Request for Proposal:

Radio Frequency Identification (RFID)

Issued by The Urbana Free Library

RFP No. 2013-1

Proposals accepted until Friday, April 5, 2013

The Urbana Free Library
210 West Green Street
Urbana, IL 61801
http://urbanafreelibrary.org

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I. The Urbana Free Library

The Urbana Free Library (TUFL) consists of one main library and serves a population of 41,250 and close to 14,000 registered users. The library is open 70 hours/week: Monday–Thursday 9:00 a.m.–9:00 p.m.; Friday–Saturday 9:00 a.m.–6:00 p.m.; and Sunday 1:00–5:00 p.m. During FY2012, TUFL welcomed almost 500,000 visitors and circulated over 816,000 items. The library’s collection had nearly 318,000 items at the end of FY2012, consisting of various types of print and media. The library uses magnetic security strips and electronic magnetic security gates to protect the collection, and looks to replace this obsolete equipment with RFID security. AV materials are kept behind the Circulation Desk because of space considerations and will not require disc media security, but all AV cases will be tagged with standard RFID tags for checkout purposes. In December 2011, TUFL migrated to Polaris for its ILS (now running version 4.1.670), forming a joint catalog with neighboring Champaign Public Library (CPL) using a terminal server environment. CPL’s materials all have Tech Logic RFID tags, and any RFID system purchased by TUFL must be able to read and process Tech Logic tags accurately and efficiently.

II. Schedule of Events

Event: RFP Release
Date: Friday, March 8, 2013

Proposals Accepted Until: Friday, April 5, 2013

All inquiries and submissions must be sent to:
The Urbana Free Library
RFP No. 2013-1
ATTN: Debra Lissak, Executive Director
210 West Green Street
Urbana, IL 61801

Phone: 217-367-4058
Fax: 217-367-4061
Email: dlissak@tufl.info
III. General Information

Introduction
The Urbana Free Library (TUFL) is seeking proposals for provision of the hardware, software, and support services necessary to install and enable the management of an integrated Radio Frequency Identification (RFID)-capable self-check, collection management, and security system.

Critical Requirements
The vendor of the RFID system proposed should be in a position to meet the following critical requirements by the date proposals are due. The vendor should have available for review and be in a position to refer to an operational site or sites to showcase the following functionality:

- Conversion to RFID tag regardless of medium of the item
- Real-time interface to UFL’s Polaris automated library system
- Durable, ISO-compliant RFID tags that easily affix to the item, regardless of its medium
- Patron self-service (desktop and kiosk) with the ability to collect fees and fines and to print receipts
- RFID conversion for the library’s existing staff circulation stations or the provision of new hardware for check-in/checkout
- Inventorying with portable RFID appliance
- Shelf reading with portable RFID appliance
- Activity statistics compilation and display that includes comprehensive reporting capabilities
- Security gates and exit alarm that are ADA compliant and customizable by TUFL
- Easily maneuverable mobile tagging stations for loan, lease, or purchase

All documents, including proposals, submitted to TUFL become the property of TUFL.

Scope of the Project
Proposals are sought for hardware, software, shipping, installation, conversion, training, project management, and ongoing maintenance—the proposal is to be for a turn-key system.

While the proposal is to include only RFID-based hardware, the proposal must include minimum specifications for PCs and LAN (local area network) that may be required in conjunction with the operation of the system.

Role of the RFP
The RFP represents the functional capabilities, performance characteristics, and hardware minimum desired. The requirements are intended for the protection of the library and vendors by reducing the possibility of misinterpretation of TUFL’s needs.
Responses to the RFP
Proposals will only be accepted from a single firm, not from joint ventures. When two or more vendors desire to submit a single proposal, they shall do so as prime/subcontractor(s). Vendors are invited to come to the library for a site visit to assist in the preparation of their responses. To set up a site visit, please contact Debra Lissak.

Exceptions
If the vendor’s specifications for furnishing products or equipment are in any respect not the equivalent of the requirements in the RFP, this discrepancy must specifically be called out in the proposal. Notwithstanding anything to the contrary in this RFP, vendors are invited to propose, and TUFL will consider, any system that is the functional equivalent, or better, system than called out in this RFP.

Proposal Submission
The entire proposal must be delivered in a sealed envelope or package and clearly marked as LIBRARY RFID PROPOSAL and must include the RFP number that appears on the cover sheet of the RFP (RFP No. 2013-1). One copy shall be marked as “Original” and must contain an original signature. Two additional paper copies must be included and one electronic copy in PDF must be included. Proposals will be typed or printed on 8.5” x 11” paper, with sections numbered as presented in the RFP. Pages will be numbered. Proposals are due Friday, April 5, 2013, at 5:00 p.m. local time and shall be delivered in a sealed package to:

The Urbana Free Library
RFP No. 2013-1
ATTN: Debra Lissak, Executive Director
210 West Green Street
Urbana, IL 61801
Proposals may be delivered by hand, mail, or courier service. Proposals received beyond the deadline will be returned unopened.

Quantities, Appropriation, and Delivery
Unless otherwise stated, quantities listed are estimates only, and TUFL does not guarantee to purchase the quantities specified. The quantities purchased will be limited to the amount of monies budgeted and appropriated.

Transportation shall be F.O.B. Origin, Prepaid and charged back with delivery to the facility where they are to be installed. If otherwise, it shall be called out in the proposal.

Pricing
Prices reflected in the proposal shall include any discounts extended. Unit prices shall be quoted for all components and costs for hardware, software, installation, and service. Vendor must indicate whether or not shipping is included. Vendor must include prices of all equipment and any options needed to meet specifications.
The Urbana Free Library is a tax-exempt organization. Vendors are requested to indicate on the proposal if they will extend the pricing, terms, and conditions of current contracts with Illinois governmental entities to TUFL.

No vendor will be allowed to withdraw and resubmit its proposal, for any reason whatsoever, after the proposals have been opened, without permission of TUFL.

**Project Schedule**
The proposal shall include an example project schedule from a previous project of a similar size and scope as TUFL for the first phase of the implementation: installation of hardware and loading of software, and appropriate supplies.

The proposal shall include a project manager to oversee the project to ensure that it meets the requirements of the library and to be the key contact for the entire installation.

**Guarantees and Warranties**
All guarantees and warranties should be stated in writing and submitted as part of the proposal.

The vendor shall warrant that the system will meet the reliability and performance requirements set forth in the RFP and will continue to do so as long as the system remains under vendor maintenance.

The vendor provides a one-year money-back guarantee on all equipment purchased by the library should the system fail to meet the specifications set forth in this RFP.

**Liability**
Vendor agrees to indemnify and hold harmless the library from and against legal liability for all claims, losses, damages, and expenses to the extent such claims, losses, damages, or expenses are caused by the vendor’s conduct, acts, errors, or omissions. The library agrees to indemnify and hold harmless the vendor from and against legal liability for all claims, losses, damages, and expenses to the extent such claims, losses, damages, or expenses are caused by the library’s conduct, acts, errors, or omissions. In the event such claims, losses, damages, or expenses are caused by the joint or concurrent conduct, acts, errors, or omissions of the vendor and the library, they shall be borne by each party in proportion to its own conduct, acts, errors, or omissions.

The vendor shall have at least $500,000 per occurrence for general liability insurance, and $1,000,000 for all occurrences. Proof of insurance should be available upon request.

**Installation**
Vendor shall install the system as specified in the RFP, by manufacturer-trained technicians subject to exceptions made in the response and agreed upon in writing.
Award of Contract
TUFL shall have a period of 120 calendar days after the submission deadline in which to award the contract, a period during which the prices shall remain firm.

Selection Criteria
Evaluation of functionality, customer reference checks, customer support ratings, third-party product integration, development history, cost, and possible vendor demonstrations or discussions will be included in the selection process. The Urbana Free Library reserves the right to select the vendor deemed most suitable, which may or may not be the low bidder.

Demonstrations
A vendor whose offer has not been rejected may be required to demonstrate its RFID system at the library at no additional cost to TUFL.

Negotiation
TUFL reserves the right to enter into negotiation with one or more vendors. TUFL reserves the right to waive any informality as may be permitted by law. TUFL reserves the right to award multiple contracts for different portions of the work or commodities, or to reject all proposals.

Contract Documents
The successful responder will be expected to enter into a contract with TUFL pursuant to the documents that include the RFP, the vendor’s proposal, the summary of negotiation, and any and all other additional materials submitted by the vendor.

The only official answer or position of TUFL will be the one stated in writing.

IV. Company

Corporate Experience and Capacity
The proposer shall provide information that documents its firm’s experience and capacity to produce the required outcomes. The proposer is defined as the company, entity, or partnership that is submitting a proposal under this RFP, not individual companies in a partnership of joint venture. This information shall include:

- A brief history of the company, including incorporation and ownership, and experience installing the products and services requested in this RFP, especially at libraries using the Polaris ILS.
- Details of any parent company, partners, and suppliers, as well as the nature of the vendor’s relationship to them.
- Details of any sale, acquisition, or merger anticipated by the vendor.
- Details of any litigation instigated against the vendor or cancellation of contract for non-performance of the vendor in the past five years.
- Demonstrable financial viability of vendor.
• Any other information regarding the vendor’s experience that will assist the library in evaluating the proposal and making a decision.
• Whether any of the vendor’s RFID customers have changed to another RFID vendor.

Client References for Similar Work Performed
Proposers shall summarize the number and type of their library customers and identify select public library customer references. The services provided to these clients must have characteristics as similar as possible to those requested in this RFP, and preferably have similar population, circulation, and holdings. Information provided for each customer reference must include the following:
• Client’s name
• Contact info
• Years with vendor
• Brief description of services provided

Failure to provide the above information may result in the proposer being disqualified and its proposal not considered. TUFL reserves the right to contact any and all references to obtain information without limitation and regardless of the proposer’s performance on the listed jobs. A uniform sample of references will be checked for each proposer.

Health and Safety
• All equipment must be CSA- or UL- or ETL-approved for adequate fire and safety compliance. That compliance must be for complete units in the system and not for individual electrical components or pieces.
• Proposers shall provide documentation and certification listing numbers of the CSA, UL, or ETL approval.
• All equipment must be FCC compliant.
• The CSA or UL/cUL or ETL/cETL and the CE and C-tick marks shall be displayed on the serial plate of the system.
• The system must be in compliance with ADA guidelines for wheelchair clearance and for reach range standards.
• Detection or security corridors must be in compliance with relevant ADA requirements.
• All products must comply with internationally recognized standards for RFID-based library self-service systems.
• Equipment should meet the EU WEEE (Waste Electrical and Electronic Equipment) Directive. RoHS prohibits lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls (PBB), and polybrominated diphenyl ethers (PBDE) above certain maximum concentration levels for those substances.

Place of Manufacture
To ensure ready availability of components, parts, and supplies, all major elements of the system must be warehoused in North America, or the proposer must demonstrate the ability to have parts available within 24 hours of request.
V. Response to Specifications

Vendors must respond to every requirement contained in the Technical Requirements and Training and Service Requirements sections (VI and VII) of the RFP using the criteria specified below.

- Y (YES)—Feature, function, product, or service is available as requested and is fully operational using the version proposed.
- N (NO)—Feature, function, product, or service is not available.
- P (PLANNED)—Feature, function, product, or service is under development or planned for the future. Provide implementation dates or estimates. Please also elaborate on whether the library will incur any additional costs for the product or service once it becomes available, either as a direct cost or because the product or service will serve as a replacement or addition.

Vendors are advised that the library is interested in receiving proposals that discuss a proven RFID system. Proposals for systems in an Alpha or Beta phase of development will not be considered.

VI. Technical Requirements

General Requirements

1. All system components must be CSA or UL or ETL, and FCC Part 15-Certified; SIP2, RS-232, TCP/IP Ethernet 10/100/1000, 802.11g/n (wireless) compliant, and meet the EU RoHS and WEEE Directives (or latest standards).
2. The proposed system and all of its components must be entirely compatible with, and in no manner interfere with, the Polaris Integrated Library System, its computer clients, or other components.
3. The proposed system must provide application-specific software to incorporate all hardware (detection systems, staff station readers, cataloging stations, patron self-check stations, portable handheld readers), the circulation RFID tags, and any other RFID-related hardware into the system.
4. The proposed system must interface with the library’s existing ILS using the SIP2 protocol.
5. The proposed system must not interfere with other equipment, automated library system clients, or PCs that may be nearby.
6. The proposed system must be able to function on both wired or wireless TCP/IP networks at speeds of up to 1 Gbit/s internally and up to 50 Mbit/s externally to the off-site ILS database.
7. The RFID system must be compliant with the latest ISO standards and must use Reader Talks First (RTF) architecture.
8. Vendor must be willing to work with the ILS vendor Polaris to resolve any RFID-ILS functionality problem.
9. The proposed system must be able to read and process Tech Logic RFID tags (used by ILS partner Champaign Public Library) accurately and efficiently. CPL currently uses 13.56
MHz ISO standard tags, using the AFI byte for security. Tags are written using the write model of Techlogic Ascii.

10. RFID system must be upgradeable for changes in technology such as, but not limited to, tag size and function.

11. The vendor must offer a 12-month, 100% money-back performance guarantee on all equipment purchased and covered by a 12-month warranty or service agreement.

**Self-Checkout Units**

1. The proposed system should have the ability to function with all major ILS, including open source.
2. The proposed system’s RFID self-checkout units must be able to read item-specific identification numbers, communicate to the host circulation system to update the library’s inventory, and turn the RFID security feature off.
3. The proposed system must be dual function – capable of processing RFID tags or item barcodes in the same transaction and without reconfiguration.
4. The proposed system must use an anti-collision algorithm that does not limit the number of tags that can be simultaneously identified and read up to six inches (6”) high.
5. The proposed system must read the type of barcode patron cards currently in the library.
6. The proposed system must have the ability to be built into the existing circulation desk with touch screen monitors that display instructions for use.
7. The proposed system must have the ability to print out all information for a patron checkout or check-in transaction on a single receipt. Such receipt should be customizable to incorporate library identity, hours, and so forth. Staff members must be able to make these changes easily without going back to the vendor.
8. The proposed system’s self-checkout units should have customizable messages based on patron and item status. Staff members must be able to make these changes easily without going back to the vendor.
9. The proposed system must display ILS system information relating to the patron or item status. Option must be available to notify a staff person whenever a patron is blocked in any part of the transaction. Notification should be in the form of a pop-up window that appears on a staff computer screen in real time.
10. The proposed system must provide visual and audible feedback during the transaction.
11. Self-checkout system software and hardware must meet ADA guidelines, and include features such as a large touch-screen interface, user-selectable high-contrast interface, and large type size.
12. The proposed system must have the ability to display select information from the patron record, such as number of items checked out, number of items on hold, and outstanding fine information, without compromising patron privacy.
13. The proposed system must have customizable instructions. Staff members must be able to make these changes easily without going back to the vendor.
14. The proposed system must be able to display multiple language options on self-check unit banners, instructions, and messages. Proposer must offer a wide variety of languages to meet the current and future needs of our community and provide a list of...
the languages currently available. The system must allow the library to select at least three languages to be used on one self-checkout system.

15. The proposed system stations must deactivate the theft or security status on the materials when checked out.

16. The proposed system must allow remote access to self-check machines from staff workstations.

17. The proposed system must turn on/off the security to allow secure library operation during offline situations.

18. The proposed system must provide performance statistics that can be accessed through the Web. Data must be broken down by day of the week and hour of the day. Data to include: number of transactions, type of transaction, number of successful and unsuccessful transactions, and an exit alarm data log.

19. The proposed system must offer the patron the option of email, paper receipt, or no receipt.

20. The proposed system must offer Web-based remote monitoring and diagnostics, which must include instant email notification, monitoring of check-in and checkout rates, Web-based troubleshooting, configuration, and the ability to obtain statistics for each machine from any location. These features should be standard. Specify the back-end hardware and software requirements necessary to perform these functions.

21. The proposed self-checkout system must provide a high percentage of first-time user success for the library's patrons. Please provide data and detail of analysis to support claim.

22. The proposed system must offer the option of a repositionable stand-alone kiosk, tabletop model, or the ability to build into the existing circulation desk.

23. The proposed system kiosk must be available with both laminate and solid-surface options.

24. The proposed system must provide patron/staff selectable checkout and check-in software feature using a reader pad, not a handheld scanner.

25. The proposed system must provide CSA or UL listing number and FCC certification numbers for the complete self-checkout system.

26. The proposed system must be capable of checking out or checking in all types of print and non-print media.

27. The proposed system must allow multiple item checkouts without first choosing the number of items that you want to check out.

28. Staff must be able to configure individual or multiple self-checkout stations by logging in to a Web interface on any staff station.

29. Credit card processing for the proposed system must interface to the library's approved credit card vendor and must use encrypted card swipes and be PCI compliant.

30. Describe options for paying fines and fees at the self-checkout stations. What type of hardware/software is offered? Please describe the process for paying any fines at the self-checkout station.
**Optional Software Functionality**

Vendors must be able to provide screen shots, sample reports, and/or online demonstrations of all optional software features.

The vendor must provide the option for the library to purchase additional software providing the following functionalities:

**General**

1. All optional software features must be Internet browser-based.
2. All optional software features must include installation wizards to facilitate quick installation for library staff.
3. The library administrator must be able to determine the access levels varying by individual permissions based on location and feature.
4. All optional software features must be password protected.

**Reporting Features**

1. Item-level self-checkout transactions by day of the week across all self-checkout devices and across multiple locations.
2. Item-level self-checkout transactions by hour of day across all self-checkout devices and across multiple locations.
3. Item count by item type for all self-checkout devices across multiple locations.
4. Item count by item status for all self-checkout devices across multiple locations.
5. Total item counts across each and every self-checkout device across multiple locations.
6. Patron-level transactions by hour of day for all self-checkout devices across multiple locations.
7. Patron-level transactions by day of the week for all self-checkout devices across multiple locations.
10. Total credit transactions for all self-checkout devices across multiple locations.
11. All transactions data for all self-checkout devices across multiple locations.

**Hardware Status Reporting Feature**

1. Real-time detailed monitoring for the following components: SIP connection, printer, barcode scanner, touch screen monitor, RFID, Coil (EM).
2. Real-time monitoring must work with multiple self-checkout devices at a single location.
3. Real-time monitoring must allow for additional self-checkout devices to be added to the network in the future.
4. The hardware component monitoring must communicate performance changes to library personnel through a Web-based dashboard display that intuitively communicates status changes in real time.
5. Hardware status reporting must allow other library-networked devices to be connected to the server, and must validate this connection.
Self-Checkout System Configuration Feature

1. The software configuration feature must allow library staff to copy a configuration from a self-checkout device to multiple self-checkout devices at the same location or at different sites.
2. The software configuration feature must allow library staff to perform the copying of a configuration from a self-checkout device to other self-checkout devices across any networked locations remotely.
3. Configuration copying software features should have a user interface that allows library staff to ‘export and import’ configurations quickly from any remote location that has network access.

Fines/Fees

1. The fines and fees system shall be integrated into a self-checkout system.
2. The fines and fees system shall utilize a seamless user interface that is integrated into the self-service process.
3. The fines and fees system must provide both audible and visual feedback when responding to the interaction with the user interface.
4. The fines and fees system shall allow the library to determine minimum, partial, or full payment of the fines or fees.
5. The fines and fees system shall accommodate cash, credit, and/or debit card payment methods.
6. The fines and fees system shall print a credit/debit card receipt separate from the checkout receipt.
7. The fines and fees system shall print a cash receipt separate from the checkout receipt.
8. The fines and fees system shall have the capability to provide the patron with change if cash funds tendered are greater than the outstanding fines and/or fees balance.

Circulation Staff Workstations

1. The proposed system must have a thin (less than 1”) reader pad that provides easy installation.
2. The proposed system shall be compatible with TUFL’s standard circulation desk computers, barcode scanners, and receipt printers.
3. RFID client software must be capable of running in Windows XP/7 at a non-administrative level, and vendor must demonstrate a commitment to support future Windows OS products.
4. The RFID staff application client interface must not be intrusive to the ILS staff client. It must take only a small amount of screen real estate and remain easily accessible in a small application window.
5. The proposed system must not require a separate staff application that is modeled on the patron self-checkout application. The system should be optimized for staff use.
6. The proposed system hardware must be attractive and contemporary, and be able to be integrated into TUFL’s own furniture.
7. The proposed system must be able to mount in, on, or under the work surface of a circulation station.
8. The proposed system readers must function when positioned under existing library slate, granite, wooden, or laminate-topped desks.
9. The proposed system must be dual function: capable of processing RFID tags or barcodes in the same circulation transaction.
10. The proposed system readers must be able to read tags and display the information contained on the tag.
11. The proposed system must be able to be used for charge and discharge of library materials.
12. The proposed system must simultaneously process multiple RFID-tagged items for check-in/out.
13. The proposed system must provide a displayed count of the number of items processed simultaneously to ensure complete check-in/out transaction processing.
14. The proposed system must use an anti-collision algorithm that does not limit the number of tags that can be simultaneously identified and read up to six inches (6”) high with a book tag.
15. The proposed system must have the ability to read, program, reprogram, and lock RFID tags.
16. The proposed system must not require mouse activations to process most items. (Exceptions made for configuration changes, error handling, or tag reprogramming situations.)
17. The proposed system must allow configuration of item identifier parameters to automatically prevent programming of partially scanned or incorrectly scanned barcodes.
18. The proposed system must be able to handle varying barcode locations and orientations.
19. The proposed system must offer a hold notification message for the staff member who checks an item in, and the ability to print hold slips.
20. The proposed system must be able to work with a weed list (a list of items to be removed from the library) to automatically alert staff to weed an item upon scanning the barcode, before applying an RFID tag on conversion.
21. The proposed system must have a “hot key” feature that can be set up to mimic the ILS’s F-Key setup so there is only one keystroke to change the system from checkout to check-in module.
22. The proposed system must have the option to integrate into an ILS circulation client so that it accepts and responds to commands from the ILS client. Note that all circulation transactions are taking place in terminal server sessions with the ILS client.
23. The proposed system must have the option to allow the ILS circulation client to turn on or off security without requiring any additional steps, and proposed system must secure item within one second of discharging the item.
24. The proposed system must be able to process sets and provide a notification if a missing part is detected.
25. The proposed system must be able to block or prompt the user on sets with missing parts prior to sending data to the ILS. This capability must be configurable.
26. The proposed system must permit configuration of RFID reader power to limit read range if desired by the user.
27. The proposed system must permit the operator to access commands to set or reset tag security independent of the ILS.
28. The proposed system must be configurable to turn off the reader transmitter when the ILS is not requesting RFID reads.
29. The proposed system must be able to read multiple tag data formats without impacting performance.
30. Vendor must provide CSA or UL listing number for complete staff workstation.

Security Gates

1. The proposed system should be approved by CSA or UL for safety to library patrons and staff. The entire system (not various components) shall be approved. As verification of CSA or UL certification of the entire device, the CSA/UL mark shall be displayed on the serial plate of the equipment.
2. The proposed system must have a read range of at least eighteen inches (18”) in either direction of each gate, but no more than twenty-four inches (24”).
3. The proposed system must be able to perform optimally when located within fifteen inches (15”) of a steel beam.
4. The proposed system must use the latest ISO standard for RFID technology.
5. The proposed system must use the latest ISO standard for RTF (Reader Talks First) architecture.
6. The detection systems must be shielded from external interference from light fixtures, elevator motors, etc.
7. The proposed detection system must include a patron counter, which can be reset by library staff.
8. The proposed system must be able to provide total patron count data via a remote Web-based software application.
10. The proposed system must be able to issue visible and audible warnings.
11. The audible alarm volume must be adjustable by staff.
12. The alarm duration should be adjustable on each individual gate.
13. Tags with theft or security status that is “on” must immediately trigger an alarm.
14. The proposed system must have the option to only trigger an alarm when a patron is present in the corridor.
15. The proposed system must have the option to only trigger an alarm when a patron is exiting the library.
16. Dual-aisle exit detection systems must create an opening of at least 36 inches (36”).
17. The proposed system must provide item security even when the library’s ILS host system or network is offline or not functioning.
18. The proposed system must offer multiple install options, including:
   - Direct mount w/ ADA-compatible threshold plate
   - Base plate, only minor floor modification (e.g., drilling required for installation)
   - Buried cables (recessed conduit under finished floor)
19. The proposed system must have multiple finish options available to better match the décor of the library.
20. The proposed system must have multiple alarm-light color configuration options.
21. The proposed system must have the capability to read three or more tag data formats.
22. The proposed system must provide CSA or UL listing number and FCC listing for complete detection system.
23. The proposed system must display that it is functioning correctly and, if not, be easy for staff members to tune/calibrate without calling vendor or a technician.
24. The proposed system must have a low-power consumption mode.
25. The proposed system should only require a single data connection for up to four corridors using either a direct fiber optics connection or a media converter with an Ethernet RJ-45 port.
26. The proposed system must have an option to connect to the network wirelessly.
27. The proposed system must have an on/off key switch accessible to staff.

**RFID Tags**

1. The proposed system tag must be tested for over 100,000 read/write cycles and be guaranteed for the life of the item on which it is originally affixed.
2. The proposed system must provide tags that operate at a frequency of 13.56 MHz.
3. The proposed system must provide RFID tags with a minimum of 1024 bits of memory.
4. All data other than the SID on the rewritable RFID tag, including the item identifier field, must be fully rewriteable.
5. The proposed system tags must enable the security status to be stored directly on the tag and must trigger an immediate alarm if an item not charged is read by the detection system.
6. The vendor must provide the option of custom-printing blank tags with a barcode or TUFL logo.
7. The proposed system tags must provide both security and inventory control functionality.
8. The proposed system tags must use an anti-collision algorithm that does not limit the number of tags that can be simultaneously identified and read.
9. The proposed system tags must be highly durable, adhesive-backed, and one piece (tag and label integrated into one piece) to adhere to library materials without addition of an adhesive cover label. Tags must use a low acid or neutral pH adhesive.
10. TUFL wants enhance its chances for RFID interoperability for the future. The proposed system must be fully compliant with and include both mandatory and optional commands specified in the latest ISO standard for North American libraries.
11. The proposed system tags must be easily applied in one step, with no need for mouse clicks, keyboard input, or touch-screen entries for most item conversion.
12. The proposed RFID tags must have an operating range of -25°C to 70°C (-13°F to 158°F).
13. The proposed system must offer RFID tags that utilize the RTF (Reader Talks First) architecture. The proposed tag must also be compatible with use of the AFI Security Model.
14. The vendor must test tags for long-term reliability using accelerated aging testing and provide failure rate of tags.

15. The vendor must show the test methods used to test RFID tags for long-term reliability, and replace any defective tags at no cost to the library.

16. The vendor must offer a portfolio of tag options and provide samples.

17. The proposed RFID tags must offer opaque black flood coat to hide antenna.

18. The proposed RFID system must offer a “punched tags” feature to mark those that are inoperative.

19. The proposed system shall not lock the data on the tag.

20. Detail the reorder process for additional tags, including the average delivery time of new tags.

21. Tags should be able to be read by different vendors – both ILS and RFID vendors – as well as future replacement scanners.

**Portable Handheld Reader**

1. The portable handheld reader and any accessories needed to meet all the specifications in this section must be a cordless, one-piece design, to be held in one hand.

2. The total weight of the portable handheld reader must be less than 32 ounces, including battery, RFID reader, antenna, display and computing unit, and any other components that must be carried by the user.

3. The portable handheld reader must feature one full watt of power, an integrated barcode scanner, and a simple method of inputting information.

4. To be able to read items that may not be tagged with RFID, the portable handheld reader must support barcode scanning.

5. The proposed portable handheld reader must accommodate data collection simultaneously with other functions. These other functions must include shelf reading, inventory, identifying items on search lists, claimed return, weeding, and items with incorrect security.

6. The proposed portable handheld reader must accommodate shelf-order checking to locate items that are out of place on the shelves. This capability must be sensitive enough to locate items that are out of place by as little as six inches (6”).

7. The proposed system must accommodate searching to identify items on multiple user-defined search lists (e.g., missing, claims returned, lost, etc.).

8. The proposed system must accommodate secure status checking to allow a user to identify individual items that have not been properly checked out and have caused an alarm of the detection system.

9. Secure status checking capability also must allow the user to scan items on library carts or shelves before reshelving to identify individual items that have not been properly checked in.

10. The proposed portable handheld reader must have the ability to upload barcodes to TUFL’s circulation system in various text file formats that can be customized to match the circulation system requirements.
11. The proposed system must accommodate finding to allow a user to quickly enter search criteria directly into the device, then search for items that meet those criteria. The system must allow display of the title of item on the device.

12. The proposed system must accommodate sorting to assist a user with sorting items on a shelf or cart.

13. The proposed system must accommodate pulling to assist the user with finding items on hold (reserve) or weed lists, or other user-defined lists available from the circulation system.

14. The portable handheld reader must feature a color touch screen display and use a removable memory card.

15. The portable handheld reader must be easy to set down on a library shelf or cart when necessary to free the user’s hands.

16. The portable handheld reader must incorporate an ergonomic design to aid user in reading shelves at all levels, must be easy to use, and must be relatively non-stressful to wrist, arm, shoulder, and elbow.

17. Portable handheld reader battery life that allows the user to work for at least four hours before charging or changing batteries is required. Extra charged batteries must be available to replace depleted batteries while they recharge. A battery charger must be included, if necessary.

18. The portable handheld reader must have built-in diagnostics for troubleshooting.

19. The portable handheld reader must use an anti-collision algorithm that does not limit the number of tags that can be simultaneously identified and read.

20. The portable handheld reader must have the capacity to download at least one million items from the library’s automation system onto the portable handheld reader memory medium.

21. The portable handheld reader system must have the capacity to read multi-line, fixed-length-field, or delimited-field records from an electronic file containing shelf or search lists and then create a portable database for use in a portable, handheld RFID reader.

22. The handheld reader must direct the user to items on “pull” lists and provide a method to keep track of which items have been found and which have not been found.

23. The portable handheld reader must be multi-functional to provide efficient collection management.

24. The proposed portable handheld reader must be able to collect and store identifiers of items scanned, and store those items in user-defined categories for upload. This capability must allow storage of up to one million items prior to upload.

25. The search capability must be active during order checking, data collection, sorting, pulling, and finding functions, with option to turn it off if desired.

26. The proposed system must validate item identifier (barcode) data from input lists and provide a log of errors found.

27. The proposed system must process results of data collection sessions or pull sessions, reading these results from the memory card and creating PC files containing lists of collected data, lists of items pulled, and lists of items not pulled.
28. The proposed portable handheld reader must have an audible tone and visible indicators to verify item has been identified. The audible tones shall be adjustable by the user.

29. The proposed portable handheld reader should have a flexible swivel or movable RFID antenna for easier use.

30. The proposed system must be able to scan shelves by waving a wand along the base of book shelves without having to stop for each item.

31. The proposed portable handheld reader must have the ability to turn the security bit on the RFID tag on and off.

32. The vendor must provide the CSA or UL listing number and FCC listing for complete portable handheld reader.

33. An optional USB connection should be available on the handheld reader to link it directly with a workstation, if desired.

34. The vendor should detail the benefits of any available non-portable inventory devices.

Conversion Station

1. The proposed system must require no more than a computer, barcode scanner, and RFID reader/antenna in addition to software, all of which can be placed on mobile cart, so that the complete operation can be performed in the stacks.

2. The proposed system must have a high-efficiency laser scanner to ensure accurate reading of all barcodes, including damaged and worn barcodes.

3. The proposed system must be able to automatically dispense tags.

4. The proposed system must function in standalone mode, not requiring an interface with the Integrated Library System.

5. The proposed system must be battery-operated and should not require an AC connection to operate.

6. The proposed system must be easy to use and able to convert book tags at a rate of at least 200 items per hour. Vendor must provide an example of a library where this number was achieved, and provide contact information.

7. The vendor should provide a list of accounts where high speed rates have been achieved and sustained for a multiple-week period.

8. Vendors will describe their tagging software and the tagging process.

9. The proposed system must have a visible scan line to facilitate correct placement of material on the conversion station.

10. The proposed system must be able to handle varying barcode locations and orientations.

11. The proposed system must automatically interrupt if barcodes are not fully scanned.

12. The proposed system must be able to convert items from a list (when an optical barcode is unavailable or unreliable).

13. The proposed system must be able to work with a weed list (a list of items to be removed from the library), to automatically alert staff to weed an item upon scanning the barcode, rather than applying an RFID tag.

14. Vendors must provide CSA or UL listing number and FCC listing for complete conversion system.
15. The application software must be able to report various levels of program completion or activity, including hourly totals, daily totals, etc.
16. The proposed system must provide visual and audible feedback when the tag has been successfully programmed.
17. The proposed system software must keep a log file of all converted items by date and item ID.

**Tech Services Workstation**

1. Describe how your system functions as a workstation, either as a stand-alone workstation or integrated into existing library hardware.
2. The proposed system must be able to print and dispense tags automatically and simultaneously.
3. The proposed system must function in standalone mode, not requiring an interface with the Integrated Library System.
4. The proposed system must be easy to use and able to tag at a rate of at least 200 items per hour.
5. The proposed system must be able to handle varying barcode locations and orientations.
6. The proposed system must allow configuration of item identifier parameters to automatically prevent programming of partially scanned or incorrectly scanned barcodes.
7. The proposed system must be able to tag items from a list (when an optical barcode is unavailable or unreliable).
8. The proposed system must be able to work with a weed list (a list of items to be removed from the library), to automatically alert staff to weed an item upon scanning the barcode, rather than applying an RFID tag.
9. The proposed system must have a thin (less than 1”) reader pad for easy installation.
10. The proposed system shall be compatible with the library’s standard circulation desk computers and barcode scanners.
11. The proposed system must be able to mount in, on, or under the work surface of a circulation station or staff workstation.
12. The proposed system readers must function when positioned under existing library slate, granite, wooden, or laminate-topped desks.
13. The proposed system must have an RFID read range of six inches (6”) minimum for book tags.
14. The proposed system readers must be able to read tags and display the information contained on the tag.
15. The proposed system must have ability to read, program, reprogram, and lock RFID tags.
16. The proposed system must give the library the option to print both the library barcode and logo on the RFID tag.
17. The proposed system must be able to print the item identifier in addition to the barcode.
18. The proposed system must provide CSA or UL listing number and FCC listing for any complete print conversion system.
VII. Training and Service Requirements

The Urbana Free Library seeks to train key circulation, technical services, system administration, and public services staff in the use of all equipment. Total number of staff to be trained is approximately 25-35.

1. Training will be performed by the vendor and will take place at TUFL.
2. The library requires user manuals, plus any other materials that are typically distributed during training.
3. The library requires that manuals be available in electronic format with unlimited distribution within the library, and shall be supplied free of charge.
4. The library requires unlimited interaction with the vendor sales staff and technical support staff during installation planning, the installation phase, and follow-up immediately after such installation.
5. Introductory operator/user/staff training shall be provided at no charge.
6. Indicate options and pricing for additional staff training periods and topics.
7. Indicate the cost for refresher training.

Hardware/Software Technical Support

Specify normal operating hours for tech support, and describe procedures for obtaining assistance during off hours.

Installation Requirements

1. The proposed system must be installed according to a schedule determined in coordination with library staff to minimize disruption.
2. Vendors must recommend an installation plan. The library anticipates starting the retrospective conversion-tagging project as soon as a proposal is accepted.
3. Vendor must also be available for consultation on placement of hardware to accommodate network infrastructure, power and ventilation requirements, building restrictions, etc., and to maximize workflow, staffing, and patron convenience issues.

Warranty and Service Requirements

1. The circulation RFID tags must be guaranteed to be effective for the life of the item to which they are originally affixed and, if found to be defective, they must be replaced at no cost to the library.
2. The vendor must provide an all-inclusive, 12-month extended warranty on equipment, software, and components and offer a maintenance/service contract thereafter. All proposed maintenance/service contracts are subject to negotiation by the library.
3. The vendor must offer a 12-month, 100% money-back performance guarantee on all equipment purchased and covered by a 12-month extended warranty or service agreement. If the detection system does not perform to the level of performance outlined in the specification document for this product, the vendor must either make the system meet the specified performance level or refund the entire purchase price and remove the system at no charge to the library.
4. Software warranty: Software patches and service pack releases must be supplied at no additional charge to the library and must be performed by the vendor.
5. Service technicians should be local in Champaign County or an adjacent county in Illinois, fully trained, factory authorized, and certified by the manufacturer to perform service on any related hardware or software. Specify location of nearest service technician.

6. Technicians shall be centrally dispatched.

7. The library shall be able to request service on a 24-hour basis using a toll-free 800 number.

8. Technical software phone support will be provided via a toll-free 800 number.

9. Service technicians will be equipped with parts normally required to service the equipment and reduce downtime.

10. Average on-site response time must be no longer than eight hours.

11. Service agreements to extend the warranty period on parts and labor must be available for a period of 12, 24, 36, or 48 months.

12. Vendor must provide a recurring fee structure.

13. Failure of vendor to meet specified standards may result in termination of the service contract.

14. The service agreement must be renewable on an annual basis.

15. The service agreement must include remote maintenance for expert technical consultation and software support.

16. Warranty and service requirements apply to both standard and optional system components.

17. The vendor shall provide sample sales, software, and support agreements.
VIII. Quantity and Pricing

Prices should include installation, but provide separate costs for service/maintenance and delivery.

<table>
<thead>
<tr>
<th>Products</th>
<th>Number Required</th>
<th>Price Per Unit</th>
<th>Total Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regular RFID Tags</td>
<td>300,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-Checkouts*</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Circ Staff Workstations</td>
<td>5</td>
<td></td>
<td></td>
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<tr>
<td>Handheld Inventory Tools</td>
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<td></td>
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<tr>
<td>Tech Services Workstations</td>
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<td></td>
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<tr>
<td>Detection System/Security Gates</td>
<td>2 double-corridor gates</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conversion Stations (Lease)</td>
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<td></td>
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</tbody>
</table>

*We wish to consider the possibility of using Polaris’s ExpressCheck. Please provide alternate quote for hardware only that could be loaded with ExpressCheck software.

Total for RFID solution (excluding service/maintenance and delivery): $________________________

Other costs (please list in detail): $________________________

Total project cost (excluding service/maintenance): $________________________

Annual service/maintenance costs (including parts, labor, and travel): $________________________

The vendor certifies that, under penalties of perjury, this proposal has been made and submitted in good faith and without any collusion or fraud.

The Urbana Free Library will keep confidential proprietary information as requested in the proposal within the limits of the law. Note any confidentiality claims in the submission.

By submitting a proposal, the vendor agrees with the terms herein stated.

__________________________________________  ________________________________
Authorized signature                                Date