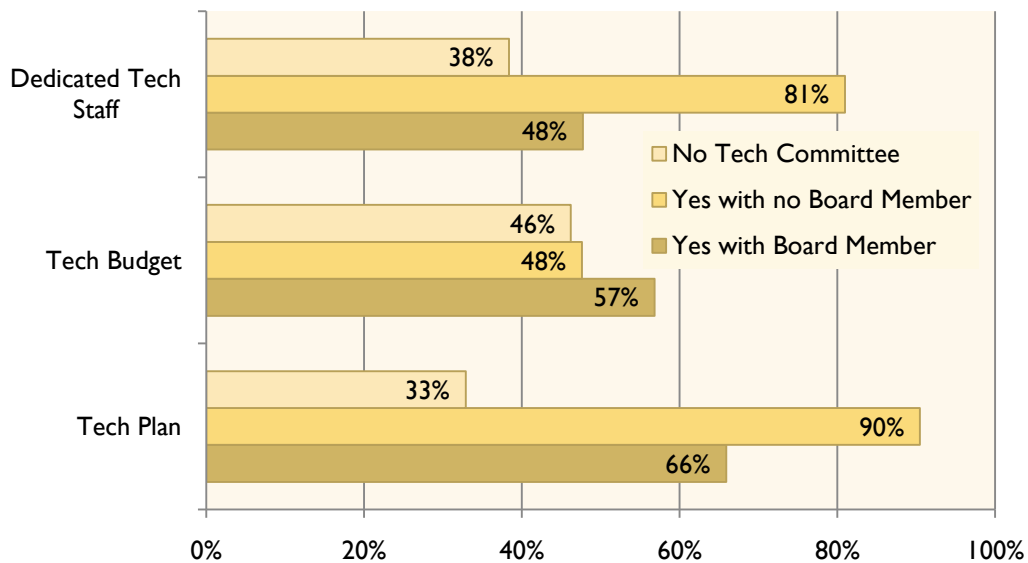
### Technology Committee



In 2000, the organizations that had a board technology committee tended to be smaller than those that didn't. In 2002 that profile flipped, and the size difference persists in the general question of whether an organization has a tech committees. The median staff size for organizations with a tech committee is 15 versus 6 for those that do not. In 2006, a distinct size difference emerged between those that have a board member on the committee and those that do not. The pattern continues in 2008. Board tech committees have a much lower median staff size (11.5) than staff tech committees (47). A similar ratio exists in budget (\$1.2M vs. \$4M). After a certain size, it seems that board members need not get involved with technology; it becomes an operational tool with adequate staff oversight.

The size analysis matters because the different committee profiles align with different adoption rates for tech best practices. In 2004, board committees were superior to staff committees. In 2006, staff committees looked to be the clear-cut winner. In 2008, the results are more ambiguous. Staff tech committee orgs are most likely to have dedicated tech staff and to have a written tech plan (90%). The link between staff-only tech committees and dedicated tech staff makes sense because once a staff member is officially identified, there may be less need for board input. The link to tech planning jives with a staff group wanting its marching orders codified. A third measure, budgeting for technology, is slightly superior in board tech committees. Board authority may enable budgetary authority.

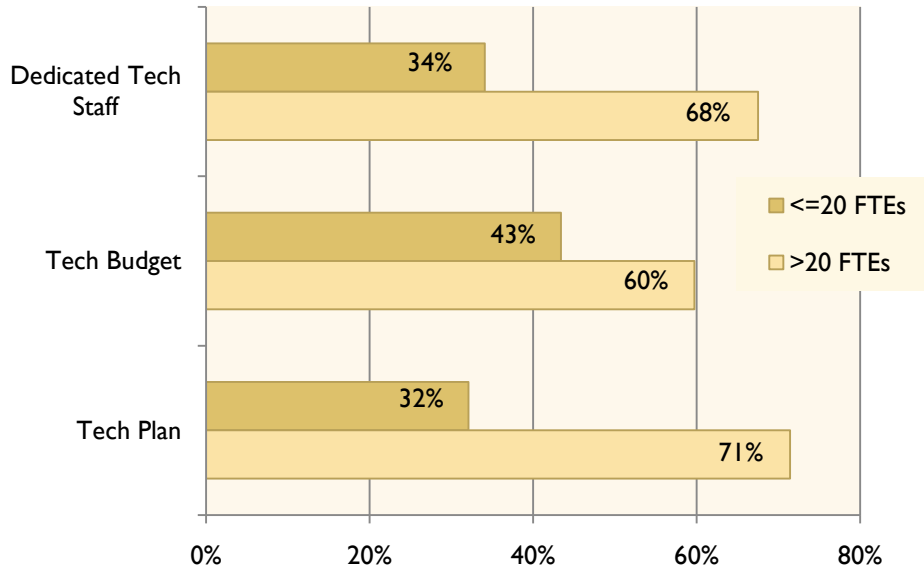
### Tech Committee vs. Best Practice



The combination of organizational size dictating the presence of a committee and the differential in the success rate of board vs. staff committees led us to delve deeper into the question. If larger organizations are more likely to have a staff tech committee and staff tech committees perform better, perhaps size is a more powerful factor than the committee. Board members may be helping out most frequently on the tech committees of the small and the struggling.

Because it would be difficult to analyze the micro effects of staff size along the increments laid out in the Respondent Profile section, we again use the threshold of 20 full-time equivalent employees and analyze best practices on either side of that line, ignoring whether the organizations had a tech committee or not. The result showed significant gaps between the large and the small.

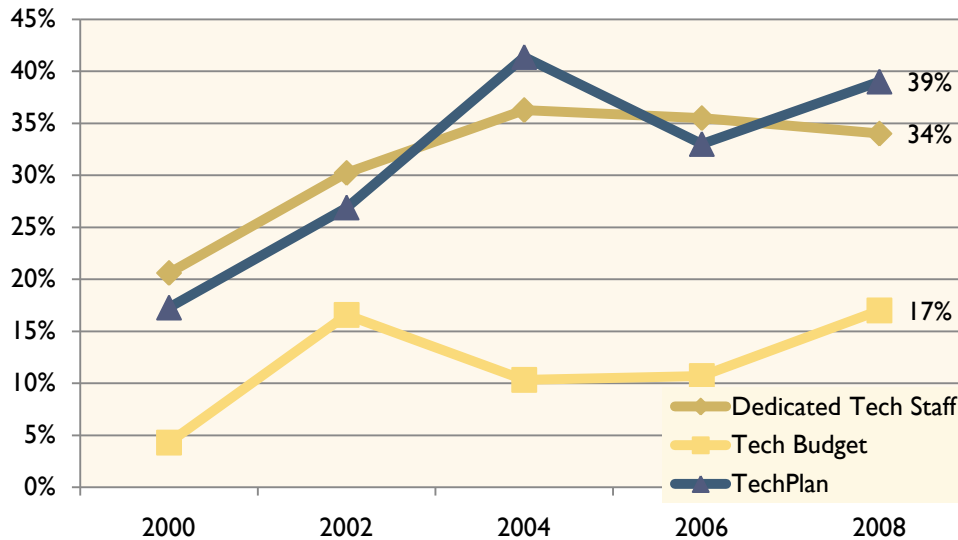
### Staff Size vs. Best Practice



Although previous surveys had analyzed best practices in relation to this threshold without such clear results, we next examined the trend in the gap between over-20 performance and under-20 performance over time. The chart below shows how the percentage point gap has widened over the years of the survey. In other words, as time passes, the best practice adoption gap between large and small organizations grows.

### Tech Best Practice vs. Staff Size Threshold

Pct. Point Difference: Orgs with >20 FTEs - Orgs with <=20 FTEs



We should be sure not to let this fact get lost in the detail: having a tech committee correlates with higher adoption of best practices, and yet, 75% of organizations do not have a tech committee.

# Computer Systems

Change in managing technology happens in a context of increasing speed and capacity of technology tools. We look with interest at whether new technologies are being deployed in area nonprofits. Nonprofits vary in the kinds of computers, software and connectivity they use. Largely, they progress from survey to survey in adopting the tools that can make them work more efficiently and effectively.

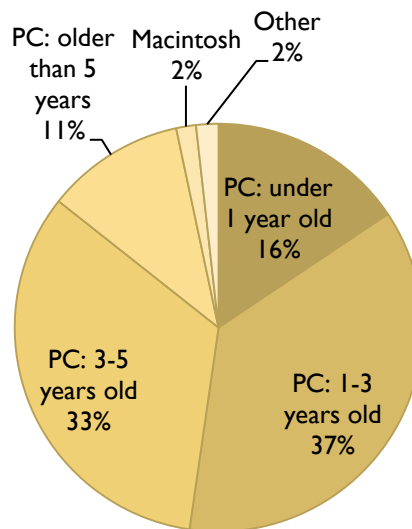
## Hardware

We sometimes use the analogy of an iceberg for technology spending. The tip of the iceberg is user hardware. There are lots of expenses like ongoing network hardware and services, software licensing, maintenance and training costs that are less obvious. Any given user, however, perceives the organization's IT resources through the keyboard at the end of her fingers.

Although it dismays some nonprofit professionals who maintain a lean ship, the most efficient useful life of a workstation is about three years. The thought of replacing machines every three years can be difficult for thrifty leaders to accept. Machines do not stop running on the first day of their fourth year, of course; they do, however, start to have more and more small failures. In addition, according to Moore's law, hardware's processing capacity doubles every two years. Software keeps pace with this supply of processing power. Upgrades become impossible on maxed-out older hardware. In a workplace, we concern ourselves with more than just one machine. In a fleet of workstations, holding onto machines older than 3 years can stand in the way of standardized software across an agency.

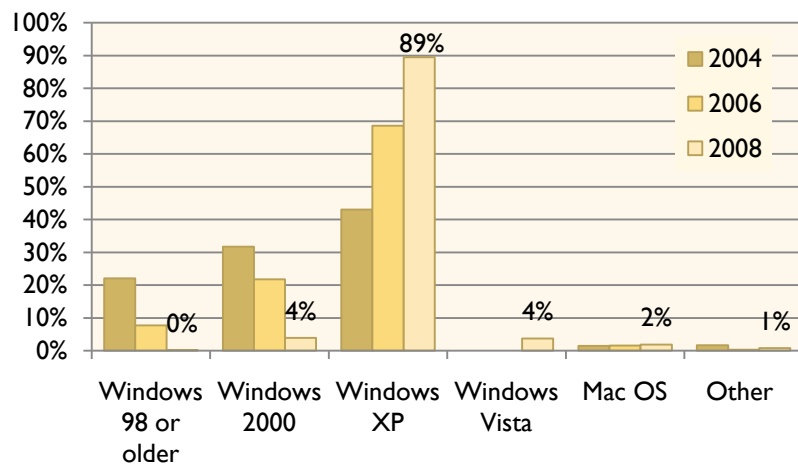
All this is to explain why we examine user hardware by its age. We could – and did in the early surveys – break workstations down by processor speed and RAM, but in the end, we only used those attributes to proxy for age. The chart shows that more than half (53%) of the PCs in area nonprofits are under three years old. A third are in that period of creeping obsolescence, 3-5 years. Just over 1 in 10 (11%) defy the odds at over 5 years old. The success of the iPod notwithstanding, Macs make up a tiny sliver of user hardware in area nonprofits. The “other” category is dominated by three agencies using a large number of thin client workstations.

**Computers by Type and Age**



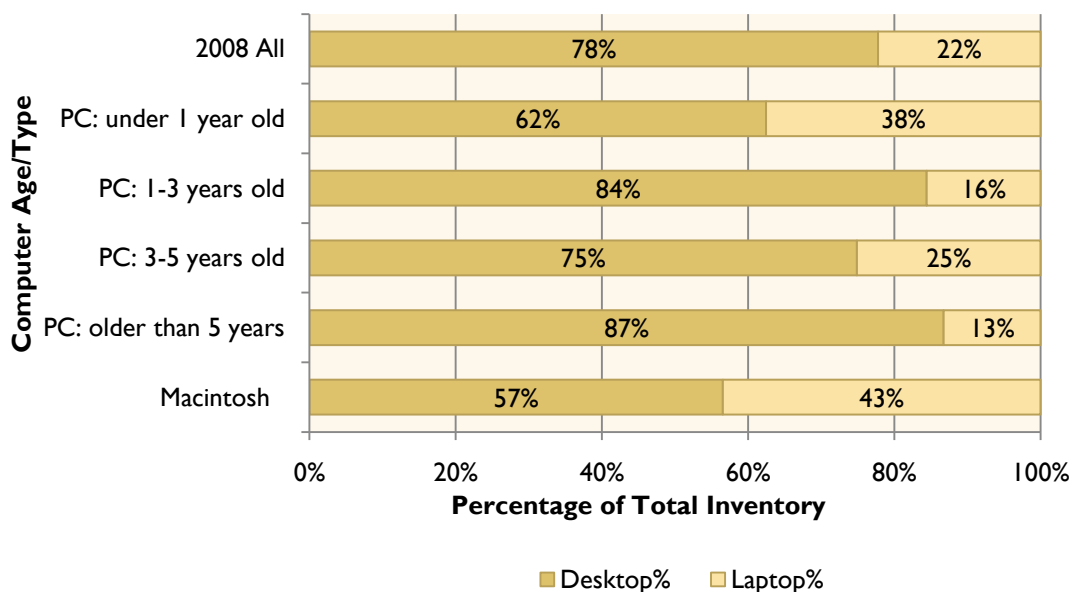
The operating systems mirror these categories of user hardware. The chart below breaks down the operating systems on all of the computers represented in the sample. Windows dominates with a few faithful Mac users. Among Windows users, versions before XP, which had some share in previous surveys, have essentially disappeared. Only 4% of the computers in nonprofits in the region have Vista loaded on them. One in five organizations has Vista loaded on at least one machine, but it's clearly a minority choice at this point.

**Total Computers by Operating System**



The breakdown of laptops versus desktops shows a noteworthy shift. Laptops make up just 22% of all the user hardware in nonprofits in 2008, up from 16% in 2006. The overall proportion has shifted because laptops make up well over a third (38%) of new workstations. In 2006, only a quarter of new machines were laptops. In addition, over 40% of Macs are laptops. Increasing numbers of laptops represent both desktop replacement and equipping mobile staff.

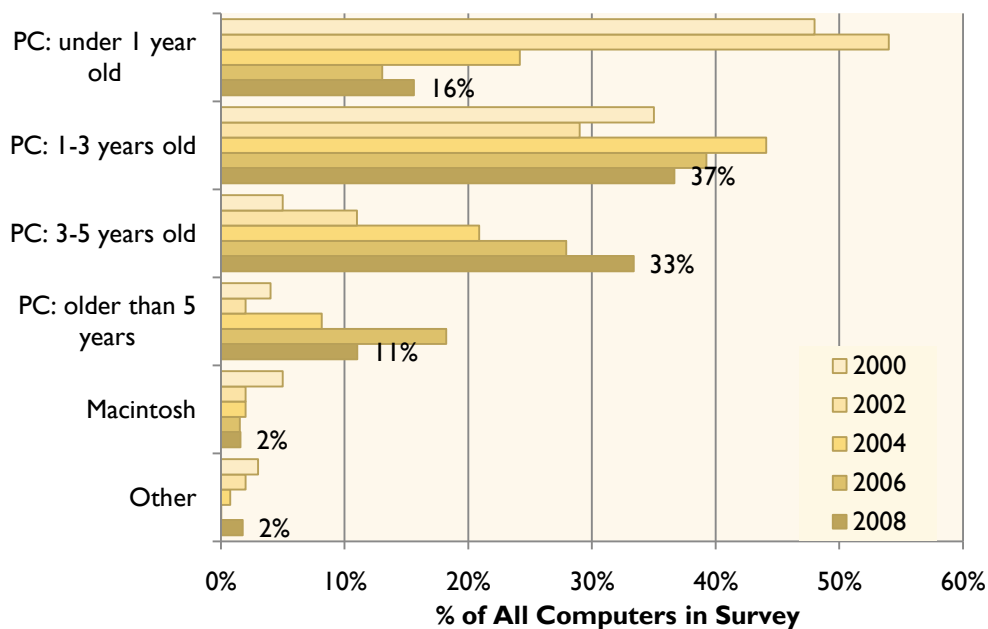
**Desktops vs. Laptops**



The 2006 results depicted a stark trend. To understand the trend, we must turn back the clock to the context of the 2000-2002 surveys. Fear of the Y2K problem motivated nonprofits to invest in their IT infrastructure just before the turn of the century. Sizable segments of workstation inventories were replaced at once. Our first tech surveys, therefore, depicted nonprofits awash in new hardware. By 2006, the pattern was clear, however: much of that user hardware was aging in place. The post-9/11 recession probably didn't help.

We feared that the trend might continue in 2008. The results are slightly ambiguous, but at the very least, we may have hit bottom in 2006. The number of PCs older than 3 years has diminished. Likely, these dinosaurs were just failing too often to keep around. A rollout of a new operating system (Vista) and Office suite (2007) since the 2006 survey may have been the death knell for these older machines. The software simply will not run without minimum specifications. That story would also account for a nominal uptick in brand new (under-1-year-old) machines. The 3-5 year range is the one bar that follows the prior trend, and that looks like organizations trying to scrape every bit of usefulness out of the machines they own.

### Computers by Age/Type

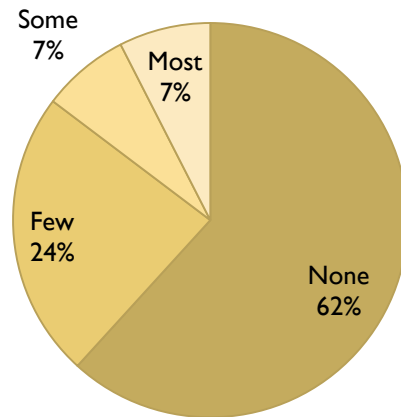


A few bellwethers predict newer or older inventories in any given organization. If an organization keeps computers for more than five years, their general IT infrastructure is more likely to be out of date. If it uses Macs, its inventory may be younger than the norm. In organizations with any 5-year-old computers, old machines account for 24% of the computers, more than twice the general rate. In Mac-using organizations, old machines account for 5%, less than half the general rate. Arts, Membership and Public/Societal Benefit organizations have slightly more Macs than other organization types.

## Donated Computers

A new computer is a highly useful donation to a nonprofit. A computer that has run its course in one's home or office represents a burden more than a boon for the recipient. Unfortunately, more of the donations we hear about tend to be in the latter category. The survey presents some good news on that score. The number of organizations with *no* donated computers is 62%, up from 58% in 2006. An additional quarter has donated computers, but they account for less than a third of their inventory. It's rare (7%) to see an organization with mostly donated computers.

**Proportion of Computers that are Donated**



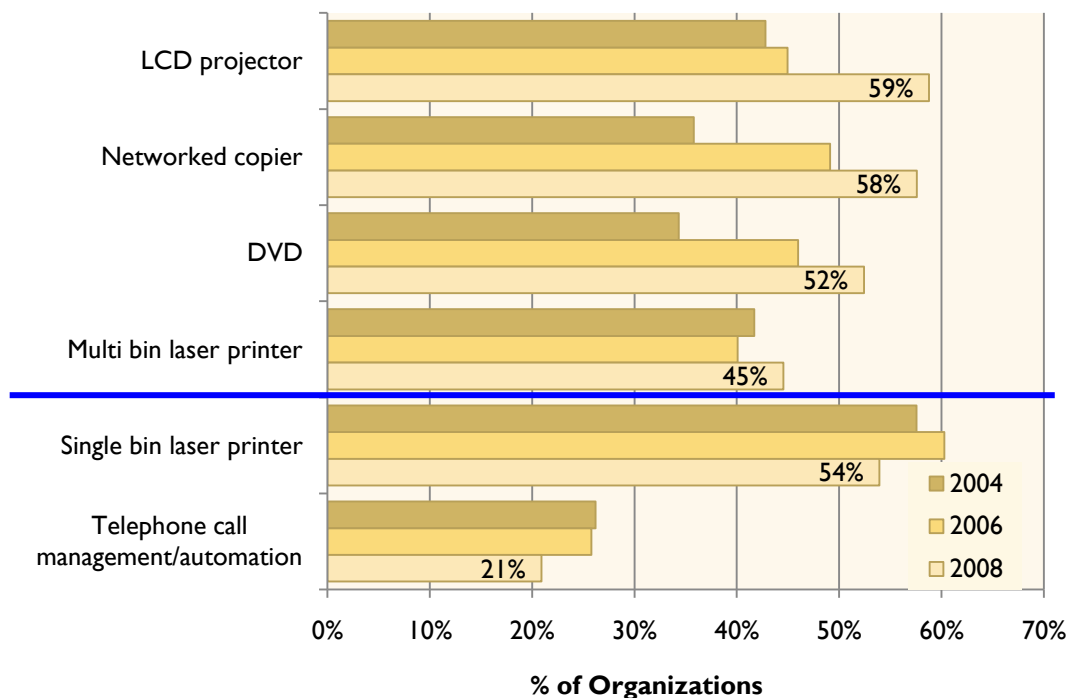
Nonprofits that use donated computers are smaller by every measure: budget, staff size and number of computers. The more donated computers they use, the smaller the organizations get.

Proportion	Average			
	Budget	Tech Budget	FTEs	# of Computers
<b>None</b>	\$ 4,523,065	\$ 154,271	60.3	43
<b>Few</b>	3,994,656	80,084	53	40
<b>Some</b>	2,115,958	9,623	24.5	25
<b>Most</b>	356,111	2,033	10.7	8

## Peripherals

The survey asks about a large variety of peripheral items (see Appendix for complete list). The utilization profile changes little year to year for many items. A few shifts are worth highlighting. LCD projectors continued their steady march and landed in the majority at 59% for the first time in 2008. In our first survey in 2000, only 16% of nonprofits had an LCD projector. Networked copiers and DVD players also crossed into the majority, following a path of steady growth. There appears to be a shift from single bin, small-volume laser printers to multi-bin machines. After holding steady just above a quarter of all nonprofits, call management systems dropped to 21%. Stay tuned until 2010 to see if a bad news trend for lovers of robot menus continues.

## Peripheral Changes



The prevalence of other peripherals is essentially stable with a steady increase in digital cameras, scanners and CD burners.

Other peripherals	2000	2002	2004	2006	2008
Scanner	60%	69%	65%	73%	79%
Digital camera	28%	48%	58%	67%	70%
Tape backup	48%	50%	42%	43%	44%
Ink jet or other color printers	78%	80%	66%	75%	75%
Telephone system with voice mail	68%	71%	73%	81%	80%
CD ROM burner	23%	55%	70%	75%	73%
Fax machine	93%	88%	83%	90%	86%

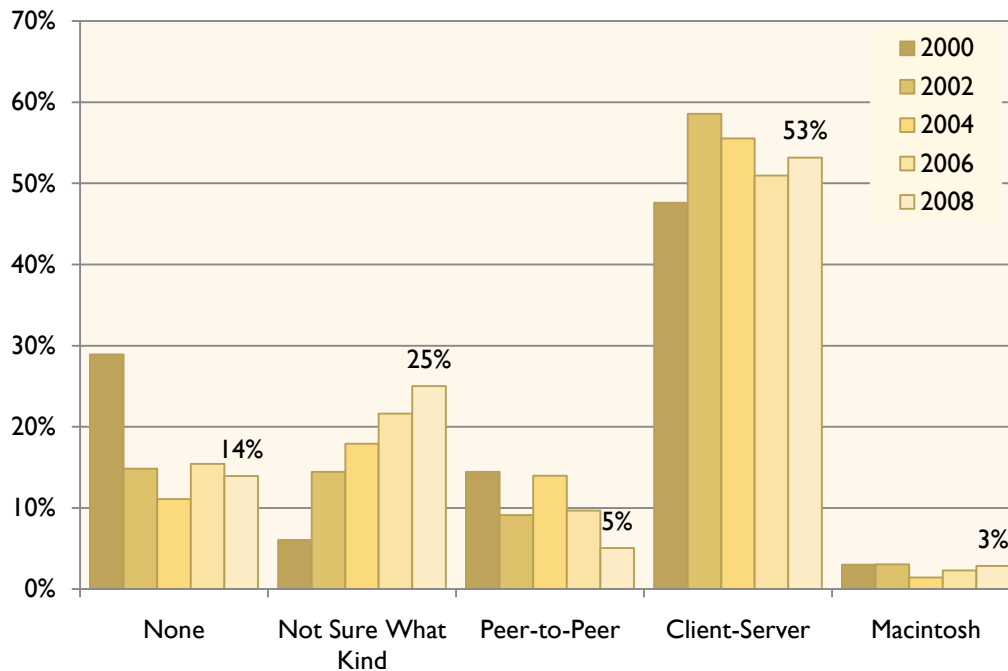
## Connectivity

### Local Area Networks

From an early low in 2000 of 72%, the proportion of nonprofits using a network of some kind has grown to 86% in 2008. Variations in survey samples explain vacillation in the proportion of Client-server, peer-to-peer and unknown network types. The “Not Sure What Kind” response has been getting more popular as respondents who are not tech-savvy can at least state that they have some kind of network. The vast majority (69%) of “Not Sure” respondents have 10 or fewer employees. Most likely, the majority can be assumed to be peer-to-peer networks

with a minority being client-server networks. Growth in the “Not Sure” category may explain the drop in reported peer-to-peer networks.

### Local Area Networks



Survey Respondents use a variety of network operating systems. Most client-server networks run Windows 2003 (33%), Windows 2003 Small Business Server (27%) and Windows 2000 (19%). Windows NT networks diminished from 19% in 2006 to 11% in 2008. The migration away from Novell networks continues, dropping steadily from 34% in 2000 to 5% in 2008. A very small number of organizations uses Linux (2%).

### Internet Connection

Hardware and networking has certainly changed at a high rate over the course of five surveys. These changes, though, pale in comparison to the pervasion of the Internet in all areas of personal and professional life. Fortunately, each survey has depicted enhanced Internet connections and more intensive use of the Internet by nonprofit staff.

Broadband connectivity continues to become more pervasive in area organizations. Respondents with broadband connections increased from less than a third (32%) in 2000 to a plateau of 79-80% in 2006-2008. In addition, 9% of 2008 respondents use Wireless Internet, up from 3% in 2006. The data suggests that broadband and wireless connections have all but eclipsed dial-up connections.



























































