DEPARTMENT OF BUDGET AND MANAGEMENT
OFFICE OF CAPITAL BUDGETING

PART I AND II PROGRAM REVIEW COMMENTS
MARYLAND STATE ARCHIVES – EXPAND STATE ARCHIVES BUILDING

Project Summary

The Maryland State Archives is a central depository for government records. Records date from the founding of the Maryland colony in 1634 to the present. These records include colonial and State executive, legislative, and judicial records; vital records; county probate, land, and court records; business records; publications and reports of the state, county, and municipal governments; records of religious bodies; and special collections of maps, newspapers, photographs, and private papers.

State Archives materials are stored in five main facilities: the State-owned Dr. Edward C. Papenfuse State Archives Building in Annapolis and the State-owned warehouse in Cheltenham, and three rented warehouses, located at Hammonds Ferry, Ordnance Road, and Candlewood Road. Altogether, the facilities store 258,109 cubic feet of permanent record material. As of 2008, more than 50% of the total collection resides in the rented warehouses, where the materials are difficult to access and cannot be kept in secure, temperature and humidity-controlled environments. Two of the three rented facilities (and the State-owned building) are already operating at capacity. The third—Candlewood—is expected to reach capacity in 2009. The proposed project will address the need for more Archives storage space and provide room for scanning and processing records.

The proposed project will construct a 135,415 square-foot addition to the existing Edward C. Papenfuse Building at 350 Rowe Boulevard. The facility would consolidate the material currently housed in the three rented warehouses at Hammonds Ferry, Ordnance Road, and Candlewood Road, and the Cheltenham warehouse. It will also provide a secure environment for emergency backup of archival records. The proposed facility will be centrally-located to enable visitors to access records in an efficient and timely manner, and will provide long-term archival storage space.

Project Justification

A. Facilities Problems

The proposed project will address four major problems: condition, capacity, efficiency, and security.

1) Condition

Archived materials must be stored in a temperature and humidity controlled environment. The existing rented storage facilities all have problems related to fluctuations in temperature, relative humidity, air quality, and light. Facilities not built for an archival purpose, such as the rented warehouses, cannot achieve the desired stability in temperature and relative humidity. Most also lack the filtration systems necessary to eliminate mold, pollution, and other contaminants. The State is also responsible for housing the Peabody Collection (over 3,000 pieces of fine art) and has inadequate conditions for these materials.

Nationally-accepted standards for fine art storage environments are 68-72 degrees with 50% humidity. Acceptable standards for paper storage are 64-68 degrees with a humidity range of 45 to 50 percent. It is also important that the temperature and humidity rates are kept stable, as fluctuations in temperature and relative humidity cause materials to degrade at a higher rate. Data loggers at the three rented warehouses provided the following readings for temperature and relative humidity, all of which exceed the recommended levels:

- Candlewood T: 76.5 – 90.2 degrees RH: 32% – 67.2%
- Hammonds Ferry T: 76.6 – 84.4 degrees RH: 51% – 64%
- Ordnance Road T: 78.8 – 88.8 degrees RH: 39.3% – 59.9%

In August 2007, the data logger in the rented art storage facility recorded a temperature reading of 74.5 degrees and a relative humidity reading of 78.7%. These conditions jeopardize the preservation of archived material and can cause mold to germinate within 19 days.

The State pays a premium rate for museum standard climate control at the rented warehouses but inadequate conditions persist. Archives data shows that the due to the poor environmental controls, the “expected materials lifespan” for the materials stored at the current facilities ranges from 5 to 51 years (15 to 44, 15 to 51, and 5 to 35 years for Hammonds Ferry, Ordnance Road, and Candlewood Road facilities, respectively). The proposed project includes storage space fitted with the proper humidity and temperature controls and additional cold storage areas.

2) Capacity
The Maryland State Archives stores materials at two state-owned facilities and rents three off-site warehouses. The Papenfuse Building has been full since 2000, and materials are also stored at the state-owned tobacco warehouse in Cheltenham (also full). Two of the three rented warehouses are now full to capacity and the third, the Candlewood Road facility, is expected to reach capacity by FY 2009. It presently contains 57,559 cubic feet of material and has 19,805 cubic feet available. Of the remaining available space, 11,138 cubic feet has been encumbered by pending transfers. That leaves only 8,668 cubic feet of capacity. This assumes an average rate of records transfer of 15,000 cubic feet of material per year based on the anticipated transfers from the judiciary, the legislature, and executive agencies. The proposed facility will address this problem by providing 98,110 NASF for storage.

3) Efficiency
Archives cannot efficiently manage the records in storage nor quickly retrieve them upon request. The record warehouse facilities are, on average, 23 miles from the main facility in Annapolis. Due to budget constraints and the distance, Archives is unable to adequately staff the multiple buildings and must send staff on a case-by-case basis to track down requested materials. In addition, because the staff cannot control the day-to-day management of off-site archived materials, the landlord has occasionally moved the State's fine art without permission and contrary to the terms of the lease. Also, no staff members are on site to monitor the facility temperature controls. The proposed project will be collocated with the existing Archives facility and staff, and would thus eliminate efficiency issues.

4) Security
Security is a critical concern for cultural heritage institutions, such as archives, libraries, and museums. For archives and manuscript repositories, the threat of loss is real and irreparable. While theft has always been a problem, television shows such as *Antiques Roadshow* and *History Detectives* have increased the general awareness of the market value of historical documents. The American Library Association reports 21 years of incidents involving damage or theft of archival materials. The existing warehouses lack any types of security beyond standard locks. Archives is also concerned about the security of items that have not yet reached a State warehouse. By centralizing the archival functions of the state in one location, the entire Archives staff will be available to monitor the security and integrity of both special collections and permanently valuable State records. The Papenfuse Building has guards present from 7:00 am to 10:00 pm and has routine patrols throughout the day and night by the Maryland Capitol Police force and staff from the DGS Facilities Operations and Maintenance.

B. Factors Influencing Facilities Problems

1) An Increase in Records Transfers

Records transfers have exceeded expectations over the past ten years. From 1980 to mid 1990's the average amount of material that was transferred to the Archives was about 6,500 cubic feet. From the mid 1990's to the present, the average amount of material transferred per year is over 13,000 cubic feet. The main Archives facility was filled to capacity before 2000 although it was projected to be able to meet demand – at 6,500 cubic feet in transfers per year – until 2005 when constructed in 1985. The rate of records transfers is not expected to subside. The chart below depicts the record material transfers and the total holdings in cubic feet. When the amount of material transferred has dipped below 9,000 cubic feet, transfers had been halted due to lack of storage space. An analysis of records transfers to the Archives revealed a long-term trend of steady increases in the amount of permanent record material being created.

FY	Transfers	Records in Custody
1999	13,032	196,674
2000	10,259	209,706
2001	9,774	219,480
2002	10,884	230,365
2003	8,061	238,426
2004	13,940	252,366
2005	8,232	260,599
2006	16,017	276,617
2007	16,889	293,506
2008	23,533	317,039
Total	**130,621**	**2,494,778**

2) Planned Annual Records Transfers

Archives receives a planned amount of archival materials on an annual basis. The Records Management Division of the Department of General Services is, by statute, responsible for coordinating the records management program for the state. It also helps to prepare retention and disposal schedules for those records and is charged with conducting a statewide records inventory every five years. The last DGS analysis was conducted in 2001 and revealed 45,404 cubic feet of material awaiting transfer to Archives storage. This analysis relied on self-reported agency data from agency retention schedules. A separate Archives analysis of State agencies in 2002 revealed that there was at least 161,113 cubic feet of record material still in the custody of agencies that can be transferred to the Archives. Archives also receives archival material from local governments because the law calls for the Archives to be the ultimate custodian of all records of all "instrumentalities of the state" including county and municipal governments, task forces, commissions, etc.

3) In-Person Visits and Information Requests
In 2007, Archives had 7,061 in-person visits. The number translates to roughly 37 visits per day, Wednesday through Friday plus three Saturdays per month. The most significant types of requests may be categorized as: files management services provided to Maryland government agencies, research and copy services provided to citizens, state, and federal agencies, requests handled via the internet. 51% of Archives requests fall into the first category and 40.3% of requests are for direct citizen services. In FY 2007, the Archives received 605,265,413 requests for data on their website and transferred 48,539 gigabytes to fulfill these requests.

4) State Responsibility to Care for Fine Art
In 1996, Maryland gave $15 million to the Peabody Institute for its endowment fund in exchange for the ownership of its fine art collection (over 3,000 pieces). Maryland pledged to preserve it for the people of Maryland and to avoid its sale at public auction. Many of the pieces are on loan to the Baltimore Museum of Art and the Walters Art Museum. Over 1,000 items are housed in storage at other institutions. However, the state is still responsible for maintaining the majority of the collection in the state-owned archival facilities that lack the proper temperature and humidity controls.

C. Consequences of Facilities Problems

1) Poor Preservation and Storage Methods for Archived Materials
Fluctuations in temperature and humidity cause paper materials to expand in response to an increase in moisture. This accelerates the rate at which materials decompose. In addition, insufficient capacity results in less than optimal storage methods. There are currently 108 framed works of art stored vertically at the Archives on stationary shelving units. This is not ideal compared to a different method: use of art racks or movable panels. The latter method is beneficial for paintings or framed works because it offers better protection, accessibility, and takes up less space. This also applies to flags. The State's civil war battle flag collection is currently wrapped and hung in the large format/map room. The flags should instead be stored in flat containers and periodically brought out to the exhibits area for public display.

2) Access Delays
Archives strives to provide access to historical records available in a physical and electronic environment. People seeking archived records often wait up to five business days for the documents. Many documents are needed for legal purposes and should be provided more quickly for better service delivery. Consolidating materials in a building proximate to Annapolis and staffed with existing Archives employees will allow the agency to more efficiently manage records and provide same-day service through scanning and electronic transfer of documents.

3) Future Generations
A primary purpose of the Maryland State Archives is to preserve the past for future generations. Without adequate storage in the future, valuable pieces of history may be lost or destroyed. The proposed project will provide sufficient storage space for Maryland's records and fine art collections.

DBM Questions/Comments Regarding Project Justification:

1) Please submit an updated cost estimate worksheet and an operating impact statement for the proposed project.

The DGS developed CEW was submitted with the formal funding request letter on June 30, 2009. We understand that DGS also submitted the CEW through the automated CBIS system on or about that date.

2) The program highlights the fact that records transfers have exceeded expectations. What accounts for the difference between the anticipated rate of transfers (6,500 cubic feet per year) and the actual rate (13,000 cubic feet per year)?

There are a number of factors that could have contributed to the difference.

- The original estimates were deliberately conservative.
- The estimates were based on incomplete data.
- Agencies have been running out of discretionary funding and space.
- Some counties utilize their own record storage facilities and in some cases had mistakenly taken on state record material that was later transferred to the Archives. This is particularly the case for those agencies that are sometimes thought to be local, but are in fact state agencies. Examples include social service departments, local offices of assessments and taxation and circuit courts.
- Agencies have sometimes mistakenly sent permanent record material to the records management center in Jessup managed by DGS. In some cases we have discovered the error and retrieved the records. In some cases permanent record material was destroyed despite unambiguous retention schedules.

3) In a site visit with DBM on 6/11/09, Dr. Papenfuse mentioned that agencies are creating more electronic documents that will lead to a reduction in agency files for the Archives in the front end. Please discuss this issue and how Archives perceives it will impact the need for storage space in the future.

In the long term most government records will be electronic. It is imperative that agencies begin to include information life cycle management as part of the System Development Life Cycle mandated by the Department of Information Technology.

Heretofore, electronic records management have *not* been incorporated in to system design and development. This means that agencies will not be able to manage their records consistent with state law, regulations or sound public policy. It also means that there will be a fiscal impact as agencies attempt to migrate or maintain data on legacy systems in perpetuity.

As agencies transfer to the Archives or destroy paper records that are no longer needed for operation of the government unit, the need for physical storage should begin to decline. It will probably be at least 50 years before all agencies of state government make the transition to managing all of their records in electronic form.

Complicating this discussion is the lack of data indicating how much record material is still being housed at agencies that may not really have an on-going need for those records for the current operation of the agency. The State Government Article specifically states that any records or materials that relate to the history of Maryland and are not needed for the operation of a unit belong to the Archives. While there is not currently a way to accurately estimate how much record material still resides in the custody of agencies, it would certainly make greater public policy sense to transfer those records to a records center storage environment or, where appropriate, to the Archives.

To give a sense of the potential impact of automation on archival storage, we looked at one of the most voluminous record series in Maryland's history: land records. In the past, land records were recorded at the courthouses and the documents were aggregated into volumes of roughly 800 pages each. These volumes were kept at the courthouse and ultimately transferred to the Archives. Now, the records are scanned and the originals returned to the person who brought the document in for recordation. Below is a chart that provides estimates of the amount of record material in cubic feet that would have been generated from the beginning of fiscal year 2005 to June 30, 2009.

Fiscal Year	Number of Images generated	Number of books	Space Requirement cubic feet
2005	13,166,706	16,458	9,875
2006	12,291,749	15,365	9,219
2007	10,036,264	12,545	7,527
2008	7,361,346	9,202	5,521
2009	5,478,591	10,957*	6,574

That comes out to 38,716 cubic feet of paper that would have required permanent storage. That is the equivalent of 968 sections of standard archival shelving, or more than 69 ranges - almost equal to another level of stacks just for land records created over the last 5 years. In roughly the same time period, however, the Archives required 2,920 square feet of computer room space to be fit up in order to accommodate electronic records.

* Note: In Fiscal Year 2009, the Judiciary changed the number of pages in a single volume from 800 to 500.

4) The program states that the Candlewood Road warehouse was expected to reach capacity by FY 2009. What is the status of available space at the Candlewood Road warehouse? How will the Archives address the need for additional storage?

As of June 2009, the Candlewood facility was filled to capacity. The Archives would prefer that this situation not be broadcast for fear that record material will be destroyed. To alleviate the situation in the short term, the Archives is in negotiation with a local government facility to provide 15,000 cubic feet of storage in exchange for some technical assistance. It is our hope that this agreement can be consummated in the near future.

5) The program mentions that the state pays a premium rate to rent storage facilities with museum conditions. How come temperature and humidity controls cannot be set to the correct levels? Is this an issue with the landlord or with the physical characteristics of the warehouses?

This was both an issue with the landlord and with the characteristics of the warehouse. Maintaining constant levels for temperature and humidity requires consistency in both the physical characteristics within a storage facility, and consistent monitoring on the part of the landlord. At CDS Logistics, the 'climate-controlled' warehouse featured large loading dock bays that were frequently opened throughout the day, along with a large interior opening to an adjacent non-climate-controlled warehouse that was only covered with heavy plastic flaps. Although temperature and humidity controls were set to required levels in this climate-controlled portion of the warehouse, the levels could not be maintained with the frequent influx of hot or cold air into the room from these openings.

Additionally, while the landlord maintained that their data readings for the climate-controlled warehouse (recorded by data loggers that were placed adjacent to the air-handling system) indicated that appropriate levels were maintained, the reading from our own data loggers, placed in the area of the warehouse where state-owned art collections were stored, indicated large fluctuations in temperature and humidity in that portion of the warehouse.

The bottom line is that the CDS facility was never an appropriate place to store the state's fine art collections. It lacked most of the characteristics that you find in the fabric of a fine arts or archival storage facility. For several years the Archives pointed out the shortcomings of the facility and on a couple of occasions lodged formal complaints with the Real Estate Division of the Department of General Services. Now, sadly, the budget situation has forced the Archives to cancel the lease altogether and move the objects in to spaces that totally lack *any* temperature and humidity controls.

6) While the program provides data regarding nationwide security incidents (page 48), have there been any Maryland-specific incidents at any of the rented storage facilities? If so, how many? What is the estimated value of stolen items and/or damaged items?

In addition to the security breeches noted at the warehouse facility that formally housed the state's art collections, there have been reported to the authorities at least two instances in which computer equipment was stolen from one of the rented facilities. Both thefts were documented by conducting an inventory upon suspicion by staff that something was missing.

There has been documented one instance in which a moving contractor hired by an agency allegedly either stole or misplaced two 18th century volumes of permanent record material. This was discovered because detailed inventories are conducted at the time material is loaded on to a truck and when the material is off-loaded at the Archives.

The Archives is not aware of any instance where record material was stolen directly from any of our rented facilities. However, it should be pointed out that it is very difficult to discover the theft of a singular record. We know that records show up on eBay and other sites or are traded through private manuscript dealers. We also find notes or annotations in transfers that might indicate the file was lent out e.g., "file borrowed by lawyer John Doe June 1907." We know from experience that a great deal of record material has gone missing, most likely before its transfer to the Archives.

Security in general has always been a critical concern for cultural heritage institutions, such as archives, libraries and museums. For archives and manuscript repositories the threat of loss is real and irreparable as these collections are by their nature unique and usually irreplaceable. Documents, both textual and graphic, have an intrinsic value bestowed by their information content, but can also acquire additional artifactual value from context, signatures or other factors. These intrinsic and additional values have attracted unwanted attention from thieves, both professional and amateur.

In decades past notable thieves have victimized famous repositories. Charles Merrill Mount removed materials from the Library of Congress. Anthony Melnikas, a professor at Ohio State University, cut maps from 15th Century volumes, previously owned by the Renaissance poet and author Petrarch, in the Vatican Library. Stephen Blumberg was tried and found guilty on four counts of possessing and transporting stolen property, more than 20,000 rare books and 10,000 manuscripts from 140 or more universities in 45 states and Canada. The threat is real and growing.

Theft has always been a problem, but technology has exacerbated it. *Antiques Roadshow* and *History Detectives* have increased general awareness of the market value of historical documents. e-Bay has provided a sales outlet for materials that is nearly anonymous due to the sheer volume of transactions. Perhaps the best clearinghouse of information related to thefts from archives, manuscripts repositories and special collections is found at http://www.rbms.info/committees/security/index.shtml, the Website for the Rare

Books and Manuscripts Section of the American Library Association. 21 years of incidents are there reported, indicating the full reported scope of the issue.

For transactional governmental records, the integrity of the custodial regimen is critical for maintaining the physical safety and evidential authority of the records. The current rented warehouses present a variety of problems. First, they are full, impeding the proper transfer of permanently valuable records from agencies to the Archives. Next, they lack proper climate controls and security systems. Ranging from 5 to 10 miles apart and 22 ½ miles from the headquarters building in Annapolis, staff must drive from building to building on a rotating schedule for document retrieval and copying. Two of the buildings are unstaffed except for times when retrieval is being performed. Delays and errors necessarily occur in such a regimen. Effective collection management, the allocation of storage space based upon frequency of utilization, is impeded by the costs of transferring materials between buildings, and the threat of loss occasioned by moving the documents on the public roads.

It is now possible to completely centralize the archival functions of the state in one location, with the entire Archives staff available to monitor the security and integrity of both special collections and permanently valuable state records. The expansion of the Annapolis campus presents a superior opportunity to safeguard the fundamental documents of the state in a single dedicated facility, compared to distant, decentralized warehouses retrofitted with varying degrees of success for the purpose.

The importance of transferring permanent record material to a safe and secure environment at the Archives cannot be overstated. In addition to legitimate concerns over records destruction due to the wear and tear of everyday use, and the slow but steady physical deterioration caused by inadequate storage and environmental conditions common in an office, attic, or basement setting, a troubling history of records being lost or alienated, whether from mishap or from outright theft, the result of inadequate agency security or safety procedures, also constitutes a continuing source of concern. A few examples can serve to illustrate this problem.

Several years ago, the Civil War muster rolls of the 19th regiment USCT were offered for sale in the February 17, 1997 issue of A B Bookman's Weekly. The 19th USCT was one of several regiments of African-American soldiers raised in Maryland for service against the rebel states. These important, permanently valuable public records, by what circuitous route is not known, had come into the possession of a private citizen in West Chester, PA. He was asking $150 for them.

In 1991, the Archives learned through the grapevine that it had been common practice for many years for officers retiring from the Baltimore City Police Department to take one of the old dockets of the Police Court as a souvenir. These dockets had been brought under retention schedule control many years before, and had been identified as permanent records to be transferred to the custody of the State Archives. However, when the day came that the Police Department offered the dockets to the Archives, we were not able to take them on due to lack of space. Needing their own space for other purposes, the officer

in charge took matters into his own hands and got rid of them. Many individual docket books, no doubt those that seemed most interesting or valuable, were taken by individual officers as mementos. Many others were simply thrown out.

The fate of one particularly important docket is known – the consolidated docket for 1861. A Captain Hennessy had been involved in setting up the police museum on the first floor of the headquarters building in downtown Baltimore in the early 1960s. He took the consolidated docket for 1861 because it contained the names of all the individuals involved in the famous "Baltimore Riot" of April 19, 1861. The docket also identified all those killed in the riot. Captain Hennessy wanted this book in his museum. Some time later, about 1971-1973, Captain Hennessy fielded an inquiry from the Maryland Historical Society about the names of those killed in the April 19th riot. Immediately recognizing the great historical value of the consolidated docket for 1861, the Historical Society asked if they could have the docket. Captain Hennessy agreed to swap this treasure for something else in the Historical Society's possession. He ended up trading this important, permanent public record for some cannon balls.

In 1997, Susanne Flowers and Donna Russell, two concerned citizens with an abiding interest in and love for Maryland history, discovered a large quantity of permanent 19th century record material in the attic of the Frederick County courthouse. These materials had been stored for many years in poorly ventilated attic space that had contributed directly to their physical deterioration over time. In fact, these records had been in the attic for so long that their existence had been lost to the collective memory. Thanks to the alert interest and aggressive persistence of these two local researchers, and the willing cooperation of the Clerk and his staff, these permanent records were transferred to the Archives and saved from what otherwise would have been almost certain destruction.

In 1991, a large quantity of 19th century Frederick County government records were literally saved from the trash dumpster by lucky happenstance and the willingness of the staff of the C. Burr Artz Library in Frederick to go the extra mile. On June 28, 1991, the Archives received a call from John Quinn with SDAT. He had received a call from the local assessments office in Frederick County with information that a local Frederick library had in its possession "a pallet sized load" of mostly unidentified, disordered records. Library staff had noted that one of the volumes had the word "assessment" on it, and this had prompted them to call the local assessment office to see what they should do with these records.

Archives staff immediately contacted Beth Telly of the C. Burr Artz Library and informed her that we were very interested in taking these old records off her hands. Ms. Telly informed the Archives that we were a day late and a dollar short. These records had been thrown into the dumpster just the day before because the library's need to free up space was critical, and because no one had expressed the slightest interest in having these records or provided any guidance as to what the library should do with them. As Ms. Telly related the story, it became clear that these records had come into the possession of the C. Burr Artz Library more than five years previously. In early 1991, the library's need for additional space became critical. This led library personnel to try and unload these

records. Library staff contacted the local assessments office to see if SDAT wanted the records or could offer any guidance on what to do with them. The local office contacted SDAT headquarters but met with silence. For a period of more than six months, no communications passed between the C. Burr Artz Library, the local assessment office, or SDAT headquarters. During this entire time, nobody thought to contact the Archives. Finally, in desperation, library staff had deposited the materials in the dumpster.

Luck was with us, however. The dumpster had not been emptied since the assessment records had been deposited in it. We urged Ms. Telly not to let those records out of her sight, and arranged for Archives staff to run up to Frederick the next day, a Saturday, to retrieve them. Ms. Telly promptly directed her staff to pull out what volumes they could and place them inside the library for safe keeping pending our arrival. Once again, by happy accident rather than by design, permanent records that otherwise would certainly have been lost forever were saved by the good will and cheerful cooperation of alert citizens.

A final well-known and well-documented example, that of land records, can serve to bring home the scope of this problem.

Land records constitute one of the most voluminous, and arguably most important, record series created and maintained by government in Maryland. Since the beginning of European settlement in 1634, county court clerks have been vested with responsibility to record, index, and maintain all land record instruments affecting title to or interest in real property. These include deeds, mortgages, releases, leases, assignments, powers of attorney, agreements, easements, and other instruments.

During Maryland's first 300 years these records were created and maintained exclusively in paper form. Anyone needing to access these materials had to travel to the courthouse to look at the single paper copy of each individual book. Following the Second World War, primarily in response to the heightened security concerns of the nuclear age, there was a concerted effort to duplicate these materials in micrographic form. This not only permitted a security copy of these land records to be deposited off-site in the Maryland State Archives, but also allowed for the circulation of multiple microfilm copies of land records, greatly increasing both ease and breadth of public access to these materials. In many jurisdictions, for a variety of reasons, all or portions of their land records were microfilmed more than once over the past 60 years, creating "slice in time" captures of the books as they existed at that moment. This is another happy accident, the unintended consequences of which were to pay rich dividends.

But still, well into the 1990s, virtually all individuals interested in accessing land records did so at the local courthouse. And visitors to the great majority of Maryland's 24 county courthouses were directed to the original paper volume still sitting on the courthouse shelf when accessing land records. From the beginning, reliance on a single paper copy of a land record was problematic. For many years the Archives received periodic requests from individual courts asking if we could help with a missing page from a land record. The process usually went like this. A land title abstractor or other researcher discovered

that a page or pages he/she needed to review were missing from the original paper book sitting on the shelf in the courthouse. Upon being informed of this, court staff contacted the Archives to ask that we check our archival microfilm (often filmed decades previously, and therefore reflecting the book as it existed many years before) to determine if the now-missing page still had been in the book at the time of microfilming. In most cases, the image would be found on the microfilm, printed and delivered to the requesting court.

In 2003, the Judiciary and the Maryland State Archives partnered in a project to combine the Judiciary's robust digital recordation and indexing system (ELROI) with a digital retrieval system that ensures the integrity of documents and data through a security archival system known as mdlandrec.net. As an electronic archives indexing and retrieval system, working seamlessly with ELROI, mdlandrec.net provides comprehensive index access to the records (based upon indexing done at the time of recordation) and provides online intranet access to images preserved in mdlandrec.net as part of a comprehensive effort to digitize all existing land records as well as new instruments recorded through ELROI.

In the course of digitizing all the pre-ELROI land records of Maryland's 24 jurisdictions it quickly became apparent that the volumes, absolutely essential for the protection of individual property rights, had suffered considerable loss over time due to accident or theft. **In the first comprehensive analysis of the Maryland's land records ever undertaken, Archival staff discovered 295,835 pages seemingly "missing" from the land records.** Archival staff has to investigate every one of these thousands of pages to determine if it is extant in some form or truly lost forever. In many cases, this meant examining multiple paper versions of a particular volume as well as up to four microfilm versions for each missing page under investigation.

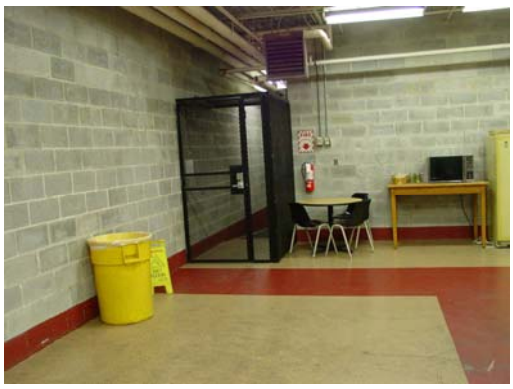
This is a herculean task. Limited staff resources mean that it will take several years to complete. To date, we have finished our analysis for five jurisdictions. Of the 45,451 pages initially identified as missing from the land records of these five jurisdictions, archival staff were able to track down the great majority. But in four of the five jurisdictions examined, there remain a number of pages that are lost forever; i.e., no longer in the paper book sitting on the shelf in the courthouse and not captured on any of the multiple filmings that had taken place over the years.

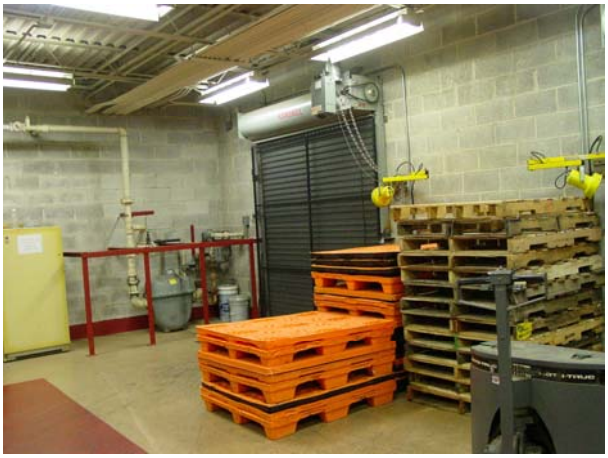
These missing pages had been removed or become separated from the original books years before. Many clearly had been cut and removed, presumably stolen, for what purpose we cannot now say. Others appear to have been torn from the binding, whether deliberately or accidently we cannot determine. Some of the books were in such poor physical condition from prolonged ill-use in the courthouse that the missing pages may simply have fallen out one day without anyone noticing their loss. However they became separated from their parent books, these vital records relating to establishing and defining title to real property were not available when these volumes were microfilmed and so now are gone forever.

We have no way of knowing the universe of records that have disappeared without notice. We only learned of the sometimes deplorable state of our land records because we had the time and resources to look. There are thousands of other records series that have not been examined in such close detail, and for which there are no resources to do so.

Second, allowing that some records loss probably is unavoidable, this in no way absolves us from doing everything possible to minimize this loss. Historically, the lack of archival space to accommodate requested transfer of records at times has inadvertently contributed to the deterioration and loss of permanent record material. This should never be allowed to happen. And finally, while no system devised by humans can be perfect we can say with assurance that an office environment is known to be very detrimental over time to the long-term survival of important records. In spite of the best intentions of public officials and employees, over time agencies cannot properly care for their permanent records in an office environment. The solution is to move records appraised as having permanent administrative, fiscal, historical, legal, or other archival value into secure, environmentally controlled archival storage as quickly as feasible once they are no longer needed for current agency operations.

Finally, it is interesting to contrast the physical security at the Department of General Services' Records Management Center in Jessup with that of the Archives' warehouses. The DGS facility is both temperature and humidity controlled and the physical security is pretty good. Note that there are three steel-reinforced doors that one must pass through before they come across record material. Note too that the garage doors are steel with steel caging on the interior.





By way of contrast, the archives warehouses have glass doors and windows with no reinforcement. The garage doors are not steel nor are they reinforced with the type of caging above.

Finally, we would be remiss if we did not identify other dangers that can be considered security risks. On the evening of Wednesday October 15, 2008, fire broke out in the space adjoining the Archives warehouse facility on Ordnance Road. By the time staff was notified by the landlord, smoke had seeped through the walls and the entire warehouse was filled with smoke. Fortunately for us, the fire department put out the fire before it penetrated the Archives space. Standard warehouse facilities are simply not appropriate spaces for permanent record material even if no theft from them can be documented.

7) The program also mentions that the landlord has occasionally moved the state's fine art without permission. What kind of recourse does Archives have when this happens? Is this a violation of the terms of the rental agreement?

Moving the fine art was most certainly contrary to the terms of the lease.

In March, 2004, the staff of CDS Logistics moved nearly the entire collection of state-owned art and furnishings that were stored there from its original location in the climate-controlled warehouse to another location within the same warehouse. This was done without any notification to Archives staff and was only discovered when Archives staff arrived at the warehouse to deliver additional items for storage. This unauthorized, and unsupervised, move violated the terms of the lease and seriously jeopardized the safety of the works of art. As a result, the Archives staff had to conduct a complete condition assessment of the stored collections in order to determine if any damage was caused.

Some items received a small amount of damage and a crate was punctured by a forklift. A frame was damaged from incorrect handling.

Archives fully documented the condition of the objects and our objections to the actions by CDS staff. A meeting with CDS followed at which the management admitted their mistake. In May, 2004, Archives asked DGS for assistance in filing a claim to have CDS pay for the cost of the repair to the damaged frame. Our records do not indicate any response from DGS. The Archives does not have statutory authority to enter into leases and, since DGS was the lease-holding agency, was unable to directly seek compensation from CDS.

We no longer have a lease with CDS, having lost the modest amount of funding to cuts.

8) In DBM's program review questions from 5/2008, we asked why the current warehouses cannot be fitted with proper humidity and temperature controls, as well as sufficient fire systems and the other components necessary for archival storage. Archives responded that to do so would be "fiscally imprudent." Please expand on this and discuss how it would be fiscally imprudent, and provide costs associated with the necessary components where applicable.

While a well-designed renovation may meet some of the requirements of an Archives, we have not been able to find any candidate buildings that would meet all requirements in order to do a comparative analysis.

An archives is not just a storage facility. The proper archival facility is first and foremost designed for collection preservation. Archives store collections that are irreplaceable. The very fabric of the building from foundation and floors to lighting, ceilings, finishings and security all need to be designed with preservation in mind. The archival facility requires special environments, building systems and environmental controls.

Standard warehouses are by their very nature *not* archival facilities.

Over the course of this past year, the Archives has visited many potential facilities. Every one had very similar defects. All are simply concrete slabs with four walls of concrete block providing absolutely no vapor barrier from the outside. Most have numerous windows, too many loading dock bay doors, sky lights etc. To effectively renovate one of these, reinforced insulated rooms would have to be built within the building. Even still, this would only satisfy a portion of the requirements for building a truly archival facility. And, the square footage requirement would be much larger than a purpose built archives.

Another model would be to explore a relationship with a full service provider. Toward that end, the Archives met with representatives from Iron Mountain and began discussion about long term contractual relationship. However, there are fundamental problems with utilizing this type of model both from a business and a facility perspective. First, the best facility that we visited was not much more than a standard warehouse that features some

level of air conditioning, but no vapor barrier, no HEPPA filtration for mold spore removal, in short, none of the elements fundamental to an archival facility.

Next, the business model is not compatible with the way in which an archives functions. Iron Mountain is basically dead storage for material that is destined to be destroyed. Only a small percentage (3 to 4%) is ever retrieved. They tend to store material in large sections of 16 boxes per section which makes retrieval quite difficult. In an Archives, a researcher may only need a few pages out of a volume or a box.

In addition, when records are returned to Iron Mountain, they are not returned to their original location, but to a new location. This is fine for a model in which very few records are ever retrieved and for scenarios in which records are ultimately destroyed in a relatively short amount of time. However, the Archives maintains record locations in a detailed database that makes retrieval accurate and fast. Constantly changing locations would present staff with an impossible logistical task of tracking location changes and finding records. Inevitably, intellectual control over the records would most certainly be lost.

Finally, the Archivist and his senior staff all feel that it is simply bad public policy to alienate the public record from public officials and place it in the custody of the private sector.

9) Please provide historical data on the amount of materials received from county and municipal governments, task forces, commissions, etc. for the past ten years. Do local governments and non-State entities pay to use State storage facilities?

A database report has been developed and accompanies this document. The report details all transfers for the last five fiscal years. The Archives receives very little material from local government. However, please note that many record series come to the Archives grouped by county but they are in fact state agency records. For example: the Register of Wills, Department of Assessments and Taxation, the circuit courts, local departments of social services - - all are grouped by county but they are state agencies. All produce a great deal of permanent record material.

Beyond the five years covered by the report, anecdotal evidence from staff suggests that transfers from county government and municipal government have been negligible over the years. There have been a few defunct task forces and commission transfers, but here too, they have been few and far between.

In answer to the last question, once a record, special collection or piece of art is accepted by the Archives, it is the responsibility of the Archives.

10) Capital projects must be designed and constructed to meet agency needs for a minimum of 15 years. What is the expected rate of transfers in square feet per year for the next fifteen years? Please provide the methodology used to calculate this projection. Given the unknown variables, such as the amount of materials

still stored by individual agencies and the municipal governments, and the projection that the proposed projects will provide storage space through FY 2024, how have these variables been considered in that projection?

The expected transfer rate was estimated – not calculated. The facility program document was developed with an assumption that the accretion rate will be 15,000 *cubic* feet per year for 15 years. The cubic feet requirement was then used to calculate the square feet requirement.

11) The two studies mentioned on page 45, performed by DGS in 2001 and Archives in 2002, generated different results (45,404 cubic feet and 161,113 cubic feet, respectively). What did the second study consider that generated the larger number?

The DGS study in 2001 was inaccurate and incomplete, to say the least. Only Executive agencies participated. There were no responses from legislative or, more importantly, judicial agencies, registers of wills, or local government.

The Archives' own 2002 study, undertaken largely in response to the inadequacies of the 2001 DGS study and itself far from comprehensive, used prior 5-year inventories as a starting point and gave a far more realistic assessment of the quantity of permanent records in the pipeline for eventual transfer to the Archives. Methodology was quite simple - - - rather than assuming that the absence of 2001 returns indicated that no records existed, the Archives incorporated "best guesses" of existing quantities derived from a thoughtful analysis of past survey information, a clear understanding of the records we had received over the intervening years, and estimates of new records being created based on our knowledge of how agencies do their work.

12) Due to budgetary constraints, Archives has indicated that DGS has not been able to obtain comprehensive retention schedules from agencies. Are any efforts underway to improve the statewide records management program? Would the Archives be able to produce a more up-to-date analysis of agency storage needs?

Last year, the Archives assisted DGS and a group of concerned attorneys general by drafting and placing on the web concise and easy to follow guidance for agency records managers to follow. The site is located at:

http://www.msa.md.gov/msa/intromsa/html/record_mgmt/homepage.html

The Archives also scanned and placed on a secure web site all known, extent record retention and disposal schedules so that agencies could have some time to examine their own schedules and update them before the site was opened to the public.

Archives is also working with DGS to send out a notice / memo to agencies to designate a records management coordinator and to generally inform agencies of their responsibilities.

Archives is also redrafting the existing records management regulations in COMAR. That effort is focused on streamlining and simplifying the inventory and scheduling process. Staff at the DGS Records Management Division are aware of this effort.

What really needs to happen is that, in addition to streamlining the regulation, a simple web-based inventory system needs to be developed that will allow agencies to begin to come in to compliance with modest effort. The Archives, with some fiscal support, could undertake to manage the development of such a site. DoIT was asked informally if funds could be designated for this purpose and the Archives was told that there are no funds to support this effort. This type of web site could be used to develop a comprehensive inventory of holdings. Thus, the five year inventory can be an ongoing database rather than a huge survey effort that has to be replicated every five years. Instead the database could be simply maintained throughout the five years with a published report being generated as called for in the State Government Article.

13) In the site visit with DBM on 6/11/09, we briefly discussed the costs associated with retrieving archived materials from the off-site storage facilities. Please explain what the current arrangements are with warehouse landlords for retrieving documents, the retrieval costs, and how much Archives spends to retrieve documents on an annual basis.

All of the records storage warehouses are true leases where the property is occupied by or demised to the custody of the Archives. The landlord plays no role in the retrieval of records.

We may have discussed other models such as that used by Iron Mountain. In that model, custody of the records is turned over to the contractor and they provide all records management services - from management to retrieval to destruction. Agencies are not even allowed to view their records without paying a retrieval fee to the contractor. We do not believe this is a viable model for the Archives for the reasons articulated in item 8 above.

14) In the responses to program review questions from 5/08, Archives provided percentages for each type of request handled. Please provide the actual numbers of annual information requests by category.

The following is for the calendar year 2008.

Category	Requests	% of Total Requests
Public	9,367	43.9
Court	6,816	32.0
State/County/Local Agencies	3,805	17.9

Criminal Background Checks	1,065	5.0
Federal Agencies	251	1.2
Total	21,304	100.0

15) Please provide the most recent data available for records transfers and archived materials to the Candlewood warehouse, as well as pending transfers still housed by individual agencies.

A report detailing transfers for the past five fiscal years has been generated. It is 272 pages in length, and it accompanies this response. Below is a list, (as of July 1, 2009), of records waiting transfer to the Archives.

WAITING LIST FOR RECORD TRANSFERS

Frederick County Circuit Court	340 boxes
Baltimore City Register of Wills	287 boxes
State Highway Administration	70,000 plans
State Highway Administration	77 boxes
Department of Assessments and Taxation (MO)	3,000 books
Baltimore City Circuit Court	5,000 boxes
Rosewood Hospital Center	250 boxes
Department of Human Resources (SM DSS)	89 boxes
Montgomery County Board of Elections	100 boxes
Walter Carter Center	
Developmental Disabilities Administration	16 boxes
Prince George's County Circuit Court	1,300 boxes
Baltimore County Register of Wills	100 boxes

16) In addition to the rented warehouses which store records, the program mentions four rented facilities that store fine art (page 26). Are these facilities at capacity? How much space, in cubic feet, is dedicated to fine art at the three rented records storage warehouses? How effective are the temperature and humidity control at the art warehouses?

Art collections are stored in portions of two warehouses rented by MSA primarily for storage of documents (Ordnance Road and Candlewood). The total space within these facilities used for art is less than 350 square feet (or approximately 4,680 cubic feet). These facilities are both at capacity. It is not possible to effectively maintain temperature and humidity controls at these warehouses because the air-handling systems are not designed for this; they do not have anything beyond basic heat, and no cooling ability. There is no dehumidification built into these air-handling systems. They are just basic warehouses. During the summer months, temperatures at these facilities regularly exceed 85 degrees Fahrenheit and 65% Relative Humidity.

The other rented facilities housing state-owned art are professional art storage facilities managed by art handling companies. These spaces are secure and climate-controlled and designed specifically for the storage of fine and decorative arts. Staff at these facilities are professional art handlers. The total amount of space being rented from these companies 768 square feet. The Archives is not budgeted funds to store fine art and, further, the facilities charge a fee every time the Archives needs to access an object in the collection.

17) The program mentions that the turnaround for document delivery is inefficient because it can take up to five business days to retrieve documents from records storage and provide them to the requesting party. What is the goal or standard turnaround time that the proposed project will enable and what is this standard based on?

The five day retrieval covers just the time it takes to find and send back to the Archives the item in question. It does not include the time for opening and logging the mail, receipting the check, scanning the record, producing the deliverable and either posting it to the web or sending it to the patron.

The stated goal of two week turnaround overall is based on what we feel is reasonable and what our clients (the public *and* state agencies) have told us is their requirement. The goal is also based on ability to deliver on those stated requirements. For example, background checks must be completed and documented within 72 hours. Generic requests for retrieval of information for genealogical reference questions may take over 8 weeks to fulfill.

18) The project justification section addresses the need for more storage space and better environmental conditions, as well as a centrally-located facility. It fails to address the need for the additional spaces for digital processing, conferences, and office spaces. Please provide data on the amount of available space at the existing facilities, the condition of that space and the extent to which it does and does not meet agency needs, and how the need for additional spaces was determined.

The Archives facility in Annapolis is full. Gradual increases in staff in the past 20 years has required the Archives to convert space to staff use. One of the conference space areas now has office cubicles; the records processing space was converted to scanning operations and much of the space that was set aside for researchers and visiting scholars is now occupied by our Information Technology department.

Staff at remote facilities occupy a total of 2,780 square feet. The request for staff space at the new facility for *both* existing and new staff is 2,705 (2,352 plus 15% circulation). Note: page 54 of the program document states the required space for staff is 3,305. That number included 600 square feet for lockable storage in the scanning / records processing area.

All of the calculations for space were based on the Archives' 20 years experience in occupying the existing facility which was superbly designed. More specifically, the requirement of the records processing space was determined by adding up the space that was formally used for records processing before the building became full and the space was repurposed to the Digital Acquisition, Processing and Publication and the Appraisal and Description departments.

Project Scope

Standards for Archival Facilities: The 135,415 NASF facility will be constructed as an addition to the existing Edward C. Papenfuse Building, located at 350 Rowe Boulevard, on the corner of Rowe Boulevard and Taylor Avenue in Annapolis. The space will consist of 98,110 square feet of records storage which will accommodate records currently housed at warehouse facilities and will be sufficient for anticipated records transfers through FY 2024.

According to Maryland State Archives research on other archival facilities, a standard archives facility includes:

- Humidity and temperature controls
- The ability to deal with extreme conditions such as tornadoes and hurricanes
- Maximum fire rating for walls, roof, columns, floors, etc., and minimum of combustible materials.
- Adequate vapor barriers and insulation to inhibit moisture infiltration and to reduce thermal gain or loss
- A minimal number of doors and windows.

Functional Space Requirements: The program provides a breakdown of general space requirements in net assignable square feet:

- Storage of Records 98,110
- Records Processing Space 2,500
- Electronic Archives (data center) 10,000
- Cold Storage 1,000
- Conference Space 2,500

The Artistic Properties program will require a total of 18,000 square feet broken down as follows:

- Exhibits Space 8,000
- Large Object Storage 3,000
- Painting Storage 2,500
- Works on Paper Storage 2,500
- Fine Arts Conservation Lab 1,000
- Fine Arts Processing Space 1,000

The total amount of space that will be required for staff is 3,305 square feet. Existing staff from warehouse locations will be accommodated as follows:

- Professional Supervisor - private (1) 126
- Professional Supervisor - open (2) 240
- CAD/scanner operators (6) 540
- Professional - open/reference personnel 360

New staff members to be accommodated in this facility are as follows:

- Professional Supervisor - private (1) 126
- Professional Supervisor - open (2) 240
- Professional Supervisor - open (2) 720

Site Plan: The proposed project includes a storage addition that consists of a ground level plus three floors and a basement. The project also includes exhibit and conference space located on the north side of the facility (two-stories, ground level, plus basement), and visitor parking. The existing facility is thought to be sound, although Archives has not contracted with engineers to perform such an assessment. The main concern with the existing facility is with the adequacy and effectiveness of the existing HVAC facility.

The program includes the following potential site improvements:

- An expanded loading dock
- Repairs to the concrete and storm drainage in the back of the building
- Additional security lighting and alarm systems
- Expanded parking in the front of the facility
- Facility generator is at capacity and would need to be upgraded to accommodate health and safety requirements and to allow for growth of information technology infrastructure.

DBM Questions/Comments Regarding Project Scope:

1) Please provide the methodology Archives used to determine the space needs for the addition. Please include the methodology used to determine the storage needs.

Space needs for storage of record material was calculated by first evaluating the cubic feet capacity per square foot of space in the existing Edward C. Papenfuse State Archives Building . Below is a chart that provides a summary of the capacity stated in cubic feet of space for each of the storage areas of the Archives:

	ranges	sections/range	shelves/ section	cubic feet/ shelf	Total capacity in cubic feet
Stacks	72	14	8	5	40,320.0
	72	14	8	5	40,320.0
	72	14	8	5	40,320.0
	72	14	8	5	40,320.0
Sub-total stacks					**161,280.0**
Room 201	11	4	8	5	1,760.0
	1	1	8	2.5	20.0
Sub-total room 201					**1,780.0**
Room 301	11	4	8	5	1,760.0
	1	1	8	2.5	20.0
Sub-total room 301					**1,780.0**
Map Room	17	3	8	8	3,264.0
	1	2	3	8	48.0
	1	5	3	8	120.0
	1	17	3	8	408.0
Sub-total map room					**3,840.0**
Totals					**168,680.0**

Looking specifically at the stack areas that house record material, each stack has 9,976 square foot of space and each has a total capacity of 40,320 cubic feet of material. Thus, the cubic foot capacity per square foot of space is calculated to be 4.04 cf. (NOTE: each stack measured totals 10,477 sf – discounting the support columns and isles we came up with the 9,976 square foot number).

Next, we look at the record material being housed at off-site, rented warehouse facilities. Below is a chart that was developed when the program document was written that provides this data.

Off-site Facility	Square Feet	Cubic Feet of Material FY 2006	Cubic Feet of Material FY 2007	Cubic Feet of Material FY 2008	Cubic Feet of Material FY 2009
Ordnance Road	20,000	55,000	55,000	55,000	55,000
Hammonds Ferry	10,000	31,000	31,000	31,000	31,000
Candlewood	25,000	16,018	32,907	56,440	71,440
Cheltenham	Unknown	10,000	10,000	10,000	10,000
Total off-site storage	55,000 sq. ft.	112,018	128,907	152,440	167,440

The total records storage requirements were then calculated by taking the total off-site storage requirement of 167,440 cf and then adding that to projected agency transfers of 15,000 cf per year for 15 years (225,000 cf) and then dividing that by roughly 4 cf per square foot of space yielding a storage space requirement of 98,110 square feet.

These calculations do not include requirements for mechanical space.

The space requirements for the Artistic Properties program were based on an evaluation of the object inventory by Artistic Properties Commission staff.

Conference space. The Archives currently has one small conference room that can accommodate up to 8 people. We also have a classroom that functions as a conference room that accommodates 16 people around the room with some additional room for spectators. The Archives current complement of full time, PIN employees, contractual employees, full time on-site consultant / contractor staff along with interns, researchers and volunteers yields almost 150 people. At the stated rate of 22 feet of conference room space per employee, we believe the request to be consistent with the DGS DBM space guidelines.

Space requirements for many of the other elements were based on the Facilities Program Manual – Office Space Standards (appendix A) published jointly by DBM and DGS.

2) Please provide a detailed chart of the current spaces in the existing facility, their NASF, and their purposes.

Function	Room / Area	Area - square feet
Storage	Vault RM 216	250
	Microfilm RM 201	494
	Circulating Microfilm RM 114	728
	Basement Stack	10,472
	1st Floor Stack	10,472
	2nd Floor Stack	10,472
	3rd Floor Stack	10,472
	Microfilm RM 301	494
	Film and Prints RM 303	437
	Large Format paper (Map Room – RM B005)	2,160
	Rm 137	250
	Rm 118	225
	Total	36,454
Administration	Room 224	1512
	Room 222	320
	Room 221	180
	Total	2,012
Entrance	Reception / Security RM 110	1,131
	Vestibule	434
	Lockers	225
	Total	1,790
Artistic Property Commission		
	Outer Conservation Lab	960
	Inner Conservation Lab	936
	Deacidification Lab	128
	Mold Chamber	49
	Staff Rm 126	88
	Staff Rm 215	190
	Staff Rm 223	176

	Total	3,493
Appraisal and Description	Room 132	1,026
Lunch Room		312
Electronic Classroom		806
Small Exhibits Room (conference room)		300
Acquisition	Rm 135	1,028
	Rm 206	2,582
	Rm 136	150
	Total	3,760
IT staff		
	Rm 143	380
	Rm 139	242
	Rm 226	430
	Rm 232	430
	Rm 229	430
	Total	1,912
Reference Staff	Rm EC2	627
	Rm 104	266
	Rm 105	266
	Cart Prep Area	342
	Total	1,501
Research Area	Library / Card Catalog Area	446
	Search Room	5,284
	Rm 113 Microfilm Reading Room	364
	Total	6,094

Research Staff	Rm 106	180
	Rm 218	500
	Rm 217	286
	Total	966
IT Infrastructure	Rm B004	520
	Rm B002	475
	Basement telco	75
	Basement DX AC unit	75
	Electrical	200
	Rm 134 UPS / net gear	200
	Imaging server area	75
	Outside AC units / UPS	800
	UMBC remote site	500
	Total	2,920
Maryland Manual	Rm 237	180
	Rm 237	180
	Rm 204	252
	Rm 103	154
	Total	766
Loading Dock	Rm 141	380

3) How many parking spaces will the proposed project add?

Parking has not yet been determined. The Archives does not believe that a great deal of additional parking is necessary. If need be, staff can park at the Naval Academy stadium.

4) Will the new facility interfere with the adjoining DGS/State Police parcel?

A new facility can be constructed that does not interfere with the building that was formally State Police Barrack "J". Under one scenario that the Archives proposed, the new Archives building would extend in to the parking lot that is part of the barrack parcel.

5) On page 62, the program states that an evaluation of the existing HVAC system is underway. Are there any conclusive results of this study and recommendations concerning the condition of the HVAC system in relation to the proposed project?

None that relate to the proposed project. A project to provide additional chilled water capacity and to replace failing chillers is proceeding with installation scheduled for this Fall.

6) The "potential site improvements" are listed on page 62. Has Archives considered seeking statewide facilities renewal funding for the repairs and generator expansion projects?

Generally, the repairs and improvements that have been sought by the Archives in the past have not been made with regard to funding source.

7) The note on page 55 explains that the staff office space was calculated with a 15% circulation addition and 600 square feet allocated to storage and preparation areas for material to be scanned. Is this factored into the "Professional Supervisor open (IT) (2)" space? According to DGS space standards, that would allow for one employee at 120 NASF and then 600 NASF of additional space. In addition, please explain the nature of this storage space.

No - - the 600 square feet is not factored into the "Professional Supervisor open (IT) (2)" space. Permanent record material should never be left unattended or unsecured. As records are being processed for storage or scanning, there is a need to have temporary lockable storage so that the material not processed during the day can be loaded on to carts and wheeled into storage so it is not left out at night or on weekends.

8) In the meeting with DBM on 6/11/09, Archives discussed hiring an engineer or consultant to evaluate the site conditions. Please discuss any developments in this area.

A meeting has been scheduled with DGS on July 21st to discuss.

9) Both the Space Specifications and Proximity Diagram chart in Appendix 2 and the project scope charts on pages 54 and 55 provide spaces that total 134,462 NASF. What comprises the remaining 953 NASF?

Missing from the proximity diagram is the 600 square feet for lockable storage of records to be scanned that are in process (see number 7 above) and the 15% circulation (353 square feet) applied to the staff space (2,352 square feet).

The total is 135,415 usable square feet.

A new proximity diagram has been posted off of the Archives web site at

http://www.msa.md.gov/msa/intromsa/html/budget.html

entitled “Relationship Diagram”

10) When the Papenfuse Building was constructed in 1985, it was expected to meet storage needs for the next twenty years. Given its failure to do so, can the proposed project be expanded at its proposed site, should it encounter similar problems?

Estimates as to how long it would take to fill the current facility were actually produced during the development of the facility program documentation. The estimates were not updated at the time the building was built several years later.

There is but a finite amount of land and the parcel is constrained by the Naval Academy to the rear. The current thinking is that, once the expansion of the Annapolis site is full, the Archives would begin to construct regional facilities.

Project Alternatives

The program does not provide a list of specific alternatives to the proposed project and comparable costs. The following three options are discussed in context: conversion of existed facilities, private sector leased storage, and fine arts storage.

Conversion of Existing Facilities: The program states that there are few prospects for conversion of existing facilities. There are a few buildings that could be suitable facilities. Archives management believes that attempts should be made over the next ten to twenty years to identify such possibilities in areas outside of the Annapolis area to convert and house regional archives to accommodate local government records. One example is the Scottish Rite Temple, on Charles Street, which would not meet the State’s needs but could serve nicely as a Baltimore City Archives.

Private Sector Leased Storage: Current warehouse rental costs are roughly $360,000 per year. The program states that it is difficult to acquire information about the availability and long term costs associated with private sector leased storage and retrieval. Attempts to gather cost information is further complicated by the pricing schemes that vendors use in which immediate transfer seems relatively reasonable but long term pricing and, more significantly, retrieval costs of archived materials are unknown.

Fine Arts Storage: One alternative to the treatment of fine arts by the proposed project is that the majority of the collection will remain in a substandard and inappropriate rented art storage facility. Objects stored in that facility will continue to deteriorate and require conservation before they can be put on public display. The Archives will be forced to contract, at an added cost to the State, with additional rented art storage facilities to provide secure storage with appropriate environmental conditions. Public and staff

access to examine objects in storage will be limited due to spatial limitations in that facility.

DBM Questions/Comments Regarding Project Alternatives:

1) Please provide a more detailed "alternatives analysis" that includes all of the specific options that Archives is presently considering to address the problems with capacity, condition, efficiency, and security, and compare these options to the status quo. Each option should include an estimated cost and square footage figures so that a cost-benefit analysis can be inferred. Please include reasons why the option is better or worse than the proposed project.

Review of Project Alternatives:

Lease suitable space on the open market.

The primary obstacle in pursuing this option is the lack of suitable archival space available in the open market. MSA has continually explored this option as the need for off-site storage space has arisen over the past decade, and, out of necessity, does rent multiple warehouses for storage of record material. However, while providing a tolerable temporary solution, none of these warehouses provide a suitable environment for permanent storage of archival materials. These facilities are designed using standard warehouse construction, on a slab, susceptible to extreme weather, and without appropriate climate control for the preservation of record material and fine arts. The Archives is not aware of any adequately-sized facility suitable for archival storage that is available for lease.

In addition to lacking the fundamental precepts for archival storage, any leased warehouse space would be located outside the Annapolis campus and thus would not enable MSA to utilize existing staff for management and retrieval of records/collections that are stored there, nor would its location be able to replicate the ideal conditions present at the current MSA site, namely proximity to fire and police protection, as well as to the Annapolis complex.

Build to suit / Lease-back with purchase at end of lease

A leaseback is a transaction in which the owner of a property sells that property and then leases it back from the buyer. One possible alternative for the Archives is for the state to identify a parcel of land, sell it to a private developer and then have the developer build a building to the Archives' specifications. The Archives would then enter into a long term lease of the building, occupying it for the term. At the end of the term the state could purchase back the property for continued use.

While this option may represent a lower cost to the state initially, the accumulated costs over time of leasing and buying back a building may prove to exceed initial building costs. This is largely dependent on the market at the time of later purchase.

This option, depending upon where available/affordable land is acquired for building, would result in an archival facility that is not located within the Annapolis complex, and could possibly be located in another region of the state. Consequently, this option also precludes the cost-saving ability to utilize existing staff to manage and retrieve records and collections that are stored in the new facility. Additionally, this option does not replicate the ideal conditions present at the current MSA site, namely proximity to fire and police protection, as well as to the Annapolis complex.

Outsource to the private sector

There are several national and international companies that offer records management and secure storage for both paper and electronic records. This growing service industry markets to business, industry, and government clients. Archives staff most recently explored this option by a site visit to Iron Mountain, a global records management and storage company with a location in Jessup. The visit to this facility, and consultation with Iron Mountain staff, revealed multiple reasons why outsourcing the management and storage of state records is unacceptable as an option to meet the current and long term needs of the Maryland State Archives. These reasons range from very practical issues of accessibility to more philosophical and ethical issues of abdicating responsibility for public records to a private company.

Limited and costly access to records:
Record storage at Iron Mountain is designed primarily for maximizing space and not for accessibility to records. Clients do not access records themselves and pay a fee to Iron Mountain staff for every retrieval. This system would be both highly inefficient and costly for the state considering that public records are requested for retrieval on a daily basis and result in significantly more waiting time for records retrieval. Additional costs also include time and travel on the part of Archives employees back and forth to the facility for pick-up and return of records.

Loss of archival collection management:
Because maximizing warehouse space is a primary function of Iron Mountain, as items from collections are retrieved and space is made available, that space is immediately taken up by incoming collections. When collections are returned after retrieval, they are then placed in a new location and not necessarily in proximity to other items from the same client. These locations are managed within an Iron Mountain system, and no longer within an archival system managed by the Archives.

Loss of professional archival management:
The aforementioned loss of collection management (i.e. collections not stored within existing MSA accession system) is compounded by the fact that records would no longer be managed by professional archivists trained to appraise and process records related to Maryland history and government. This would be true for any records that are acquired by the Archives that require immediate storage pending time and resources for processing and appraisal. This situation arises regularly as collections often come to the Archives on

short notice. Currently such collections go to our rented warehouses which are staffed by MSA personnel and where archivists have access to them and can sort/appraise/process incrementally without incurring retrieval fees. If storage is outsourced to a private company such as Iron Mountain, records would immediately be put into their system without benefit of professional appraisal making it far more costly and inconvenient for MSA staff to appropriately process, accession and organize collections for long-term storage.

Inability to store fine arts collections:
Records storage companies such as Iron Mountain do not provide space or services suitable for storing the state owned art collection. Furthermore, the Iron Mountain location at Jessup does not have any IPM plan (Integrated Pest Management) for protection of stored collections.

Lack of adequate controls
The climate controlled space shown to us by Iron Mountain was a room roughly 5,000 square feet in size. While it was air conditioned, the HVAC was not designed to maintain the temperature and humidity at constant rates. It was designed to keep the room relatively cool. Maintaining a constant level of temperature and humidity is of paramount importance - not simply having air conditioning. In addition, there was no provision for mold spore / pollution filtration.

<u>Retrofit an existing facility / Build at an alternative site</u>

Use of the Scottish Rite Temple in Baltimore was discussed in the program document. This type of facility would represent an opportunity for the state to pursue were it available to the state. A retrofit or building at an alternative site, while worthy of consideration, would not represent the best possible scenario for the Archives. These options preclude the ability to maintain current staff size and cannot replicate the ideal conditions present at the current MSA site, namely proximity to fire and police protection, as well as to the Annapolis complex. In addition, a remote site would be more difficult for DGS to maintain because it would be outside of state government campus.

2) In the site visit on 6/11/09, Archives discussed the possibility of building some of the storage space underground. Please discuss this option in the revised alternatives analysis.

The archives has requested a meeting with the Department of General Services in the hopes of doing a feasibility study.

3) DBM is aware of several warehouses available for purchase in the area surrounding Annapolis (see attached document). Please discuss renting or purchasing additional warehouse space as possible options in the revised alternatives analysis, including estimated costs and square footage.

The acquisition of rented warehouse facilities was meant to be a short term, stopgap measure. They are substandard from an archival standpoint for many, many reasons. The very fabric of a building, (its floors, foundation, structural columns, roof etc), are key to the survival of an Archives. The building must be constructed of sturdy, fire proof materials given the volatile nature of the contents of the building.

An archives should be designed and built with many unique design criteria including:

1. The ability to deal with extreme conditions such as tornadoes and hurricanes
2. A maximum fire rating for walls, roof, columns, floors etc., and minimum of combustible materials. (There are also many materials and finishing products common to other facilities that should be avoided)
3. Adequate vapor barriers and insulation to inhibit moisture infiltration and to reduce thermal gain or loss.
4. A minimum number of windows and doors.
5. Adequate security.

Most important is an HVAC system specifically designed to maintain a constant level temperature and humidity. Standard air-conditioning systems simply do not have the ability to maintain the constancy that is required. Further, the kind of temperature and humidity control that is needed for archives and museum spaces are not readily available for rent on the open market. It is a very specialized market with limited space.

The standard, contemporary warehouse facility is not much more than a concrete slab with a shell and flat roof. The warehouse facilities that currently house Maryland's permanent records have:

- No air-conditioning
- No insulation to speak of - or vapor barrier at all
- Too many loading dock doors and skylights
- Insufficient fire detection and suppression
- Minimal intrusion protection
- No security

4. Please provide FY 2009 annual rental costs for each off-site facility as part of your analysis.

The rent for the storage facilities is as follows:

Candlewood	$164,997
Ordnance Rd.	$140,940
Hammonds Ferry Rd.	$ 76,398
Total:	$382,335

5) The program mentions renting art storage facilities for fine art. How do art museums deal with similar storage issues?

Art museums utilize storage areas within their own buildings, and, when necessary, remove collections to off-site storage managed by professional art handling companies.

6) In FY 2011, the University of Maryland, College Park, and Johns Hopkins University will begin the design for a 12,000 NASF Remote Storage Library Facility. Please explore and discuss the option of collocating records at this facility and address whether this would alleviate the need for the proposed project.

Dr. Papenfuse did discuss the possibility of collocation some time ago. There is not enough space at that facility. In addition, it would suffer from the same shortcomings related to building at a site other than Annapolis as noted above.