



Nova Southeastern University Joint-Use Library Agreement: Review of Reported Public Usage

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Report No. 07-15

Office of the County Auditor

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Executive Summary

This report presents the results of our review of reported public usage at the Nova Southeastern University (NSU) Joint-Use Alvin Sherman Library, Research and Information Technology Center (hereafter referred to as the “Joint-Use Library”). In accordance with the Joint-Use Library Agreement¹ (“Agreement”), County funding of facility operating expenses is adjusted based on public usage levels. Our objective was to review the usage records maintained by NSU to validate reported public usage of the Joint-Use Library.

The Agreement provides for a Joint-Use Library supported by County funding for a portion of capital construction costs and subsequent operational expenses for a term of 40 years. In the fifth full [NSU] fiscal year of operation, should public usage of the Joint-Use Library represent greater than 40% of total patronage, County funding is subject to increase to that percentage, not to exceed 50% of annual operating expenses. The proposed change in funding would be effective July 1, 2007 for NSU’s fiscal years 2008-2012.

Usage is defined by the Agreement as physical entry into the facility, or circulation of materials, or use of on-line resources. NSU reported the following average public usage during the measurement period (January 1, 2006 to December 31, 2006) for each measure as:

| | |
|--------------------------|-------|
| Physical Entry | 75.1% |
| Circulation of Materials | 52.3% |
| Use of On-line Resources | 0.73% |

In our review of the three measures, we determined the following:

1. Circulation of materials is the only measure subject to consistent controls that could produce recorded, discrete transactions to substantiate reported usage levels.
2. NSU retained limited records of circulation activity, the details of which were not sufficient to validate reported usage via circulation. The practice of limited data retention is usual and customary for academic libraries to protect the privacy of patron activity.
3. While we could not validate NSU reported circulation activity, we performed procedures subsequent to the measurement period to obtain reasonable assurance that the process for measuring public circulation activity does occur as described and intended by management.

Upon discussion of our findings, NSU representatives agreed that circulation was the most reliable method of measuring public access at this time. They also acknowledged that the retention of detail records was necessary for our purposes and agreed to: 1) retain detailed circulation transaction data to support reported measures of facility usage in the future, 2) an interim measurement period from June 1, 2007 through November 30, 2007, and, 3) retroactive adjustment of the funding percentage based upon the results of our review of the interim period.

We recommend the Board of County Commissioners direct the County Administrator to:

¹ Board Agenda Item #80, December 14, 1999.

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1. Formalize NSU's agreement for the retroactive adjustment of the funding percentage based on validation of reported usage during the interim measurement period.
2. Pay the fifty percent of the Joint-Use Library operating expenses as required by the agreement subject to retroactive adjustment based upon the audit results of public usage during the interim measurement period of June 1, 2007 through November 30, 2007.
3. In conjunction with the County Auditor, perform procedures to review and validate reported measures of public usage during the interim measurement period of June 1, 2007 through November 30, 2007.
4. Coordinate with NSU to address noted limitations and process control deficiencies in the measurement methodologies to enable accurate measurement of public usage.

Objective and Scope

The Agreement² requires that NSU maintain usage records indicating the number of patrons who are NSU students and employees as well as the number of patrons who are members of the general public. At every fifth year throughout the Agreement term, the Agreement provides that if members of the public other than NSU students and employees constitute more than forty percent (40%) of the usage of the Joint-Use Library during the applicable usage period, then for the ensuing five (5) years, the County's percentage share of annual operating expenses shall increase to the actual percentage of usage not to exceed fifty percent (50%).

Accordingly, the objective of our procedures was to review the usage records maintained by Nova Southeastern University (NSU) for the twelve (12) month period ended December 31, 2006, to validate reported public usage.

Background

On December 14, 1999, the Board of County Commissioners approved a joint-use library agreement for a term of forty years. The Joint-Use Alvin Sherman Library, Research, and Information Technology Center (the "Joint-Use Library"), which is located on NSU's main campus in the Town of Davie, opened on December 8, 2001. County residents have access to the Joint-Use Library, which offers programming for children and adults, and special exhibits. Upon presentation of proof of residency and application for an NSU library card, public patrons are also permitted to use circulation materials, databases, study rooms, conference rooms, computer terminals, interlibrary loan, and electronic classrooms. The Joint-Use Library provides public access to over 400,000 items in their collection, inclusive of circulating and non-circulating (e.g., reference) materials.

The Agreement identifies NSU as the sole owner of the Joint-Use Library and adjacent Parking Garage and requires the County to provide funding to support joint-use by the public. NSU is responsible for the operation and administration of both the Joint-Use Library and the Parking Garage. As of September 30, 2006, the County paid approximately \$37.3 million in capital costs and operating expenses (see details of funding at **Appendix A**).

Section 11 of the Agreement specifically addresses annual operating expenses and the County's share of operating expenses for joint-use of the facility. Nova is to provide an annual estimated budget for operating expenses, capped at 3% over the prior year budget. The initial projected annual operating budget was \$6.9 million. With respect to increases in funding for operational expenses, the Agreement³ stipulates the following:

During each of the first five full fiscal years the County shall be obligated to pay forty percent (40%) of the annual operating expenses of the library. During the last six months of the 5th, 10th, 15th, 20th, 25th, 30th, and 35th full fiscal years; there shall be a review of the usage records for the library for the prior 12 months. NSU shall maintain usage records throughout the term of the

² Section 11.i, Board Agenda Item #80, December 14, 1999.

³ *ibid.*

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agreement indicating the number of library patrons who are NSU students and employees and the number of library patrons who are members of the general public. If members of the public other than NSU students and employees constitute more than forty percent (40%) of the users of the library during the applicable period, then for the ensuing five years, the County's percentage share of annual operating expenses shall increase to the actual percentage of usage not to exceed fifty percent (50%). The County's percentage share of annual operating expenses shall never be more than fifty percent (50%) or less than forty percent (40%).

Usage⁴ is defined as 1) physical entry into the facility or 2) circulation of materials or 3) use of on-line resources.

An increase in the County's share of Joint-Use Library operating expenses up to the maximum level of 50% will result in additional funding of approximately \$4.9 million over the next five years.

Procedures

We obtained an understanding of the three measures of public usage through interviews of staff from both NSU and Broward County Libraries Division and observations of actual physical entry, circulation of materials and use of online resources. Summaries of the three processes for measuring usage and respective limitations are included at **Appendix B**.

We reviewed NSU reported usage statistics from each of the three measures and the underlying detail records as available. We worked with NSU staff to identify which measure could be substantiated through review and testing. Reported usage is summarized at **Appendix C**.

Upon consideration and comparison of the three available measures for public usage, we determined that circulation of materials was the only measure that could result in recorded, discrete transactions to substantiate reported usage levels. Upon requesting a detail of activity to support reported usage levels, we found the following:

- *Details of historical check-out activity were unavailable for review, as NSU retains only the current and last patron check-out record for patron privacy reasons. Available data was limited to record counts of circulation transactions by patron type and collection.*
- *Due to confidentiality concerns, our review of proper classification of patrons as compared to registered students, faculty and staff was limited to confirming the reasonableness of the number of patrons classified as students, faculty or staff in the library system with the number of students, faculty and staff records in the university registration system.*

In consideration of presented limitations, we performed the following procedures:

1. Reviewed details of an ad-hoc data extract for February 2007 activity and compared extracted data to reports generated from the production system to validate the process for accumulating usage statistics.

⁴ Section 5.b, Board Agenda Item #80, December 14, 1999.

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2. Compared circulation activity during the measurement period for the month of February 2006 to the ad-hoc data extract of circulation activity during February 2007 to determine consistency.
3. Compared the number of students, faculty and staff records in the university registration/payroll system to the number of students, faculty and staff records in the integrated library system to determine the reasonableness of registered academic library patrons.

Findings

Finding 1

Circulation of Materials is the only measure subject to consistent controls that could produce recorded, discrete transactions to substantiate reported usage levels.

The Agreement defines usage as 1) physical entry into the facility or 2) circulation of materials or 3) use of on-line resources. As such, the three measures must be considered individually, and cannot be combined for analysis.

We worked with NSU staff to understand the three measurement processes and the extent of underlying data available to substantiate reported usage. See a summary of our analysis at **Appendix B**.

In accordance with our objective, we found that circulation of materials was the only measure where the process for capturing usage was subject to consistent controls and where underlying records were captured at a sufficient level to validate reported usage.

We observed inconsistent application of controls over the process for measuring physical entry. Furthermore, underlying records of reported physical entry usage were limited to “card entries” by NSU patrons. There is no basis for determining whether “non-card entries” are truly public patrons, or NSU patrons who failed to swipe their ID card at time of entry.

We learned that the process for measuring online usage captures the number of system processes that occur during a patron session. The reported usage level may not correlate to the actual volume of access to or use of online resources by Joint-Use Library patrons.

Finding 2

NSU retained limited records of circulation activity, the details of which were not sufficient to validate reported usage via circulation.

Available supporting records of NSU reported public usage consist of system transaction counts of activity by patron type (undergraduate student, Broward adult, law faculty, etc.). The supporting records of transaction counts provide insufficient detail to validate reported public usage.

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While sufficient details of circulation activity are captured initially, the system used by NSU has a limited period for data retention. The transaction record that links a patron account with the checked-out material is maintained only for the current and prior patron check-out. Beyond these two detailed transactions, underlying transactions of historical check-out activity are not maintained by NSU. NSU staff report that the limited retention of detailed circulation transactions is performed in the interest of patron privacy.

The policy of maintaining confidentiality over library borrowing records and other information relating to personal use of library and information services is promulgated by the American Library Association in the Library Bill of Rights. The practice of limited data retention is usual and customary for academic libraries, and is not unique to NSU.

Finding 3

We obtained reasonable assurance that the process for measuring public circulation activity does occur as described and intended by management.

While we could not validate NSU reported circulation activity, we performed procedures subsequent to the measurement period to obtain reasonable assurance that the process for measuring public circulation activity does occur as described and intended by management.

Based on procedures performed, we determined the following:

- The process for accumulating usage statistics, as reviewed in February 2007, appears to function as described and intended by management.
- Circulation activity in February 2007 indicated an increase in total patronage of 8.8%, of which public patronage rose 3.6% over February 2006.
- The number of NSU staff, faculty and student patron accounts defined in the Joint-Use Library system is reasonable in relation to the number of registered NSU students and employees.

The review procedures performed serve only to evaluate the process, and do not provide a basis for validating the NSU reported circulation statistics of public usage during the measurement period January 1, 2006 to December 31, 2006. Until NSU addresses limitations identified with each of the usage capture and calculation processes, the accuracy and validity of reported usage levels cannot be determined.

NSU Response

Finding 1

NSU representatives concurred with our evaluation of the measurement methods and determination of the circulation method as the best measurement method of public usage of materials at this time. To address Finding 1 and noted limitations in the measurement methods, NSU representatives reported the following:

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- Detailed circulation transaction data will be retained in the future to support reported measures of facility usage.
- Actions are underway to improve controls over physical access to the facility and resulting measures.

Finding 2

NSU representatives acknowledged that detailed circulation records are necessary to validate the measure of public circulation usage. In order to enable validation of public usage measures, NSU representatives agreed to:

- Retain detailed circulation transaction data;
- An interim measurement period from June 1, 2007 through November 30, 2007; and
- Retroactive adjustment of the funding percentage of operational expenses, based on the results of our review of the interim period.

Finding 3

NSU acknowledged the County's efforts in validating the process for measuring public usage via the circulation method.

Recommendations

We recommend the Board of County Commissioners direct the County Administrator to:

1. Formalize NSU's agreement for the retroactive adjustment of the funding percentage based on validation of reported usage during the interim measurement period.
2. Pay the fifty percent of the Joint-Use Library operating expenses as required by the agreement subject to retroactive adjustment based upon the audit results of public usage during the interim measurement period of June 1, 2007 through November 30, 2007.
3. In conjunction with the County Auditor, perform procedures to review and validate reported measures of public usage during the interim measurement period of June 1, 2007 through November 30, 2007.
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Appendix A: Joint-Use Library – Funding Details

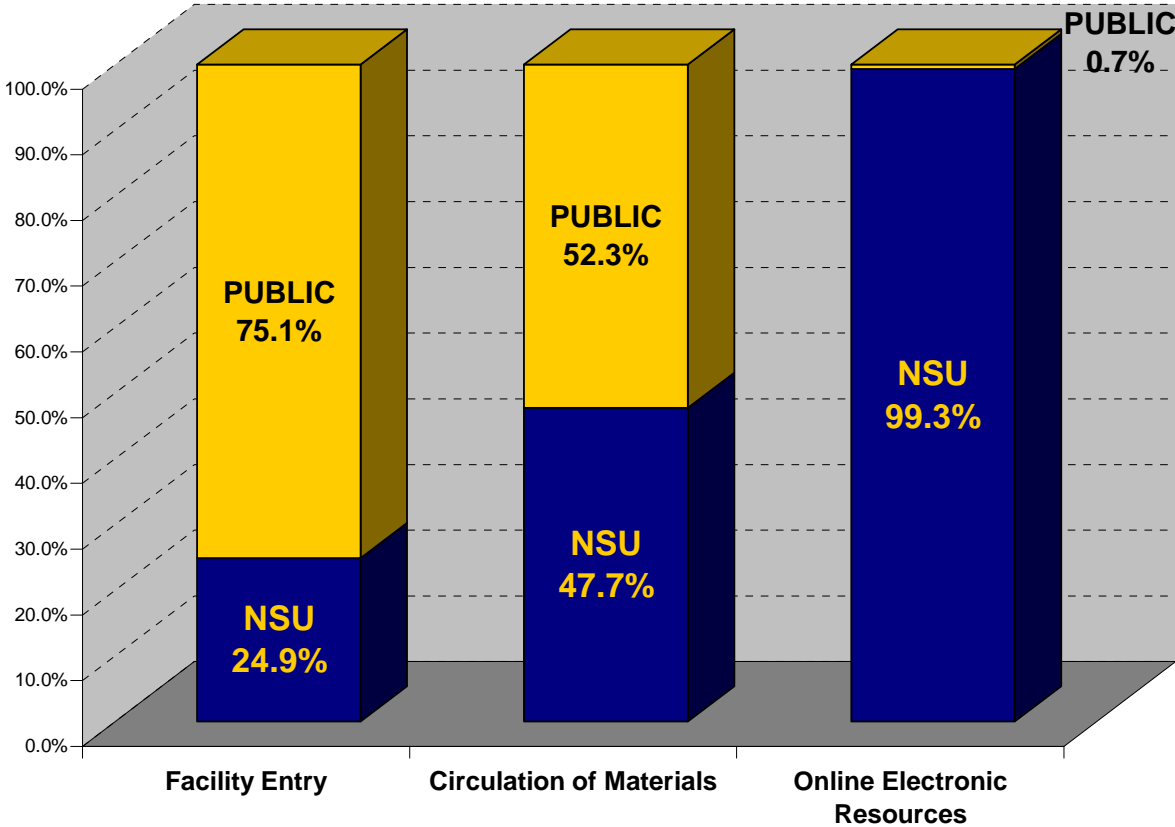
| Terms of Agreement | Projected Funding | Payments As of 9/30/2006 |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|----------------------------|
| Construction of the library building (not-to-exceed \$20,150,000; actual costs \$13,650,000) | Completed | \$13,650,000 |
| Initial books and materials | Completed | 5,250,000 |
| Commencing in the sixth year (on January 2, 2007) and in every year thereafter, annual funding for library materials | 45,184,833 | -0- |
| Build-out of the library building's fifth floor no later than January 2, 2010 (minimum contribution of \$2,500,000, Budget Office projected estimate is \$3,250,000) | 3,250,000 | -0- |
| Construction of parking garage (50% of actual cost not to exceed \$17,400,000, payable over a twenty year period, payments to be reduced by parking revenues generated by public usage) | 17,400,000 | 2,495,318 |
| Share of operating expenses at 40% for the agreement term (40% for first five years of operation, subject to increase every five years based on public usage, not to exceed 50%) | 214,559,943 | 14,823,435 |
| Reserve fund for capital repair, replacement and renewal (\$150,000 annually) | 5,100,000 | 1,050,000 |
| Totals | <u>\$285,494,776</u> | <u>\$37,268,753</u> |

Source: Schedules prepared by Broward County Libraries Division and the Agreement between Broward County and Nova Southeastern University, Inc. for Design, Construction, and Operation of a Joint-Use Library and Parking Garage, as approved by the Board of County Commissioners, December 14, 1999.

Appendix B: Usage Measures

| Measure | Functions | Observed Control Deficiencies | Implications |
|-------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Physical Entry | Counts physical entry of all persons entering the facility Requires diligence of NSU students, staff and faculty to "swipe" ID cards at time of entry. Captures data indicating "card entry" or "non-card entry" | <ul style="list-style-type: none"> - Inconsistent monitoring of physical access by security personnel - Lax enforcement of card swiping by NSU patrons - Insufficient data capture to discern public patron from non-swiping NSU patron | <ul style="list-style-type: none"> - Non-card entries may be incorrectly assumed to represent public usage - Public v. Non-public usage may be misstated |
| Circulation of Materials | Requires patron accounts denoted as public and NSU patrons Creates transaction records linking patrons with circulation activity Provides statistics on the number of check-out transactions by patron type | <ul style="list-style-type: none"> - Public library patrons are not routinely culled for inactivity - Lack of historical transaction details | <ul style="list-style-type: none"> - The number of active, registered public patrons may be overstated - Unable to validate reported usage |
| Use of On-line Resources <i>(on campus and remotely via the World Wide Web)</i> | Requires patron accounts denoted as public and NSU patrons Captures patron use of online resources by counting "clicks" | <ul style="list-style-type: none"> - Each item within a web page is counted as a "click" when loaded - Workstation usage within the facility is not captured - Public and NSU patrons are not provided equal access to online resources | <ul style="list-style-type: none"> - Reported usage is not representative of actual usage activity |

**Appendix C: NSU Reported Usage During the Measurement Period
January 2006 to December 2006**



SOURCES: Summary of NSU provided Facility Entry Reports; monthly reports of Circulation by Patron Type and Material Location; and Connection Statistics for Electronic Resources.