



The Library of Congress
Office of the Inspector General



Integrated Support Services

*Review of the Requirements Analysis for
the Proposed Fort Meade Logistics Center*

Review Report No. 2006-SP-802

March 2008



UNITED STATES GOVERNMENT

LIBRARY OF CONGRESS

Memorandum

Office of the Inspector General

TO: James H. Billington
Librarian of Congress

March 19, 2008

FROM: Karl W. Schornagel
Inspector General

A handwritten signature in black ink, appearing to read "Karl W. Schornagel".

SUBJECT: Review of the Requirements Analysis for
the Proposed Fort Meade Logistics Center

Review Report No. 2006-SP-802

This transmits our final review report on the Library's Requirements Analysis for the Proposed Fort Meade Logistics Center. The Executive Summary begins on page i and complete findings and recommendations appear on pages 7 to 18.

Integrated Support Services' (ISS) response to our draft report is briefly summarized in the Executive Summary and in more detail after individual recommendations appearing on pages 9, 12, 14, and 17. The complete response is included as Appendix D.

Based on ISS' response to the draft report, we consider recommendations I, III, and IV resolved. Please provide within 30 calendar days, an action plan addressing implementation of recommendation II including implementation dates, in accordance with LCR 211-6, Section 11.A.

We appreciate the cooperation and courtesies extended by ISS during the audit.

cc: Chief Operating Officer
Assistant Chief Operating Officer for Support Services
Integrated Support Services Director

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▶▶ EXECUTIVE SUMMARY

This report focuses on the requirements analysis for a potential replacement for the Landover Center Annex (the Annex), a facility in Landover, Maryland that the Library of Congress leases to store office supplies, furniture, publications, collection items, Copyright Office deposits, and other materials. The Annex is 32 years old and is in need of extensive renovation. Facility Services, the Integrated Support Services' component which operates the Annex, asserts that the facility does not provide sufficient space to accommodate the Library's future storage needs. The lease on the Annex expires in 2011 and, at that time, the Library plans to replace it with another facility to help consolidate storage of existing materials and accommodate future needs.

In 2004, the Library, in coordination with the Architect of the Capitol, proposed the construction of a new Logistics Center at Fort Meade to fulfill the Library's storage requirements. In 2005, the construction cost of the new facility was projected to be \$54.1 million. However, due largely to constraints in the current budget environment, the Library is now considering leasing as an alternative to constructing the proposed Logistics Center.

Critical to the Library's warehouse planning is a carefully-determined estimate of existing and future warehouse space requirements. A survey performed by Facility Services in April 2006 arrived at a current storage requirement of 527,900 cubic feet (cf) and, using a ten-year time horizon, projected a future requirement of 709,454 cf.

In this review, we evaluated the results of Facility Services' 2006 storage requirements survey and assessed the Library's basic planning assumptions for addressing its future warehousing needs. We determined that the methodology Facility Services used in its requirements survey is consistent with U.S General Services Administration guidelines. As recommended by GSA, the survey included measuring the space required to accommodate the materials on-hand and adding space to accommodate estimated surges and future growth for various material categories. However, we also determined that the survey's result is inflated because its baseline estimate includes unused and outdated material that

was stored in the warehouse at the time of the survey. We also questioned the reasonableness of Facility Services' estimates for growth and surge allowances in the survey's result based on other information we collected for our review.

Moreover, we concluded that the Library should critically review its basic assumptions about storing its materials. Specifically, it should consider what types of materials it should be storing and decide how to store these materials in developing an effective warehousing solution. ISS' strategy is to commit to a single, large storage facility at a high initial cost (and uncertain usage). We believe the Library can dynamically adjust the storage space it uses by building or leasing a relatively small storage facility, then leasing temporary facilities on an as-needed basis. This strategy could potentially save the Library \$6 to \$8 million over ten years.

ISS generally agreed with our findings and recommendations. Concerning our suggestion that ISS lease short-term rental space on an as-needed basis to supplement its storage space, ISS replied that "...the ability to appropriate monies on an annual basis and be assured that space would be available on an as needed basis in the Washington D.C. market place carries a risk that far exceeds the benefit of this approach."

We disagree. We concur that our approach carries some risk but do not believe that these risks outweigh the benefits. ISS' strategy to build or lease a warehouse with excess space to accommodate unpredictable surges and growth carries a guaranteed high risk of paying for space that may never be needed. Officials at GSA informed us that warehouse space for short-term periods is available in the Washington, D.C. metropolitan region. GSA also discussed other agencies that were able to reprogram funds in their budgets to facilitate short-term leases.

Since our project ended, the Library's funding priorities have changed, and the Logistics Center has been removed from the AOC's fiscal year 2009 budget request. The Library is now seeking an interim solution to its storage needs.

▶▶ BACKGROUND

The Library stores most of its materials, such as office supplies, surplus furniture, preservation supplies, as well as some collections at the Landover Center Annex (a leased facility located in Landover, Maryland) (the Annex), its three Capitol Hill buildings, three storage buildings at Fort Meade, and the Taylor Street Annex. This report focuses on a potential replacement for the Annex,¹ which is 32 years old and in need of extensive renovation. In addition, Facility Services, the component of Integrated Support Services (ISS) which operates the Annex, asserts that it provides insufficient space to accommodate the Library's future storage needs. The lease on the Annex expires in 2011, and at that time, the Library plans to replace it with another facility. According to the Library, this will help consolidate existing storage and accommodate future needs.

In 2004, the Library, in coordination with the Architect of the Capitol (AOC), proposed the construction of a new Logistics Center at Fort Meade. The Logistics Center was intended to be a multi-purpose facility, fulfilling the Library's storage needs and providing some collections swing space as well as office space for emergency operations.

We reviewed four separate reports estimating costs and space requirements:

- *Library of Congress Logistics Center at Fort. [sic] Meade, MD, Space Assessment & Economic Analysis* by Leo A. Daly (a Library contractor), August 2, 2006 [Daly Report];
- *Library of Congress Logistics Warehouse, Final Design Cost Submission – Revision 1* by URS Corporation (an AOC contractor), September 28, 2005 [URS Report];

¹ The Library leases a 216,500 square foot warehouse in Landover, MD for \$2, 319,284 annually or \$12.62 per square foot (Updated FY 2007 costs per ISS response to this report). Integrated Support Services' warehousing operation occupies 85,000 square feet of the facility. The remaining space is used for the Library's collections, such as motion pictures, music, serials, manuscripts, and copyright deposits. A portion of the space has also been designated as an emergency operations headquarters.

- *Library of Congress Storage Requirements* by ISS, April 7, 2006; and
- *ISS Update on the Logistics Center at Ft. Meade* by ISS, March 20, 2007 [ISS Update].

The Daly Report proposed a warehouse area spanning 148,043 square feet (sf)² and a total footprint of 213,371 sf.³ In 2005, the URS report projected cost of construction at \$54.1 million. We found that this projection included significant AOC fees for project and construction management. Furthermore, we found that the AOC and the Library set costly high-end construction standards for the facility. Subsequent reductions of certain expenses have reduced the cost projection to \$50.7 million.⁴

Due largely to constraints in the current budget environment, the Library is now considering leasing as an alternative to constructing a new facility.

Whether building or leasing, critical to any plan is a carefully determined estimate of the Library's existing and future space requirements. A survey performed by Facility Services in April 2006 arrived at a current storage requirement of 527,900 cubic feet (cf) and projected a 709,454 cf requirement for the foreseeable future (using a ten-year time horizon). The survey's results included current storage, estimated surge allowances⁵ for stored materials and a future growth allowance of 3 percent per year for 10 years. Details of Facility Services' survey are shown in Appendix B.

Facility Services was continuing its evaluation when we concluded our fieldwork for this report. Specifically, it was:

- "Revalidating" the Service Units' storage needs and surge allowances;

² Daly Report, page 3.

³ *Id.*, page 9.

⁴ The Library's published revised cost estimate of \$43.9 million did not include required warehouse shelving projected to cost an additional \$6.8 million. Accordingly, the revised cost estimate is more accurately reflected as \$50.7 million (\$43.9 million plus \$6.8 million).

⁵ Surge allowances represent additional storage space needed to accommodate day-to-day fluctuations. Surge allowances, as needed, range from 3 percent for relatively stable items with low churn (such as boxed records and forms) to 50 percent for bulky, frequently arriving items such as furniture and exhibit cabinets.

- Exploring with the Copyright Office the possibility of maintaining a joint storage facility;
- Determining whether it is more cost effective to store documents and records in the new facility or continue paying Iron Mountain, Inc.⁶ for storage; and
- Seeking analyses from a consulting firm on (a) warehouse space requirements, and (b) net present values of building versus leasing a warehouse facility.

Regardless of its final decision and before the Library can develop requirements for storage, it must decide on a short- and long-term strategy.

ISS Response and OIG Comments

ISS provided a lengthy response to our draft report, some sections of which did not specifically address our findings, but were geared to other issues. In addition to the lack of storage space, ISS asserted that the Landover Annex is unsuitable because of serious deficiencies in building and code compliance, security, environmental controls, and inefficient building design.

ISS also responded that there were two additional reports that we should have reviewed to fully understand the requirements analysis: AOC's *Program for Design, Logistics Warehouse Facility at Fort Meade, MD* dated June 16, 2003, and URS' *Logistics Warehouse Facility for the Library of Congress 100% Contract Document Submission, Project Manual, Volume 1 of 3*, dated June 30, 2004. On February 13, 2006, we met with and asked representatives from the AOC and Facility Services to provide us with any pertinent documents and reports. Neither the AOC nor Facility Services provided us with these two reports. After analyzing these additional documents, however, our position is unchanged.

ISS believes that we characterized the Logistics Center as a "warehouse" and did not take into account all of the other programmatic requirements such as space for collections processing, conservation work, conference areas, and COOP space. We believe our report is fair and accurate. The amount

⁶ The Library uses Iron Mountain, a company specializing in records storage and management, to fulfill certain storage needs.

of overall space for the other programmatic requirements is minor in comparison with the amount of space dedicated for basic storage. Incidentally, the titles of the two documents cited above that ISS thought critical for us to review both refer to the proposed facility as a “warehouse.”

ISS disagreed with our statement that the AOC and the Library set costly high-end construction standards for the facility: “AOC construction standards for a facility of this type achieve a life expectancy of 100 years, far exceeding the useful life of typical commercial warehouse construction. Superior construction required by the AOC has proven to be more economical over the lifecycle of the building and adds real, durable value to Government-owned buildings.” We stand by our finding that a life expectancy of 100 years is grossly excessive, especially for a warehouse. The 100-year standard is double the GSA standard. GSA requires exterior structures to be built to last at least 50 years. Similarly, an International Warehouse Logistics Association spokesperson confirmed that “[n]o one is specing a [warehouse] building as long as a 100 year time line.”

ISS also provided updated project information: “[r]ecognizing the current budget environment and Congressional priorities, the Library directed the AOC to remove the Logistics Center from their FY09 budget request[,]” and “[t]he Library remains fully committed to the Congressional Campus at Ft. Meade, but recognizes that an affordable interim solution is necessary until funding issues and the schedule for construction can be resolved. “...At the Library’s request, the Architect of the Capitol included \$400,000 in its FY09 budget request to fund a study of the Library’s interim requirements and to identify the most effective and economical facility alternatives. Related to this, and at the Library’s request, the Architect has also requested Lease Authority for the Library, an administrative provision the AOC currently has for other Legislative Branch agencies that will provide additional expertise and flexibility.”

►► OBJECTIVES, SCOPE, AND METHODOLOGY

Our objectives in this review were to determine whether Facility Services:

- used sound methodology to estimate future warehouse space requirements for Library materials, and
- made reasonable judgments and assumptions in developing the requirements estimate.

We consulted with the U.S. General Services Administration's (GSA) National Capitol Area Chief Appraiser. The Appraiser provided us with current rental rates for about 20 warehouses in Fort Meade, Maryland, and vicinity.

In our report dated March 2005,⁷ we had found that the Library was not using its storage space efficiently, and estimated that it could reduce its storage needs by about 20%. On September 25, 2007, we made an unannounced inspection of the Annex to follow up on this finding and determine if the Library had corrected this problem⁸. We also interviewed custodians for materials in Facility Design and Construction (FD&C) (mostly furniture and carpet tiles), the Preservation Directorate (storage boxes), the Interpretive Programs Office (exhibit cases), and the Geography and Map Division (surplus maps and census maps) to evaluate Facility Services' estimates for surge and expected future growth.

The Library engaged the Leo A. Daly consulting firm to perform an analysis of lease versus build cost. The Daly Report may be outdated, as it was based on 2005 cost figures (projected out to 2009). Nonetheless, its analysis represents a reasonable benchmark. We used the report's cost figures to form some of our conclusions. In addition, we reviewed several other reports that form the basis for the Library's proposed Logistics Center.

⁷ Inventory and Equipment Management: Lack of an Inventory System And Ineffective Processes Contribute to Inefficient Warehousing Operations, Audit Report No. 2004-PA-103 (March 2005).

⁸ Based partly on the findings from this inspection, the Library's Chief Operating Officer and the Inspector General toured the Landover Center Annex on January 24, 2008.

We conducted our fieldwork during September and October 2007, as a “non-audit service,” as defined in Section 2.14 of Government Auditing Standards (“The Yellow Book”) issued by the Comptroller General of the United States, and Library of Congress Regulation (LCR) 211-6, *Functions, Authority, and Responsibility of the Inspector General*.

►► FINDINGS AND RECOMMENDATIONS

The methodology that Facility Services and Logistics Services used in its requirements survey to estimate the Library's future warehouse space requirements is consistent with GSA guidelines. As recommended by GSA, the survey included measuring the space required to accommodate the materials on-hand and adding space to accommodate estimated surges and future growth for various material categories. However, the Library should reevaluate its fundamental storage strategy by reexamining what types of materials need to be stored, and how these materials should be stored. Also, the requirements estimate that Logistics Services has developed is inflated because it includes unused and outdated material that is currently in storage. Moreover, we question some of the judgments and assumptions that Facility Services and Logistics Services used in developing the estimate. Specifically, we question whether

- the estimate should include a growth factor in view of recently available material handling technologies, improved business practices, and the cost to acquire excess vacant space which may not be needed in the future, and
- surge allowances should be included in the estimate for certain materials, such as furniture and carpet tiles, preservation supplies, and duplicate maps.

The following sections provide assessments of significant issues we identified during our review.

I. The Library Must Critically Evaluate its Storage Strategy

As the Library moves forward in planning its future storage needs, we urge it to critically review its basic assumptions about storage. The Library should consider *what* types of materials it should be storing, decide *how* these materials should be stored, and only then begin developing requirements for a storage solution.

What Should Be Stored

This basic question should be the starting point for any well-considered analysis. The Library's mission is to collect and make available knowledge. As such, it is not – and should not be – for example, in the office supply storage and distribution business. Ordering, receiving, processing, storing, then distributing office supplies is a resource-intensive task. The Library would be well served to allow third party purveyors of office supplies to perform these activities, rather than duplicating functions available elsewhere at a lower cost. Given that most major office supply companies can now deliver within 24 hours of an order, why should the Library warehouse office supplies?

Likewise, the Library is not a records management organization. It may be more advantageous to allow a third party records management firm to collect and store its archived records. Storage of federal records requires certain environmental conditions and controls which add to the overall cost of constructing and maintaining a facility.

These two examples illustrate the need for the Library to critically examine what we store – and why. At the same time, the Library must perform a cost/benefit analysis to determine if it would be cost-beneficial to outsource one or more of these storage functions.

How Materials Should Be Stored

Once it has identified its basic storage needs, the Library should evaluate how to go about allocating storage space. For example, should the Library build a warehouse capable of storing a minimum core of its requirements or should it build one capable of handling surges in storage needs? Should it lease or combine building and leasing?

These questions form the core of this step of the analysis and are all contingent on a rigorous, structured cost analysis. The Library could decide, for example, to build a small storage facility which could handle its basic needs, and supplement it with temporary rental space as its needs change. This option would lock it into a small facility with less flexibility. On the other hand, it could build a large storage facility capable of handling current and future needs. This option would provide more flexibility, but would be inefficient because much space would remain empty until the future needs

occurred.⁹ Other options include leasing a small facility that could expand over time and leasing a small facility on a relatively short-term basis, supplementing the facility with other short-term rental space on an as-needed basis, and reevaluating its needs at the end of the initial lease term. This last option provides the Library maximum flexibility. Certainly, it may be marginally more expensive, but at the same time, it requires the Library to continually rethink its storage posture so as to minimize cost.

Recommendation

We recommend that the Library critically analyze its strategy for providing storage space for materials in order to determine the best storage strategy for various types of materials.

ISS Response and OIG Comments

ISS responded that it has hired a consultant and assembled a team to “work with each Service/Support Unit in an effort to identify, analyze, and definitize each storage requirement (both long term and short).” “...The completion of an initial review is currently scheduled for March 2008.”

ISS generally agreed with our conclusions concerning the supply operation. However, due to delays caused by the security requirement of off-site mail and freight screening, ISS determined that it is more cost efficient to maintain an inventory of copier paper.

Concerning our suggestion that ISS lease short-term rental space on an as-needed basis to supplement its storage space, ISS agreed that in theory this is a viable solution. However, ISS noted that “...the ability to appropriate monies on an annual basis and be assured that space would be available on an as needed basis in the Washington D.C. market place carries a risk that far exceeds the benefit of this approach.” We believe that ISS needs to explore this matter further. We agree that our approach carries some risk. However, we do

⁹ The Library has proposed taking this route, and using the temporary excess space to store Copyright deposits for a limited amount of time. We question how this would contribute to a more efficient storage scheme, given that, in theory, Copyright deposits would have to be continuously moved out as the Library’s other storage needs increase (using the Library’s own growth factors as a guide).

not believe that these risks outweigh the benefits. ISS' strategy to build or lease a warehouse with excess space to accommodate unpredictable surges and growth carries a guaranteed high risk of paying for space that may never be needed. Officials at the General Services Administration (GSA) informed us that warehouse space for short-term rental is available in the Washington, D.C. metropolitan region, albeit more expensive than space for a long-term period. GSA also discussed other agencies that were able to reprogram funds to facilitate leasing space for a short-term period. We reaffirm our recommendation.

II. The Baseline Space Estimate May be Inflated by Unused and Outdated Material

Logistics Services projects that the Library needs 709,454 cf of space to accommodate its future warehouse requirements. This estimate may be inflated because it includes items which most likely should no longer be stored in the Annex.

Logistics Services conducted a comprehensive review to identify and eliminate unused, outdated, or obsolete materials from the Landover warehouse in response to a Senate Appropriations Committee requirement included in 2006 Senate Report 109-89 based on an audit report we issued in 2005. Logistics Services claims that actions it took in response to these reduced the inventory by more than 20 percent.

Although Logistics Services' efforts are a good start, more work is needed. During our September 2007 unannounced inspection at the Landover Annex, we identified some inventory materials which have been stored in the warehouse for five years or more and will likely never be used. Some items are outdated and are no longer usable because they have been replaced by updated products. Some notable observations follow:

- The Publication Office had some materials dating back to 1997 and 2000. The Warehouse Foreman informed us that the Publications Office Director has not responded to requests to determine if this material is still needed;
- We found two pallets of note paper with an expiration date of "12/20/2004;" and

- FD&C had numerous boxes of steel case furniture materials dated “2004”. FD&C has also stored carpet and floor tiles in the warehouse since 2004 and 2005.

On January 24, 2008, subsequent to our fieldwork, we accompanied the Library’s Chief Operating Officer during a tour of the Landover Annex. The observations noted above were reaffirmed during this trip.

Maintaining unused and outdated items in the warehouse is principally attributable to three factors: (1) the lack of service unit cooperation in managing their warehouse materials, (2) a warehouse space assignment process that yields minimal incentive for service units to minimize the spaces they occupy, and (3) the absence of accurate, up-to-date information on inventory turnover.

Under current procedures, Logistics Services assigns warehouse space to service units and allows them to determine the materials they put in storage. Although this provides some incentive to the service units to use their space efficiently, it does not ensure that total warehouse space is efficiently used.

Implementing a reimbursement-based procedure could provide a more effective incentive to achieve greater warehouse space efficiency. For example, Facility Services could charge a service unit a fixed dollar amount per cubic foot of storage space. Such a procedure would likely compel a service unit to monitor its warehouse space more closely, dispose of unneeded material more frequently, and minimize the space it occupies to save money.

In addition to a more effective incentive, the service units need to have accurate information on the turnover of their inventory items. In the past, this information has not been available. But now, through its new automated inventory system, it is possible for Logistics Services to provide inventory turnover information to the service units. At minimum, Logistics Services should conduct periodic reviews or inventories of materials stored by service and support units in order to maintain control over storage space.

Such data would help service units order their materials more efficiently, manage their material inventories more effectively, and save them money.

Recommendation

We recommend that Facility Services consider implementing a reimbursement-based procedure for warehouse storage, such as charging a service unit a fixed dollar amount per cubic foot of space. At minimum, Logistics Services should conduct periodic reviews or inventories of materials stored by service and support units and communicate this information to the service and support units.

ISS Response and OIG Comments

ISS responded that it “is unaware of any precedence [sic] for an individual agency to enact a cost sharing structure across an agency.” In our opinion, this is not a good reason not to implement incentives for efficiency. We believe ISS needs to adopt a more progressive, open-minded approach to space management. Our recommendation is similar to the recommendation we made concerning office space in our audit *Opportunities Exist to Improve Space Management—Final Audit Report No. 2004-PA-104*, issued July 2005.

ISS’ response did not directly address our recommendation regarding Logistics Services conducting inventories of the service and support units’ materials. Management replied that “ISS provides a storage service to SU/SU’s, however with the exception of the supply operation, ISS do not provide any inventory management of the items sent to ISS for storage.” We believe ISS’ response illustrates the problem. Neither Logistics Services nor the service and support units are assuming responsibility for the materials stored at Landover. Although the inventory items belong to the service and support units, we believe Logistics Services serves as the custodian and should provide inventory control. This control not only provides a useful service to the service and support units but also provides control within the warehouse to detect possible theft.

Several times in its response, ISS mentioned that it could not confirm with any of its staff members or the visitor’s log at LCA the unannounced inspection we conducted on Tuesday,

September 25, 2007. We would like to assure ISS that we inspected the warehouse space assigned to Logistics Services on this date. At our request, the Office of Emergency Preparedness and Protective Services provided us with a copy of the visitor's log for that date. It shows the auditor's printed name and signature as well as an arrival time of 8:55 a.m. and a departure time of 12:00 p.m.

The Warehouse Foreman accompanied us during the inspection. He pointed out two areas in particular where he thought more efficient use of space may be possible. First, in aisles S, T, and U, the Publication Office was storing some materials dating from 1997 and 2000. The Warehouse Foreman mentioned that he had asked the Publications Office Director to determine if this material is still needed and if not then dispose of it. Second, the Warehouse Foreman brought to our attention that aisle O has traveling exhibit materials belonging to CDS, Copyright, Photoduplication Service, NDL, and NLSBPH. He was unsure if they are still used.

We note that while ISS questioned whether we performed an inspection, it never questioned our findings during the inspection.

III. The Requirements Estimate Includes at Least Three Questionable Surge Allowances

In general, Facility Services' strategy of including a factor to accommodate additional warehouse capacity needed for possible surges in volumes of material is reasonable. As shown in Appendix B, Facility Services assigned a surge allowance of 10 percent to most items. However, we question whether the surge factors assigned to furniture and carpet tiles (mostly 50%), preservation supplies (30%), and duplicate maps (45%) are reasonable.

Furniture and Carpet Tiles

Although Facility Services has new facilities to furnish such as the Library's new National Audio-Visual Conservation Center in Culpeper, Virginia, and the storage and preservation facilities at Fort Meade, FD&C informed us that "just-in-time" ordering procedures could be implemented and better project management could be applied to its projects. As a result,

additional warehouse space may not be needed for furniture and carpet tiles.

Preservation Supplies

Facility Services' warehouse requirements estimate indicates that the Preservation Directorate was occupying 56,768 cf as of March 2006. The Directorate is confident that that amount of space would be sufficient for its material and could possibly be reduced if better inventory turnover information was available from Logistics Services.

Duplicate Maps

The Geography and Map Division confirmed that it has duplicate maps occupying 18,000 cf in the Madison Building. The Division did not expect to need any additional warehouse space for this material.

Material surge and growth space for the three items referenced above total more than 80,000 cf. A significant portion – 11.7%¹⁰ of the storage portion of the proposed facility – is allocated to this space.

Recommendation

We recommend that Facility Services reevaluate the surge allowances for these items.

ISS Response and OIG Comments

ISS concurred with the recommendation and responded that it has already retained the services of a consultant to conduct an in-depth survey of items currently in storage and validate customer storage requirements.

Regarding the storage of furniture, ISS stated that it has developed a just-in-time furniture delivery system and "FD&C will validate this method prior to moving furniture inventories to a new leased warehouse."

¹⁰ Surge space: 82,918 cf divided by total storage space 709,454 cf equals 11.7%.

IV. Growth Estimates are Questionable

Facility Services estimated the Library's storage requirements by taking the materials on-hand as of March 2006 and adding an annual growth factor for certain categories of materials. We believe the growth factor – a three percent increase per year, for a grand total of 41 percent over ten years – lacks adequate support.

The Library was storing approximately 445,000 cf of materials as of March 2006. The growth estimate adds an additional 181,554 cf, or 25.6%¹¹ of the storage portion of the proposed facility.

We question whether this growth factor should be included in the requirements estimate for three reasons:

- As noted in finding II above, we believe that the Library is storing materials it should not be and therefore inflating the baseline from which its future estimates spring;
- Both the Library's current materials storage principles and projected growth factors are based on an outdated model; and
- Dynamically adjusting space on an as-needed basis may eliminate the need for a fixed amount of growth space.

Baseline

Our 2005 audit report found significant inefficiencies in materials storage. Although it has made significant progress in reducing its storage needs over the last few years, our unannounced visit to the warehouse in September 2007 indicated that the Library continues to store materials it should not. Our announced visit in January 2008 with the Chief Operating Officer again confirmed that the Library continues to store unneeded items in the warehouse just because it has space to do so. In order to properly calculate its storage needs, the Library must start from a "clean" baseline. This has not yet occurred.

¹¹ Growth space: 181,554 cf divided by total storage space 709,454 cf equals 25.6%.

Modern Materials Handling and Storage Principles

In the past, slower ordering and transportation options required large organizations to maintain stockpiles of supplies they were going to need. If, for example, it took a week to order and receive copier paper, a certain amount of inventory had to be held on hand to avoid disrupting business processes. Notwithstanding recent improvements in materials handling technologies, the Library continues to practice the old-fashioned model of materials storage. In considering its storage needs, the Library should review some improved practices, for example:

- "just-in-time" materials deliveries: this principle has fundamentally changed the operations of manufacturers, warehouses, and distribution centers. Instead of placing large orders and storing materials until they are used, the Library could order materials as it needs them from vendors who are able to make timely deliveries.
- staggered deliveries: if the Library believes it is necessary to place a large order with a vendor (for example, in the case of custom-made storage boxes), it could negotiate a staggered delivery schedule in its contract with the vendor.
- distributed storage: the Library could make use of alternative storage facilities to temporarily house materials for which it has no immediate need. For example, it may be less expensive to require a vendor to store office furniture until the Library is ready to install it.

Certainly, incremental costs may be associated with requiring vendors to stagger deliveries or temporarily store materials; however, these costs may be significantly less than the up-front cost of making storage space available for future needs.

These methods will allow the Library to streamline its storage process, make better use of less space, and save money.

Dynamic Adjustment

Instead of committing itself to a single, large storage facility at a high initial cost (and uncertain usage), the Library can dynamically adjust the storage space it uses by building or

leasing a relatively small storage facility, then leasing temporary facilities on an as-needed basis. Using the Library’s own growth estimate of approximately 182,000 cf, we calculated that the cost to lease that amount of storage space is about \$1.5 million over ten years.¹² The cost to build the same amount of growth space ranges from \$7.5 to \$9.6 million, depending on which construction cost estimate is used.¹³ Leasing the space on an as-needed basis could potentially save the Library \$6 to \$8 million over ten years.¹⁴ Because ISS did not provide a single, detailed, cohesive estimate of space and cost, we had to derive cost estimates from multiple sources. See Appendix C for further calculations.

Recommendation

We recommend that Facility Services recalculate the growth factor starting from a “clean” baseline and consider leasing storage space on an as-needed basis to accommodate potential growth in storage requirements.

ISS Response and OIG Comments

ISS responded that it has already retained the services of a consultant to conduct an in-depth survey of items currently in storage and validate customer storage requirements.

¹² Present value of minimum lease payments for growth space acquired ratably over ten years. See appendix C.

¹³ Allocation of construction cost to growth estimates:

	Daly Report	URS Report	ISS Update
Construction cost (millions)	\$42.4	\$54.1	\$50.7
Storage square feet (thousands)	148		
Total square feet (thousands)	213	69.5%	[A]
Cost allocated to storage:			
Growth cubic feet (thousands)	182		
Storage cubic feet (thousands)	709	25.6%	[B]
Percentage of total square feet allocated to growth (A times B)		17.8%	
Square feet (thousands)		37.9	
Cost allocated to growth (millions)	\$7.5	\$9.6	\$9.0

¹⁴ Our calculation does not take into account intangibles such as the availability of space and is intended only as a guide.

Concerning leasing space, ISS responded that it had compared the cost of storing system furniture at the distributor's warehouse with storing the same product at Landover and found it is more cost effective to store it at Landover. We believe this may be the case because FD&C's past inefficiencies in coordinating the purchase with the installation date has resulted in long-term storage. To illustrate, during our two inspection trips (September 2007 and January 2008) we observed numerous boxes of steel case furniture materials dated "2004." The ISS response to section III of this report stated that FD&C has developed a just-in-time furniture delivery system. If effectively implemented, we believe this will allow FD&C to order smaller quantities and better transfer the storage cost to the vendor.

» CONCLUSION

Critical to the cost effectiveness of either the lease or build alternative for the Library's warehouse needs is a carefully-determined estimate of existing and future warehouse space requirements. Such an estimate must be based on sound methodology, valid data on usable existing inventory, and reasonable assumptions on events that could occur which would affect future warehouse material levels.

Our review shows that the methodology that Facility Services used to estimate the Library's future warehouse space requirements is sound and consistent with GSA guidelines. As recommended by GSA, Facility Services measured the space required to accommodate the materials on-hand and added space to accommodate estimated surges and future growth for various material categories. However, our review also shows that the estimate that Facility Services prepared is overstated and that some assumptions involved in its development are questionable. Further, the Library has not critically reviewed its basic assumptions for a storage facility. Failure to do so could incur substantial unnecessary additional long-term costs.

Before moving forward with a decision on the Library's warehouse needs, Facility Services should reevaluate its estimate of the Library's future warehouse space requirements by focusing on the areas identified in this report. An effective reevaluation should minimize costs and maximize efficiency for the storage decision that is eventually made.

The original cost estimate of \$54.1 million to build at Fort Meade included costly design, construction, and finish choices for a structure that was, for the most part, storage space. Facility Services should strive for cost consciousness in its construction plans, whether for a new facility at Fort Meade, or tenant improvements to a leased facility.

Major Contributors to This Report:

Nicholas G. Christopher, Assistant Inspector General
Patrick J. Cunningham, Senior Auditor

▶▶ APPENDIX A: ACRONYMS USED IN THIS REPORT

AOC	Architect of the Capitol
FD&C	Facility Design and Construction
GSA	General Services Administration
ISS	Integrated Support Services
CF	Cubic Feet
SF	Square Feet

►► APPENDIX B: BREAKDOWN OF STORED MATERIALS

Service Unit/Location	Items	Cubic Feet	Total Cubic Feet	% of Total	Surge Factor
Landover (excluding furniture)	Forms and records	105,152		23.6%	10%
	Film cans	2,304		.5%	50%
	Computers	2,880		.7%	10%
	Copy paper	9,664		2.2%	10%
	Misc.	14,400		3.2%	10%
	Office Supplies	3,600		.8%	30%
Total Landover			138,000	31.0%	
Ft. Meade	Mostly metal shelving and misc. Less: IPO Cases	83,847 9,517	74,330	16.7%	0 to 10%
Integrated Support Services	Furniture and carpet tiles		73,280	16.5%	Mostly 50%
Preservation	Collection storage boxes		56,768	12.8%	30%
Geography & Map	Duplicate maps (18,000 cf.) and census maps (21,100 cf.)		39,000	8.8%	45% and 10%
Interpretive Programs Office	Mostly exhibit cases and crates		32,331	7.3%	0%
Taylor Street	Books, boxes, furniture		27,995	6.3%	Mostly 10%
Collection Access, Loan, & Management	Shelving and business records		2,148	0.5%	5%
Prints & Photographs	Exhibit materials		668	0.2%	5% and 45%
African/Middle Eastern	Books and newspapers		462	0.1%	10%
Materials Currently Stored			444,982	100.0%*	
Surge Allowance			82,918	18.6%	
Current Requirements (with surge)			527,900		
Growth Allowance			181,554	40.8%	
TOTAL			709,454		
Table 1: Storage estimates by Service unit/category					

Source: Facility Services' Library of Congress Storage Requirements report dated April 7, 2006.

*Totals may not agree due to rounding.

▶▶ APPENDIX C: LEASING COST ESTIMATE

We attempted to locate a cost per square foot for the growth and surge portions of the facility. The four reports we reviewed alternately quoted square and cubic feet; none related one to the other. We therefore had to derive the cost per square foot for the various segments of the storage portion of the facility. Our calculations are rough estimates at best, since different finishes and fit-outs affect the final cost of each segment, however, they can be used as a guide.

Facility Services' April 7, 2006 *Library of Congress Storage Requirements* report allocated 181,554 cubic feet, or approximately 25.6% of the total storage area (709,454 cf) to growth. The Daly report allocated 148,043 square feet to the storage area. By extension, therefore, we estimate the growth portion of the facility to occupy about 37,900 sf (25.6% of 148,043 sf).

Year	Gross Square Feet	Usage Rate	Required Square Feet	Annual Rent Per Sq. Ft.	Gross Annual Rent	NPV of Rent
1	37,900	10%	3,790	\$8.00	\$30,320	\$28,876
2	37,900	20%	7,580	8.28	62,762	56,927
3	37,900	30%	11,370	8.57	97,439	84,171
4	37,900	40%	15,160	8.87	134,465	110,625
5	37,900	50%	18,950	9.18	173,964	136,306
6	37,900	60%	22,740	9.50	216,064	161,230
7	37,900	70%	26,530	9.83	260,897	185,415
8	37,900	80%	30,320	10.18	308,604	208,875
9	37,900	90%	34,110	10.53	359,331	231,628
10	37,900	100%	37,900	10.90	413,230	253,688
Totals					\$2,057,077	\$1,457,741

Table 2: Net present value of future minimum lease payments

To calculate the estimated cost to lease this space, we used an annual rental estimate of \$8 per sf¹⁵, an annual inflation factor of 3.5%, a present value factor of 5%, and assumed that the space would become necessary in equal increments over a ten-year period. See table 2.

¹⁵ Daly Report, page 25.

►► APPENDIX D: ISS RESPONSE TO THE DRAFT REPORT

UNITED STATES GOVERNMENT
Memorandum

LIBRARY OF CONGRESS
DATE: February 11, 2008

TO: Karl Schornagel
Inspector General

FROM: Robert Williams, Acting Director
Integrated Support Services

SUBJECT: ISS Response to OIG Review Report No. 2006-SP-802

In the Draft Review Report *Review of the Requirements Analysis for the Proposed Fort Meade Logistics Center* (2006-SP-802, January 14, 2008), your office reviewed aspects of the Library's requirements analysis and justification for construction of the planned Logistics Center at Ft. Meade as a replacement for the Landover Center Annex, a commercial warehouse facility leased from GSA in Landover, Maryland.

As required by LCR 211-6, *Functions, Authority, and Responsibility of the Inspector General*, Section 10.B, this transmits Integrated Support Service' response to the draft report, indicating general agreement or disagreement with major findings and recommendations of the report, explaining reasons for any disagreement, as well as clarifying or correcting information contained in the report. I understand ISS' response to the draft report will be included in the final report.

We appreciate the opportunity to review and comment on your draft review report and look forward to working with you through the Audit Resolution process.

Please let me know if you have questions, comments or require other information.

Attachments

ISS Response to OIG Draft Review Report No. 2006-SP-802 (February 11, 2008)
Logistics Center Program for Design (AOC, June 16, 2003)
AOC Project Manual (including narrative on basis of design), (June 30, 2004)

cc: Jo Ann Jenkins, Chief Operating Officer
Lucy Suddreth, Assistant Chief Operating Officer for Support Services
Mary Levering, Director, ISS
Neal Graham, Chief, ISS/Facility Services

ISS Response to OIG Draft Review Report No. 2006-SP-802

BACKGROUND

In the Draft Review Report *Review of the Requirements Analysis for the Proposed Fort Meade Logistics Center* (2006-SP-802, January 14, 2008), the Office of the Inspector General reviewed aspects of the Library's requirements analysis and justification for construction of the planned Logistics Center at Ft. Meade as a replacement for the Landover Center Annex, a commercial warehouse facility leased from GSA in Landover, Maryland.

In accordance with LCR 211-6, *Functions, Authority, and Responsibility of the Inspector General*, Section 10.B, the following is Integrated Support Service' response to the draft report, indicating general agreement or disagreement with major findings and recommendations of the report, explaining reasons for any disagreement, as well as clarifying or correcting information contained in the report.

1. OIG Comment (Page i, Para. 1): This report focuses on the requirements analysis for a potential replacement for the Landover Center Annex (the Annex), a facility in Landover, Maryland that the Library of Congress leases to store office supplies, furniture, publications, collection items, Copyright Office deposits, and other materials.

ISS Response: Design criteria for the Logistics Center was based on a detailed analysis of programmatic and technical requirements developed jointly over several years by the Library and the AOC. Comprehensive requirements were published in the AOC Program for Design dated June 16, 2003. This document provides background information and detailed requirements for the new facility.

It appears that the IG's office did not review the basic Program for Design in its assessment of the Library's requirements analysis. Excerpts from the program are attached to this response; a copy of the Project Manual dated June 30, 2004 (Volume 1 of 3), including narrative describing the basis of design is being provided separately to the IG.

Furthermore, Integrated Support Services believes that the IG's characterization of the facility as a warehouse, and review primarily of storage needs, does not take into account all of the other programmatic requirements. The Logistics Center is required to provide secure, environmentally controlled space for collections processing, conservation work, staff and conference areas, telephone and data rooms, and secure COOP space for LOC leadership and senior managers. Any comparison of the Logistics Center to a commercial storage warehouse must also address these critical operating requirements.

2. OIG Comment (Page i, Para. 1): Facility Services, the Integrated Support Services' component which operates the Annex, asserts that the facility does not provide sufficient space to accommodate the Library's future storage needs.

ISS Response to OIG Draft Review Report No. 2006-SP-802

ISS Response: The IG's draft report presents a fundamental and recurring misunderstanding of the relationship between ISS/Facility Services and ISS/Logistics Services. ISS/Facility Services is responsible for oversight of building-related issues including GSA occupancy agreements, rent and utility payments, maintenance contracts, building support services, etc. ISS/Logistics Services is responsible for day-to-day operations of the Landover Annex warehouse, supply store, receiving and logistical operations. Logistics Services is a separate office within ISS and is not part of Facility Services.

Furthermore, ISS/Facility Services asserts that the Landover Annex is unsuitable to accommodate current and future storage not simply because of a lack a storage space -- but also because of serious deficiencies in building code compliance, safety compliance, security, environmental controls and fundamentally inefficient building design. ISS/Logistics Services concurs with this assessment.

3. OIG Comment (Page i, Para 4): In this review, we evaluated the results of Facility Services' 2006 storage requirements survey and broadly assessed the Library's basic planning assumptions for addressing its future warehousing needs.

ISS Response: The storage requirements survey cited in the IG report was conducted in March 2006 by the Facility Design and Construction office (a section within ISS/Facility Services) and by ISS/Logistics Services to validate with more specificity materials to be stored in the Logistics Center. Integrated Support Services' report entitled Library of Congress Storage Requirements focused on storage needs as recommended by the IG, but does not purport to validate all of the other programmatic and technical requirements of the proposed facility. (See also response No. 1.)

4. OIG Comment (Page ii, Para. 1): Moreover, we concluded that the Library should critically review its basic assumptions about storing its materials. Specifically, it should consider what types of materials it should be storing and decide how to store these materials in developing an effective warehousing solution.

ISS Response: ISS has already hired a consultant and assembled a team consisting of staff with extensive warehouse management and logistics experience to work with each Service/Support Unit in an effort to identify, analyze, and definitize each storage requirements (both long term and short). The team will contact each SU/SU space liaison via the SU/SU head for a series of discussions on material management and the LCA. The intended results of these discussions are; identification of should be stored at the LCA, the expected short term "churn" of materials coming in and out of the LCA, a materials review plan to assure only current and necessary materials are retained at the LCA, and what materials are in the "pipeline" that will ultimately be destined to LCA.

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From this comprehensive review, a definitive short term and long-term storage requirement to support the service units can be determined, and an efficient warehouse storage configuration can be determined. The completion of an initial review is currently scheduled for March 2008.

5. OIG Comment (Page 1, Footnote 1): The Library leases a 216,500 square foot warehouse in Landover, MD for \$1,275,185 annually or \$5.89 per square foot. Integrated Support Services' warehousing operation occupies 85,000 square feet of the facility. The remaining space is used for the Library's collections, such as motion pictures, music, serials, manuscripts, and copyright deposits. A portion of the space has also been designated as an emergency operations headquarters.

ISS Response: The GSA charge basis of 216,500 usable square feet is measured according standards of the Building Owners and Managers Association (BOMA). The total lease costs in FY07 were \$2,319,284 or \$12.62 per square foot.

Based on current utilization verified in 2007 by field survey, the ISS warehousing and supply store operations occupy 75,949 net square feet, exclusive of building common areas. The ISS warehousing operation will expand into Bay 2 in February 2008 for a total assignment of 95,949 square feet managed by Logistics Services.

6. OIG Comment (Page 2, Para. 1): The Daly Report proposed a warehouse area spanning 148,043 square feet (sf) and a total footprint of 213,371 sf. In 2005, the URS report projected cost of construction at \$54.1 million. We found that this projection included significant AOC fees for project and construction management.

ISS Response:

(A) The total area of the Logistics Center is 162,043 gross square feet (GSF). To conduct a meaningful comparison of warehousing alternatives, the consultant excluded 14,000 GSF allocated by the Library to COOP and supplemental office areas, and considered a general storage area of 148,043 gross square feet (GSF).

The total building area referenced on page 9 of the Daly Report (213,371 GSF) is erroneous because it includes an allowance for material no longer stored by the Library and duplicate planning factors for building circulation. On page 21 of the Daly Report, the consultant affirms that 2164 shelving units recommended would satisfy the LOC requirement for 709,454 cubic feet of general storage space.

(B) Efforts by the AOC and the LOC to reduce and defer costs reduced the initial project cost by \$12.28 million. Significant savings were achieved by reducing AOC markup and overhead (\$2.45M).

- *Reduction of \$2.45M was achieved by reducing the cost of AOC and Army Corps of Engineers oversight. COE change in fee structure for construction management*

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(flat fee vs. percentage of construction cost) saves \$825,474. AOC plan to hire two temporary employees for project management saves \$1,605,563 in FY07 dollars.

7. OIG Comment (Page 2, Para. 1): Furthermore, we found that the AOC and the Library set costly high-end construction standards for the facility.

ISS Response: AOC construction standards for a facility of this type achieve a life expectancy of 100 years, far exceeding the useful life of typical commercial warehouse construction. Superior construction required by the AOC has proven to be more economical over the lifecycle of the building and adds real, durable value to Government-owned buildings.

Other elements of the design impacting cost were driven by the Library's requirements for secure, 100% environmentally controlled space, incorporating some (not all) of NARA's facility design standards for storage.

Furthermore, esthetic aspects of the building (e.g. exterior materials, roof type, fenestration and landscape) were influenced substantially by congressional and community concerns for appearance and for compliance with Ft. Meade base design standards. These were not AOC or LOC choices.

8. OIG Comment (Page 2, Para. 1): Subsequent reductions of certain expenses have reduced the cost projection to \$50.7 million.

ISS Response: At the request of House and Senate clerks, the Library worked cooperatively with the AOC to review the project design and cost factors to identify possible ways to reduce costs while still accomplishing the basic requirements of the Library. This effort focused primarily on adjustments that would not require overall redesign of the facility and would allow construction to proceed according to the schedule.

Based on construction documents issued in 2005 by URS Corporation (a government contractor), the total project cost was estimated to be \$54.13 million. Subsequent efforts by the AOC and the LOC to reduce and defer costs reduced the initial project cost by \$12.28 million. Significant savings were achieved by reducing AOC markup and overhead (\$2.45M), LOC program reductions (\$1.07M), deferring shelving (\$6.81M) and changing the approach to fit-out of COOP space (\$1.95M).

- Reduction of \$2.45M was achieved by reducing the cost of AOC and Army Corps of Engineers oversight. COE change in fee structure for construction management (flat fee vs. percentage of construction cost) saves \$825,474. AOC plan to hire two temporary employees for project management saves \$1,605,563 in FY07 dollars.*

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- *LOC program reductions of \$1.07M include elimination of a Leak Detection System (\$841,327 plus markup) and other items. AOC and LOC concur this system may be eliminated without creating unacceptable risk.*
- *Eliminating shelving from the contract for construction would reduce initial costs, markups and contingencies by \$6.81M. The Library recommended purchasing shelving later, when needed, under a separate AOC contract, at an estimated cost of \$6.38M. This approach postpones the purchase for two years and results in a net savings of \$430,000 by eliminating certain AOC contingencies and unnecessary markups.*
- *By eliminating fit-out of COOP space from the AOC contract for construction, only structural elements necessary to maintain the integrity of the building will be constructed, saving \$1.95M. Facility Services' plan is for the AOC and LOC to complete the fit-out using other available funding and recycled furniture. This approach reduces cost and eliminates certain AOC contingencies and unnecessary markups while still accomplishing the Library's requirement.*

With escalation and other cost adjustment, the FY09 total project cost is estimated to be \$42.50 million. Recognizing the current budget environment and Congressional priorities, the Library directed the AOC to remove the Logistics Center from their FY09 budget request.

9. OIG Comment (Page 2, Para. 2): Due largely to constraints in the current budget environment, the Library is now considering leasing as an alternative to constructing a new facility.

ISS Response: Lack of appropriated funds for several new buildings planned for Ft. Meade has delayed construction and occupancy of the Logistics Center, Copyright Deposits Facility and Collections Storage Modules. Together, these facilities represent more than 300,000 square feet of specialized space needed today to more effectively accommodate day-to-day operations and essential storage requirements.

Understanding the current budget situation and congressional priorities, Facility Services anticipates that implementation of the AOC facility master plan for the Library will be further delayed. The Library remains fully committed to the Congressional Campus at Ft. Meade, but recognizes that an affordable interim solution is necessary until funding issues and the schedule for construction can be resolved. Accordingly, Facility Services is taking appropriate steps to assess and accommodate temporarily the Library's most critical space and facility needs. (See also response No. 10.)

The original program plan for the Logistic Center to be built at Ft. Meade was conceived in the mid-'90s as the most viable option to resolve the issues associated with the current Logistic Annex. Driven largely by budget constraints, the lease

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option redirection provides an opportunity for the Library of Congress to reevaluate our storage needs. Funding requested in the AOC FY09 Budget, is to provide an opportunity to study the expanded Library concerns regarding the 8-year delay in the Library's Ft. Meade Master Plan build-out. 1) Logistic warehousing 2) Copyright Deposit material storage and 3) surge space for collection storage, all caused by Master Plan delays.

10. OIG Comment (Page 3, Para. 1): Facility Services was continuing its evaluation when we concluded our fieldwork for this report.

ISS Response: Integrated Support Services, and its Facility Services division, are working closely with the Library's executive leadership, the Office of the Inspector General, affected Service and Support Units, and the Architect of the Capitol to assess and coordinate essential storage and operating requirements. At the Library's request, the Architect of the Capitol included \$400,000 in its FY09 budget request to fund a study of the Library's interim requirements and to identify the most effective and economical facility alternatives. Related to this, and at the Library's request, the Architect has also requested Lease Authority for the Library, an administrative provision the AOC currently has for other Legislative Branch agencies that will provide additional expertise and flexibility.

11. OIG Comment (Page 3, Para. 6): Regardless of its final decision and before the Library can develop requirements for storage, it must decide on a short-and long-term strategy.

ISS Response: Any strategy must be customer based and have customer confidence of success.

12. OIG Comment (Page 4, Para. 3): In our report dated March 2005, we had found that the Library was not using its storage space efficiently, and estimated that it could reduce its storage needs by about 20%. On September 25, 2007, we made an unannounced inspection of the Annex to follow up on this finding and determine if the Library had corrected this problem.

ISS Response: It cannot be confirmed by any staff member or the visitor's log at LCA of an unannounced inspection of the Annex on September 25, 2007 by the OIG. Nevertheless, the utilization of storage space is always a snapshot in time. A tremendous effort was exerted by the ISS/LOG staff and the SU/SU's that had material stored at the LCA to reduce the un-necessary materials stored. Better than a 20% of the materials stored were removed. However, LCA is a warehouse with the purpose and function to store materials for the Library of Congress' SU/SU's. As the inappropriate materials were reduced at LCA, materials located on Capitol Hill and other LC locations, which should have been stored at LCA, were relocated to free up the more expensive space on Capitol Hill and other locations. Until this type of "pipeline" of materials waiting to be stored at LCA is emptied, it is unreasonable

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believe that LCA will experience a consistent reduction in space requirements in the immediate future.

13. OIG Comment (Page 6, Para 1): However, the Library should reevaluate its fundamental storage strategy by reexamining what types of materials need to be stored, and how these materials should be stored. Also, the requirements estimate that Facility Services has developed is inflated because it includes unused and outdated material that is currently in storage. Moreover, we question some of the judgments and assumptions that Facility Services used in developing the estimate. Specifically, we question whether: The estimate should include a growth factor in view of recently available material handling technologies, improved business practices, and the cost to acquire excess vacant space which may not be needed in the future, and; surge allowances should be included in the estimate for certain materials such as furniture and carpet tiles, preservation supplies, and duplicate maps.

ISS Response: (See also response No. 1) The ISS/Logistics Services Unit (not ISS/Facilities Services) developed the baseline storage requirements. The two units, collaborated to determine the surge and growth factors used. However, in spite of the inclusion of materials that the OIG may view as outdated or unused being included in the baseline storage requirement, the baseline requirement is not completely invalid. The results of the analysis that is being initiated by ISS with the SU/SUs supported by the LCA warehouse will identify the baseline storage needs for each SU/SU, which will identify short term (churn), long term, and materials waiting in the pipeline.

It is recognized that storage efficiency and building size can be significantly affected by the level of technology infused into the facility and the infrastructure required to support this technology. Regardless, any facility provided must be able to provide for current and future storage requirements, including the ability to instantly surge when required (extra capacity). Again, the conclusion of the ISS led analysis should yield the baseline requirement plus any surge and growth factors.

14. OIG Comment (Page 6, Para. 2): As the Library moves forward in planning its future storage needs, we urge it to critically review its basic assumptions about storage. The Library should consider what types of materials it should be storing, decide how these materials should be stored, and only then begin developing requirements for a storage solution.

This basic question should be the starting point for any well-considered analysis. The Library's mission is to collect and make available knowledge. As such, it is not - and should not be - for example, in the office supply storage and distribution business. Ordering, receiving, processing, storing, then distributing office supplies is a resource-intensive task. The Library would be well served to allow third party purveyors of office supplies to perform these activities, rather than duplicating functions available elsewhere at a lower cost. Given that most major office supply companies can now deliver within 24 hours of an order, why should the Library warehouse office supplies?

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ISS Response: Every federal agency has a logistics support storage facility of some type, the Library of Congress is not exempt from this requirement. While the Library's mission is to collect and make available knowledge, this mission must have an infrastructure that is robust and flexible enough to support and be responsive to this mission as it is executed. While infrastructure is not the primary mission of the Library of Congress, all of the elements of infrastructure are required for the Library of Congress to accomplish its primary mission to collect and make knowledge available.

ISS agrees with the OIG conclusion concerning the supply operation, although not for the reasons cited by OIG, and will cease operations of this service by the end of calendar year 2008. Given the security policies of the Library of Congress, customers can not order and receive an item from an office supply store in 24 hours without incurring significant additional security related costs. All office supplies shipped to the Library of Congress via the U.S. mail system must be subjected to a three day screening process. Items delivered by the vendor directly to the Library must be screened at the U.S Capitol Police off-site screening facility. ISS has determined that it will remain cost efficient to maintain an inventory of copier paper to support the Library of Congress. Copier paper is a spot market commodity item that if bought in bulk, it will save a significant amount of cost to the customer rather than individual small orders. Additionally, all Federal Agencies are under a Presidential Executive Order to use the more expensive recycled copier paper rather than virgin white. It is in the best interest of the Library of Congress that copier paper is ordered centrally and stored.

Recognizing the need for expert analysis and advice on best warehousing practices, ISS has already retained the services of a consultant to work with Logistics Services staff and all service units to conduct an in-depth survey of items currently in storage, to validate customer storage requirements, and to determine the most efficient storage methods and space required.

The team will ascertain the nature of each service unit's storage and retrieval requirements, and will evaluate the supply chain and churn of routine items requiring short-term storage. The consultant will identify (1) storage space that can be cleared, (2) storage space needed to accommodate the churn of routine items, and (3) a timetable for reducing overall space requirements as a result of supply chain improvement.

15. OIG Comment (Page 7, Para. 2): Likewise, the Library is not a records management organization. It may be more advantageous to allow a third party records management firm to collect and store its archived records. Storage of federal records requires certain environmental conditions and controls which add to the overall cost of constructing and maintaining a facility.

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ISS Response: Again, OIG's comment is unclear. There are no costs for environmental conditions and controls of constructing and maintaining a facility associated with the storing of records. Every organization is required to store records of some fashion, the Library of Congress is no exception. Clarifying the definition of the term "records management" as it is used at the Library of Congress' may resolve this misunderstanding by OIG. The Library of Congress do not archive any records. Library of Congress "records" that are archived become part of the Library of Congress' collection. The only records stored by ISS are temporary records that are awaiting destruction based on the records retention schedule. ISS retrieved 2940 cubic feet of temporary records from Iron Mountain last year and relocated these records to LCA to await destruction. This move saved the Library of Congress \$ \$403.00 per month in costs, . These records do not require the environmental conditions or level of management that was provided by Iron Mountain. In addition, these records avoid the additional charge by the vendor each time they must go in and retrieve any document from the articles in their possession. Oftentimes retrieving old temporary records are necessary to answer FOIA inquiries or to support research requested by other SU/SUs. The convenience and cost avoidance to manage these temporary records far exceed the cost of a third party taking possession of them.

16. OIG Comment (Page 7, Para. 5): These questions form the core of this step of the analysis and are all contingent on a rigorous, structured cost analysis. The Library could decide, for example, to build a small storage facility which could handle its basic needs, and supplement it with temporary rental space as its needs change. This option would lock it into a small facility with less flexibility. On the other hand, it could build a large storage facility capable of handling current and future needs. This option would provide more flexibility, but would be inefficient because much space would remain empty until the future needs occurred. Other options include leasing a small facility that could expand over time and leasing a small facility on a relatively short-term basis, supplementing the facility with other short-term rental space on an as needed basis, and reevaluating its needs at the end of the initial lease term.

ISS Response: Funding to secure additional storage requires multi-year planning and additional appropriation to acquire space. The Library does not have the luxury of having funding flexibility in our space rental budget. When additional facility space is required or is no longer needed, funding is requested or removed from the Library's space rental appropriation. As a result, the Library will always need to have excess space available to accommodate material storage surges.

While in theory this approach appears to be a viable solution and may be workable in the private sector, the ability to appropriate monies on an annual basis and be assured that space would be available on an as needed basis in the Washington DC market place carries a risk that far exceeds the benefit of this approach. Given the rigid appropriation cycle, the unrealistic negotiating position that would exist for the Library to lease short term space for an immediate need with vendors, and the

ISS Response to OIG Draft Review Report No. 2006-SP-802

occasional inability for SU's to forecast the need for additional needed space (now the requirement is no longer a forecast), makes this approach unrealistic.

17. OIG Comment (Page 8, Para. 4) Facility Services [sic] conducted a comprehensive review to identify and eliminate unused, outdated, or obsolete materials from the Landover warehouse in response to a Senate Appropriations Committee requirement included in 2006 Senate Report 109-89 and an audit report we issued in 2005. Facility Services [sic] claims that actions it took response to these reduced the inventory by more than 20 percent.

Although Facility Services [sic] efforts are a good start, more work is needed. During our September 2007 unannounced inspection at the Landover Annex, we identified some inventory materials which have been stored in the warehouse for five years or more and will likely never be used. Some items are outdated and are no longer usable because they have been replaced by updated products. Some notable observations follow:

- The Publication Office had some materials dating back to 1997 and 2000. The Assistant Warehouse Foreman informed us that the Publications Office Director has not responded to requests to determine if this material is still needed.
- We found two pallets of note paper with an expiration date of 12/20/2004, and
- FD&C had numerous boxes of steel case furniture materials dated 2004. FD&C has also stored carpet and floor tiles in the warehouse since 2004 and 2005.

ISS Response: Please correct these statements by replacing "Logistics Services" in each place where you have "Facility Services".

The actions taken by the Logistics Services Section to conduct a comprehensive review to identify and eliminate unused, outdated, or obsolete materials from the Landover warehouse was done as a course of good management housekeeping practices, and not as a result of the 2006 Senate Report 109-89, or OIG Report 2004-PA-103. The Senate Report 109-08 stated:

"The Committee supports efforts to develop an inventory system and improve warehousing operations and directs the Library to report on its progress in this area within 6 months".

The response to this report was for actions executed well before this report requirement was generated and not as a response to it. ISS has hired a consultant and assembled a team consisting of staff experienced in warehousing and logistics management to assist in answering the requirements of this report, however a comprehensive review of the LCA had already occurred and action taken. The OIG report 2004-PA-103 recommended:

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*“ISS’s Logistics Section and service units should **continue** to eliminate obsolete inventory in the Landover warehouse as soon as possible.”*

Clearly this is an initiative that began prior to the 2004 OIG report and it continues to date.

It is unclear whom the OIG spoke with concerning the statement, “The Assistant Warehouse Foreman informed us that the Publications Office Director has not responded to requests to determine if this material is still needed”. ISS/Logistics Services does not have a position of Assistant Warehouse Foreman located at LCA. The Warehouse Foreman, Mr. James Davis and the Warehouse Team Leader, Ms. Valerie Palmer, neither recall speaking with anyone on the OIG staff concerning this issue. It would not be feasible for anyone other than the Warehouse Foreman or someone higher in his management chain to communicate with the Director of the Publications Office concerning this matter. While OIG may have discovered some publications that in OIG’s opinion were out of date or obsolete, this determination resides with the owner of the material, the Publications Office. (See also response No. 1)

18. OIG Comment (Page 9, Para. 3): Implementing a reimbursement-based procedure could provide a more effective incentive to achieve greater warehouse space efficiency. For example, Facility Services could charge a service unit a fixed dollar amount per cubic foot of storage space. Such a procedure would likely compel a service unit to monitor its warehouse space more closely, dispose of unneeded material more frequently, and minimize the space it occupies to save money.

ISS Response: ISS is unaware of any precedence for an individual agency to enact a cost sharing structure across an agency

19. OIG Comment (Page 10, Para. 3): ...FD&C informed us that “just-in-time” ordering procedures could be implemented and better project management could be applied to its projects.

ISS Response: When OIG was interviewing Marion Wyers, Design Supervisor in FD&C, Marion was speaking from the perspective on an ideal model. Realities are that in an agency the size of the Library of Congress, there will always be delays in the installation of furniture that has been procured. Service/Support unit furniture procurements are generally based on the availability of fiscal year funding and the unit’s strategic needs. As of this date, Library Services’ Acquisitions and Bibliographic Access (ABA) furniture procurement of FY04, installation was delayed as a result of the ABA reorganization. With issues such as this a reality, FD&C in FY04 conducted a benchmarking study of system furniture storage methods in other public and private agencies with similar concerns, and developed its own just-in-time furniture delivery system, which saved over \$1M annually by maintaining a new and recycled stocking/restocking system within the Landover warehouse. As a result of the

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anticipated AOC FY09 study of the Library's storage programs, FD&C will validate this method prior to moving furniture inventories to a new leased warehouse.

20. OIG Comment (Page 10, Para. 4): [Preservation Supplies] Facility Services' warehouse requirements estimate indicates that the Preservation Directorate was occupying 56,768 cf as of March 2006. The Directorate is confident that that amount of space would be sufficient for its material and could possibly be reduced if better inventory turnover information was available from Logistics Services.

ISS Response: (Library Services' Preservation Directorate provided input into this response.) In order to reduce space required to store inventory on hand, Preservation have moved to a "just in time" inventory model where supplies are ordered based on planned projects as well as historical indicators of past consumption. In this way, Preservation is able to ensure supplies are on hand to ensure steady work on projects but does not accrue excess materials. This approach was implemented beginning in 2005 and is consistent with the staggered delivery schedule suggested by the OIG.

21. OIG Comment (Page 12, Para. 1): Our 2005 audit report found significant inefficiencies in materials storage. Although it has made significant progress in reducing its storage needs over the last few years, our unannounced visit to the warehouse indicates that the Library continues to store materials it should not. In order to properly calculate its storage needs, the Library must start from a "clean" baseline. This has not yet occurred.

ISS Response: ISS provides a storage service to SU/SU's, however with the exception of the supply operation, ISS do not provide any inventory management of the items sent to ISS for storage. Continued references to an OIG unannounced surprised visit to LCA in September 2007 can not be addressed since no member of ISS or the visitors sign in log at the front desk of LCA indicates such a visit occurred. The issue that OIG has is the ordering practices of the SU/SU, not ISS and it this issue should be addressed at these levels.

22. OIG Comment (Page 12, Para. 5) [third bullet] ...distributed storage: the Library could make use of alternative storage facilities to temporarily house materials for which it has no immediate need. For example, it may be less expensive to require a vendor to store office furniture until the Library is ready to install it.

ISS Response: During the benchmarking study FD&C conducted in FY04, FD&C found that based on system furniture (which is the bulk of the furniture that is stored) production schedule, vendors will produce furniture for the Library with future delivery dates; however, this will not delay delivery more than 9 months. This refusal of Steelcase, the Library's primary product line, is driven by the fact that product lines do impact what we can continue to order. Steelcase does not store furniture products. This requirement is passed along to its distributor, in this case USBI. During the benchmarking study in FY04, we compared the cost of storing system furniture at the USBI warehouse with storing the same product at Landover. We found that the cost of

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storing at Landover, using the same method that USBI employs, would be more cost effective. USBI manages our furniture inventory in the Landover Annex, using its automated tracking system that we access, which replicates the same method as if it were housed at the USBI warehouse. USBI only manages the inventory. All incoming/outgoing products are reviewed by Logistics staff, and all products moved between the warehouse and Capitol Hill are moved by Logistics, which eliminates the possibility of theft.

23. OIG Comment (Page 13, Para. 3): Because ISS did not provide a single, detailed, cohesive estimate of space and cost, we had to derive cost estimates from multiple sources. See Appendix C for further calculations.

ISS Response: Integrated Support Services asserts that the Space Assessment & Economic Analysis provided by Leo A. Daly Company (an ISS contractor) provides a thorough comparative analysis of space and cost of the Logistics Center and three alternatives. The report was provided to the IG and is included among the documents reviewed and cited in the IG's review report.