
12.0 PURCHASING

This chapter reviews the functions and activities of the purchasing operation in the Hillsborough County School District. This chapter also includes warehousing and copier functions.

- 12.1 Purchasing
- 12.2 Warehousing
- 12.3 Copiers

An efficient purchasing and warehousing function should have management processes in place to ensure that supplies, equipment, and services vital to a school district's education mission are purchased from the right source, in the right quantity, at the lowest prices, and stored and timely delivered to the appropriate location. These criteria should be met for each purchase without sacrificing quality and timely delivery.

12.1 Purchasing

Purchasing is an essential function to the Hillsborough County School District because instructional supplies, materials, and equipment critical to its educational mission must be obtained in the most efficient and cost effective manner possible. Schools, centers, and offices must be able to order and receive these items on time and in good condition.

CURRENT SITUATION

Current purchasing policies require written quotations for all purchases over \$5,000 and competitive sealed bids for purchases over \$10,000. Buyers work with the requisitioning department to develop bid specifications and a bidders' database is searched for all vendors with the appropriate commodity code. Potential bidders are mailed solicitation notices to respond to if interested in receiving the Request for Proposals (RFP). RFPs are mailed to all vendors who responded as well as vendors who subsequently express an interest in bidding. Bids are opened, read publicly, reviewed and tabulated. Selection of the successful vendor is posted. All bids greater than \$10,000 are approved by the Board.

Exhibits 12-1 and 12-2 show a three-year history of purchasing activity supported by the Hillsborough County School District's Purchasing Department.

The Purchasing Department has implemented an incidental bid process. Incidental bids are used to meet purchasing requirements for federally-funded programs. Each year bid packages are sent to vendors for various commodities. Responses are evaluated and all vendors meeting the bid specifications are included in the bid catalog published by the Purchasing Department. During the year, campuses and departments may place orders from bid catalog vendors without seeking additional quotes or bids.

**EXHIBIT 12-1
NUMBER OF PURCHASE ORDERS PROCESSED
1993-94 TO 1995-96**

Threshold	1993-94	1994-95	1995-96
\$5,000 and less	58,775	75,038	101,951
Between \$5,000 & \$10,000	1,511	1,451	1,519
Greater than \$10,000	1,617	1,620	1,724
Total	61,903	78,109	105,194

Source: Hillsborough County School District Purchasing Department, 1997.

**EXHIBIT 12-2
DOLLAR VOLUME OF PURCHASE ORDERS
1993-94 TO 1995-96**

Threshold	1993-94	1994-95	1995-96
\$5,000 and less	\$33,790,745	\$37,590,023	\$40,037,482
Between \$5,000 & \$10,000	\$10,516,616	\$10,141,452	\$10,661,292
Greater than \$10,000	\$67,967,474	\$83,569,252	\$48,830,417
Total	\$112,274,835	\$131,300,727	\$99,529,191

Source: Hillsborough County School District Purchasing Department, 1997.

The district has operated an automated purchasing system since November 1994. The system allows the campuses and departments to electronically enter purchase requisitions. The Purchasing Department prints work copies of the purchase orders on financial run days (usually Monday, Wednesday and Friday). Working copies of the purchase orders are reviewed by the office manager (Clerk IV) for proper account coding, bid numbers, and vendor information.

If required, the office manager will correct the account coding. Purchase orders without vendor numbers are routed to the vendor clerk (Secretary II or Clerk II) to be set up in the vendor master file. Where bid numbers are required, purchase orders are routed to the supervisor or buyers. All corrections are made on work copies and routed to the Control Clerk. Corrections are entered into the system and purchase orders are released for final printing.

Once purchase orders are released, they are batched together and printed on financial run days. Seven copies of purchase orders are printed. Copies are distributed to the vendor, purchasing, accounts payable, property control, receiving site, and the user (two copies). The Management Information Systems Department (MIS) separates and bursts the copies. Each set of copies is sorted in a different order. Purchase orders have a section for special instructions which is used to provide additional information or instructions to purchasing, accounts payable, and the vendor.

Field purchase orders and Telephone Purchase Authorizations (TPAs) are used for emergency procurement of materials, services, and supplies. Only certain departments are authorized to use TPAs.

FINDING

In November 1995, the Hillsborough County School District implemented an automated purchase order system. The system is viewed as a major improvement by the personnel throughout the district. Turnaround time for processing purchase orders has decreased from nearly six weeks to three days.

The decrease in processing time is further validated by survey responses received from central administrators, principals, and teachers. Approximately 64 percent of central office administrators, 77 percent of principals, and 31 percent of teachers indicated that most administrative processes (including purchasing) are highly efficient and responsive. Further, 66 percent of central administrators, 74 percent of principals, and 30 percent of teachers stated the purchasing process is highly efficient and responsive. The lower level of satisfaction among teachers appears to indicate that, although the turnaround time for processing purchase orders has decreased significantly, further enhancements to the purchasing process may be necessary.

COMMENDATION

The Hillsborough County School District is commended for implementing an automatic purchasing system which resulted in significant reductions in response time.

FINDING

The on-line purchase order system was developed internally by MIS applications programmers. Since its implementation in November 1995, several errors and required enhancements have been identified by users. Corrections and enhancements include, but are not limited to, the items shown in Exhibit 12-3.

RECOMMENDATION

Recommendation 12-1:

Incorporate corrections and enhancements identified by users into the on-line purchasing system to allow for maximum efficiency.

Because some corrections and enhancements to the system have not been implemented, processing purchase orders is not as efficient as possible. For example, one clerk is assigned full-time to distributing purchase orders. If methods of distributing purchase orders were incorporated as input fields on user screens, similar distribution could be grouped thereby reducing the time required to distribute purchase orders. The Purchasing Department also spends considerable time assisting vendors with sales tax exemption and payment questions which could be eliminated by providing vendors the proper information on the purchase order.

**EXHIBIT 12-3
CORRECTIONS OR ENHANCEMENTS
FOR ON-LINE PURCHASING SYSTEM**

IDENTIFIED NEED	CORRECTION OR ENHANCEMENT
Purchase order issue date is not correct.	Correction
Request and transmission dates may not be correct.	Correction
Sales tax exemption number is not printed on the vendor copy of the purchase order.	Enhancement
Accounts payable department phone number is not printed on vendor copy of purchase order.	Enhancement
Special instructions to purchasing, accounts payable, and vendor are contained in one area. Need three separate areas to reduce confusion.	Enhancement
Standard methods for distributing purchase orders should be incorporated as input fields. These fields should be used to group like distribution methods to reduce the time required to distribute purchase orders.	Enhancement
Ability to print approved and issued purchase orders directly at remote sites.	Enhancement
Ability to print and issue amended purchase orders.	Enhancement

Source: MGT Review Team interviews and observations, 1997.

IMPLEMENTATION STRATEGIES AND TIMELINE

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| 1. The Purchasing Supervisor, in conjunction with the General Director of Management Information Systems, should survey users for input on corrections and enhancements. | July 1997 |
| 2. The Purchasing Supervisor, in conjunction with the General Director of Management Information Systems, should review and prioritize corrections and enhancements. | August 1997 |
| 3. The General Director of Management Information Systems should assign programming duties to staff members. | September 1997 |
| 4. Corrections and enhancements should be completed and implemented by MIS programmers. | October 1997
and Ongoing |

FISCAL IMPACT

This recommendation can be implemented within existing resources.

FINDING

On November 9, 1993, the *Tampa Tribune* published an article regarding conflict of interest with the Hillsborough County School District's award of a food services contract. The contract was awarded to a food distributor who purchases products from a manufacturer that employs the Food Services Director's husband. The Purchasing Department investigated the alleged conflict of interest and determined no conflict of interest existed since the Food Services Director does not participate in selecting the vendor.

In December 1993, the Food Services Director further advised the Supervisor of Purchasing that her husband's position had expanded to include the brokering of certain other manufacturer's products. The new duties were at a level apart from where the Hillsborough County School District bids and buys food. The Supervisor of Purchasing notified the Board of the change, stated that no conflict of interest existed, and asked for concurrence by the Board. The Board agreed with the findings and approved the agenda item stating that no conflict of interest existed.

As an internal control measure, purchasing has included additional checks and balances into the bid process to determine potential conflict of interest within the Food Services Department.

COMMENDATION

The district is commended for its thorough investigation, timely resolution, and internal controls to avoid potential conflicts of interest.

FINDING

The school district is the largest organization in Hillsborough County and allows other county agencies and Florida school districts to participate in their competitive purchasing activities to receive the best price for goods and services. The Purchasing Department is active in several cooperative purchasing groups, including Bay Area Schools, Hillsborough County, and the Tampa Bay Governmental Purchasing Cooperative. All Hillsborough County School District bids include a clause which invites vendors to offer the same prices to school districts participating in the purchasing cooperative.

Survey results also reflect that district employees feel that the district should continue to participate in cooperative purchasing activities. Approximately 20 percent of administrators, 15 percent of principals, and 21 percent of teachers responded to an open-ended item that the operational efficiency of the district could be improved by joining with other districts to provide joint services, including purchasing.

COMMENDATION

The district is commended for its leadership role in cooperative purchasing.

FINDING

Blanket purchase orders are used by various schools and departments to purchase emergency items required throughout the school year. The Auditor General of the State of Florida performs an audit of the district each year. In the audit report for fiscal year 1996, the Auditor General reported that internal controls for blanket purchase orders were weak.

The dollar value of blanket purchase orders can be increased by anyone who writes a memo to the Purchasing Control Clerk. No approval by the principal or his/her designee is required for increasing a blanket purchase order. If funding is available, the Control Clerk changes the amount of the blanket purchase order. All invoices up to the total amount of the blanket purchase order are paid by accounts payable.

Changes to blanket purchase orders are not reviewed by the Purchasing Department to ensure that procedures are followed. A blanket purchase order, originally in the amount of \$200, can be increased to \$10,000 without requiring quotes or bids to be obtained.

RECOMMENDATION

Recommendation 12-2:

Develop and implement new procedures for approving changes to blanket purchase orders and to monitor compliance with new procedures.

Blanket purchase orders should not be increased without proper approval. In addition, all changes should be reviewed to ensure that purchasing thresholds are not being circumvented.

IMPLEMENTATION STRATEGIES AND TIMELINE

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| 1. The General Director of Finance should direct the Supervisor of Purchasing to develop procedures for approving changes to blanket purchase orders. | July 1997 |
| 2. The Supervisor of Purchasing should develop procedures for changing blanket purchase orders. | July 1997 |
| 3. Procedures should be reviewed and approved by the General Director of Finance. | August 1997 |
| 4. The General Director of Finance should distribute new procedures throughout the district. | September 1997 |

5. Campuses and departments should implement procedures throughout the district. September 1997

FISCAL IMPACT

The new procedures can be developed and implemented within existing resources.

FINDING

Competitive sealed bids are required by Board policy for all purchases in excess of \$10,000. Recently, the state increased the competitive sealed bid threshold to \$15,000. As shown in Exhibits 12-1 and 12-2, the number of sealed bids increased 6.4 percent from 1994-95 to 1995-96. The average value of competitive sealed bids decreased to \$28,324 in 1995-96 from \$51,585 in 1994-95. As a result, Purchasing is allocating personnel resources to prepare a greater number of competitive sealed bids with lower dollar values.

RECOMMENDATION

Recommendation 12-3:

Increase the threshold for issuing competitive sealed bids to meet the state threshold.

By increasing the competitive sealed bidding from \$10,000 to \$15,000, the Purchasing Department will reduce the effort required to complete the large number of bids and will provide a higher quality of service to users.

IMPLEMENTATION STRATEGIES AND TIMELINE

1. The Assistant Superintendent of Business and Research, in cooperation with the General Director of Finance and Supervisor of Purchasing, should revise the policy as a general statement which will reference the threshold established by the state. July 1997
2. The Board should approve the policy. August 1997

FISCAL IMPACT

This recommendation can be implemented within existing resources.

FINDING

Two methods are used to make emergency purchases: telephone purchase authorizations and field purchase orders. The Maintenance Department is the primary user of temporary purchase orders and field purchase orders. If a part is needed and not in stock, maintenance employees will call the Maintenance Department's office for a temporary purchase order or field purchase order. If a temporary purchase order is to

be used, the Maintenance Department will call Purchasing and request a temporary purchase order number. Purchasing has written procedures which are followed to issue a temporary purchase order. Temporary purchase orders can be issued for any amount. Purchases of up to \$2,500 are approved by a purchasing secretary. Amounts in excess of \$2,500 must be approved by a buyer. The invoice is submitted to the Purchasing Department where it is matched to the temporary purchase order log and released for payment by Accounts Payable.

Issuance of field purchase orders is controlled by the Purchasing Department. Campuses and departments must call Purchasing and request a field purchase order number. Campuses and departments issue field purchase orders directly to vendors. Field purchase orders can be issued for up to \$100; however, the Purchasing Department attempts to limit field purchase orders to purchases of \$25 or less. The invoice and field purchase orders are submitted to Accounts Payable for payment and a copy of the field purchase order is forwarded to the Purchasing Department.

RECOMMENDATION

Recommendation 12-4:

Implement procurement cards in lieu of telephone purchase authorizations and field purchase orders.

Procurement cards are credit cards issued by the district to employees. The district can set spending limits for each card when issued, and place restrictions on the types of purchases made. Procurement card expenditures would be paid monthly to the issuing bank in one lump-sum payment. Cardholder payments can be reviewed daily, weekly, or monthly by both the cardholder and Accounts Payable staff. Using procurement cards will eliminate the need for temporary purchase orders and field purchase orders, and reduce the number of payments processed annually.

To implement a procurement card program, the Hillsborough County School District should contract with a procurement card company to provide the cards. Through effective negotiations, the card and service fees can be negotiated out of the agreement (no cost to the district). The Hillsborough County School District should assign two of their Accounts Payable staff to manage the program.

IMPLEMENTATION STRATEGIES AND TIMELINE

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| 1. The Assistant Superintendent of Business and Research should establish a team of members from Purchasing, Accounts Payable, Accounting and other customer departments. | July 1997 |
| 2. The team should visit and interview other procurement card users. | August 1997 |
| 3. The team should review card capabilities with major | August 1997 |

providers (American Express, Visa, MasterCard).

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| 4. The team should gain the approval of the Assistant Superintendent of Business and Research to move forward with a Request for Proposals. | September 1997 |
| 5. The team should develop the RFP. | October 1997 |
| 6. The Assistant Superintendent of Business and Research should approve the RFP. | November 1997 |
| 7. The team should establish policies and procedures for the procurement cards. | December 1997 |
| 8. The procurement card vendor should be selected. | January 1998 |
| 9. The General Director of Finance should identify the staff members to be reassigned to manage the card program. | January 1998 |
| 10. The procurement card staff should conduct a needs assessment to determine which employees will be issued cards. | February 1998 |
| 11. The Hillsborough County School District should pilot the program with several campuses and departments. | April 1998 |
| 12. Districtwide training on the use of procurement cards should be conducted. | September 1998 |
| 13. The district should implement the procurement card program throughout the district. | October 1998 |

FISCAL IMPACT

This recommendation should be implemented at no cost to the district. Savings will be realized in the amount of \$14,954 with the elimination of one-half of a Secretary II position (\$11,327 salary plus 32 percent for benefits). The remaining one-half of the position is eliminated with implementation of Recommendation 12-5.

Recommendation	1997-98	1998-99	1999-2000	2000-01	2001-02
Implement Procurement Cards	\$0	\$14,954	\$14,954	\$14,954	\$14,954

FINDING

As expected, with an organization as large as the Hillsborough County School District, vendor and potential bidder data require many resources to enter and maintain an up-to-date vendor and bidder database. The Hillsborough County School District has two

separate databases: a vendor database and a bidder database. Forms used to gather the information for vendors and bidders are exactly the same except for the title. The bidder database also contains information regarding commodities and sub-commodities vendors are able to supply.

File maintenance for the vendor database is performed by a Clerk II. The Purchasing Department is responsible for entering and maintaining all purchasing and non-purchasing vendors. The Secretary II is responsible for maintaining the bidders' list.

RECOMMENDATION

Recommendation 12-5:

Consolidate the vendor and bidder lists into one database.

Duplicative data entry is counter-productive to the efficiency of the department. In addition, two individuals are contacting vendors/bidders requesting identical data, which is not only an ineffective use of resources, but also projects an image of disorganization and inefficiency to the public.

IMPLEMENTATION STRATEGIES AND TIMELINE

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| 1. The Supervisor of Purchasing and General Director of Management Information Systems should develop a plan to consolidate databases. | Fall 1997 |
| 2. MIS programmers should develop modifications to consolidate databases. | February 1998 |
| 3. Programmers should convert data from the two databases into the consolidated database. | March 1998 |
| 4. The Supervisor of Purchasing should present elimination of the Secretary II position to the Superintendent. | July 1998 |
| 5. The Superintendent should approve the elimination of the Secretary II position. | July 1998 |

FISCAL IMPACT

Elimination of duplicate data entry and maintenance functions will result in costs savings of \$14,953 per year (\$11,327 salary plus 32 percent benefits). One-half of the Secretary II position can be eliminated after the databases are consolidated. The other one-half of the position is eliminated with Recommendation 12-4. Therefore, after implementation of both recommendations, the position can be eliminated.

Recommendation	1997-98	1998-99	1999-2000	2000-01	2001-02
Combine Databases	\$0	\$14,953	\$14,953	\$14,953	\$14,953

FINDING

Vendor tax identification numbers and organization type are missing for a large number of vendors in the vendor database. Incomplete information for vendors forces additional manpower to be used to process Form 1099s required by the Internal Revenue Service (IRS). Currently, if a vendor does not submit a complete vendor application, the Purchasing Department sends a letter to the vendor for three consecutive months requesting the information required for processing Form 1099. If no response is received, the vendor is tagged in the database as an incomplete vendor and no further action is taken by the Purchasing Department.

At the end of each calendar year, Accounts Payable prepares Form 1099s. For each Form 1099 submitted to the IRS which does not contain a tax identification number, the IRS levies a \$50 penalty. In order to avoid the penalty, Accounts Payable contacts all vendors that did not provide taxpayer identification number to obtain the required information.

Vendors continue to receive payments for goods and services even though all necessary information has not been provided. Therefore, the vendor has no incentive to provide the complete information to the district.

RECOMMENDATION

Recommendation 12-6:

Implement a procedure to withhold payments to vendors until all required information is provided to the district.

Vendors are required to complete a vendor application in order to receive payment. The district should implement a procedure to withhold payment until a complete application has been submitted to the district. Although this action may be viewed as punitive, it is necessary to eliminate the significant amount of manpower currently expended to obtain information vendors are required to provide.

IMPLEMENTATION STRATEGIES AND TIMELINE

1. The Assistant Superintendent of Business and Research should direct the Supervisor of Purchasing and Supervisor of Accounts Payable to develop a procedure to withhold payment to vendors who submit incomplete vendor applications. July 1997
2. The Supervisor of Purchasing and Supervisor of Accounts Payable should develop the required procedure. August 1997

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| 3. Form SB-00834, Vendor Application, should be modified by the Supervisor of Purchasing to include a notification to vendors that payment will be withheld if the application is not complete. | August 1997 |
| 4. The procedure should be implemented and SB-00834 revised. | September 1997 |

FISCAL IMPACT

One Accounts Payable clerk spends approximately five hours per week attempting to obtain information necessary for processing Form 1099s. Additionally, at least one “person month” is required during the last quarter of the calendar year (i.e., year ending in December) to ensure that information not previously submitted by vendors is obtained. Assuming clerks work 50 weeks per year and a “person month” is equivalent to 169 hours, a total of 418 hours will be available to be reallocated to core purchasing functions as a result of this recommendation (50 weeks x 5 hours per week 250 hours + 168 hours = 418 hours).

FINDING

The Hillsborough County School District must comply with state and federal purchasing regulations. Federal regulations must be applied to purchases for federal programs. Exhibit 12-4 provides details of the Hillsborough County School District, state, and federal regulation thresholds and purchasing requirements.

**EXHIBIT 12-4
DISTRICT, STATE, AND FEDERAL REGULATIONS**

ACTION REQUIRED	DISTRICT THRESHOLD	STATE THRESHOLD	FEDERAL THRESHOLD
Buyer determines price is reasonable	not in excess of \$5,000	not in excess of \$5,000	not in excess of \$2,500
Buyer solicits at least three written quotes	in excess of \$5,000 and not in excess of \$10,000	in excess of \$5,000 and not in excess of \$15,000	in excess of \$2,500 and not in excess of \$25,000
Buyer solicits sealed or competitive bids	in excess of \$10,000	in excess of \$15,000	in excess of \$25,000

Source: FAR Part 13, District Policies, Florida Statute, 1997.

Currently, the Purchasing Department spends a large amount of administrative costs soliciting incidental bids to meet federal regulations. Since price is not a consideration for vendors to be included in the bid catalog, incidental bids are not ensuring that the most competitive price is being obtained using district or federal funds. For each category of items purchased, as many as 30 vendors can be included in the bid catalog.

RECOMMENDATION

Recommendation 12-7:

Reengineer purchasing procedures to eliminate unnecessary solicitations, yet ensure compliance with district, state, and federal policies and regulations.

All incidental bids should be reviewed to ensure that the process complies with all regulations. In addition, vendors should be included in the bid catalog based on two factors: meeting specifications and competitive cost. Vendors selected for each item category should be limited to those within the competitive range. This limitation would ensure cost is competitive, yet provide campuses and departments adequate options for obtaining items if vendors are unable to meet delivery requirements.

This recommendation supports the district's Five-Year Technology Plan.

IMPLEMENTATION STRATEGIES AND TIMELINE

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| 1. The Assistant Superintendent of Business and Research should direct the Supervisor of Purchasing to reengineer purchasing procedures to ensure compliance with regulations and competitive costs. | July 1997 |
| 2. The Supervisor of Purchasing should review the types of incidental bids and eliminate those which are unnecessary or redundant. | August 1997 |
| 3. The Supervisor of Purchasing should revise the procedures for including vendors in the bid catalog. | August 1997 |
| 4. The Assistant Superintendent of Business and Research should review and approve the new procedures. | September 1997 |
| 5. The new procedures should be applied to all new incidental bids. | October 1997 |

FISCAL IMPACT

Cost savings from this recommendation cannot be quantified. Resource requirements within the Purchasing Department should be reduced because of a smaller number of incidental bids. Sites will also achieve cost savings that can be reallocated to meet other needs.

FINDING

From the period of January 1994 through January 1996, the Hillsborough County School District processed a total of 233 bids which averages to nine bids per month. Initially, each RFP package was mailed to all vendors with commodity codes matching

those required by the bid. The Purchasing Department successfully reduced the cost of distributing RFPs by revising its procedures. Prior to release of the RFP, all vendors with the appropriate commodity code are mailed a letter asking vendors to indicate whether or not they would like to participate in the upcoming bid. Only vendors who respond positively automatically receive a copy of the RFP. This change has significantly reduced the number of RFPs which are distributed.

The Supervisor of Purchasing also indicated that the option of fax on demand is being considered as the method of RFP distribution. Fax on demand would allow vendors to call the district and have RFPs automatically faxed to them. In addition, a procurement home page on the Internet was mentioned as another option; although the district is not actively researching this option.

RECOMMENDATION

Recommendation 12-8:

Continue to research and implement new methods for distribution of RFPs.

Improvements have been made in the method of distribution of RFPs. However, additional savings can be realized with other methods. Use of fax on demand or downloading RFPs from the Internet will reduce the cost of paper to the district and eliminate postage costs. Additional benefits could be achieved with the use of a procurement home page such as posting schedules of bids, posting selection results, and allowing vendors to update their information.

IMPLEMENTATION STRATEGIES AND TIMELINE

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| 1. The Assistant Superintendent of Business and Research should direct the Supervisor of Purchasing to research alternate methods of distributing RFPs. | July 1997 |
| 2. The Supervisor of Purchasing should recommend implementation of a method. | September 1997 |
| 3. The Assistant Supervisor of Business and Research should approve the recommendation. | October 1997 |
| 4. The Supervisor of Purchasing should acquire the appropriate systems required to implement the method. | November 1997 |
| 5. The new method should be implemented. | December 1997 |

FISCAL IMPACT

The district currently processes approximately 10 bids per month. Each bid package contains an average of 35 pages of information. With new procedures, we estimate an average of 15 vendors per bid request bid packages.

Based on the preceding information, the fiscal impact is calculated as follows:

Total bids issued each month	10
Average number of pages per bid packages	35
Total pages required each month for bid packages	350
Average number of vendors requesting packages each month	15
Total number of copies per month	5,250
Multiply by 12 months to annualize	x 12
Total annual copies	63,000
Cost per copy, stapled (provided by OMR Department)	\$.044
Total cost of reproduction	\$2,772
Add: Postage for 180 mailings per year at \$1.47 per mailing	265
Add: Paper cost (63,000 ÷ 500 sheets per ream = 126 reams x \$3.00/ream)	378
Total savings	\$3,445

Recommendation	1997-98	1998-99	1999-2000	2000-01	2001-02
Implement New Methods to Distribute RFPs	\$1,720	\$3,445	\$3,445	\$3,445	\$3,445

12.2 Warehousing

CURRENT SITUATION

The warehouse is responsible for acquiring, inventorying, and delivering routine supplies to all campuses and departments within the district. Routine supplies include instructional, janitorial, audio visual, physical education, first aid, and industrial art supplies; as well as forms and other items. The warehouse also stores and delivers food to campuses for the Food Services Department. Food items stored include dry goods, frozen and refrigerated products. The Hillsborough County School District operates three warehouses with a total of 100,198 square feet --- freezer space totaling 2,985 square feet and cooler space totaling 720 square feet.

Exhibit 12-5 shows the breakdown of space for each location.

EXHIBIT 12-5 WAREHOUSE SPACE (IN SQUARE FEET)

Warehouse	Warehouse Space	Freezer/Cooler Space
Central	72,000	2,880
Bonacker	19,998	0
Data (Records Storage)	8,200	0
Book Depository*	0	825

Source: Hillsborough County Warehouse Department, 1997.

*Represents the name of the Warehouse only; books are not stored in the warehouse.

A warehouse catalog is published each year which details all items stocked by the warehouses. Campuses and departments are required to purchase all inventory stocked by the warehouse directly from the warehouse. Items are priced at the average cost of inventory, plus a 10 percent markup to cover the cost of operating the warehouse. Prior to the start of the school year, the Warehousing Department

develops a delivery schedule for the year and includes it in the catalog. Food is delivered to each site once a week. Schools are scheduled for delivery of supplies once every 12 days.

Campuses and departments requisition supplies by typing a Maintenance Warehouse Requisition (SB-00051) and forwarding the requisition to the warehouse. The requisition includes the stock number, description, quantity and unit of measure for each item requested. General information such as site number, site name, fund, function, object, program, requester, requisition number and approval are entered on the top portion of the form.

Warehouse staff stamp the date received on the requisition, review the requisition to verify stock numbers, and assign a delivery ticket number. Requisitions are separated, batched together by delivery run, and forwarded to the central office for data entry. Warehouse copies are retained to match to delivery tickets.

The Data Entry Department enters the stock numbers into the mainframe system. Availability of funding is verified, campuses and departments are charged for the stock, and inventory is reduced. On financial run days (usually Monday, Wednesday and Friday), delivery tickets are printed and sent to the warehouse. Delivery tickets are matched with the requisition and put into bins which are in delivery run order.

Storekeepers use delivery tickets as a "pick lists." Requested items are pulled from the stock shelves, boxed and placed onto pallets. Delivery tickets for each delivery run are picked in order of the delivery run. Normally, storekeepers are picking items to be delivered in three or four days. After a delivery ticket is picked, it is checked to ensure the proper items and quantity are delivered. Both the storekeeper and checker initial the delivery ticket to provide accountability for accuracy.

Warehouse stock is grouped into several different areas such as classroom, janitorial, audio visual, athletic, and maintenance supplies. Each area has its stock placed in stock number order except for bulk items which are not easily placed in order. Each area has a storekeeper assigned as a "manager" of the group.

Each morning, food delivery trucks are first loaded. Trucks containing supplies are loaded second and all trucks begin deliveries before 8:30 a.m. When items are delivered to the campuses and departments, the delivery ticket is signed by the individual receiving the delivery. Completed delivery tickets are returned to the warehouse clerical staff where requisitions are attached and tickets filed. Two sets of files are maintained: one alphabetically by site, and the other in numerical order by delivery ticket.

Campuses and departments receive emergency items by appearing in person at the warehouse or, in some cases, receiving an unscheduled delivery.

Warehousing is also responsible for distributing and collecting test data, delivering of library materials to media services, and assisting with mail distribution and other deliveries upon request. All furniture for new schools is stored by warehousing until each facility is completed.

FINDING

The manual requisitioning of warehouse supplies is very time consuming at campus, department, and warehouse locations. Campuses and departments are required to type information directly from the warehouse catalog onto a form. The form is then entered into the mainframe system and a delivery ticket is generated.

Automation of warehouse requisitioning is one of the systems to be developed by Management Information Systems. Although the project had not been scheduled as of the date of the on-site activities by the review team, an automated warehouse requisition application is third on the district's list of developmental applications. Higher priority has been given to the on-line attendance reporting system and the unit allocation/position control system.

RECOMMENDATION

Recommendation 12-9:

Short-term

Revise the warehouse catalog to serve as both a requisition form and a catalog.

Based on interviews with peer school districts, the review team found that the Pinellas County School District has set up their warehouse catalog to serve dual purposes: as a catalog and as a requisition form. Exhibit 12-6 shows a sample page from the Pinellas County catalog. Pages of the catalog can be copied and used to order quantities. Other information can be completed and forwarded to the warehouse. This change would relieve the campuses and departments from having to retype stock numbers and descriptions for requisitioned items. It would also eliminate using incorrect stock numbers when requesting warehouse stock.

Long-term

Implement an on-line warehouse requisitioning system.

The district should begin developing the planned on-line warehouse requisitioning system immediately. An on-line system would reduce redundant data entry and decrease the response time for receiving of stock items requisitioned from the warehouse.

IMPLEMENTATION STRATEGIES AND TIME LINE

Implementation of the Short-Term Recommendation:

1. The Assistant Superintendent of Business and Research should instruct the Supervisor of Purchasing to revise the warehouse catalog to allow the pages to be used as a substitute requisition form. July 1997

2. The Warehouse Coordinator should revise the warehouse catalog to include information contained on the top portion of SB-00051 and a column for the quantity ordered. July 1997
3. Instructions for the use of the substitute SB-00051 should be developed by the Warehouse Coordinator. August 1997
4. The Supervisor of Purchasing should review and approve the instructions for the substitute SB-00051. August 1997
5. The revised warehouse catalog, with the instructions incorporated, should be distributed districtwide by the Warehouse Coordinator. September 1997
6. The use of the substitute SB-00051 should be implemented districtwide. September 1997

Implementation of the Long-Term Recommendation:

1. The Superintendent should direct the General Director of Management Information Systems to develop and implement an on-line warehouse requisitioning system. July 1997
2. The Assistant Superintendent of Business and Research should meet with the General Director of Management Information Systems to develop requirements of the warehouse requisitioning system. July 1997
3. Applications programmers should begin developing an on-line warehouse requisitioning system. August 1997
4. Applications programmers should begin pilot testing the on-line warehouse requisitioning system. May 1998
5. The General Director of Management Information Systems should bring the system on-line. January 1999
6. The Supervisor of Purchasing should present the elimination of two Clerk II positions to the Superintendent. January 1999
7. The Superintendent should submit the request for the elimination of two Clerk II positions to the Board. January 1999
8. The Board should approve the elimination of the two positions. January 1999

FISCAL IMPACT

Short-term

The short-term recommendation can be implemented within existing resources. Indirect cost savings will result at the campuses and departments with reduced time to prepare warehouse requisitions.

Long-term

Upon districtwide implementation of an on-line requisition system, two Clerk II positions can be eliminated resulting in an annual savings of \$54,472 (\$41,267 in salary plus benefits of 32 percent). One-half year is projected in 1998-99 because positions are eliminated in January 1999.

Recommendation	1997-98	1998-99	1999-2000	2000-01	2001-02
Implement On-line Warehouse Requisition System	\$0	\$27,236	\$54,472	\$54,472	\$54,472

FINDING

Food products are delivered to campuses and departments once each week. The Food Services Department will not accept delivery of food from vendors which is not delivered in refrigerated trucks. However, the Warehousing Department is often forced to use non-refrigerated trucks to deliver food to the campuses and departments. Only one refrigerated truck is owned by the Warehouse Department and it does not have a large enough capacity to handle the size of the deliveries required. Three non-refrigerated trucks are being used to deliver food to the campuses and departments.

The district is currently in the process of acquiring three refrigerated trucks within the next six months. Delivery of food to all campuses and departments will be accomplished using the new refrigerated trucks (also see Chapter 14, Food Service).

COMMENDATION

The Hillsborough County School District is commended for its actions in acquiring refrigerated trucks to be used in delivering food.

FINDING

The Warehousing Department has a fleet of 13 vehicles used to deliver supplies, commodities, and food products to all schools in the district. Exhibit 12-7 provides a list of the fleet, including model year and manufacturer.

**EXHIBIT 12-7
WAREHOUSE TRUCK FLEET**

Truck Number	Model Year	Manufacturer
1257	1981	International
1552	1983	Chevrolet
1651	1985	Ford
1675	1985	Ford
1724	1986	Chevrolet (open bed)
2162	1989	Ford
2163	1989	Ford
2164	1989	Ford
2165	1989	Ford (refrigerated)
2177	1989	Ford (van)
2503	1992	Ford
2535	1992	Ford
2536	1992	Ford

Source: Hillsborough County School District, Warehouse Department, 1997.

The average age of the fleet is nine years. With the acquisition of the three new refrigerated trucks, the Warehousing Department will reassign the fleet to better utilize the newer and better operating trucks. Exhibit 12-7 demonstrates that the district does not systematically replace its vehicles over a period of time, but rather replaces a large number of trucks in one year. Large expenditures in a single year create a burden on the district's budget, particularly if the expenditures are unplanned.

RECOMMENDATION

Recommendation 12-10:

Develop a fleet replacement plan for warehouse trucks.

A fleet replacement plan will assist the district in spreading the expenditures over a period of time versus incurring a large expenditure in a single year when multiple trucks must be replaced. Timely replacement of trucks will reduce the amount of repair and maintenance costs required to keep older trucks operating.

IMPLEMENTATION STRATEGIES AND TIMELINE

1. The Assistant Superintendent of Business and Research should instruct the Supervisor of Purchasing to develop a fleet replacement plan for the warehouse fleet. October 1997

2. In cooperation with the Warehouse Coordinator, the Supervisor of Purchasing should develop a replacement plan for the next five years. October 1997

3. The Assistant Superintendent of Business and Research should review and approve the replacement plan. November 1997
4. The replacement plan should be provided by the Assistant Superintendent of Business and Research to the Budget Department for inclusion in the 1998-99 budget. November 1997
5. The Supervisor of Purchasing and Warehouse Coordinator should review and revise the replacement plan for inclusion in the budget. Annually

FISCAL IMPACT

A fleet replacement plan can be developed within existing resources.

FINDING

The district contracts for additional space for food storage. The cost of additional storage space for the past three fiscal years is shown in Exhibit 12-8.

**EXHIBIT 12-8
COST OF ADDITIONAL FOOD STORAGE**

Year	Amount
1993-94	\$ 30,464
1994-95	\$ 40,216
1995-96	\$ 31,021

Source: Warehouse Department, 1997.

Outside storage costs average \$33,900 per year. Annualized storage year costs for 1996-97 are \$9,714 and reflect a significant reduction in the cost of additional food storage space. This cost savings is attributable to improved coordination between the two warehouse staff responsible for ordering and managing food stock. By working closely together, working with vendors, and efficiently managing freezer and cooler space, the two employees have reduced food stock to levels that can be stored in the district's existing freezers and coolers.

COMMENDATION

Warehouse personnel are commended for coordinating their efforts to reduce the cost of outside storage.

FINDING

During 1995-96, warehouse inventory levels were reduced by 57 percent from the previous year. Exhibit 12-9 shows year-end inventory levels for the past three fiscal years.

**EXHIBIT 12-9
YEAR-END WAREHOUSE INVENTORY**

Year	Amount
1993-94	\$ 2,719,533
1994-95	\$ 3,440,512
1995-96	\$ 1,486,885

Source: Warehouse Department, 1997.

Previously, the warehouse stocked as much as a six-month supply of inventory. In 1995-96, inventory levels have been reduced to a three-month supply. Ordering frequencies have been revised to allow for an adequate, but not excessive amount of stock to be on hand. Lower inventory levels result in more working capital and lower warehouse space requirements.

COMMENDATION

The Hillsborough County School District is commended for the reduction in warehouse inventory levels.

FINDING

Because of the delivery schedule for supplies, campuses and departments receive deliveries from the warehouse either once or twice a month. Some campuses were observed by the review team to be storing excessive amounts of supplies. Campuses and departments must properly plan for supply needs and usually order more than required. As a best practice, Fairfax County Public Schools in Virginia has implemented a passive order system which achieves these five objectives:

- minimizes the time and effort required by campus staff to process supply orders;
- reduces occasions of campuses and departments running out of critical supplies;
- eliminates the stockpiling of supplies at schools;
- reduces peak summer workload in the central warehouse; and
- reduces warehouse inventory levels by establishing predictable demand.

Under a passive order system, schools define their product requirements for each month of the year, and each month supplies are delivered to campuses and departments based on a schedule established by the administrator. With site-based management, principals and department administrators are able to control material and

supply orders necessary to achieve the educational mission of the district. They know when products will be delivered (e.g., elementary schools can plan to have additional pink and red construction paper delivered prior to Valentine's Day). A majority of the warehouse stocked items can be available through a passive order system. To provide flexibility to the schools, each month the warehouse can send each school a listing of the items they are scheduled to receive the following month. Sites could have 10 days to return the list with any adjustments to their orders. If the campuses and departments take no action, supplies are delivered as originally scheduled. As a result, supplies arrive at each school when needed; eliminating unexpected shortages and the need to stockpile critical items.

The passive order system is then implemented at the warehouse level to achieve a "just-in-time" inventory level. After the campuses and departments have defined their monthly requirements, the warehouse will combine them to determine districtwide monthly requirements. Orders and deliveries can automatically be placed on a monthly basis with the vendors. Warehouse deliveries will be scheduled and inventory received "just in time" to deliver to the campuses and departments. As with the campuses and departments, the Warehouse Department will have the ability to modify its quantities with the vendors if the scheduled amount will not meet all needs. The warehouse can also choose to stock a minimum amount of excess inventory for all or selected items.

Implementation of a passive order system can significantly reduce warehouse costs. Inventory requirements can be projected more accurately to enable ordering proper quantities. Ordering is done once a year and then is slightly modified each month to meet any unplanned requirements. With the proper quantities in the warehouse, campuses and departments will be assured to receive the required supplies and the warehouse will reduce stock levels. Stocking of obsolete items can virtually be eliminated with the implementation of a passive order system.

Other districts have realized significant savings with the implementation of a passive order system. Summer workloads; mistakes in picking, packing and shipping; and inventory levels have been reduced. In addition, more competitive prices can be negotiated with vendors when the quantity and delivery dates are defined during the bidding process.

RECOMMENDATION

Recommendation 12-11:

Implement a Passive Order System for routine supplies.

Implementation of a passive order system should be accomplished with a phased approach. Initially bulk and high demand items should be used for implementation. Each year, items should be added to a passive order system until, after a three-year period, nearly all items are included in the system.

IMPLEMENTATION STRATEGIES AND TIMELINE

1. The Assistant Superintendent of Business and Research should instruct the Supervisor of Purchasing to implement a passive order system. July 1997
2. Interviews with peer school districts using a passive order system or just in time inventory systems should be conducted by the Supervisor of Purchasing. July 1997
3. The Supervisor of Purchasing and Warehouse Coordinator should determine the initial stock items which will be available in the passive order system. August 1997
4. The Supervisor of Purchasing, in coordination with the Warehouse Coordinator, should develop procedures, forms, and tracking systems for implementation of a passive order system. Fall 1997
5. A passive order system pilot program should be implemented. January-June 1998
6. The Warehouse Coordinator should begin limited implementation of a passive order system with vendors. January 1998
7. Site managers should be trained by the Warehouse Coordinator in planning passive orders and monitoring needs. March 1998
8. The passive order system should be implemented districtwide for initial items. July 1998
9. Additional items should be included in the passive order system by the Warehouse Coordinator. July 1999
10. Final items should be included in the passive order system by the Warehouse Coordinator. July 2000
11. The Warehouse Coordinator should fully implement a passive order system with vendors. July 2000

FISCAL IMPACT

Fairfax County Public Schools performed approximately 1,500 deliveries in 1995-96 with a warehouse staff of 15 FTE, equating to 100 deliveries per position. Based on the Hillsborough County School District making 1,800 deliveries (one delivery per month per school for 10 months), the warehouse staff should be reduced by 6 FTE over the next three years while the passive order system is being phased in.

Inventory levels can be reduced by at least a one month's supply based on the implementation of the recommendation. The current inventory is estimated to be a

three-month level. The district will increase its cash flow by approximately \$495,000 with full implementation of the purchase order system. Investment income will also increase due to the additional cash flow. Increased investment income is based on a three-year phased implementation and an earnings rate of five percent per year.

The cost savings resulting from the reduction of warehouse staff are calculated as follows:

Salary of six staff using an average of \$25,800 per year	\$154,802
Benefits of 32 percent of salary	49,537
Total annual cost savings from reduction in warehouse staff	\$204,339
FY 1998-99 (1/3 of implementation complete)	\$68,113
FY 1999-2000 (2/3 of implementation complete)	\$136,226
FY 2000-01 and 2001-02 (implementation complete)	\$204,339

The cost savings resulting from the lower inventory levels are calculated as follows:

Description	<u>Inventory Reduction</u>	<u>Investment Income at 5%</u>
FY 1998-99 - 1/3 of annual reduction in inventory	\$165,209	\$8,260
FY 1999-2000 - 2/3 of annual reduction in inventory	\$330,418	\$16,521
FY 2000-01 and 2001-02 - annual reduction in inventory	\$495,628	\$24,781

Implementing the passive order system will require less inventory and, as a result, reduced warehouse space. Since the district has plans to build a central warehouse in the near future, the total planned square footage should be decreased to reflect reduced inventory levels from implementing the passive order system.

Recommendation	1997-98	1998-99	1999-2000	2000-01	2001-02
Reduce Warehouse Staff	\$0	\$68,113	\$136,226	\$204,339	\$204,339
Increase Investment Income	\$0	\$8,260	\$16,521	\$24,781	\$24,781
Total	\$0	\$76,373	\$152,747	\$229,120	\$229,120

FINDING

The central warehouse is currently not capable of storing all items. Therefore, the district rents an additional 19,998 square feet of warehouse space known as the Bonacker Warehouse. Exhibit 12-10 summarizes rent costs for the past two fiscal years.

**EXHIBIT 12-10
BONACKER WAREHOUSE RENT COSTS**

Year	Amount
1993-94	\$ 51,992
1994-95	\$ 75,099

Source: Warehouse Department, 1997.

Neither warehouse is adequately equipped with a racking system to provide maximum utilization of the space. With racking systems, most warehouses are able to achieve three to four times the amount of storage for each square foot within the warehouse. Exhibit 12-11 calculates the total amount of storage capacity for the central warehouse if the space utilization was two, three and four times the current square footage. Currently, the district is planning to rent tractor trailers to temporarily store furniture for new schools opening in 1997-98 because of limited storage space in current available warehouses. The district is incurring additional costs to rent trailers when the funds could be used to purchase a racking system which would provide for permanent additional storage capacity.

The Hillsborough County School District has been reluctant to invest in racking systems because they may be incompatible with a new warehouse planned for the district. Plans for construction of a new warehouse have been delayed because of overwhelming student population growth within the district. The district has acquired land for the purposes of constructing a new warehouse; however, construction of new schools has top priority.

**EXHIBIT 12-11
POTENTIAL STORAGE CAPABILITY OF CENTRAL WAREHOUSE**

Utilization Factor	Storage Capacity
200%	144,000
300%	216,000
400%	288,000

Source: MGT Review Team calculation, 1997.

RECOMMENDATION

Recommendation 12-12:

Acquire a racking system for the central warehouse.

Interviews with the warehouse management and staff revealed the need for a racking system. Staff have a thorough understanding of cost and efficiency savings that can be realized. Acquisition of the system has been delayed until the completion of the new warehouse. However, with the construction of the warehouse uncertain, the district should take action immediately. Upon construction of the new warehouse, the system should be transferred and re-installed.

IMPLEMENTATION STRATEGIES AND TIMELINE

1. The Assistant Superintendent of Business and Research should instruct the Supervisor of Purchasing to acquire a racking system and other related equipment to maximize use of the central warehouse. July 1997

2. The Supervisor of Purchasing, Warehouse Coordinator, Storeroom Manager, and warehouse staff should develop the requirements for implementing a racking system. August 1997

3. The Supervisor of Purchasing should issue an RFP for the racking system. September 1997

4. The selection of the racking system vendor(s) should be announced by Purchasing. November 1997

5. The installation and implementation of the racking system should be completed by the Warehouse Coordinator. December 1997 - February 1998

6. Storage at the Bonacker facility should cease. March 1998

FISCAL IMPACT

The long-term effect of this recommendation will result in a cost savings of \$148,619. Initial expenditures will be made for acquisition of the racking system and a forklift required to use the system. In addition, the warehouse's ventilation system will need to be upgraded to increase circulation when the racking system is installed.

Additional savings may occur in future years when a large number of new schools are opened. The need for temporary storage may be eliminated if the furniture can be stored in the district's existing facilities.

Recommendation	1997-98	1998-99	1999-2000	2000-01	2001-02
Acquire Racking System, Forklift, and Ventilation Modifications	(\$146,000)	\$0	\$0	\$0	\$0
Eliminate Bonacker Warehouse Rent	\$17,331	\$69,322	\$69,322	\$69,322	\$69,322
Total	(\$128,669)	\$69,322	\$69,322	\$69,322	\$69,322

FINDING

The Hillsborough County School District is not complying with Board policies and procedures for Warehouse Services. Section H-20.2 states:

. . . .The warehouse shall operate as an independent intergovernmental school services system. The users of the warehouse facilities shall bear the costs of this function. Service charges shall be established to reflect the costs of operations of this facility and may be adjusted from time to time by the recommendation of the Director of Finance and approval of the School Board.

A 10 percent service charge is being added to warehouse stock. This service charge does not cover the cost of operating the warehouse. Shortfalls are funded by the general fund. In order to recover the entire cost of operations, the service charge would need to be increased to 30 percent.

RECOMMENDATION

Recommendation 12-13:

Comply with Board policy and operate the warehouse as an independent intergovernmental school service system.

Compliance with policy should be accomplished with an increase in the service charge and a decrease in warehouse operating costs, or a combination of both.

IMPLEMENTATION STRATEGIES AND TIMELINE

- | | |
|---|----------------|
| 1. The Assistant Superintendent of Business and Research should instruct the General Director of Finance to recommend modifications which will result in adherence to Board policy. | July 1997 |
| 2. The General Director of Finance should recommend modifications. | August 1997 |
| 3. The Assistant Superintendent of Business and Research should approve the modifications. | September 1997 |
| 4. The General Director of Finance should implement the modifications. | September 1997 |

FISCAL IMPACT

Implementation of the recommendation will not result in a cost savings as long as campuses and departments are required to obtain supplies from the warehouse.

12.3 Copiers

CURRENT SITUATION

While testing the fixed assets inventory, the review team found that some schools had purchased copiers with funds solicited from outside sources. Analysis of data provided by the district revealed that over 43 percent of copiers owned by the district are over six years old. Exhibit 12-12 summarizes the analysis performed.

**EXHIBIT 12-12
SUMMARY OF HILLSBOROUGH COUNTY SCHOOL DISTRICT COPIERS
BY SITE AND AGE**

Facility Type	Average Number of Copiers	0-3 years Average Number of Copiers	4-6 years Average Number of Copiers	>6 years Average Number of Copiers	Percent of Copiers 0-3 years old	Percent of Copiers 4-6 years old	Percent of Copiers > 6 years old
Elementary	8.21	2.19	2.72	3.30	26.67%	33.10%	40.23%
Middle	11.88	5.79	3.45	6.73	36.24%	21.63%	42.13%
High	33.16	8.74	8.79	15.63	26.35%	26.51%	47.14%
Other Schools	7.06	2.11	1.83	3.37	26.32%	25.91%	47.77%
Administrative	6.13	1.81	1.58	2.74	29.47%	25.79%	44.74%
Total	11.00	3.17	3.04	4.79	28.81%	27.68%	43.51%

Source: Hillsborough County Property Control Department, 1997.

The Office Machine Repair Department (OMR) is responsible for maintaining and repairing of all district copiers, computers, and other office equipment. Fourteen (14) OMR staff members are dedicated to servicing copiers. A committee is currently studying opportunities to provide better methods for copying within the district. Alternatives being considered are incorporating new technology, outsourcing maintenance, and outsourcing copying.

FINDING

Analysis of copier data provided by the district shows there is a large disparity in the number of copiers at different campuses. Exhibit 12-13 shows the smallest and largest number of copiers at elementary, middle, and high schools.

**EXHIBIT 12-13
SMALLEST AND LARGEST NUMBER OF COPIERS BY SCHOOL TYPE**

Type of School	Smallest Number of Copiers	Largest Number of Copiers
Elementary	3	24
Middle	9	32
High	23	55

The Supervisor of Office Machine Repair has developed a proposed model to allocate copiers to campuses. The proposed allocation would be based upon the type of school and its enrollment. Large, medium, and small copiers are uniquely allocated to each campus.

RECOMMENDATION

Recommendation 12-14:

Implement the proposed model of allocating copiers to campuses within the district.

Implementation of the proposed copier allocation model should serve two purposes. First, schools of like enrollment will be provided the same resources to meet their objectives. Secondly, the cost of purchasing copiers within the district will be decreased because less copiers will be required. Excess copiers can be used as trade-ins on new copiers or sources of parts for copiers remaining in service. The allocation will clearly define the district's requirements so that proper planning and budgeting can be accomplished. Eventually, the cost of repairing and replacing excess copiers will be eliminated.

IMPLEMENTATION STRATEGIES AND TIMELINE

- | | |
|---|------------------------------|
| 1. The Director of Divisional Programs, General Director of Finance, Supervisor of Office Machine Repair, and Supervisor of Budget and Cash Management should develop an allocation model which would appropriately allocate the district's copier resources. | July 1997-
September 1997 |
| 2. The Assistant Superintendent of Business and Research should review and approve the allocation model. | September 1997 |
| 3. The Superintendent should review and approve the allocation model. | October 1997 |
| 4. The Board should approve the allocation model. | November 1997 |
| 5. The allocation model should be incorporated into the 1998-99 budget. | November 1997 |

FISCAL IMPACT

The district can implement this recommendation at no cost.

FINDING

Districtwide, over 43 percent of the copiers currently in service are more than six years old. OMR has provided the School Board replacement lists in each of the past five years. Budget constraints have forced the Board to disapprove the replacement of

copiers. Older copiers generally require more frequent repairs and parts are hard to find or very expensive. For example, the district has a large number of OCE 1825 models that require the use of a “master” (a huge rubber belt that transfers the picture to paper) to produce photocopies. Effective July 1996, the cost of a “master” increased from \$80 to \$200. When notified of the upcoming increase, OMR ordered a year’s supply prior to the increase becoming effective. Therefore, in 1996-97, the effect of the increase was not realized by the district. However, stock is running low and the cost increase will effect the district in the 1997-98 school year.

RECOMMENDATION

Recommendation 12-15:

Develop a replacement plan for copiers.

A replacement plan will assist the district in spreading the expenditures over a period of time versus incurring large expenditures in a single year when multiple copiers must be replaced. Timely replacement of copiers will reduce the amount of repair and maintenance costs required to keep older copiers in service.

IMPLEMENTATION STRATEGIES AND TIMELINE

- | | |
|---|---------------|
| 1. The Assistant Superintendent of Technical, Career and Adult Education should instruct the Director of Divisional Programs to develop a replacement plan for copiers. | October 1997 |
| 2. In cooperation with the Supervisor of Office Machine Repair, the Director of Divisional Programs should develop a replacement plan for the next five years. | October 1997 |
| 3. The Assistant Superintendent of Technical, Career and Adult Education should review and approve the replacement plan. | November 1997 |
| 4. The replacement plan should be provided by the Assistant Superintendent of Technical, Career and Adult Education to the Budget Department for inclusion in the 1998-99 budget. | November 1997 |
| 5. The Director of Divisional Programs and Supervisor of Office Machine Repair should review and revise the replacement plan for inclusion in the budget. | Annually |

FISCAL IMPACT

A replacement plan for copiers can be developed within existing resources.

FINDING

Site-based management requires the cost of new equipment to be charged to campuses. Both campuses and departments are not charged for copier repairs and, therefore, have no incentive to dispose of older copiers which are costly to repair. The Office Machine Repair Department absorbs all costs to repair copiers. OMR does not have a method of charging back the costs to the campuses and departments. In addition, campuses and departments are quick to place a service call for minor problems such as paper jams. OMR staff must respond to all service calls when the campuses may be able to correct the problem themselves.

Since districtwide data related to cost per copy for small and medium-sized copiers are not complete, the Supervisor of Office Machine Repair (OMR) recently analyzed the district's cost per copy using data available for large copiers (copiers that process 60 copies per minute) for the 1995-96 school year. During 1995-96, large copiers produced 313,500,000 copies. The average annual equipment cost for the large copiers was \$828,845, with attendant annual service costs of \$955,905, for a total annual cost of \$1,784,750. The total cost per copy produced by large copiers was \$.0057 per copy.

RECOMMENDATION

Recommendation 12-16:

Establish an Internal Service Fund in the Office Machine Repair Department to recover the cost of providing copiers and repair services to campuses and departments.

OMR should be operated as an Internal Service Fund that requires the unit to provide copier repair services to campuses and departments on a full cost-reimbursement basis. Copier repair services would be "sold" to campuses and departments based on clearly stated prices. Prices must be calculated to cover the full cost of operations and include the replacement cost of supplies and materials, payroll costs, operating expenses (including allocations for facilities use and utilities), capital cost recovery in future years through depreciation based on the estimated useful life of equipment, maintenance costs, and debt service (if any).

A feature of an Internal Service Fund essential for a competitive operation is to allow campuses and departments to purchase copier repair services from sources outside Hillsborough County School District if they are cheaper. This forces OMR to operate as a "business", using private sector practices to make appropriate capital investment decisions, understand its real cost of operations, and allocate resources properly—thereby justifying its existence and controlling costs.

A search for best practices revealed that Jefferson County School District, the largest school district in Colorado, operates 11 internal service funds. The Jefferson County School District found that creating internal service funds (where appropriate) creates significant incentives to conserve resources since services are no longer free to internal customers (e.g., the Fleet Maintenance Department's costs decreased \$500,000 over

two years). In fact, the Jefferson County School District refuses to “bail out” units operating as internal service funds that are in financial difficulty, thereby forcing them to operate like private vendors.

The Jefferson County School District has over 71,000 students and approximately 145 facilities of which all but 20 are high schools, middle schools or elementary schools. Jefferson County considers its copier program its most successful Internal Service Fund. The Jefferson County School District bases the success of the district’s many Internal Services Funds on the following:

- providing the schools with the dollars being expended centrally for copier maintenance;
- buying back the old equipment from the schools at depreciated value;
- allowing the schools to decide if they wish to participate in the program;
- placing the schools in a position to control how much they will spend on copies;
- allowing schools to spend the additional maintenance dollars as they wish; and
- creating a customer service environment.

Jefferson County also reduced the average number of copies per student as a result of establishing the Internal Service Fund charging campuses on a “per-copy” basis. Charging schools on a per-copy basis was agreed to with the expectation that fewer copies would be made by individual schools to save money. Jefferson County compared its average number of copies per student to peer districts and determined that the district produced 45 percent fewer copies per student than the average of its peers.

The Jefferson County School District notes that:

Reductions in costs for equipment repair could not have been achieved with an edict that all equipment over a certain age would not be repaired and that schools should up-grade their copiers. It was accomplished by establishing a program that placed the resources and financial responsibility in the hands of the individual(s) in the best position to make the decision.

IMPLEMENTATION STRATEGIES AND TIMELINE

1. The Director of Divisional Programs and Supervisor of Office Machine Repair should analyze the full cost of providing copier repair services, including labor, operating expenses (with related overhead allocations for facilities July 1997

- use and utilities costs), and capital costs.
2. The Director of Divisional Programs should calculate the costs of each copier repair service to be provided by the unit based on the repair request and develop a comprehensive pricing structure to be distributed to campuses and departments. August 1997
 3. The Director of Divisional Programs and the General Director of Finance should draft a procedure for establishing an Internal Service Fund for copier repair services. September 1997
 4. The Assistant Superintendent of Business and Research should approve the plan for an Internal Service Fund and related procedures, and present the plan to the Board for approval. October 1997
 5. The Director of Divisional Programs should communicate the price structure and procedures for interfacing with the newly created Internal Service Fund to campuses and departments. November 1997
 6. The replacement plan should be provided by the Assistant Superintendent of Business and Research to the Budget Department for inclusion in the 1998-99 budget. November 1997
 7. The Director of Divisional Programs should routinely perform financial and operational analyses to update the fee schedule as necessary. Quarterly

FISCAL IMPACT

OMR was able to provide the total number of copies produced by large and medium-sized machines for the 1995-96 fiscal year. A total of 313,500,000 copies were made on large machines and a total of 50,985,550 copies were made on medium-sized machines, for a total of 364,485,550 copies in 1995-96. Because the copy volume for small machines was not available, assumptions made in calculating the potential fiscal impact of this recommendation do not include small copiers and are likely to produce significantly more actual cost savings than the estimated savings. To be conservative, the fiscal impact is calculated based on a projected 30 percent reduction in the number of copies per student, rather than the 45 percent reductions achieved by the Jefferson County School District model.

Total copies (large and medium-sized copies)	364,485,550
Total student enrolled in Hillsborough County (pre-K through 12)	÷ 147,443
Average copies per student (Hillsborough County School District)	<u>2,472</u>
Average copies per student (Jefferson County)	<u>- 988</u>
Difference	<u><u>1,484</u></u>
Percentage difference (Jefferson County percent less than Hillsborough County)	60 Percent
<i>For comparative purposes only</i>	
Average copies per student (Hillsborough County School District)	2,472
Targeted percentage reduction if Internal Service Fund implemented	<u>x .30</u>
Decrease in average number of copies per student	742
Multiplied by number of students	<u>x 147,443</u>
Total annual reduction in copies	109,402,706
Multiplied by average cost per copy calculated by OMR	<u>x \$.0057</u>
Estimated annual cost savings	<u><u>\$623,595</u></u>

A 50 percent savings is estimated for the 1997-98 school year.

Recommendation	1997-98	1998-99	1999-2000	2000-01	2001-02
Establish Internal Service Fund	\$311,800	\$623,600	\$623,600	\$623,600	\$623,600