

REQUEST FOR INFORMATION (RFI)

Q22885

CITY OF HOUSTON

HUMAN RESOURCES DEPARTMENT

REQUIREMENT DEFINITION EXPERIENCE

FOR

**LEARNING MANAGEMENT SYSTEM/LEARNING CONTENT
MANAGEMENT SYSTEM**

FOR THE

CITY OF HOUSTON

HUMAN RESOURCES DEPARTMENT

**NOTICE OF
REQUEST FOR INFORMATION FOR
REQUIREMENT DEFINITION EXPERIENCE FOR
LEARNING MANAGEMENT SYSTEM/ LEARNING CONTENT MANAGEMENT
SYSTEM (LSM/LCMS)**

RFI #Q22885

THE CITY OF HOUSTON

The City of Houston Human Resources Department is requesting information from software developers, professional services firms, systems integrators, and other interested parties to the selection, implementation and support for a city-wide Learning Management System/Learning Content management System (LMS/LCMS). Statements of information are solicited for this service for the City of Houston in accordance with the terms, conditions and instructions as set forth in this Request for Information (RFI).

- This Request for Information is available on the Internet from: <https://purchasing.houstontx.gov>

The RFI document may also be obtained from the Administration & Regulatory Affairs Department, Strategic Purchasing Division, Basement Level, Room B121A, City Hall, 901 Bagby, Houston, Texas 77002.

The City of Houston, Texas will receive Statements at the E.B. Cape Center, 14501 Leeland St. Houston, Texas 77023 Attn: Tom Morley **until Thursday May 15, 2008 @ 2:00 PM** No Statements will be accepted after the stated deadline.

Questions concerning the RFI should be submitted to, E.B. Cape Center, 14501 Leeland St. Houston, Texas 77023 Attn: Tom Morley (713) 928-4501, fax: (713) 926-3462, tom.morley@cityofhouston.net no later than **5:00 PM, Monday, April 28, 2008**.

There will be a **Conference on Monday, May 1, 2008 at 1:30 PM** at the E.B. Cape Center, Conference Room No. 204, located at 4501 Leeland St. Houston, Texas 77023.

All professional service providers will be required to comply with City Council Ordinance No. 78-1538, passed August 9, 1978, relating to Equal Employment Opportunity Contract Compliance. The City reserves the right to reject any or all statement of information or to accept any statement of information or portion of a statement of information deemed to be in the City's best interest.

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SECTION I. GENERAL INSTRUCTIONS

Submittal Procedure

Ten (10) copies of the RFI, including one (1) original, signed in ink, are to be submitted in a sealed enveloped bearing the assigned Control Number located on the first page of the RFI document to:

Attn: Tom Morley
4501 Leeland St.

City of Houston
E.B. Cape Center
Houston, Texas 77023

The deadline for the submittal of the RFI is no later than **2:00 PM, Thursday, May 15, 2008**. Respondents may elect to either mail, or personally deliver, their statements to the E.B. Cape Center. They will be date stamped as they are received.

The City of Houston shall bear no responsibility for submitting responses on behalf of any Respondent. Respondents may submit their Statement to the Information Technology Department any time prior to the above stated deadline.

Information Format

The Statement should be typewritten and the original signed in blue ink. Legibility, clarity and completeness are important.

Conference

A Conference will be held Monday, May 1, 2008 at 1:30 PM in the E.B. Cape Center, Conference Room No. 204, located at 4501 Leeland St. Houston, Texas 77023. Interested Respondents should plan to attend. It will be assumed that potential Respondents attending this meeting have reviewed the RFI in detail and are prepared to bring up any substantive questions, which have not already been addressed by the City.

Additional Information and Specifications Changes

Requests for additional information and questions should be addressed to the Human Resources Department, E.B. Cape Center, Tom Morley, (713) 928-4501 fax: (713) 926-3462, tom.morley@cityofhouston.net no later than 5:00 P.M., Monday, April 28, 2008. The City of Houston shall provide written response to all questions received in writing on or before the written question submittal deadline. Questions received from all respondents shall be answered and sent to all respondents who are listed as having obtained Request for Information. Respondents shall be notified in writing of any changes in the specifications contained in this Request for Information.

Examination of Documents and Requirements

Each Respondent shall carefully examine all RFI documents and thoroughly familiarize themselves with all requirements prior to submitting information to ensure that the information meets the intent of this RFI.

Before submitting information, each Respondent shall be responsible for making all investigations and examinations that are necessary to ascertain conditions and requirements affecting the requirements of this RFI.

Terms, Conditions, Limitations and Exceptions

1. This RFI does not commit the City of Houston to award a contract, issue a Purchase Order, or to pay any costs incurred in the preparation of a proposal in response to this request.
2. The City of Houston shall not be held accountable if material from responses is obtained without the written consent of the vendor by parties other than the City, at any time during the responses evaluation process.
3. The Respondent shall not offer any gratuities, favors, or anything of monetary value to any official or employee of the City of Houston (including any and all members of responses evaluation committees) for the purpose of influencing consideration of a response.
4. The City of Houston has sole discretion and reserves the right to cancel this RFI or to reject any or all responses received.
5. The City reserves the right to waive any formalities canceling this RFI, or to reject any or all responses or any part thereof.
6. The City reserves the right to request clarification of any response after all responses have been received.

RFI Schedule

Listed below are important dates and times by which actions related to this Request For Information (RFI) should be completed.

EVENT	DATE
Date of issue of the RFI	April 17, 2008
Questions from Vendors due to City	April 28, 2008
Pre-Response Conference	May 1, 2008
Responses due from vendors	May 15, 2008

SECTION II. SCOPE OF INFORMATION REQUEST

The City of Houston is requesting information from software developers, professional services firms, system integrators and providers of Learning Management Systems/ Learning Content Management Systems related to the proposed scope of services of a City of Houston LMS/LCM and related to financial considerations to the purchase, fielding, and operations of this COH LMS/LCMS. City staff will use the information obtained during this process to assess the current state of the LMS marketplace and may use it to develop a formal request for proposal (RFP) for a LMS software, for configuration and implementation services and for continuing support of the production system. Solution providers are encouraged to challenge the explicit and implicit assumptions underlying this RFI and to explain how their solutions will exceed the City's expectations.

Background

The City of Houston (COH, the City) is seeking a proven Learning Management System (LMS)/Learning Content Management System (LCMS) that can successfully support training and development activities of the City and its various departments. The LMS/LCMS will provide electronic data management, e-learning and program administration while seamlessly integrating with existing COH data bases with special emphasis on the COH's financial and personnel data systems. The COH has recently converted to the SAP system for personnel and financial data in 2007. In addition, the COH has legacy systems of various natures that will need to interface with the selected LMS.

Scope

The Human Resources (HRD) Department of the COH is seeking to field a LMS/LCMS to assist in the management and administration of all the training and development activities for citywide, departmental/divisional and organizational training conducted within the COH. The LMS/LCMS shall interface with current City of Houston systems to include but not limited to our SAP Financial System, SAP Human Resources System and current MS Outlook E- Mail System. The contractor's software must be able to migrate relevant data into the selected LMS/LCMS from existing COH's training databases. The selected LMS/LCMS must also be able to work seamlessly with minimal extra computer programming or life-long support with the city's existing and planned database systems. The contractor must also provide technical support for the evaluation of current City of Houston's infrastructure, bandwidth and provide a plan of action if needed (prior to purchase). The Contractor must provide a prototype that unequivocally demonstrates their capability of providing a viable and fully functional City of Houston LMS/LCMS that operates with current City of Houston legacy software, bandwidth and current infrastructure (prior to purchase). The Contractor must assess the City's current infrastructure (database capacity and administration, server and storage capacity, backup and recovery systems, network bandwidth and provide a plan for remediating any deficiencies if needed. The Contractor must assist the city in creating the governing rules and structure for both the LMS/LCMS and for its interaction with relevant existing city systems. They must also assist and support the training and fielding/deployment efforts as required for the LMS/LCMS to selected City of Houston employees.

The LMS/LCMS must support a hierarchical structure of governance, security, operation and organization that will be reflective of the city's organizational and functional structure and the various roles and responsibilities associated with the training management spectrum of duties.

The COH conducts training using a hybrid model that combines centralized training at both the city and departmental/divisional level and at the below department/division organizational level to include specialized organizations such as the Police or Fire Academy. The LMS/LCMS governing structure and its operational rules and logic must be parameter-driven; that is, the City must be able to modify the way the product behaves without any significant programming or customization. The LMS/LCNMS must use the existing COH email system for notifications, permissions and other associated functions.

The LMS/LCMS will have several levels of users performing different functions across the COH workforce. At a minimum the LMS/LCMS must support the following distinct levels of usage:

- i. Basic Employee. At this level, an individual employee must be able to :
 1. see his/her individual training record,
 2. access customized training schedules and class calendars of classes available to him/her from citywide training programs and those classes available from their department/division or specific organization,
 3. access course information on every available course to include course description, requirements, assignments, prerequisites, class times and locations and any special instructions,
 4. access and complete e-learning courses from any COH computer,
 5. select classes to attend and use electronic workflow to forward request for registration through a predefined approval process
 6. create training requests for management approval on courses and conferences conducted by other than COH organizations.
- ii. Management. Management includes individuals with responsibility for overseeing the training and development of their workforce. At this level a member of management must be able to:
 1. perform all of the functions i1-5 listed above as a employee,
 2. receive requests for training through the COH email system and approve or disapprove with appropriate routing through other levels of management as required and ultimately to the responsible COH training organization,
 3. conduct reporting functions on his/her workforce to include monitoring individual training records and collective and aggregated reports on the various components of the data base relevant to its workforce,
 4. monitor financial expenditure and workforce commitments for training and development of its organization,

5. enter either personally or through a surrogate, training information for his/her workforce to include local training events and informational briefings as required.
- iii. Training Administrators. Training administrators create, administer and manage training programs for COH employees and may have responsibility for citywide, departmental/divisional or special purpose programs. These are the organizations within COH that create, administer and manage training programs for COH employees. These organizations will have a variety of employees who will have roles and responsibilities for data entry; course creation, registration and closeout activities; elearning administration and student management. In addition, each training group will have at least one or two individuals that will be required to be administrators to their particular training organization and will need to be able to perform administrative oversight functions. For example, the E.B Cape Center as the COH training and development organization must have access to all the training information and data throughout the entire city. The Training administrators must be able to:
 1. create courses to include instructions, prerequisites,
 2. manage an overall schedule of classes,
 3. accept student enrollments,
 4. send notification and reminder emails with any required attachments,
 5. close out classes to include individual student grades/comments,
 6. create and administer e-learning courses,
 7. create reports
 8. control access to LMS/LCSM functions/data based upon organization identity and designated roles within the organization.

Vendor Approach

The City expects LMS/LCMS implementation to be a large, complex undertaking. The City is interested to understand how each RFI respondent would address the problem of implementing, testing, training and supporting an LMS/LMCS. Specifically, RFI responses should:

- Outline an implementation methodology that has been used successfully used with similarly sized organizations and organizations with similar organizational complexity
- Describe a project management structure that has been used successfully with similar engagements
- Provide a high-level project plan and timeline for fully implementing the solution that will meet the City's needs

General Pricing Model

Because COH must control the costs of implementing a city-wide learning management system, the City would be interested to understand what advice industry experts might have about alternative pricing/costing strategies. In particular, it would be helpful to learn how the industry is licensing the different categories of users (and technology

support staff) outlined earlier. In essence, we envision any proposed costs to take the various types of usage into consideration.

The City is not asking for a price proposal or a formal quote, but would like to understand how the market is pricing the following:

- Software for essential and desirable products (licensing costs by type of user)
- Servers & storage and/or hosted services (capital and annual costs)
- Database management systems (turn-key costs)
- Implementation (project costs)
- Continuing support and maintenance (annual costs)
- Professional services (hourly rates)

The City is not asking for a detailed project plan or timeline, but it would like to understand the commitment that will likely be required to:

- Assess the capacity of existing hardware & network environments
- Deploy development & test environments
- Define business processes
- Configure the solution to meet the business requirements
- Test that all aspects of the system are ready
- Train users (by type)
- Convert data from legacy systems
- Stabilize the new system after go-live
- A general timeline for fielding and implementation

Process

It is anticipated that the City will invite some or all of the respondents to make a presentation and answer questions relating to their responses.

Submission Requirements

The City requests each Respondent to:

- summarize its ability to achieve the tasks identified in the scope of services while discussing their actual experiences in accomplishing these tasks,
- address any capabilities that have not been identified in this RFI that might be beneficial to the successful operation of an LMS/LCMS in an organization similar to the COH,
- address pricing considerations and potential pricing strategies in order to help the COH determine pricing economies and budgetary issues for any future RFP,
- suggest additions or modifications to the scope of services that might have significant financial impact without losing the essential operational requirements should also be presented by the respondent,
- provide information on pricing of licenses with special emphasis on the Contractor's ability to price in relation to the COH's concept of the various levels of user requirements as discussed above,
- describe up to five engagements which are similar to the expected City of Houston engagement,
- a general timeline to file and implement the LMS
- show a sample employee training record

SECTION III. RESPONSE OUTLINE AND CONTENT

To simplify the review process and to obtain the maximum degree of comparability, the response must follow the outline as set forth below and, at a minimum, contain the information as requested. Respondents are encouraged to include additional relevant information.

Letter of Transmittal

The letter of transmittal should be limited to one (1) or two (2) pages and should include:

1. A brief statement of the Respondent's understanding of the requirements of the overall tasks of fielding and making operational an LMS/LCMS within the COH. This statement should also address the Respondent's LMS/LCMS ability to meet the requirements of successful operation in accordance with the COH's scope.
2. The names, titles, addresses, and telephone numbers of the individuals who are authorized to make representations on behalf of the Respondent.

Title Page

The title page should include the RFI subject and RFI number, the name and address of the Respondent and the date of the response.

Contents

The contents should be identified by section, description and page number.

1. Cover letter. Identify the firm and what information is being provided.
2. Organization's Resources and Capabilities. Describe the capability of the organization to carry out the project. Address pricing considerations and potential pricing strategies in order to help the COH determine pricing economies and budgetary issues for any future RFP. Include suggestions to additions or modifications to the scope of services that have significant financial impact without losing the essential operational requirements.
3. Supporting Documentation. Additional materials or statements deemed appropriate by the respondent to demonstrate qualifications or experience may also

SECTION IV. CURRENT DRAFT OF SCOPE OF SERVICES

The scope of the engagement is described below in its current draft form. While this is a comprehensive scope, not all services may be included in the final contract with the successful proposer(s). The City reserves the right to include or exclude any part of this scope in the final contract(s).

A. Fundamental Considerations.

- b. The Learning Management System (LMS) Learning Content Management System (LCMS) shall interface with current City of Houston (COH) systems to include our SAP Financial System, SAP Human Resources System, current MS Outlook E- Mail System, MS Office and other associated MS products.
- c. The contractor must be able to migrate relevant existing training and development data from the various city legacy database systems into the selected LMS/LCMS.
- d. The selected LMS/LCMS must also be able to work seamlessly with minimal extra computer programming or life-long support with the city's existing and planned database systems.
- e. The contractor must also provide technical support for the evaluation of current City of Houston's infrastructure, bandwidth and provide a plan of action if needed (prior to purchase).
- f. The contractor must provide a prototype that unequivocally demonstrates their capability of providing a viable and fully functional COH LMS/LCMS that operates with current COH legacy software, bandwidth and current infrastructure (prior to purchase).
- g. The contractor must assist the city in creating the governing rules and structure for both the LMS and for its interaction with relevant existing city systems.
- h. The contractor must also assist and support the training and fielding efforts as required for the deployment of the LMS/LCMS to selected City of Houston employees.
- i. The contractor must provide updates and improvement to its LMS/LCMS system as they are developed.
- j. The LMS/LCMS must be capable of maintaining its specified level of performance through the evolutionary type changes of the MS products used by the COH and associated evolutionary changes in the COH current personnel and financial operating systems.

B. Governing Structure.

- a. The LMS/LCMS must have a hierarchical structure of governance, security, operation and organization that will be reflective of the city's organizational and functional structure and the various roles and responsibilities associated with the training management spectrum of duties.
- b. The COH conducts training using a hybrid model that combines centralized training at both the city and departmental/divisional level and at the below department/division organizational level to include specialized organizations such as the Police or Fire Academy.

- c. The LMS/LCMS governing structure and its operational rules and logic must be capable of modification in the future without extensive programming.
- d. The LMS/LCNMS must use the existing COH email system for notifications, permissions and other associated functions.
- e. The LMS/LCMS will have several levels of users performing different functions across the COH workforce. At a minimum the LMS/LCMS must have the following distinct levels of usage:
 - i. Basic Employee. At this level, an individual employee must be able to
 - 1. see his/her individual training record,
 - 2. access customized training schedules and calendars of classes available to him/her from citywide training programs and those classes available from their department/division or specific organization,
 - 3. access course information on every available course to include course description, requirements, assignments, prerequisites, class times and locations and any special instructions,
 - 4. access and complete e-learning courses from any COH computer,
 - 5. select classes to attend and forward electronic requests for attendance through appropriate levels or management to the appropriate training organization.
 - 6. create training requests for management approval on courses and conferences conducted by other than COH organizations.
 - ii. Management. At this level a member of management must be able to:
 - 1. perform all of the functions i1-5 listed above as a employee,
 - 2. receive requests for training through the COH email system and approve or disapprove with appropriate routing through other levels of management as required and ultimately to the responsible COH training organization,
 - 3. conduct reporting functions on his/her workforce to include monitoring individual training records and collective reports on the various components of the data base relevant to its workforce,
 - 4. monitor financial expenditure and commitments for training and development of its organization,
 - 5. enter either personally or through a surrogate, training information for his/her workforce to include local training events and informational briefings as required.
 - iii. Training Administrators. These are the organizations within COH that create, administer and manage training programs for COH employees. These organizations will have a variety of employees who will have roles and responsibilities for data entry; course creation, registration and closeout activities; elearning administration and student management. There will be at least one or two individuals that will be required to be administrators to

their particular training organization and will need to be able to perform administrative oversight functions. The E.B Cape Center as the COH training and development organization must have access to all the training information and data throughout the entire city. This group must be able to:

1. create courses to include instructions, prerequisites,
2. establish a detailed schedule of classes for each course and an overall schedule,
3. accept student enrollments, send notification and reminder emails with any required attachments,
4. close out classes to include individual student grades/comments,
5. create and administer e-learning courses,
6. create reports.

C. Operational Procedures.

- a. The LMS/LCMS must provide all of the operational capabilities required to administer/manage all aspects of the COH training and development operations and learning content with special emphasis on the operations and administration of the spectrum of e-learning.
- b. The LMS/LCMS must be capable of providing a flexible variety of management and security administrative roles to facilitate the use of the system based on our current and potential future organizational structures. These roles must be capable of modification by the city without extensive programming or external vendor support.
- c. The LMS/LCMS must interface with existing HR systems and the SAP financial systems to ensure the data used is current and that billing, funds transfers and accounting is an invisible process.
- d. LMS/LCMS must have the capability of scheduling various training resources such as classrooms, instructors, video/audio and multimedia resources, training areas, and other appropriate materials, locations and resources.
- e. The LMS/LCMS must have the capability to send and receive level one (employee), level two (management) and other associated electronic evaluations through our existing email system and to be automatically entered into the LMS/LCMS database.
- f. Managers must be able to see in the LMS/LCMS their training funds status as shown in the COH's SAP systems.
- g. The LMS/LCMS must have high rates of functionality and availability within the parameters of the city's existing network, and be robust enough to serve the diverse needs of thousands of learners, administrators, content builders and instructors simultaneously.
- h. The LMS/LCMS must be able to control and manage course content and training materials with storage of all prior content and materials and an active display of the most current content and materials. Editing and authoring controls must be part of the system.
- i. The contractor must provide the capability to convert legacy electronic training and development and employee data bases into the new LMS/LCMS.

- j. The LMS/LCMS must be able to apply an established fee schedule with its various components to include fee discounts and fee waivers and transfer funds from cost centers of the students into designated accounts.
- k. The LMS/LCMS must be able to enter and account for fees and room rentals from those individuals outside of the COH's organization and workforce.
- l. The LMS/LCMS must be capable of creating, administering tests and surveys that can have both individual and collective reports and results. Notifications and reminders must be sent through the COH email system with tests and surveys taken through the COH network systems. Results will be collected in the LMS/LCMS data base system and reports generated from within the LMS/LCMS.
- m. The LMS/LCMS must be capable of assigning internal ID numbers and data to non-City of Houston employees. We have many of these individuals attend our training and need to be able to register them for various courses, record their attendance/completion and report their activity in various ways and reports.

D. Student Management.

- a. The LMS/LCMS must issue access to the system IAW the city's organizational structure, while organizing administrators, management and employees into defined groups with specific functions for usage and access of the system.
- b. The LMS/LCMS must have a fully functional automated registration system to include initial acceptance letters, reminders, active online schedule of classes, and a management permission routing system using our existing email system.
- c. The LMS/LCMS acceptance letters and reminders must consist of both predetermined elements and elements/instructions specific to the particular course. These specific instructions should be created as part of the initial course creation within the system and transferred to the various forms and letters.
- d. The LMS/LCMS must provide to all employees a schedule of available training customized to their organization using access rights, to include at least a weekly, monthly, quarterly and annual calendar displays. These displays need to be available both electronically while in the LMS and capable of sending via the COH's email system.
- e. The LMS/LCMS must have a wait list functionality to include a relocation capability to other open sessions of that course. The wait list function must send email instructions and information to the employee and their management. It must also automatically send emails of potential relocation to the employee and management for their acceptance of the relocation with notification of their decision routed back to the appropriate training administrator.
- f. The LMS/LCMS must integrate appropriate support tools including interactive exercises, reference materials (routing to and active display and storage), laboratory exercises, tests (to include pre, in course, and post assessments), and other collaboration/cooperative activities.
 - i. In e-learning activities, the pre assessments must be capable of routing the student to various learning content paths based on the scores of the assessment. In addition, post assessments need to

- be capable of adjustment to only cover those areas that the employee had taken from the pre assessments.
- g. The LMS/LCMS must provide storage and tracking of professional certifications and licenses to include a system of electronic reminders for annual or refresher requirements for these certificates and licenses. This function needs to be capable of input and updates from employees with verification step by management.
 - h. The LMS/LCMS must be able to store data on formal education to include degrees received, schools attended and majors and minors. This function needs to be capable of input and updates from employees with a verification step by management.
 - i. The LMS/LCMS must be capable of creating and maintaining a formal education degree plan for those students in a degree completion or tuition assistance program.

E. Course and Content Management

- a. The LMS/LCMS must be able to arrange courses, and other related training and development events in electronic catalogs that are visible in and/or downloaded through the LMS/LCMS or that can be printed by employee or training administrators. The catalogue must be organized in an intuitive manner and searchable using a user friendly search engine. The LMS/LCMS catalogue must be created based on the individual's organizational location and courses available to him/her.
- b. The LMS/LCMS must provide complete computer based and e-learning capabilities up to and including streaming audio and video- with both live/real-time; play at will and bookmarking capabilities; and storage by individual employee for later use capabilities. The LMS/LCMS must be capable of using products of all of the major authoring tools currently used to create and manage e-learning.
- c. The LMS/LCMS must provide capabilities for Frequently Asked Questions (FAQ) display sections for each course and training event and a capability for online, real time and delayed/at will discussions and interaction between students and between students and instructors/subject matter experts. The interaction capability must include the ability to provide instruction using training materials such as PowerPoint displays and other similar lesson aids linked in real time to interactive discussions and/or lectures.
- d. The LMS/LCMS must provide a capability to distribute informational or instructional materials via our internal email system to all employees or to specific targeted groups or organizations, such as job type, management level, etc...
- e. The LMS/LCMS must have the capability to designate selected courses or pre course work content as required learning and/or as a prerequisite that must be completed before enrollment/attendance in designated courses. The system must notify the appropriate training administrator that an individual is ineligible for enrollment and designate the course or pre work that has not been completed.
 - i. If successful completion of another course is required before registration in another course, the LMS/LCMS must be able to deny enrollment at its initial entry and provide the rationale behind the denial to the employee.

- ii. For failure to complete required electronic pre course work, the LMS/LCMS must provide email notification to employee, appropriate manager and appropriate training administrator at designated intervals prior to the commencement of the class.
- f. The LMS/LCMS must have the capability to create, edit, distribute, deliver and administer assignments to include associated training materials for blended, online or classroom courses.
- g. The LMS/LCMS must have the capability to develop, display and periodically update personalized learning paths and development plans that can be developed and designated for job types, organizations, or individuals
- h. The LMS/LCMS must have the capability to create job descriptions, roles, tasks, and functions for individuals, job families or groups and provide linkage to packaged learning/developmental plans if desired. These should be easily inputted into individual employee developmental plans as required.
- i. The LMS/LCMS must provide complete and robust e-learning and blended learning capabilities. The LMS/LCMS must be the operations, data management, and administration center for all e-learning components and activities.
- j. The LMS/LCMS must have the capability to provide virtual Classroom (VC) capabilities within the city's network system that can be easily accessed on any COH computer.
- k. The LMS/LCMS must provide the capability to use I-pod type technology to distribute e-learning.
- l. The LMS/LCMS must provide a content management system that will control usage and availability of training and course materials and information. It must have also have an archive functionality to store previous and now out of date materials and documents. Changes must be tracked and controlled.
- m. The LMS/LCMS must have the functionality to designate any college credit awarded for particular courses by partner colleges and universities and award Continuing Education Units (CEU) on employee's training record and the overall data base.
- n. The LMS/LCMS must have the ability to input conferences and professional development activities outside the COH programs for employees to include having cost inputted into the LMS/LCMS from the COH SAP system.
- o. The LMS/LCMS must be capable of creating and printing certificates for employees or organizations that completed a training event.
- p. The LMS/LCMS must be able to assign instructors and maintain their special qualifications and training proficiencies. This would be used for full time, part time and adjunct instructors.

F. Communication.

- a. The LMS/LCMS must establish a robust, reliable communication between administrators, managers, and employees founded on the use of the city's existing email and computer networks. The system must be able to send notifications and promotional/informational materials through COH email system and establish appointments for registered classes in the employee's MS Outlook.

- b. The LMS/LCMS must be able to search and identify learners and deliver information on targeted courses, schedule, news, references and other information. This includes periodic informational and advertising promotions on future courses and offerings
- c. The LMS/LCMS must interface and share information with the COH's financial and personnel data bases and operating systems automatically and without any additional COH interaction, programming or human interaction.
- d. The LMS/LCMS must have a viable and flexible security system and a customized architecture to ensure effective communications and operations.
- e. The LMS/LCMS must have the capability to charge cost centers and transfer funds to appropriate accounts upon registration or completion of training.

G. Tracking and Reporting.

- a. The LMS/LCMS must provide a predetermined set of established reports-identified by the city-that can be accessed and run by employees, managers and training group administrators IAW established security rules and individual roles.
- b. The LMS/LCMS must have the capability to create ad hoc, one time or special reports as needed or newly identified standard reports as part of the established report package. This functionality must be simple to learn and have electronic help and assistance available within the program. The report function must be capable of using MS Office to create representations of the data. Pull down menus should be available to assist in the creation of these reports.
- c. All reports must be capable of customization by organization from work group through cost center to division and department and across departments in job families or job groupings.
- d. Each employee must be able to view their individual training record and their developmental plan stored in the LM/LCMS and print these records as appropriate.
- e. The LMS/LCMS must track and report on student progress and activity both within a particular course or within a designated program or within his/her individual developmental plan.
- f. The LMS/LCMS must track and report on an employee's professional development progress against a predefined set of training goals
- g. The LMS/LCMS must track and report on licensing, certification and professional education efforts both individually and as a job family or an organizational unit. The tracking must include date of expiration and certifying authority.
 - i. For professional education requirements, the LMS/LCMS must have the capability to track the annual requirements providing reminder emails to employee and supervisor as appropriate.
- h. The LMS/LCMS must be able to designate, track and report on mandated training. Reminders should be sent on failures to take designated training through the email system to employees and appropriate managers.
- i. The LMS/LCMS must be able to gather and track electronic evaluation and assessment data by course and instructor. The LMS/LCMS must be

able to create electronic forms and questionnaires that can be used for these level one through level four post training evaluations.

- j. The LMS/LCMS must be able to track and report on costing, charging and billing training and development activities. These reports must be by individual cost centers, divisions and departments. The LMS/LCMS must also be able to group costs by types of expenditures, by job family or by organizational unit.
- k. The LMS/LCMS must be able to create and provide individual employee student transcripts.
- l. The LMS/LCMS must be able to generate reports based on the criteria required by the COH affirmative action department.
- m. The LMS/LCMS must provide access to the underlying database structure it is maintaining to allow the development of specialized reports beyond the scope of the report generator provided by the LMS/LCMS. This can be via database Tables, Views or Stored Procedures that allow "linking" to Microsoft Access and/or Crystal Reports or equivalent (which should be specified). If this access is provided, a full description should be made available for each element as well as any necessary ODBC parameters, passwords, etc. necessary to establish the "link".

H. E-learning training.

- a. The LMS/LCMS must have the capability to develop, operate and administer new proprietary courses in its spectrum of formats- blended, e-learning, and traditional classroom.
- b. The LMS/LCMS must provide templates to facilitate development and electronic delivery capabilities for e-learning course development.
- c. The LMS/LCMS must provide capability to use the entire spectrum of e-learning tools consistent with the various COH's electronic network and computer capabilities.
- d. The LMS/LCMS must conform to industry standards to improve compatibility between the course and the platform (AICC, SCORN, IMS and IEEE).
- e. The LMS/LCMS must be able to integrate purchased or propriety courses seamlessly into the learning environment (interoperability)
- f. The LMS/LCMS must provide the capability to use electronic chat rooms and discussion forums for training purposes
- g. The e-learning capability must include a bookmarking capability by individual employee and a multiple learning path instruction capability based on pre assessments.