UNIVERSITY OF
FLORIDA

2002 NATIONAL RETAIL SECURITY SURVEY

FINAL REPORT

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Special thanks to model Jessica Spence for posing as our shoplifter on the cover and to the University of Florida Bookstore for allowing us to photograph their merchandise.

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INTRODUCTION

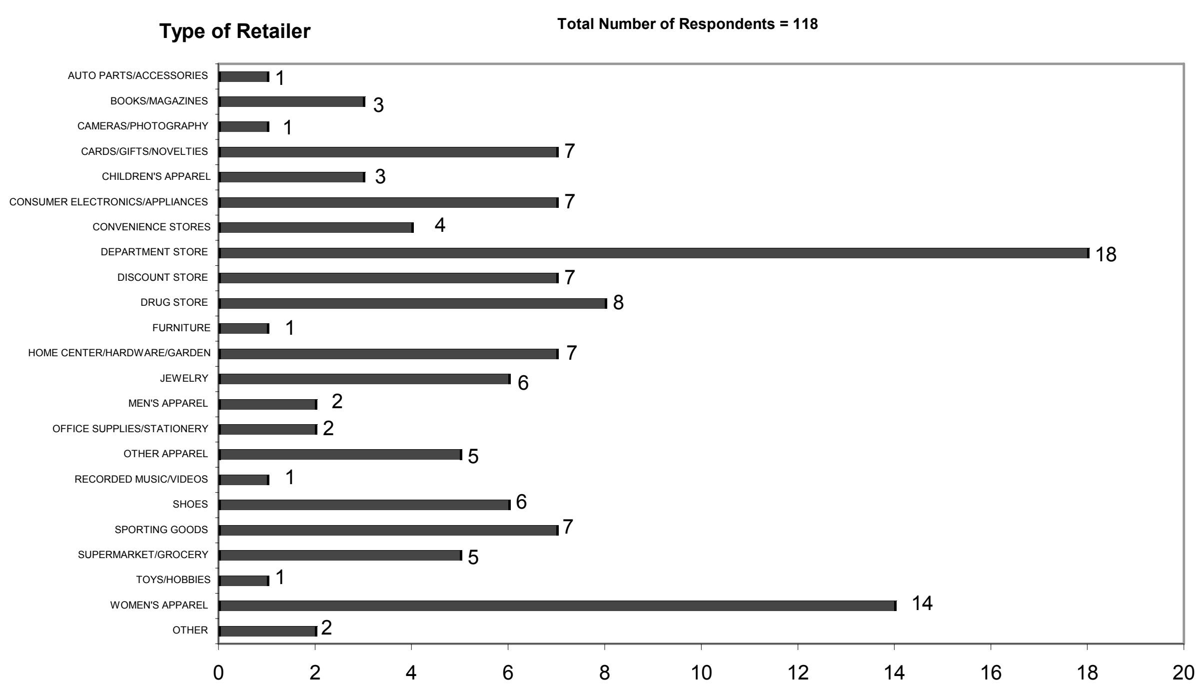
Retail loss prevention executives engage in a constant battle to detect and prevent inventory shrinkage. Inventory shrinkage (sometimes called inventory shortage) is the financial loss attributable to a combination of employee theft, shoplifting, administrative error, and vendor fraud. In order to overcome the problems associated with shrinkage, loss prevention directors must possess accurate information regarding the prevalence of the problem, sources of the loss, obstacles other firms encounter, as well as a way to identify and employ "best practice" prevention strategies. The National Retail Security Survey is intended to provide loss prevention executives with the most current market-specific information to assist in their continuing efforts to minimize inventory shrinkage and various other sources of financial loss. The 2002 National Retail Security Survey (NRSS) is the eleventh annual report in a series of industry-wide empirical research studies beginning in 1991 that have focused on retail loss prevention and retail store security practices.

RESPONDING RETAILERS

During the past year we received anonymous questionnaire responses from a total of 118 retail companies representing 22 different retail markets. The retail firms participating in the survey represent virtually the entire retailing industry with the intentional exclusion of restaurants, bars, motor vehicle dealers, auto service stations, direct catalog sale outlets, and internet "e-tailers." The reader should note that the total number of respondents for the last two NRSS surveys was significantly lower than received in previous years. For example, the 2001 survey yielded 120 retail respondents, almost identical to this past year's response rate. On the other hand, the 2000 NRSS survey included 199 different retail companies and the 1998 NRSS survey received responses from 200 companies. We speculate that the lower response rate for the past two years is a function of the continuing economic recession resulting in the corresponding poor sales experienced by the entire retail industry. An examination of returned, uncompleted questionnaires suggests that a significant number of retail establishments filed for bankruptcy or went out of business during the past year. Last, the turnover and down-sizing in senior loss prevention executives has been particularly high during the past two years. This unsettled condition in the industry causes continuing difficulties in getting access to the most accurate data and fully completed questionnaires.

The type of retail store chain that most frequently responded to this year's survey were full-line department stores (19) and women's specialty apparel stores (14). No other type of retailers responded in the double digits. Vertical markets participating at

Figure 1: RETAIL COMPANIES IN SAMPLE



moderate levels included drug stores (8), cards/gifts/novelties (7), consumer electronics/appliances (7), discount department (7), home centers/hardware/garden (7), and sporting goods stores (7), jewelry (6), shoes (6), recorded music/videos (6), other apparel (5), supermarket/grocery (5), convenience stores (4), books & magazine stores (3), children's apparel (3), office supplies/stationery (2), men's apparel (2). A few vertical market segments were very poorly represented by only one firm each, namely, auto parts, tires & accessories (1), cameras/photography (1), furniture (1), recorded music & videos (1), and toys & hobbies (1). Two responding retailers did not indicate their type of vertical market. Due to low response, summary statistics will not be calculated for the above five categories of retailers.

LEVELS OF INVENTORY SHRINKAGE

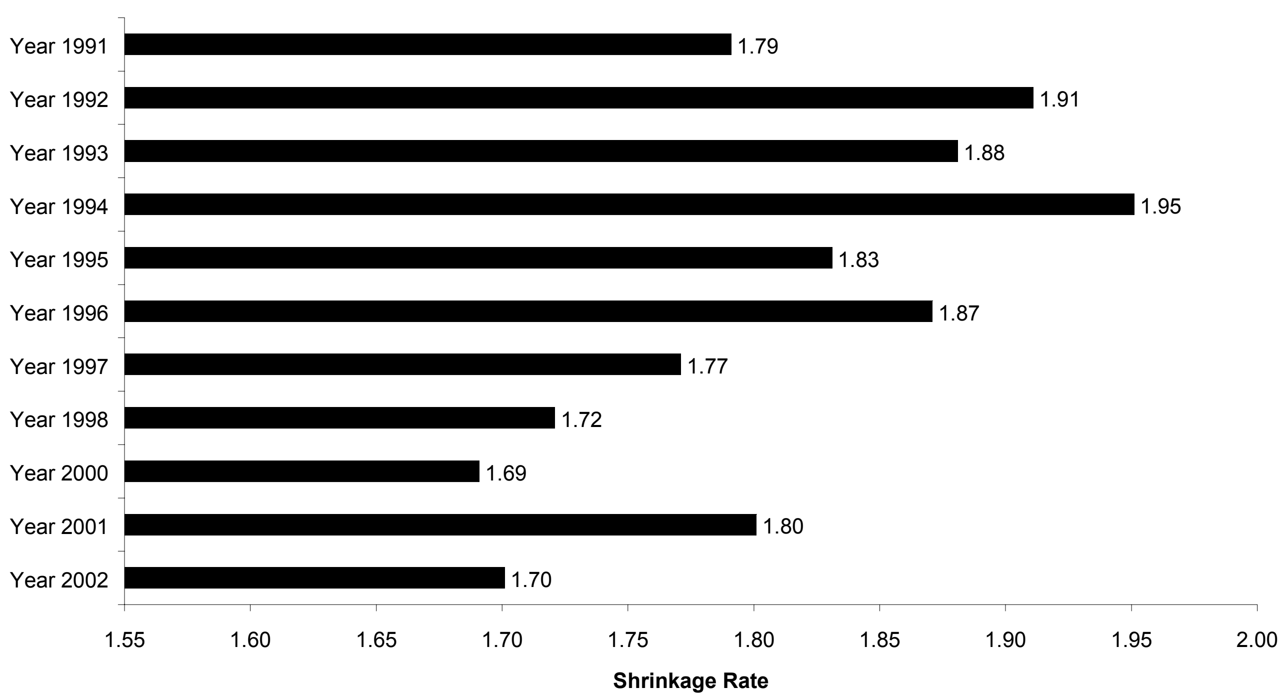
Each year for the past decade the principal objective of the NRSS is to ascertain the level of inventory shrinkage experienced by various types of chains within the retail industry. Relying on data collected from calendar year 2001, the 118 responding firms reported an average shrinkage rate equaling 1.70% of total annual sales. This figure is significantly lower than the 2001 NRSS shrinkage rate of 1.80% and is almost identical to the 2000 NRSS shrinkage rate of 1.69%. (Please note that this shrinkage rate is calculated "at retail." Even firms that use "at cost" or other methods of shrinkage calculation were instructed to translate their shrinkage levels to "retail" making comparisons easier between firms.)

The overall average (mean) shrinkage percentage has remained relatively stable over the past decade. In fact, this past year's level is lower than the rate of 1.79% when we started the study in 1991. Since then we reported a shrinkage rate of 1.91% during 1992, down slightly to 1.88% for 1993, increasing in 1994 to 1.95%, decreasing again in 1995 to 1.83%, rising to 1.87% in 1996, down to 1.77% in 1997, dropping further in 1998 to 1.72%, falling to its lowest rate at 1.69% for 2000, back up to 1.80% for 2001, and now decreasing to 1.7% for this year's report.

Assuming a retail base of $1.845 trillion in annual sales for the retail sectors surveyed in this study, this translates into an approximately $31.3 billion annual loss to retailers as a result of inventory shrinkage. There was some significant variation observed among the various market segments included in the study.

Specifically, above average shrinkage percentages were reported by: Jewelry (2.24%), "Other" Apparel stores (2.14%), Children's Apparel (2.01%), Women's Apparel (2.01%), Drug (1.91%), Discount (1.90%), Cards/Gifts/Novelties (1.85%), and Home Centers, Hardware & Garden Supply (1.77%) chains. Below average shrinkage percentages were reported by: Sporting Goods (1.68%), Department (1.67%), Shoes

Figure 2: SHRINKAGE RATES OVER PAST DECADE



(1.67%), Supermarket & Grocery (1.50%), Men's Apparel (1.19%), Convenience (1.09%), Office Supplies and Stationery (1.07%), Books & Magazines (0.9%), with the very lowest shrinkage reported by Consumer Electronics & Appliances (0.74%) chains.

SOURCES OF INVENTORY SHRINKAGE

A second major annual objective of the NRSS is to measure the perceived sources of inventory shrinkage as assessed by corporate retail loss prevention and asset protection executives. Inventory shrinkage refers to loss caused by a combination of different sources including employee theft, shoplifting, administrative (i.e., paperwork) error, and vendor fraud. In most cases of shrinkage, there is not a definite audit trail, so loss prevention managers must make "after-the-fact" educated guesses to estimate just how their inventory losses occurred. While such guesses are undoubtedly affected by personal biases, nevertheless, loss prevention executive opinions are very useful because of their intimate knowledge concerning problems related to shrinkage. While not nearly perfect estimates, these educated guesses are the single best source of information that one can obtain regarding where missing inventory in the retail store most likely ends up. Among the four major sources of inventory shrinkage, during the past calendar year retailers attributed 48% of their company's losses to employee theft, 32% to shoplifting, 15% to administrative error, and 5% to vendor fraud during the past year. Last year we reported in the 2001 NRSS these numbers were 45.9%, 30.8%, 17.5%, and 5.9%, respectively. In other words, employee theft continues to increase significantly, shoplifting is also increasing slightly, while administrative error and vendor fraud are both decreasing as a proportion of total losses.

Employee Theft

Consistent with the recent trend observed over the most NRSS studies, loss prevention executives again indicated that they believed employee theft to be the single most significant component of inventory shrinkage. Specifically, retailers attributed 48% of their inventory shrinkage to employee theft. This is the highest figure yet observed in the ten-year history of the National Retail Security Survey. In fact, the proportion of total inventory shrinkage thought to be the result of employee theft is up 2.1 percentage points from the previous record high figure of 45.9% observed in last year's 2001 NRSS. Assuming a total shrinkage dollar total of approximately $31.3 billion, this translates into an annual employee theft price tag of slightly over $15 billion. This is a staggering amount of crime. In fact, there is no other form of larceny that annually costs American citizens more money than employee theft.

The categories of retailers that reported the greatest problems with employee theft include (in descending

Figure 3: SHRINKAGE RATE BY RETAIL MARKET SEGMENT

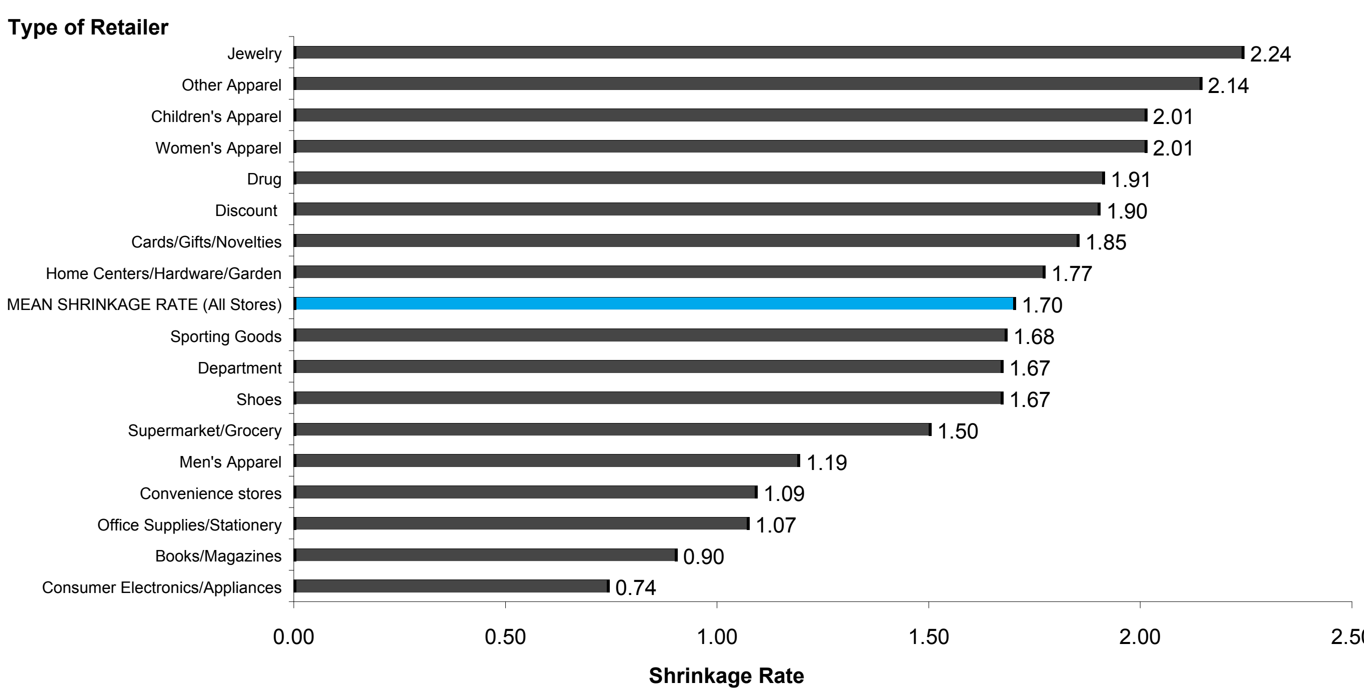


Figure 4: SOURCES OF INVENTORY SHRINKAGE

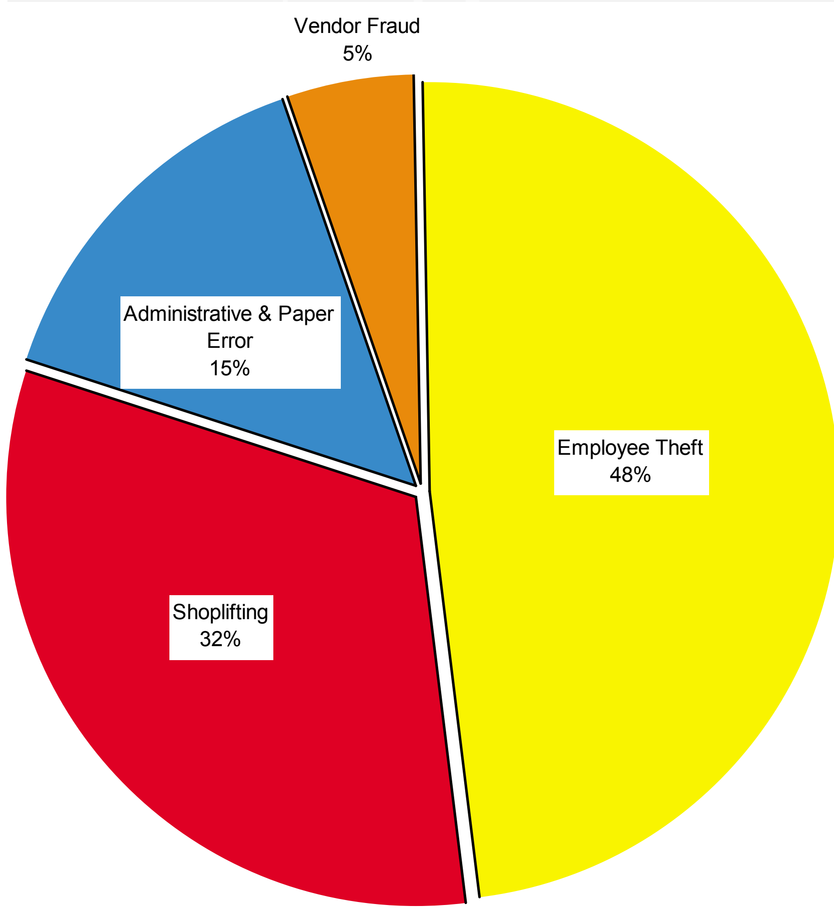
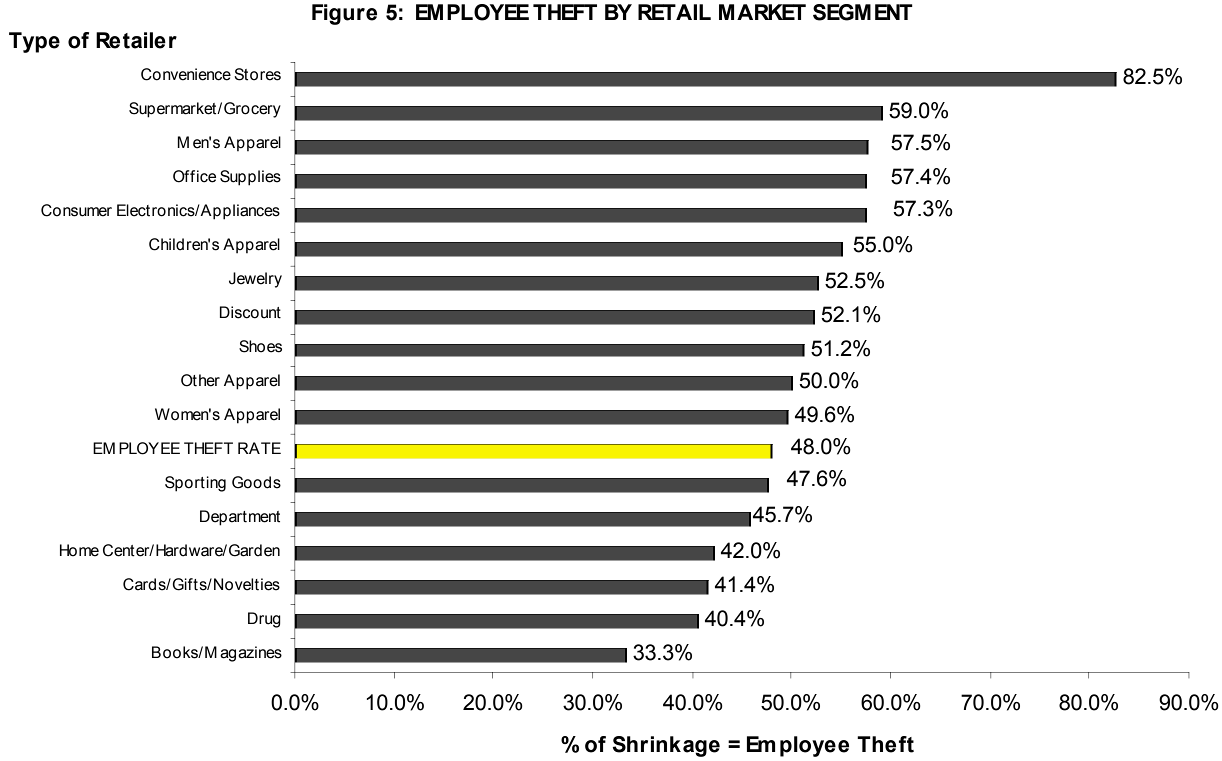


Figure 5: EMPLOYEE THEFT BY RETAIL MARKET SEGMENT



rank order) the following. Each of this first group of eleven retailers reported employee theft levels above the average of 48%. Convenience stores (82.5%), supermarket and grocery (59.0%), men's apparel (57.5%), office supplies and stationery (57.4%), consumer electronics and appliances (57.3%), children's apparel (55.0%), jewelry (52.5%), discount stores (52.1%), shoes (51.2%), other apparel (50.0%), and women's apparel (49.6%). Alternatively, the following six categories of retailers reported employee theft levels at or below the industry wide average for this year: sporting goods (47.6%), department stores (45.67%), home center, hardware, lumber and garden supply (42%), cards, gifts and novelties (41.4%), drug stores (40.4%), and books and magazines (33.3%).

Shoplifting

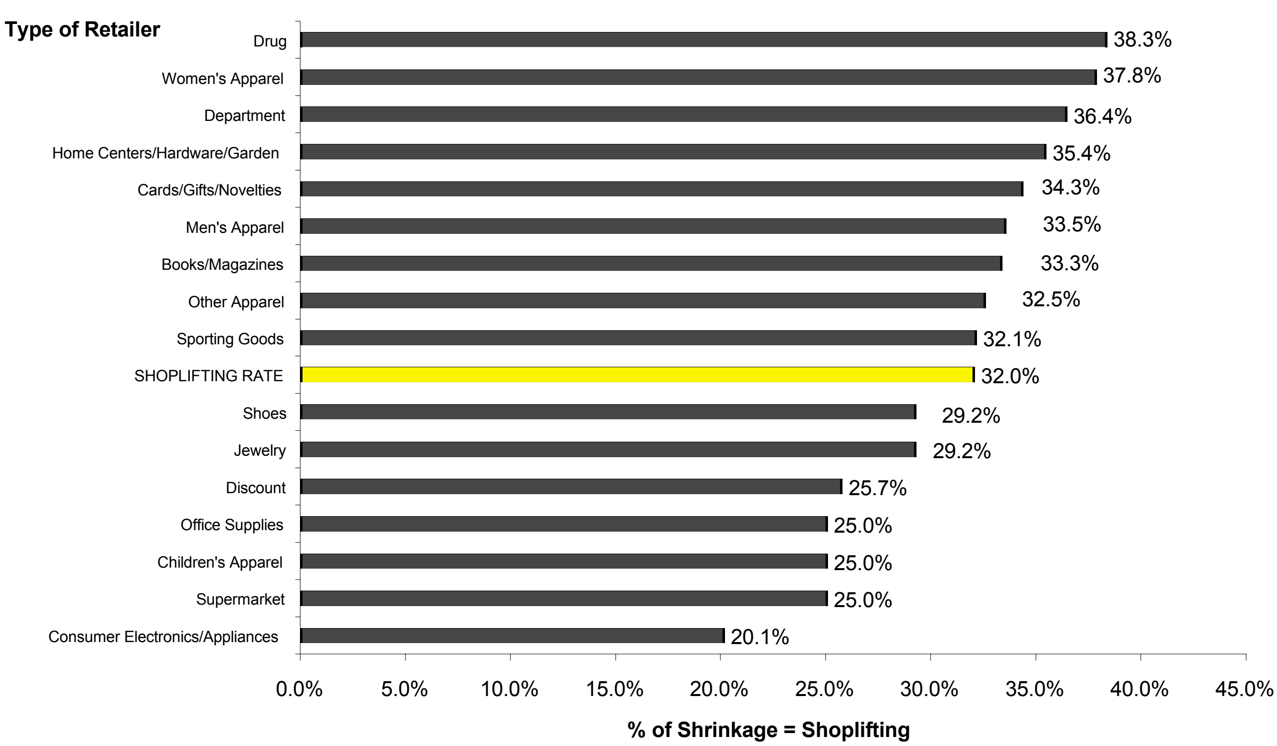
The second largest source of inventory shortage was once again reported to be losses due to shoplifting. For the calendar year 2001, US retailers attributed 32% of their company's inventory shrinkage loses to shoplifting. When this number is compared to last year's survey, losses caused by shoplifting increased 1.2 percentage points (from 30.8% as reported in the 2001 NRSS). In other words, this year's data indicate that while shoplifting remains a smaller inventory shrinkage loss source than employee theft, stealing by shoppers still costs American retailers an impressive $10 billion. According to the FBI's Uniform Crime Reports, shoplifting is roughly equivalent to the cost of auto theft. Losses due to shoplifting are yet another major profit loss that retailers must pass along to consumers in terms of higher product prices.

Retail chains that reported the highest estimates of shoplifting are listed below in descending order. Those experiencing shoplifting levels at or above the industry-wide average of 32% included the following seven groups: drug (38.3%), women's apparel (37.8%), department (36.4%), home centers/hardware/garden (35.4%), cards/gifts/novelties (34.3%), men's apparel (33.5%) stores, and books & magazines (33.3%). Categories of retailers that were at or below the industry shoplifting average of 32% during the calendar year 2001 included the following nine groups: other apparel (32.5%), sporting goods (32.1%), shoes (29.2%), jewelry (29.2%) chains, discount (25.7%), office supplies and stationery (25.0%), children's apparel (25.0%), supermarket and groceries (25.0%), and consumer electronics/appliances (20.1%) stores.

Administrative and Paperwork Error

While employee theft and shoplifting are the largest inventory shortage problems, there are other sources of loss in the retail store which do not involve larceny by shoppers or dishonest employees. For example, inventory shrinkage related to administrative and

Figure 6: SHOPLIFTING % BY RETAIL MARKET SEGMENT



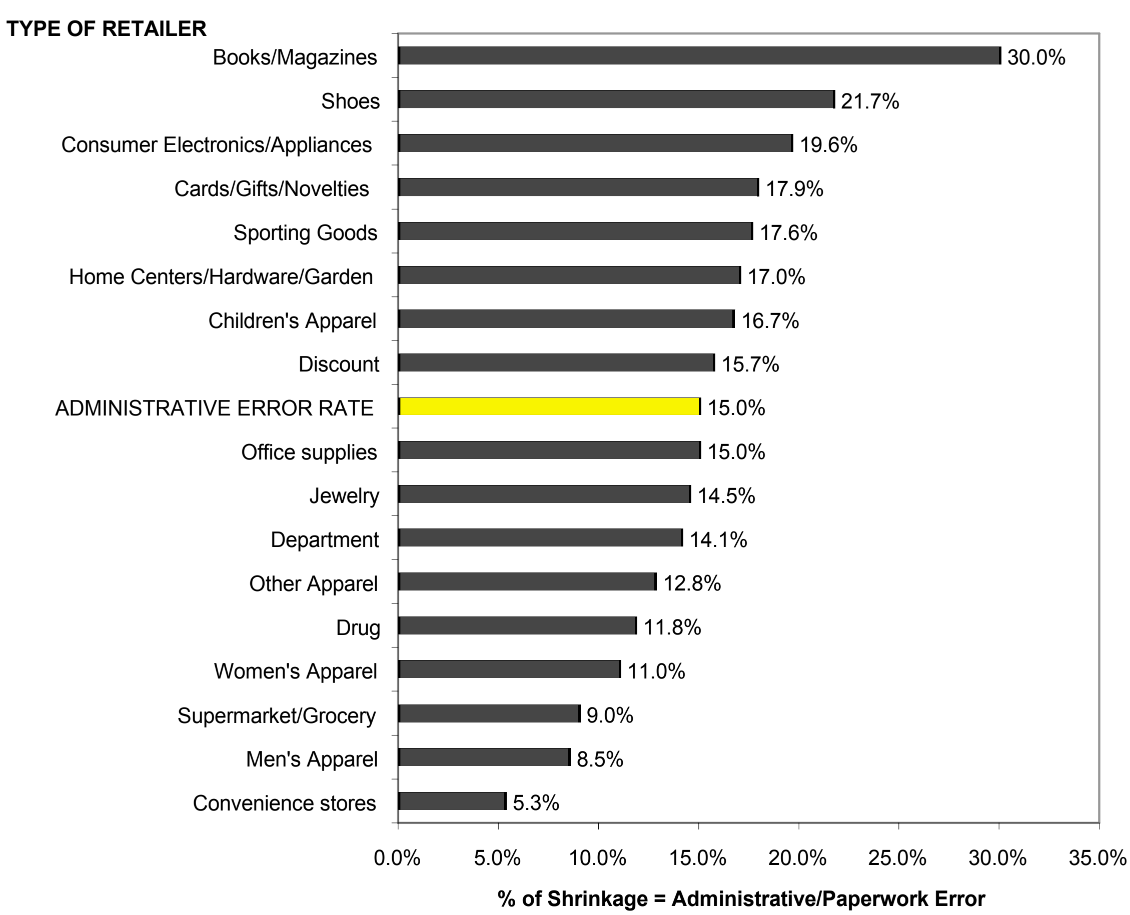
paperwork error as a source of inventory shrinkage has dropped from last year's 17.5% to only 15% in this year's survey. This category includes shrinkage losses due largely to inventory pricing mistakes, such as markup and markdown errors. Retail market segments that reported estimates of administrative and paperwork error above the overall average of 15% included: books & magazines (30.0%), shoes (21.7%), consumer electronics/appliances (19.6%) stores, cards/gifts/novelties (17.9%), sporting goods (17.6%), home centers/hardware/garden (17.0%), children's apparel (16.7%), and discount (15.7%). Estimates of administrative and paperwork error that were reported at or below the 15% average included the following nine categories of retailers: office supplies and stationery (15%), jewelry (14.5%), department (14.1%), other apparel (12.8%), drug (11.8%), women's apparel (11.0%), supermarket and grocery (9.0%), men's apparel (8.5%), and convenience store (5.3%) chains.

Vendor Fraud

Another source of inventory shrinkage occurs when vendors steal merchandise while in the store stocking their company's merchandise. Although important, losses due to vendors stealing merchandise was again the smallest category of inventory shortage. Losses due to vendor fraud decreased almost a full percentage point, from 5.9% reported in last year's study to 5% in this year's NRSS.

Companies that reported the highest estimates of vendor fraud include seven market segments that rely heavily on various outside vendors to stock merchandise in the store: drug (9.6%), consumer electronics/appliances (8.3%), cards/gifts/novelties (7.5%), supermarket/grocery (7.0%), home centers/hardware/garden (6.5%), discount (6.4%), and men's apparel (6.0%). Estimates of vendor fraud reported equal to or below the industry average of 5% include the following retail market segments, most of which do not rely heavily on outside vendors, but instead, use their own staff to stock merchandise: Other apparel (4.8%), Jewelry (4.6%), Department (4.4%), Shoes (4.0%), Sporting goods (3.8%), Children's Apparel (3.3%), Office Supplies and stationery (2.5%), and Women's apparel (2.4%).

Figure 7: ADMINISTRATIVE ERROR % BY RETAIL MARKET SEGMENT



CHECK, CASH, AND CREDIT CARD LOSSES

Inventory shortage is not the only way that retail stores lose valuable assets. Another focal point of the NRSS has been to document the amount of check, cash, and credit card loss that retailers experience within a given year.

For the 2001 calendar year, retailers reported that bad check losses totaled 0.55% of annual sales. This figure is significantly higher than last year's reported check loss of 0.08%, suggesting that either check losses are up dramatically or that last year's rate may have been a low statistical anomaly. The later scenario is most likely since this year's level of bad check loss is lower, but much closer to the total of 0.67% of sales reported two years ago in the 2000 NRSS.

The second most important source of non-inventory shrinkage financial loss was cash shortages, amounting to 0.37% of annual sales. This number is significantly higher than the 0.07% of annual sales figure reported in the 2001 NRSS.

Finally, the least serious source of financial loss was credit card charge-back loss, accounting for 0.27% of annual sales. Although lower than check and cash loss, this number was significantly higher than reported last year. In fact, this year's credit card charge-back loss number was more comparable to the 2000 NRSS total of 0.23%. Given the level of missing and inaccurately reported data on these three variables, the reader must be warned that these check, cash and charge-back loss numbers have invariably been some of the most volatile statistics when compared from year to year.

LOSS PREVENTION BUDGET

Each year we also measure the corporate commitment to loss prevention by examining the level of financial resources committed to controlling losses in each retail chain. This year survey respondents indicated the average budget for security and loss prevention was 0.52% of their 2001 annual sales. This figure is only slightly lower than the 0.55% figure reported by retailers in last year's NRSS survey.

Figure 8: VENDOR FRAUD % BY RETAIL MARKET SEGMENT

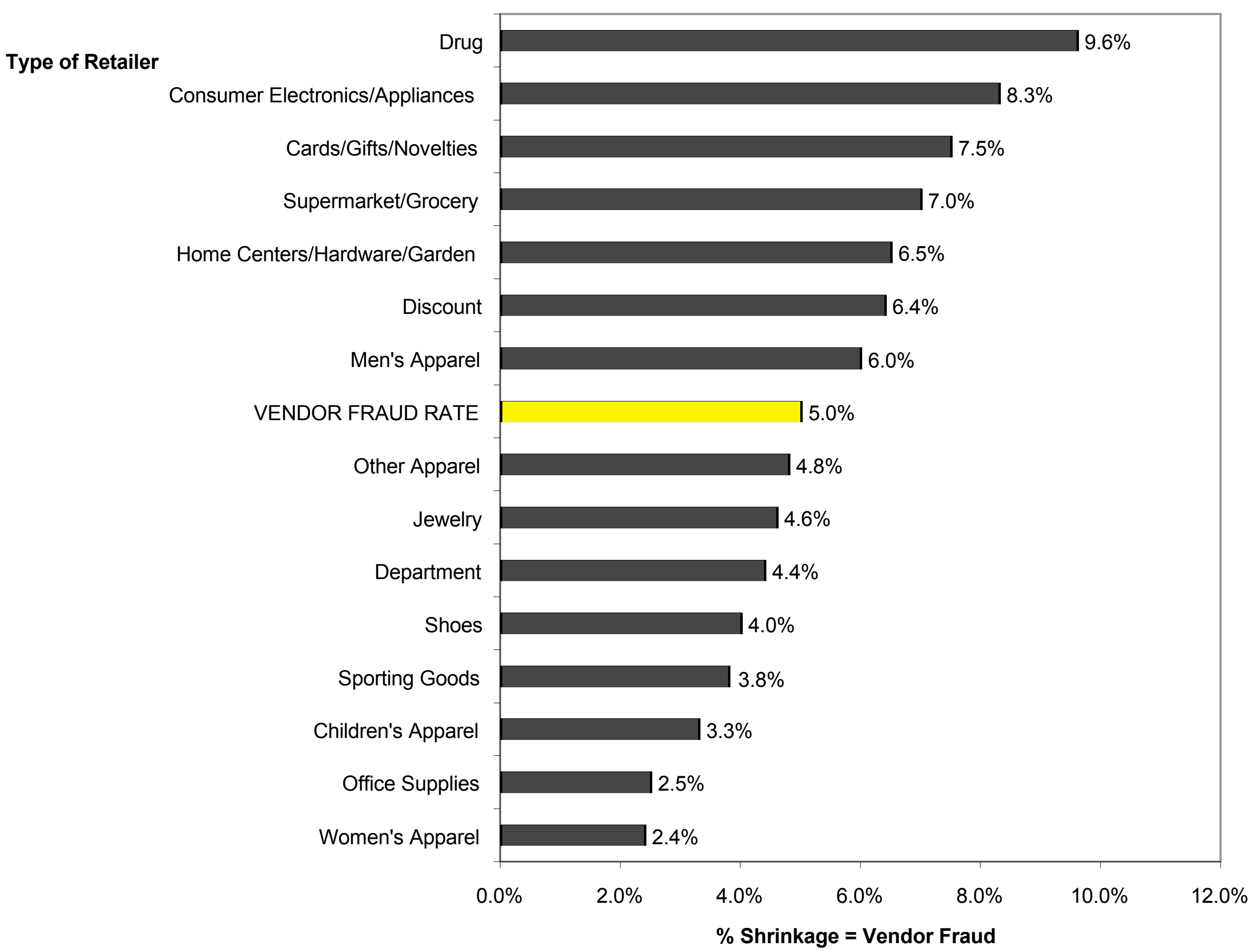


Figure 9: CHECK, CASH, & CREDIT CARD LOSSES

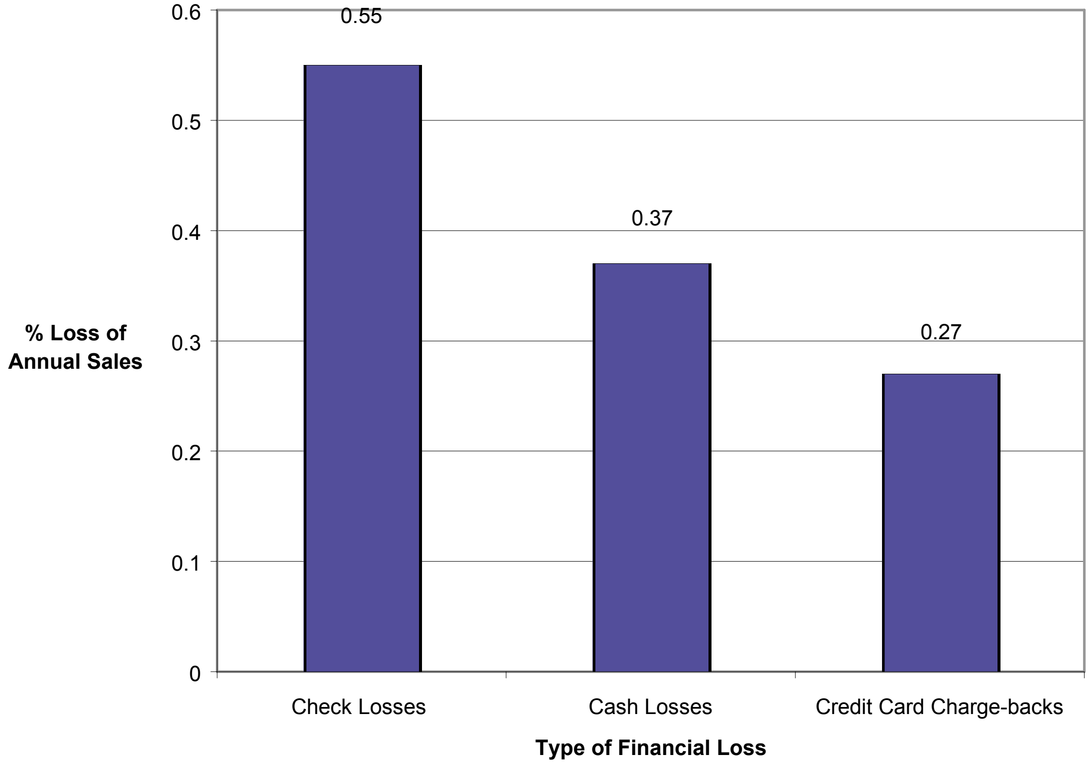
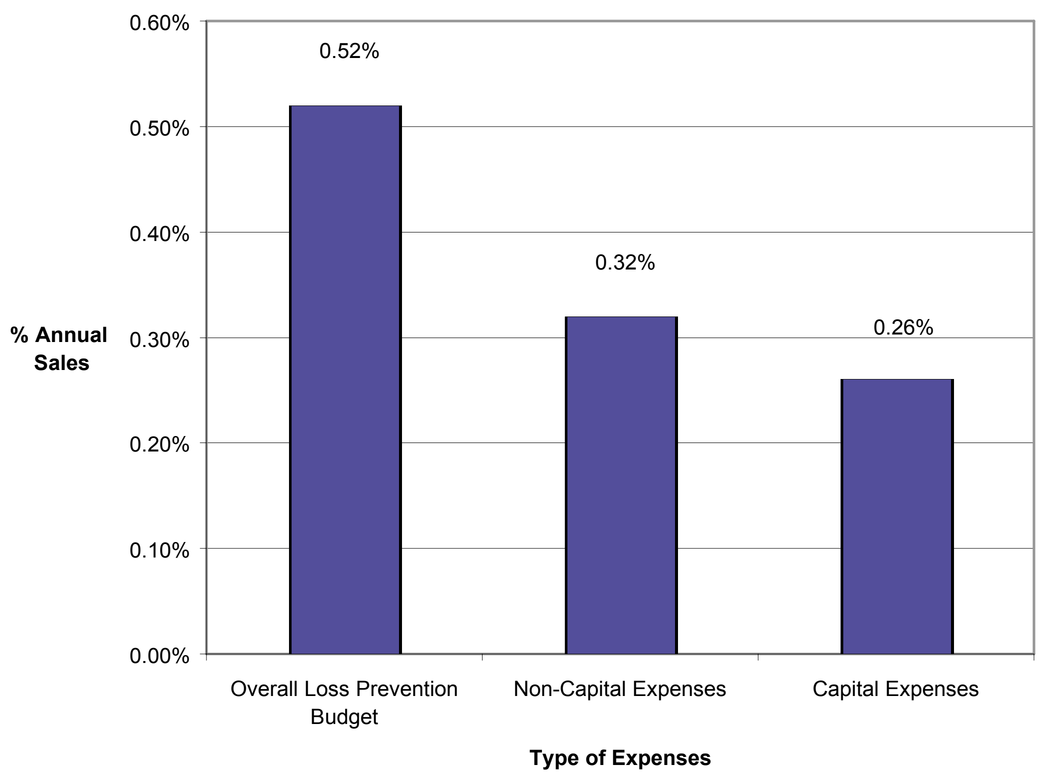


Figure 10: LOSS PREVENTION BUDGET AS % ANNUAL SALES



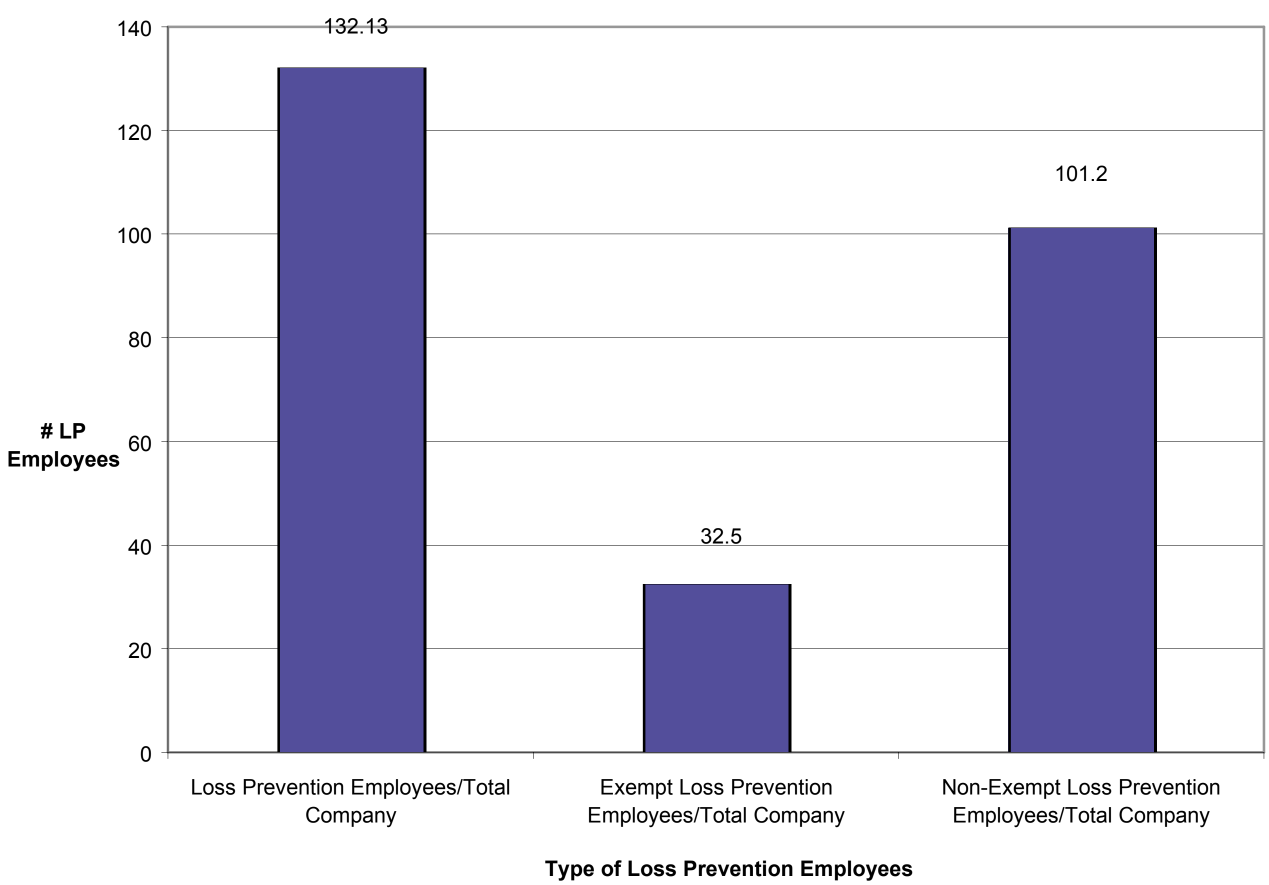
Approximately 0.32 percentage points of 2001 annual sales were spent on non-capital expenses (e.g. payroll), while 0.26 percentage points of 2001 annual sales were invested in capital expenses (e.g., security equipment). (Note that we recognize that these two numbers do not add to the total of 0.52 percentage points due to slight inaccuracies in the reported data and rounding error.) Both capital and non-capital expenditures were down 0.03 percentage points from last year's reported LP budget levels. This is the same level of decrease observed in the total and is probably a reflection of the declining budgets caused by decreased sales during the past year. Security professionals all report that they are being expected to "do more with less" in these very tight economic times.

LOSS PREVENTION DEPARTMENT PERSONNEL

Another major indication of the corporate commitment to preventing inventory shrinkage is the number of loss prevention employees hired throughout the entire company and personnel deployed within a typical store. Responding retail chains to the 2002 NRSS indicated that an average of 132.13 employees worked within the loss prevention department in the typical retail chain. Retailers reported that there were approximately 32.5 "exempt" (e.g., managerial) loss prevention employees per firm compared to 101.2 "non-exempt" (e.g., detectives) assigned specifically to loss prevention. Thus, these data indicated that despite tighter budgets, total LP staff numbers are actually higher than reported last year. However, the growth seems to be greatest in store level LP personnel as opposed to managerial staff. Last year's NRSS reported 97.5 total LP staff, 34.9 "exempt" (e.g. managerial) loss prevention employee within the total company and 70.4 "non-exempt" (e.g. detective) loss prevention employees within the entire company.

When we examine the average number of loss prevention employees assigned to work in a typical store, respondents to the 2002 NRSS indicated there was just under one (0.8) loss prevention employees protecting the assets of a typical store. Specifically, this statistic breaks down to 0.2 "exempt" loss prevention managers and 0.6 "non-exempt" loss prevention floor detectives available per store. These LP staffing

Figure 11: LOSS PREVENTION DEPT PERSONNEL



numbers calculated on a per store basis are significantly down from last year, where in the 2001 NRSS we reported that there were almost two (1.8) loss prevention employees on average assigned to a typical store. As a dramatic point of reference, in calendar year of 2000 we reported 0.5 "exempt" loss prevention managers in a typical store and 1.4 "non-exempt" loss prevention floor detectives assigned to a typical store.

In summary, these are unprecedented decreases in loss prevention staffing. It would appear that the current number of LP personnel (both LP managers and store detectives) assigned to a typical store appear to be less than half the staffing levels reported just one year ago! The reader should note that we have never noted such a significant one-year decline in the person-per-store LP staffing levels in the history of this survey. This ominous decline in store LP staffing could produce significant loss and shrinkage ramifications in the very immediate future.

LOSS PREVENTION STRATEGIES

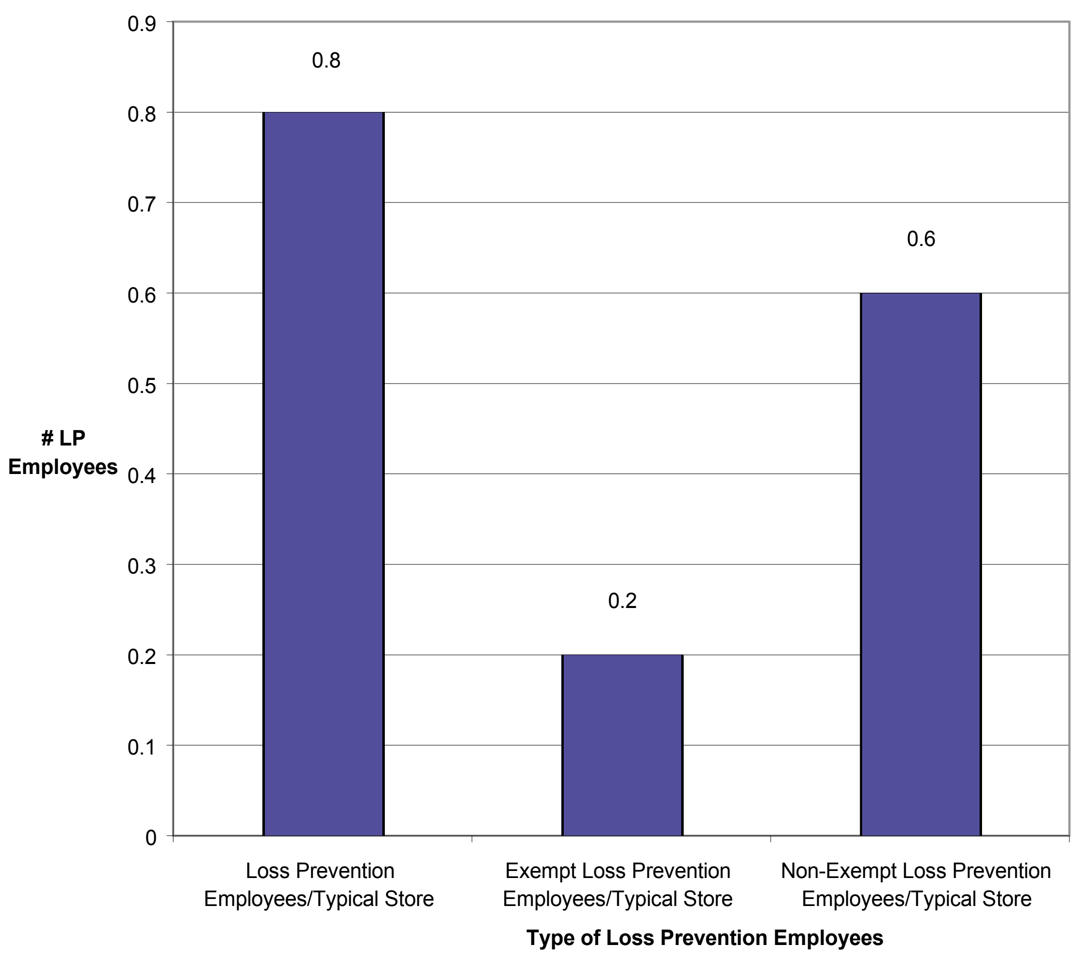
To investigate how retail firms attempted to minimize their losses, we examined a total of 67 different loss prevention strategies grouped into four major categories. The four loss prevention strategy categories include pre-employment integrity screening measures, employee awareness programs, asset control policies, and loss prevention systems.

A. Pre-employment Integrity Screening Measures

The various pre-employment integrity screening measures used by retailers are almost identical to the types and levels of usage observed in last year's final report. However, one screening measure, handwriting analysis, was not reported by any of respondents and therefore was dropped from this year's report. All 13 of the remaining pre-employment integrity screening measures were reported as being utilized by a significant number of retail companies.

By a wide margin the two most popular pre-employment screening measures were verification of past employment history (89.0%) and criminal

Figure 12: LOSS PREVENTION DEPT PERSONNEL PER STORE



conviction checks (83.9%). Four out of five retailers in this year's survey reported using these two techniques to screen employees.

Two of the 13 employee screening measures were used by approximately three-quarters of the companies, namely, multiple interviews (77.1%) and personal reference checks (73.7%). Three of the techniques were employed by nearly half of the responding companies, namely, driving history (50.8%), drug screening (43.2%), and credit history checks (40.7%). After these pre-employment screening measures there was a significant drop in utilization.

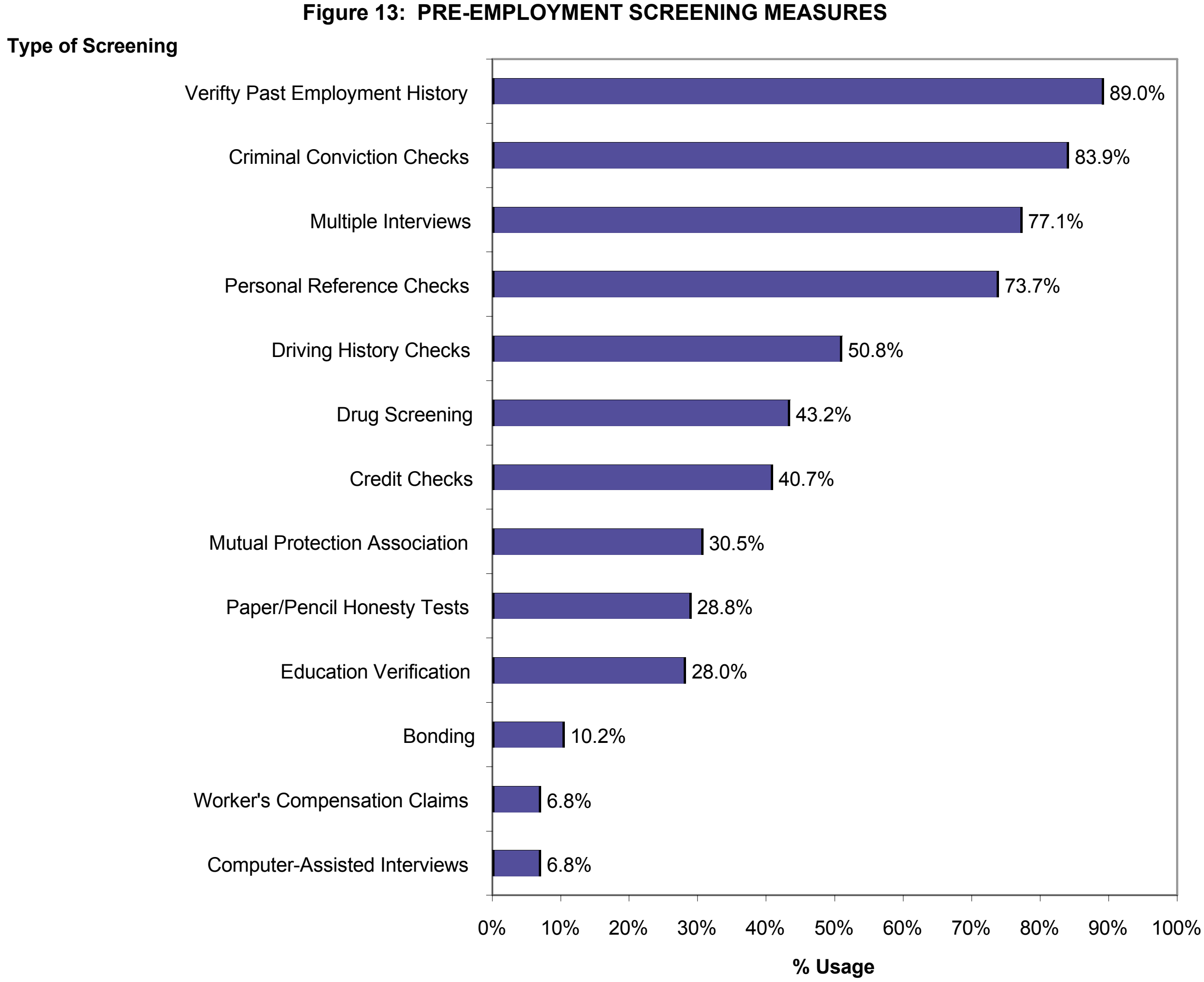
For example, three (3) of the 13 pre-employment integrity screening measures were utilized by barely a third of the responding retail companies including mutual protection associations (30.5%), paper and pencil honesty tests (28.8%), and education verification (28.0%). Finally, the three (3) remaining pre-employment screening measures were used by just a small fraction of the responding retailers, namely, bonding (10.2%), workman's compensation insurance checks (6.8%) which was tied with computer assisted interviewing technologies (6.8%).

While the usage of pre-employment integrity screening has begun to stabilize from years past, there are some procedures that are receiving increased attention. Specifically, the "hot" items receiving the greatest increased usage over the next year will be criminal conviction checks (31% of responding firms reporting increased use next year), drug screening (16% increased use), verification of past employment (13% increased use), and credit history checks (11% reporting increased use).

The use of pre-employment integrity screening measures was identical for managers and non-manager positions. However, different screening measures were employed for professional positions. Companies used an average of 5.29 employee integrity screening measures for managers, 3.92 measures for non-managers, and 1.54 measures for professionals.

For managers, the most frequently used integrity screening measure was the verification of past

Figure 13: PRE-EMPLOYMENT SCREENING MEASURES



employment history (89%), followed by the use of criminal conviction checks (78.8%), multiple interviews (75.4%), personal reference checks (73.7%), credit checks (38.1%), drug screening (37.3%), driving history checks (36.4%), mutual protection association (29.7%), education verification (25.4%), paper and pencil honesty tests (24.6%), bonding (8.5%), computer assisted interviews (5.9%), and checks for worker's compensation claims (5.9%).

The most commonly used pre-employment integrity screening measure for non-managers was also the verification of past employment (89%), followed by criminal conviction checks (78.8%), use of multiple interviews (75.4%), personal reference checks (73.7%), credit checks (38.1%), drug screening (37.3%), driving history checks (36.4%), mutual protection association checks (29.7%), education verification (25.4%), paper and pencil honesty tests (24.6%), bonding (8.5%), computer assisted interviews (5.9%), and worker's compensation claims (5.9%).

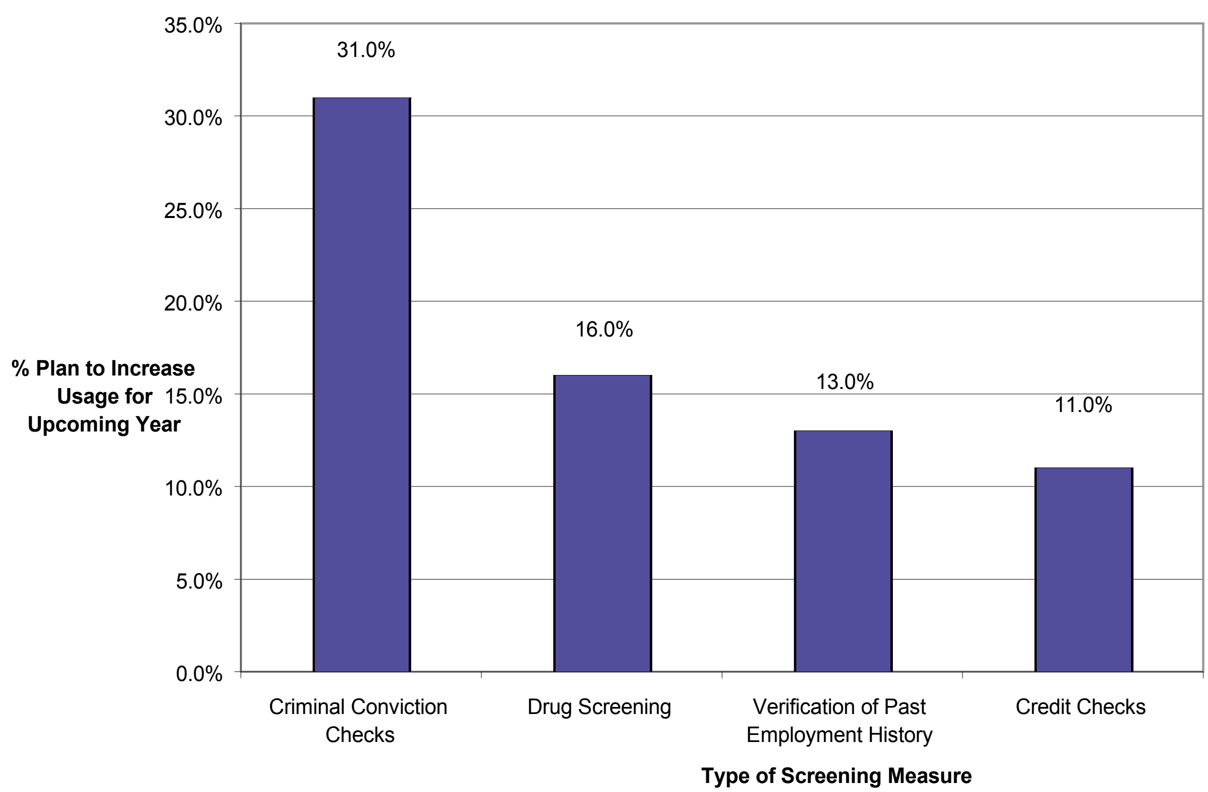
Finally, for professionals (like pharmacists), the most frequently used integrity screening measure was again the verification of past employment (29.7%), followed by personal reference checks (22.9%), use of multiple interviews (22%), criminal conviction checks (18.6%), drug screening (11.9%), driving history checks (11.9%), credit checks (10.2%), education verification (8.5%), mutual protection association checks (6.8%), paper and pencil honesty tests (5.1%), bonding (2.5%), worker's compensation claims (2.5%), and computer assisted interviews (1.7%).

B. Loss Prevention Awareness Programs

All of the 13 loss prevention awareness programs were utilized by at least one company. The most commonly used awareness program continues to be a discussion about shrinkage during new hire orientation (89.8%). Bulletin boards notices/posters and the use of anonymous telephone hot-lines were tied as the next most commonly used techniques (both 84.7%). Two of the awareness program categories were used by approximately three-fourths of the responding retail chains in this year's survey, namely, periodic programs/lectures (78%) and the dissemination of an employee "code of conduct" (75.4%). Another three (3) of the 13 awareness programs were used by approximately three-fifths of the participating retail chains, including: training videotapes (62.7%), newsletters (60.2%), and honesty incentives 58.5%).

The remaining five (5) awareness programs were utilized by under a third of companies including: in-store employee loss prevention committees (29.7%) informational paycheck stuffers (29.7%), Internet

Figure 14: "HOT" PRE-EMPLOYMENT INTEGRITY SCREENING ITEMS



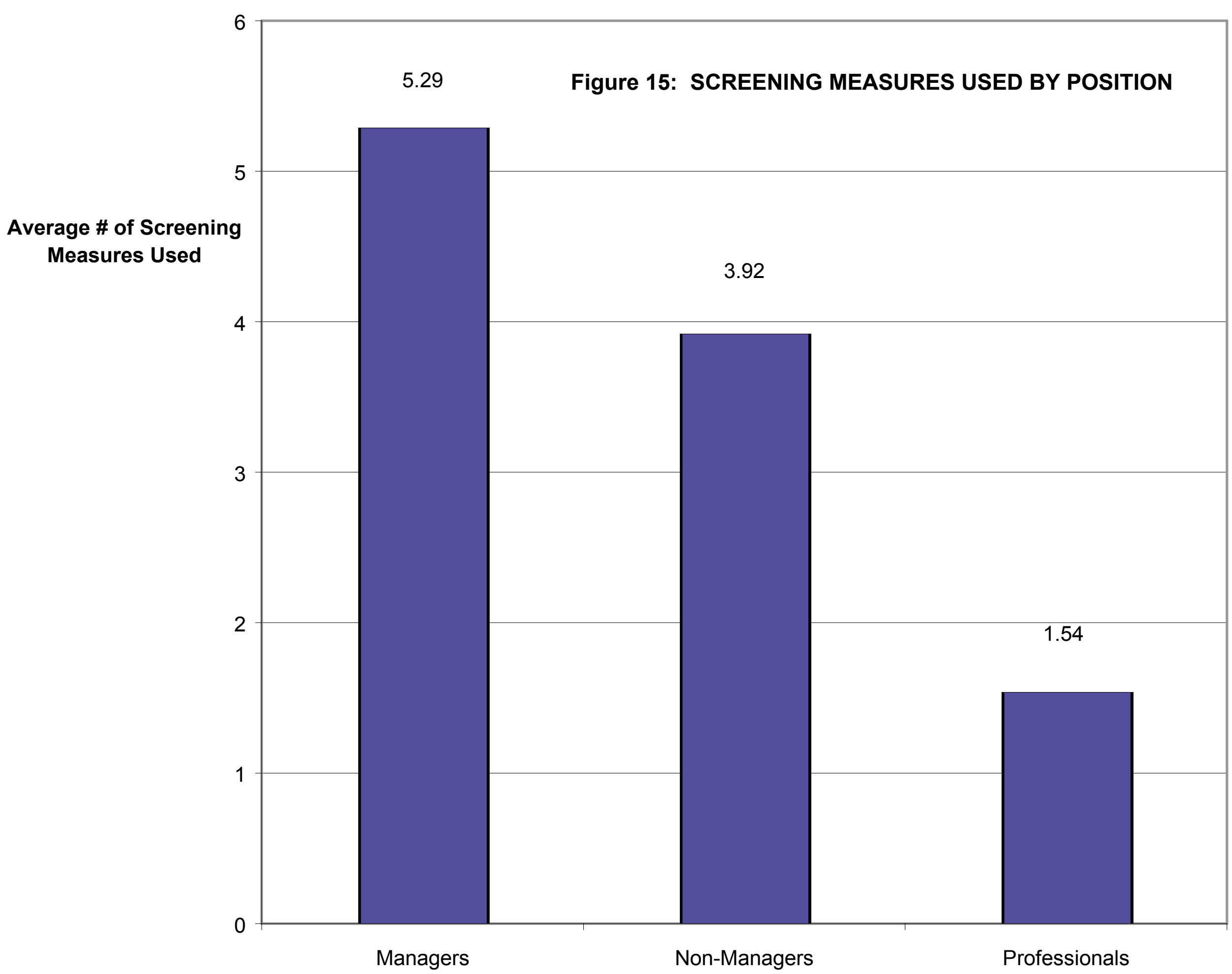
communications (28%), employee surveys (22.7%), and lastly, training audio tapes and announcements (10.2%).

The reader should note that while the usage levels have each changed somewhat, the ordinal ranking and magnitude of LP awareness program usage has remained virtually unchanged from last year's 2001 NRSS report. Nevertheless, a few of the responding firms indicated that they expected to see increased use of some awareness programs during the coming year. The "hot" items for next year include new hire orientation (24% plan increase), training videotapes (23% plan increase), periodic programs (22% plan increase), bulletin board poster programs (22% plan increase), Internet communications with employees (19.5% plan increase), and last, employee surveys (16% of the retail chains plan to increase).

C. Asset Control Policies

Consistent with previous years' results, asset control policies were clearly the most widely used group of retail loss prevention strategies. Each of the 12 asset control policies was utilized by at least one company. Moreover, with one exception, the remaining asset controls were used by at least half of the responding retail chains. The most frequently used asset control policies included: refund controls (93.2%), void controls (88.1%), employee package checks (80.5%), POS exception-based reporting (79.5%), trash removal controls (76.3%), inter-store transfer controls (73.7%), POS bar coding/scanning (73.7%), price change controls (70.3%), unobserved exit door controls (67.8%), inventory bar coding/scanning (66.9%), and detailed merchandise receiving controls (55.1%). The least frequently used item among the one dozen asset control policies was the use of newly developed, electronically controlled access to cash handling areas (17.8%).

With the exception of the final item, which was not included in our previous studies, all the remaining asset control policies were virtually unchanged from the 2001 NRSS results. Greatest growth was observed in the use of POS exception based reporting systems, which increased over five percentage points from last year. The remaining items changed only slightly from the ranking and percentages reported in the 2001 NRSS Final Report.



Given the extremely high level of reported use for asset control policies one would expect that there might be little possibility for greater usage, but there were some items identified for improvement. By a wide margin the "hottest" item in this category remains POS exception reporting, with 36% of the respondents indicating that they plan to increase use of this technology in the coming year. Other items on the planning boards for increased use next year include: employee package checks, refund controls, and inventory bar code scanning. Sixteen percent (16%) of the firms anticipate increased use of all three items for the coming year.

D. Loss Prevention Systems and Personnel

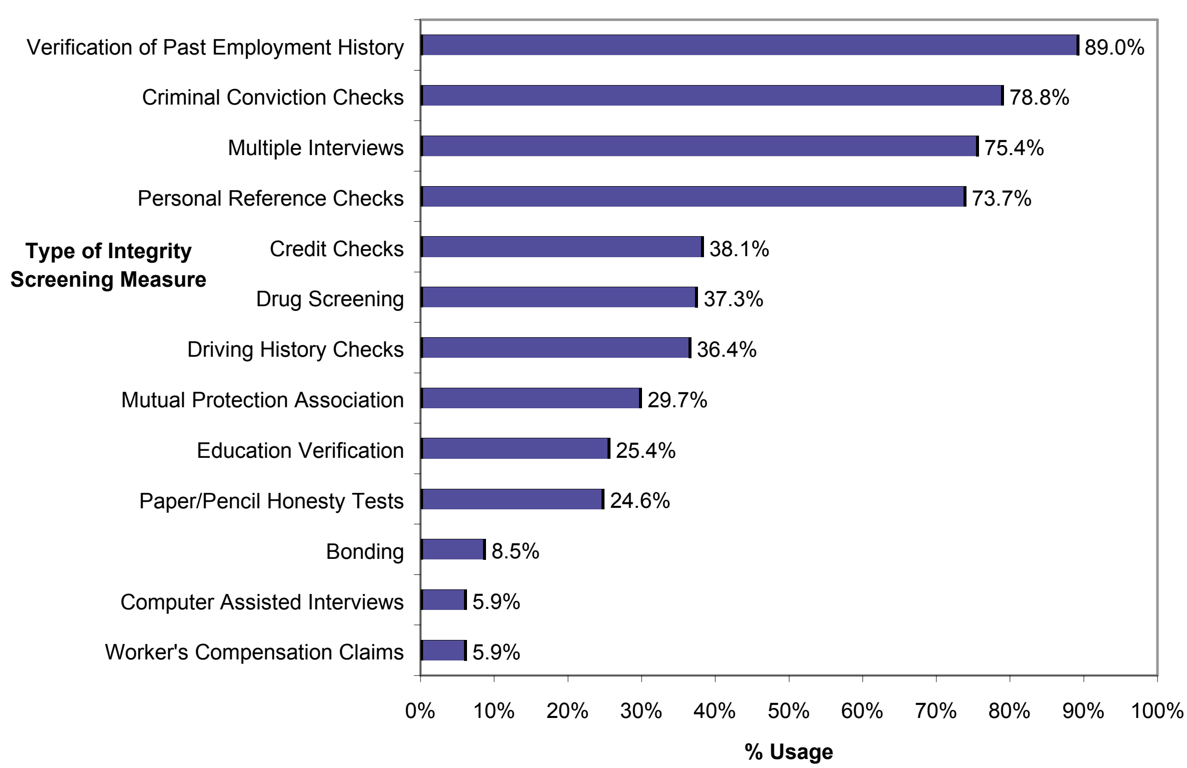
The largest category of the report is an assessment of the level of use for the vast assortment of mechanical, electronic, video and personnel used to monitor shoppers, employees, and the store's merchandise. Each of the 29 loss prevention systems and personnel programs examined were reported in use by at least one company. In fact, most of the 29 systems were used by a significant number of retail chains. However, unlike pre-employment screening, awareness programs and asset controls policies, the usage levels of LP systems and personnel varied dramatically from item to item. Some were very heavily used, while some of the more technologically sophisticated systems were much less frequently employed in the quest for lower shrinkage and losses.

Each and every year that we have asked about LP systems the most commonly utilized item was burglar alarms (94.4%), which are in use by virtually all of the responding retail firms. Twenty percentage points lower we find the next most popular system, namely, live, visible closed circuit TV cameras (73.3%). Only one item was used at the sixty-percent level, namely, check approval databases (61.9%).

Four (4) of the LP systems and personnel programs were utilized by approximately half of the responding retail chains, including armored car deposit pickups (56.8%), cable/locks/chains (51.7%), live, hidden CCTV (50.8%), and digital video recording systems (50.8).

Another seven (7) systems were used in at the forty percent level, including observation mirrors (49.2%), POS data mining software (49.2%), secured display fixtures (48.3%), drop safes (46.6%), mystery/honesty shoppers (45.8%), acousto-magnetic, electronic security tags (EAS) (42.4%), and shoplifting deterrence signage (41.5%). Systems used in the thirty percent range include three (3) categories of technology and security

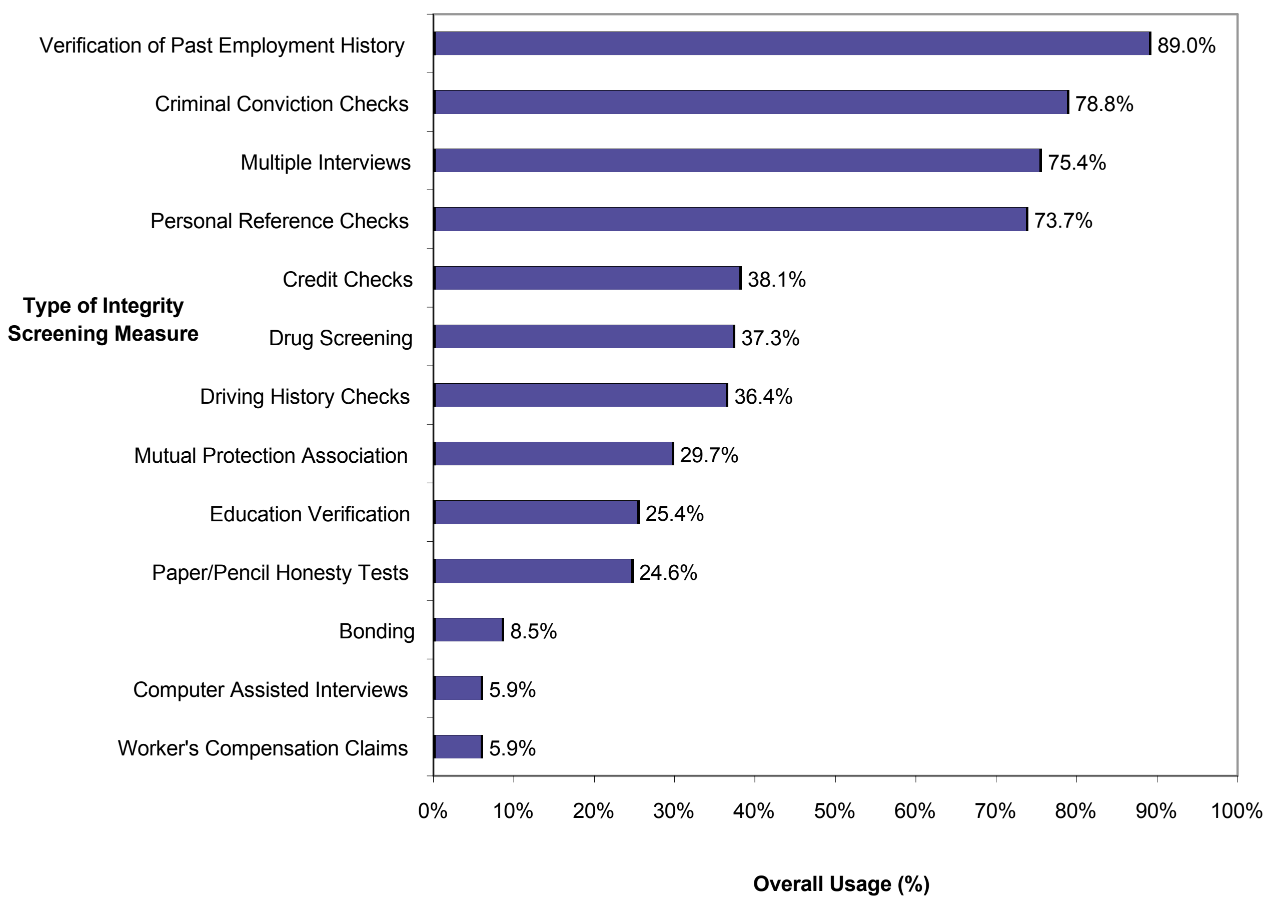
Figure 16: % OF INTEGRITY SCREENING MEASURES USED FOR MANAGERS



personnel: uniformed guards (37.3%), ink/dye benefit denial tags (36.4%), and silent alarms (32.2%). Four groups of systems and personnel were used at the twenty percent level, namely, simulated, visible CCTV (29.7%), radio frequency EAS tags (28.0%), plain clothes detectives (27.1%), and merchandise alarms (26.3%). Finally, seven (7) of the systems and personnel were reported below twenty percent level of use, namely, fitting room attendants (18.6%), microwave EAS tags (17.8%), POS exception based CCTV interface recording (17.8%), timed entry safes (14.4%), acousto-magnetic EAS source-tagged merchandise (13.6%), radio-frequency source tagged merchandise (10.2%), and observation booths (10.2%). The last item on the LP systems list was the very newest technology employed in the battle to reduce inventory shrinkage, RFID tags, which was reported to be adopted by just under two percent (1.7%) of the retail chain respondents in this year's survey.

With so many LP systems and personnel options for increased use, one would expect a great deal of increased use of technology in the plan for next year, but this was not the case. Perhaps tight budgets were constraining the use of these loss prevention options. Only three categories of LP systems were designated for any significant increase in the coming year. By far, the "hottest" new technology is the switch to digital video recording with 39% of the respondents indicating increased installations. Other increases were found in POS exception-based CCTV interface (26% planning increased use) and the use of POS data mining software (22% planning increased use). Rounding out the list of "hot" new LP systems included the following. Between 11 and 12% of the responding firms planned increased use of mystery and honesty shoppers, acousto-magnetic EAS tags, check approval database screening systems, source tagged acousto-magnetic EAS products, shoplifting deterrence signage, and secured product display fixtures. The rest of the LP systems and personnel items will see none or only single digit increased use for the coming year. The only item slated for any significant decrease was the use of uniformed guards, as 10% of our sample planned to lessen their reliance on uniformed, contracted security personnel. This confirms the long observed trend to use in-house, proprietary staff for loss prevention.

Figure 17: % OF INTEGRITY SCREENING MEASURES USED FOR NON-MANAGERS



HUMAN RESOURCES AND SHRINKAGE

In a continuing effort to determine the relationship between shrinkage levels and the characteristics of the workforce, a variety of human resource variables were discovered to be correlated with inventory shrinkage levels. As previous NRSS reports detected, dishonest employees typically work less than one year. Similarly, this year's data revealed that the average length of employment for a dishonest worker was only 8.5 months. This is even a shorter length of time than reported last year when the average was just under ten months before getting caught.

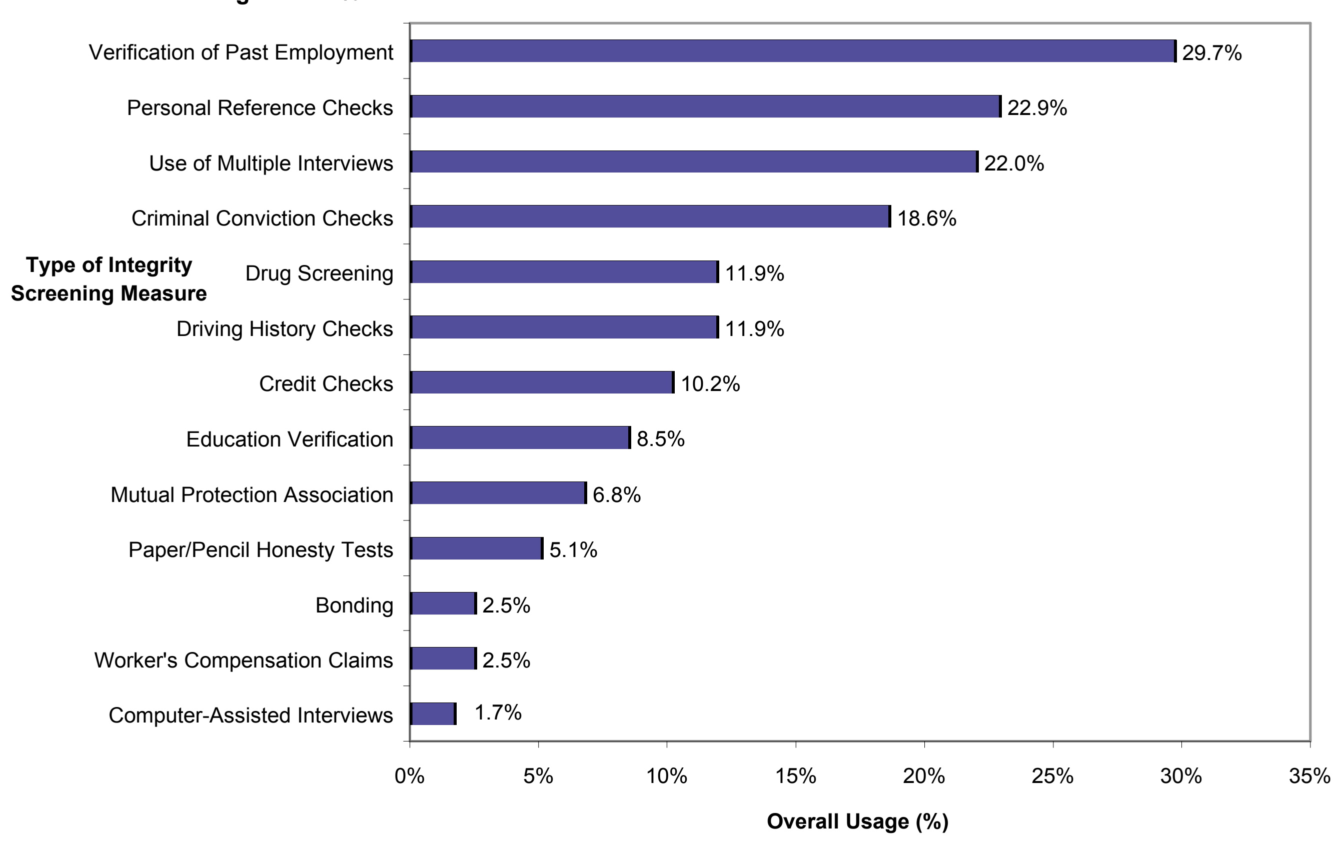
Turnover and shrinkage

One of the most consistent predictors of inventory shrinkage has always been a retail firm's level of annual employee turnover. As we have repeatedly demonstrated in ten years of research, shrinkage rates are lower in firms with lower turnover. This year shrinkage rates averaged 1.61% in those firms where sales associates' turnover rates are less than 50% — a shrinkage rate well below the industry average. Alternatively, when sales associates' turnover rates are greater than 50% per annum we find shrinkage rates significantly above the average at 1.85%. The same pattern can be observed when we look at the shrinkage for the all-important store managers. Specifically, the shrinkage rate is 1.63% when turnover rates are less than 50% and an extremely high 2.1% when managerial turnover rates become greater than 50%. This is almost the identical pattern that was observed in last year's study. Clearly, the constant "churn" of new employees supervised by inexperienced managers produces a level of uncertainty and instability that directly contributes to higher levels of shrinkage and financial loss.

Part-time employees and shrinkage

Continuing to verify the long established relationship between shrinkage rates and heavy reliance on part-time employees, this year's NRSS confirmed that the use of part-time employees continues to be associated with higher shrinkage rates. Specifically, shrinkage rates are only 0.96% when part-time employees account for less than 25% of the workforce, 1.64% when part-time employees account for 26-50% of the workforce, 1.86% when part-time employees account for 51-75% of the workforce, and an unacceptable 1.92% when part-time employees account for greater than 75% of the workforce. Obviously, the part time worker is less committed to the overall success of the company.

Figure 18: % OF INTEGRITY SCREENING MEASURES USED FOR PROFESSIONALS



RESPONSES TO EMPLOYEE THEFT AND SHOPLIFTING

Each year the NRSS also collects information describing the nature of the typical employee theft and shoplifting cases. Consistent with previous years' results, incidents of shoplifting continue to outnumber occurrences of employee theft. However, the average cost of employee theft is generally much greater than the average cost of shoplifting.

Employee Theft

There are three common responses to employee theft including: apprehension/termination, prosecution, and civil demand or recovery.

Retailers reported an average of 35.2 employee theft apprehensions for every $100 million in sales. This figure confirms a continuing trend of significant increases in employee theft apprehensions. For instance, in the 2001 NRSS we reported an average of only 30.3 apprehensions per $100 million in sales. Additionally, this year's retail respondents reported an average of 14.5 DE prosecutions and 35.8 employee theft civil demand cases for every $100 million in sales.

The average dollar loss per employee theft incident for this year totaled $1,341.02. This figure is a variation from the upward trend observed during the past decade, as the 2002 NRSS average dishonest employee case total is slightly lower than the employee theft loss average reported last year which was $1,445.86.

Shoplifting

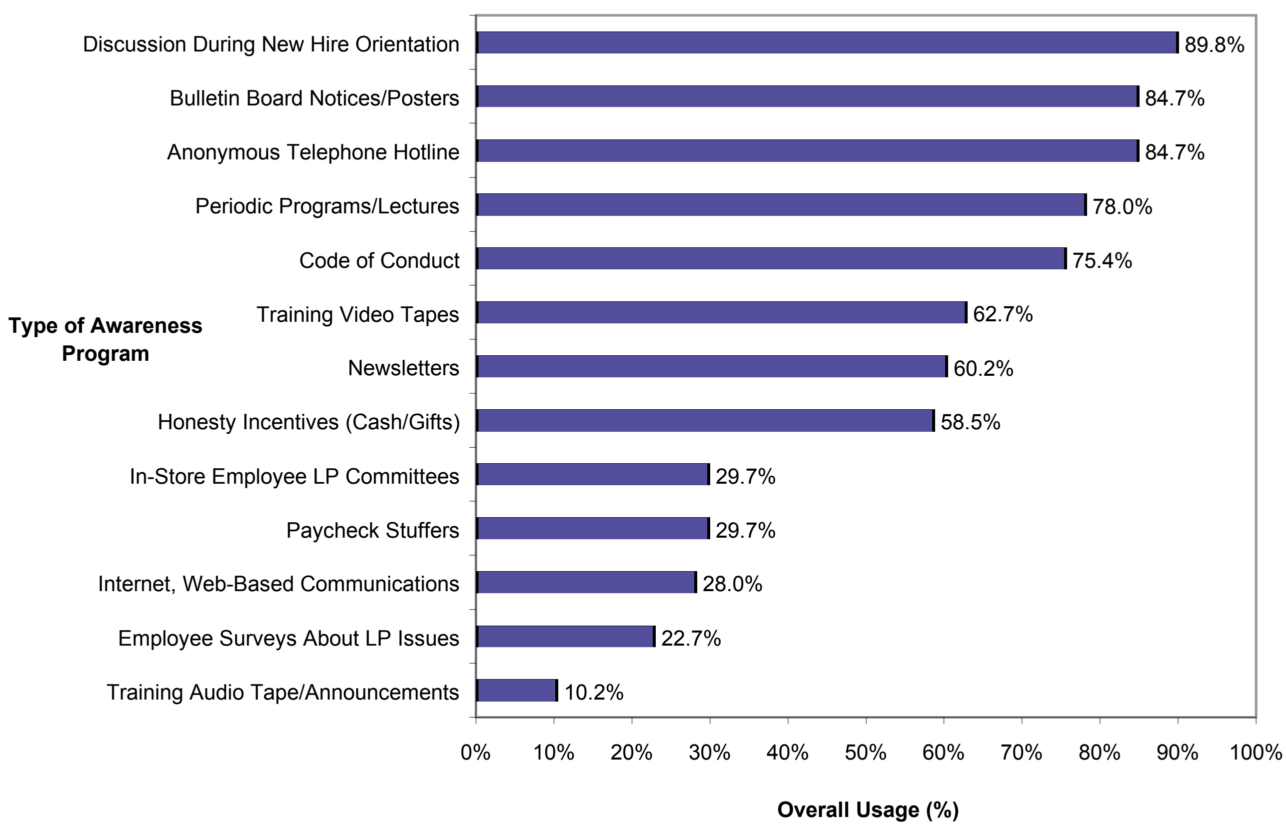
Consistent with previous NRSS reports, even though the total cost is higher, shoplifting incidents continue to outnumber employee theft.

Similar to responses to employee dishonesty, firms also apprehend, prosecute, and seek civil demands against shoplifters. Retailers reported this year an average of 134.8 shoplifting apprehensions for every $100 million in sales. This figure is slightly higher number than the 2001 NRSS average of 131.6 apprehension for every $100 million in sales.

Shoplifting prosecutions are up too. Retailers reported an average of 108.4 shoplifting prosecutions for every $100 million in sales. This average is significantly higher than the 2001 NRSS figure of 92.8 prosecutions.

Civil demand (or civil recovery) laws are used to respond to shoplifting as well. Our respondents reported an average of 149.5 shoplifting civil demand cases for every $100 million in sales. This figure is also

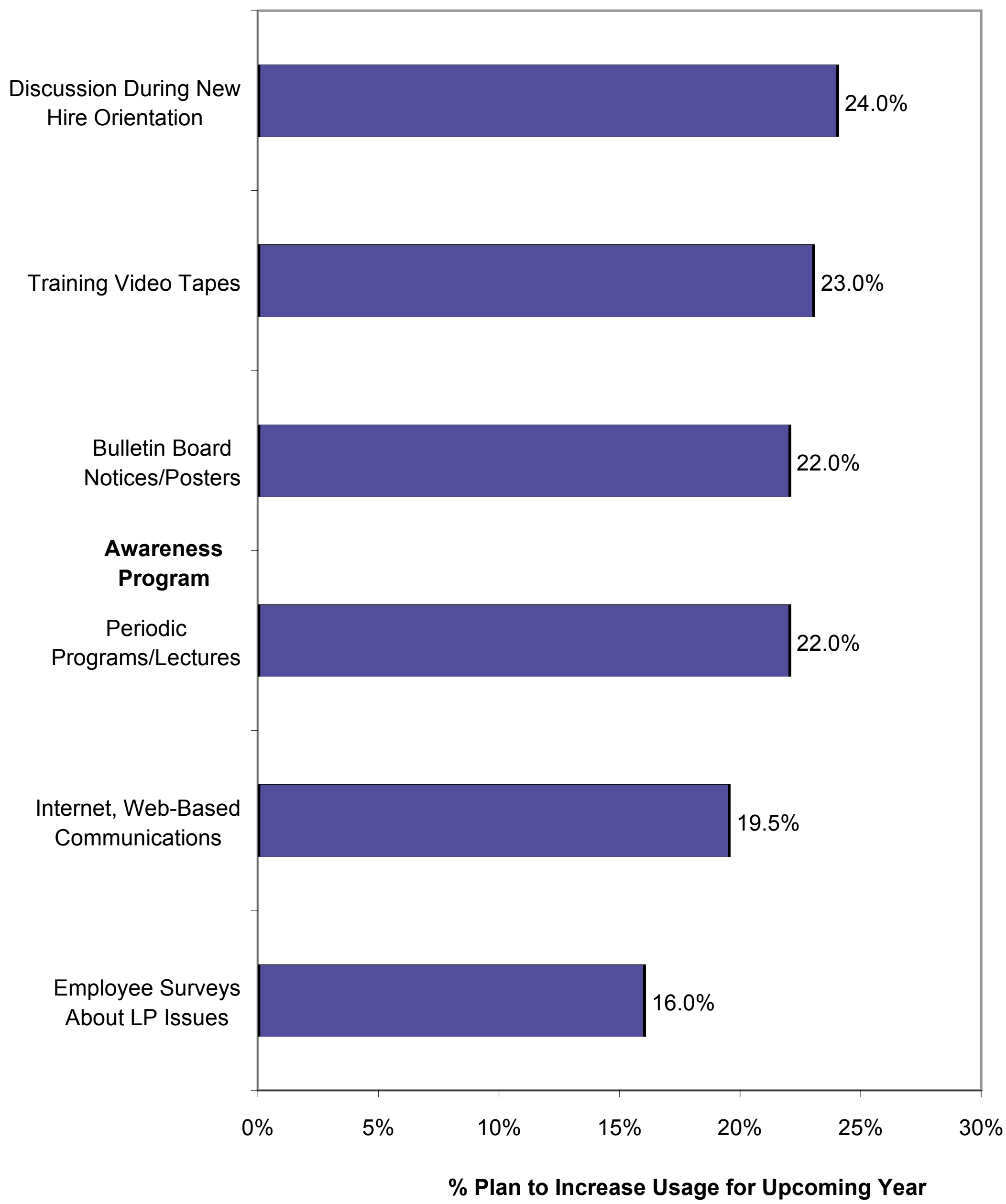
Figure 19: USE OF LOSS PREVENTION AWARENESS PROGRAMS



significantly higher than the 2001 NRSS figure of 133.7 civil demands.

Finally, the average dollar loss per shoplifting incident has been increasing over the years. Retailers reported for this past calendar year that their average shoplifting case totaled $207.18. This marks a slight increase from the 2001 NRSS dollar loss figure of $195.73 per shoplifting case. Shoplifters steal more often, but thankfully, on average, take less merchandise than do employees who are in the store for much longer periods of time.

Figure 20: "HOT" LOSS PREVENTION AWARENESS PROGRAMS



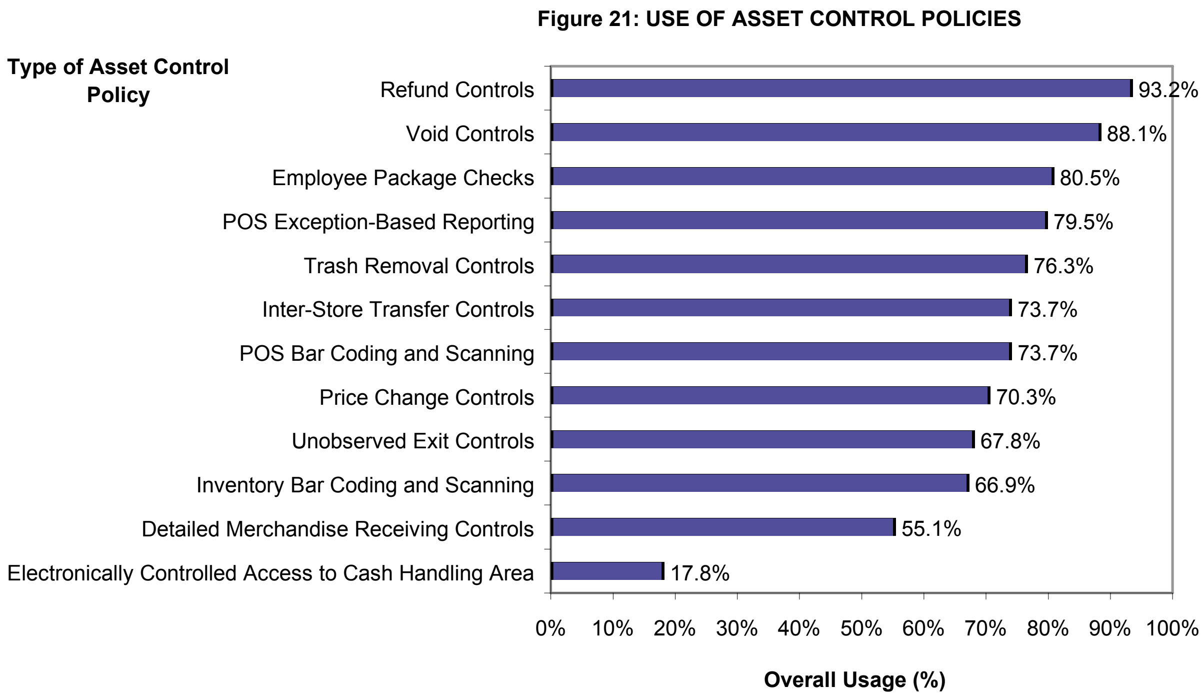


Figure 21: USE OF ASSET CONTROL POLICIES
Type of Asset Control Policy
Refund Controls 93.2%
Void Controls 88.1%
Employee Package Checks 80.5%
POS Exception-Based Reporting 79.5%
Trash Removal Controls 76.3%
Inter-Store Transfer Controls 73.7%
POS Bar Coding and Scanning 73.7%
Price Change Controls 70.3%
Unobserved Exit Controls 67.8%
Inventory Bar Coding and Scanning 66.9%
Detailed Merchandise Receiving Controls 55.1%
Electronically Controlled Access to Cash Handling Area 17.8%
0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%
Overall Usage (%)

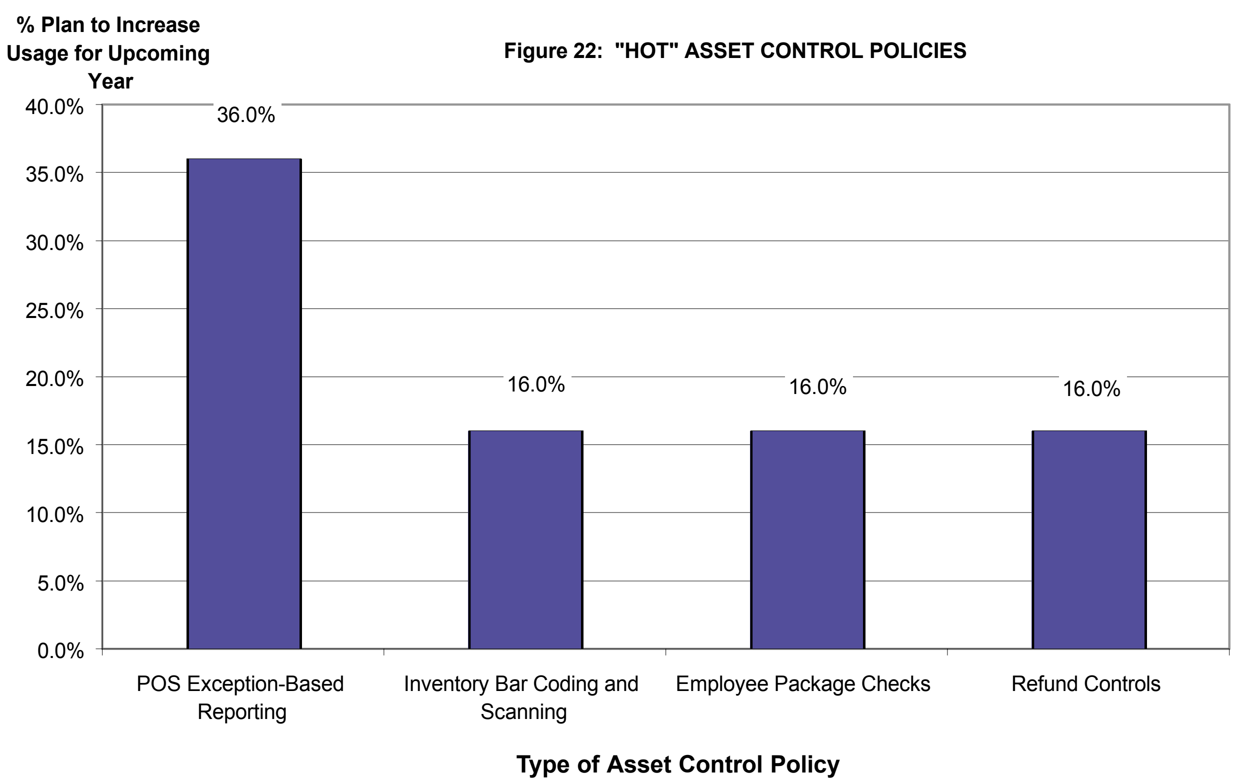

% Plan to Increase Usage for Upcoming Year
Figure 22: "HOT" ASSET CONTROL POLICIES
40.0% 35.0% 30.0% 25.0% 20.0% 15.0% 10.0% 5.0% 0.0%
POS Exception-Based Reporting 36.0%
Inventory Bar Coding and Scanning 16.0%
Employee Package Checks 16.0%
Refund Controls 16.0%
Type of Asset Control Policy

Figure 23: USE OF LOSS PREVENTION SYSTEMS & PERSONNEL

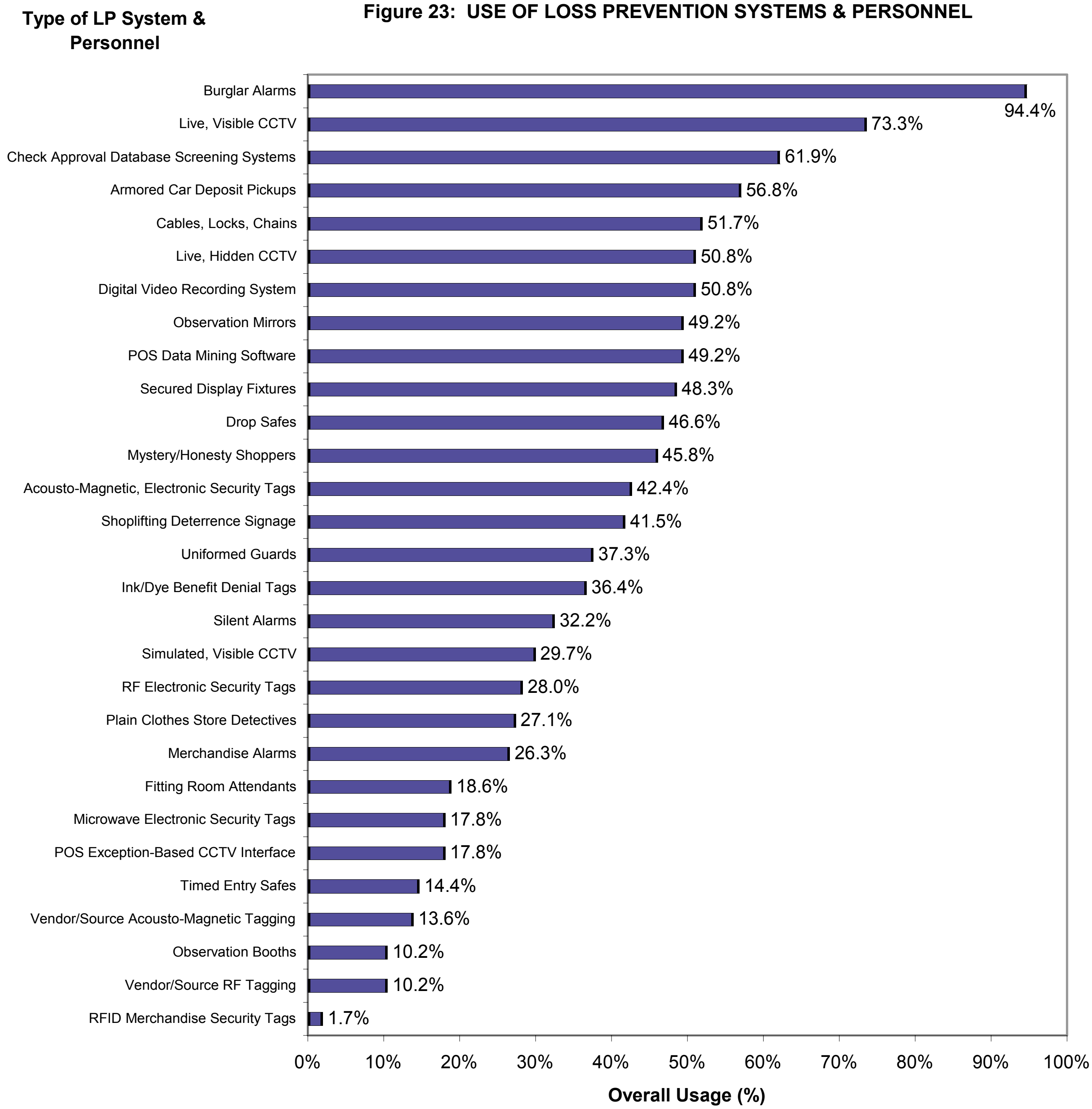


Figure 24: "HOT" LOSS PREVENTION SYSTEMS & PERSONNEL ITEMS

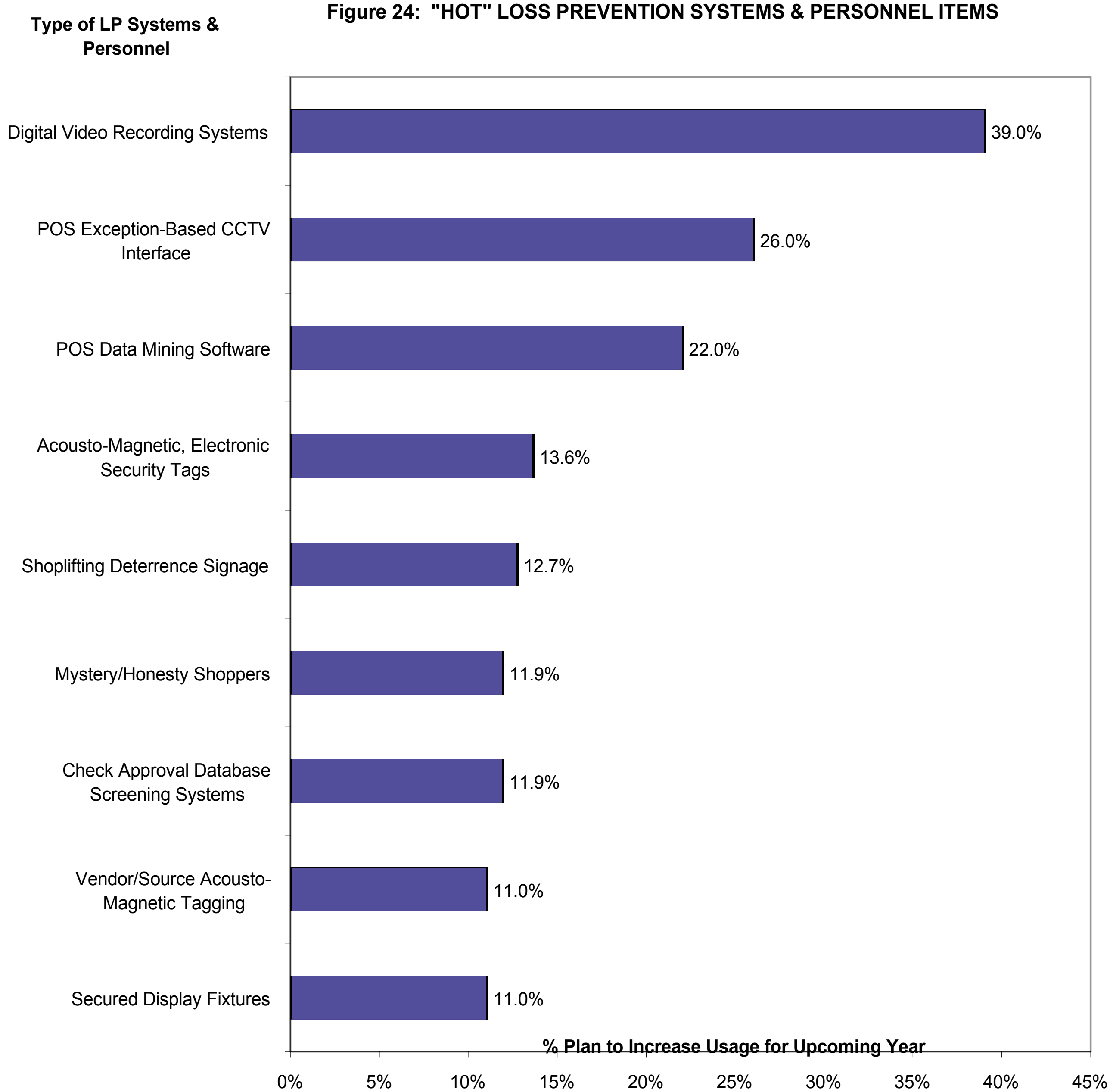


Figure 25: SHRINKAGE LEVEL AND TURNOVER RATES BY POSITION

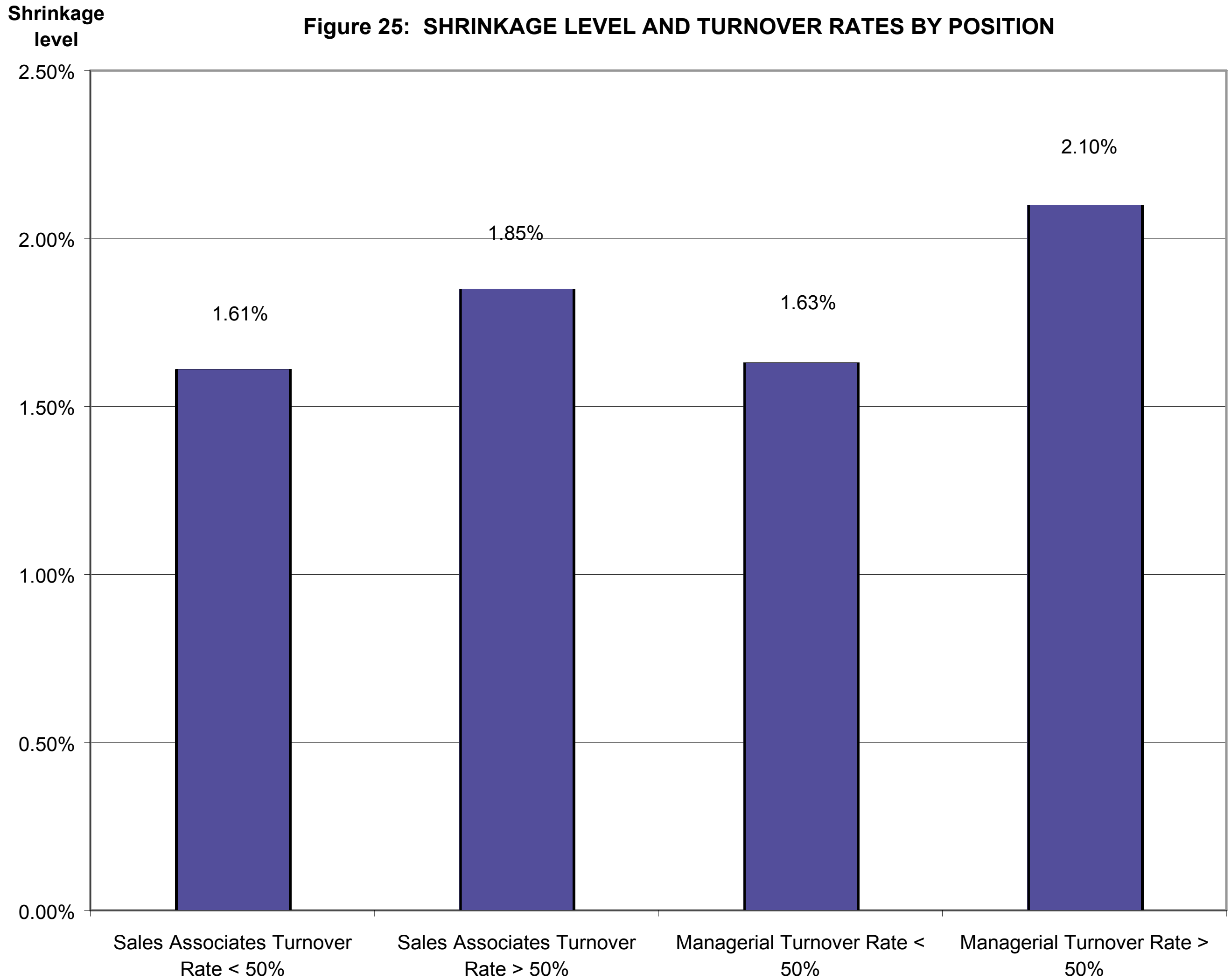
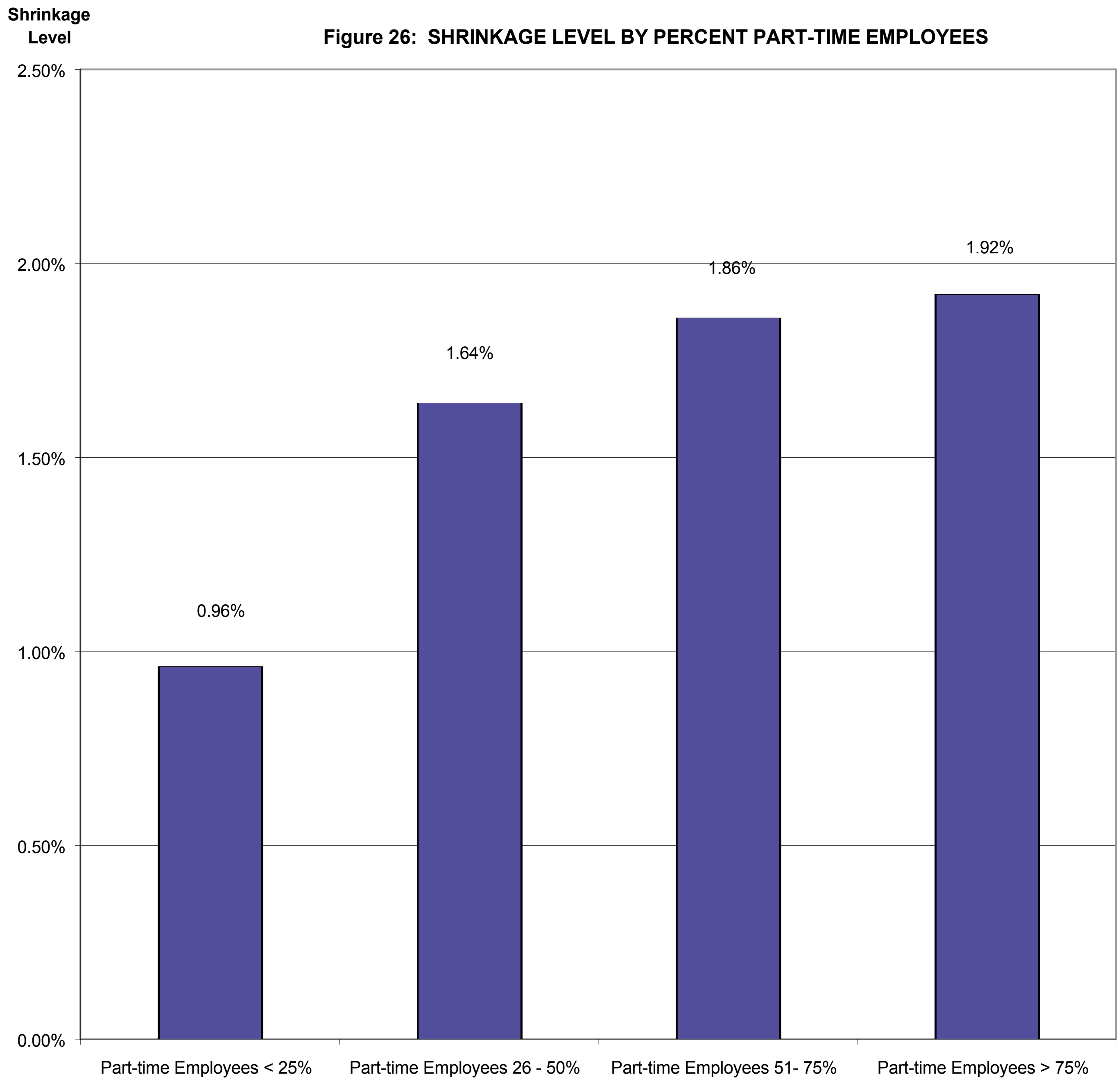


Figure 26: SHRINKAGE LEVEL BY PERCENT PART-TIME EMPLOYEES



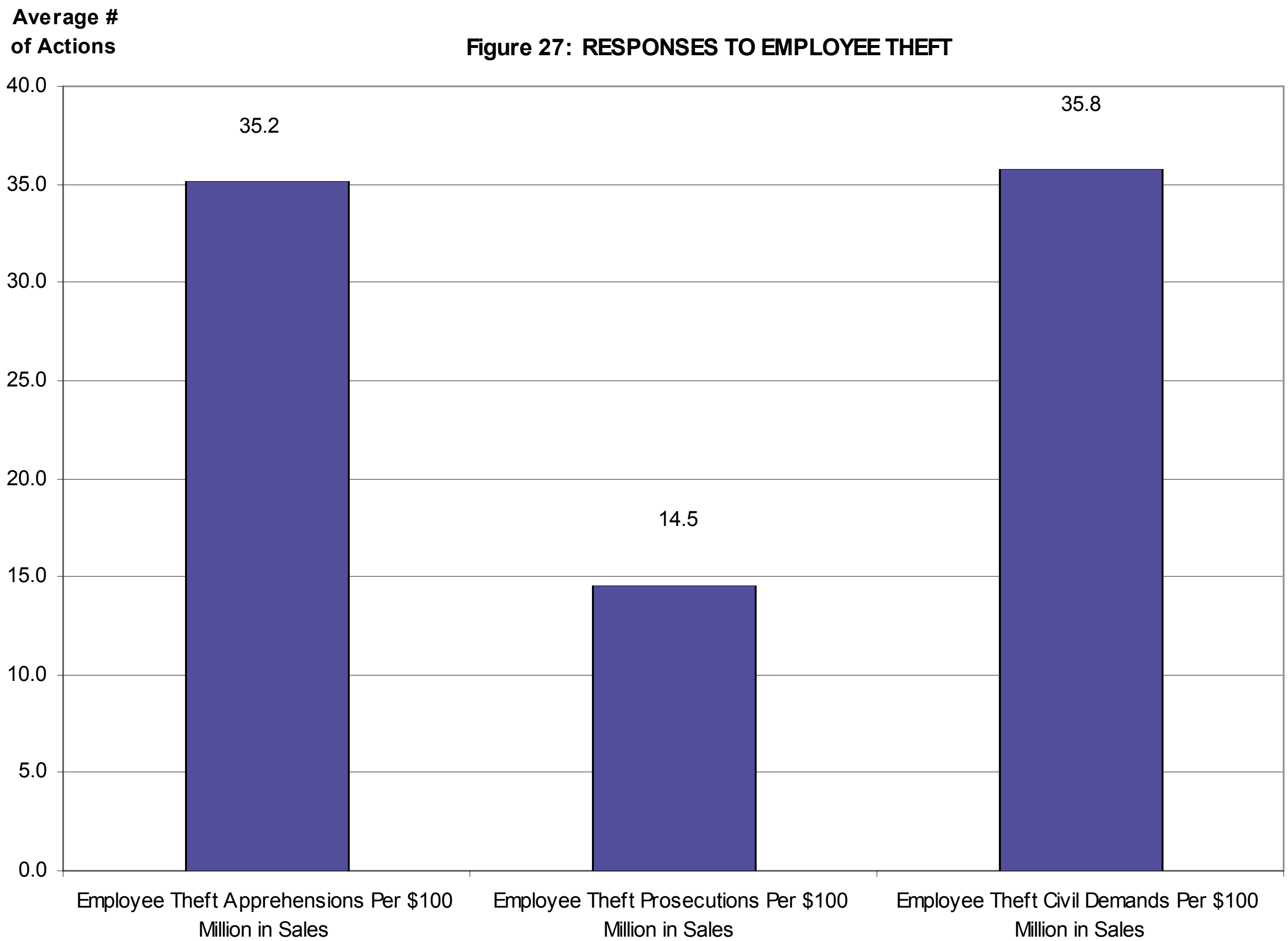

Average #
of Actions
Figure 27: RESPONSES TO EMPLOYEE THEFT
40.0
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
35.2
14.5
35.8
Employee Theft Apprehensions Per $100 Million in Sales
Employee Theft Prosecutions Per $100 Million in Sales
Employee Theft Civil Demands Per $100 Million in Sales

Figure 28: RESPONSES TO SHOPLIFTING

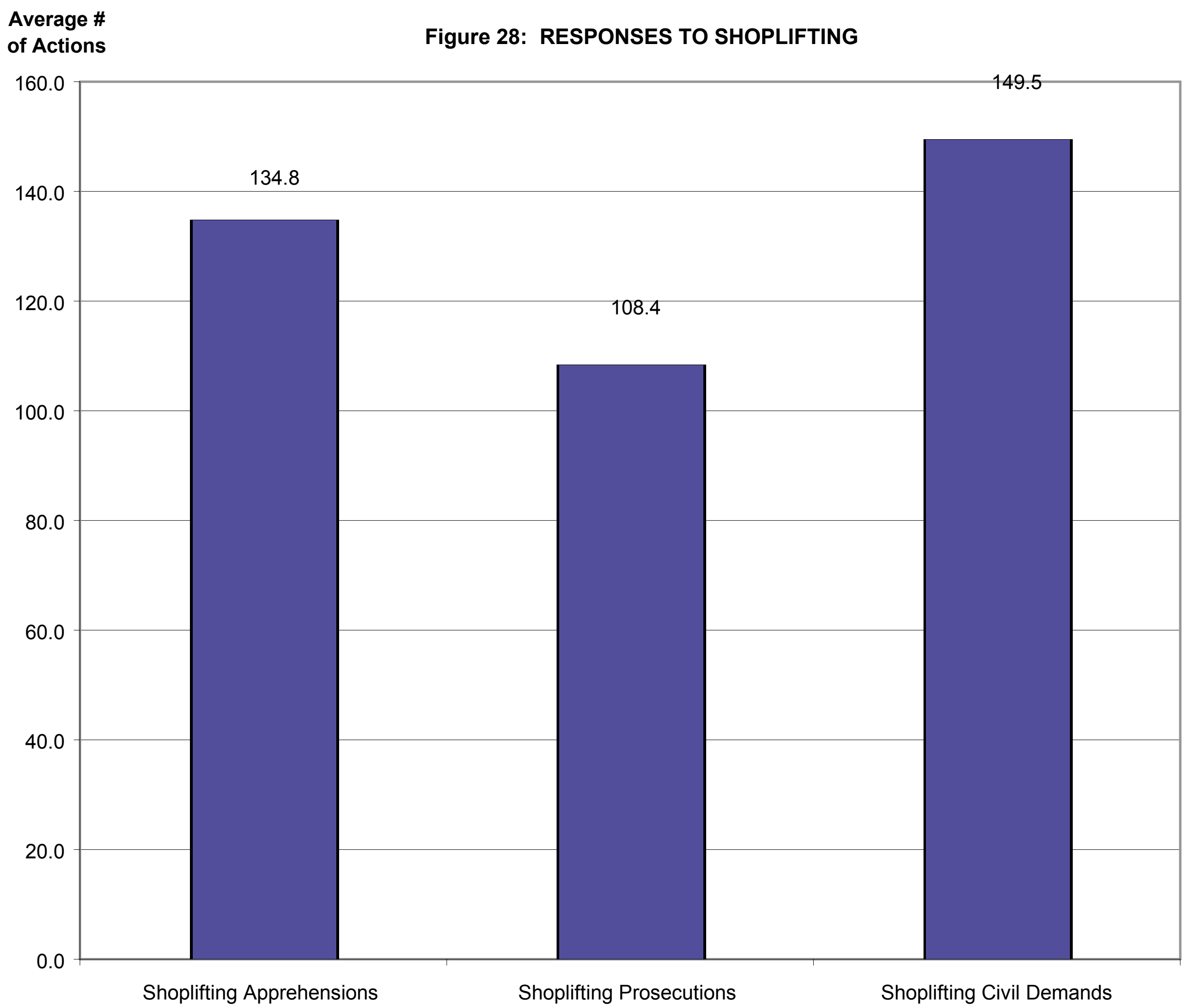


Figure 29: AVERAGE DOLLAR LOSS PER EMPLOYEE THEFT AND SHOPLIFTING INCIDENT