

CDL Goals and Objectives 2010-2011

Progress from 2009-2010

As noted in the introduction to CDL's Goals for 2009-2012, we have an ambitious plan but felt we could make significant progress. The summary of accomplishments in Appendix 2 is one way to view the progress made. Another way is to consider the major themes that developed from our goal statements.

Certainly a major area of emphasis was around ebooks which continue to present complex challenges in the digital realm. Efforts in 2009-2010 focused on studying licensed ebooks from various perspectives through surveys and analysis, considerable efforts focused on HathiTrust as the main locus for managing digitized print books, and considering how ebooks affect management of print collections. These areas will continue to be active for the foreseeable future.

Another major theme revolved around access: launching access for the Web Archiving Service and improving access for eScholarship, removing barriers in existing systems, and providing a range of other tools to extend access such as developing search widgets for HathiTrust and OAC, hosting the Archivists Toolkit, and implementing infrastructure support for audio/video formats. Explorations of mobile services set the stage for improving access to services appropriate for that environment in the future.

Curation of UC assets was another area of progress reflected in the conceptual life cycle model depicted on the CDL web site, followed by progress in data management and microservices, the growth in contributors to OAC, and participation in the University as Publisher to support UC's scholarly output.

Increased efficiencies were evident, both internally and for systemwide efforts in several improvements to statistics generation, technical infrastructure, and of course in licensing activities. There was also progress in establishing service level agreements such as for Resource Sharing. Clarification of rights and liability issues in the eScholarship agreement also supports this objective.

In the area of advancing digital library development, several applied research projects made headway, some of which will continue into next year, including the Social Networks and Archival Context project and analyses of improvements to eScholarship.

Finally, some significant achievements occurred in the area of outreach and communication with the major accomplishment being the relaunch of the CDL web site. An outreach campaign for Calisphere experimented with social media techniques and there was progress in integrating support for contributing institutions with Digital Special Collections and UC3.

Some things didn't progress as planned which deserves noting as well. A prospective journals archive project in partnership with the Center for Research Libraries did not attract sufficient interest to continue at present and the Flickr Commons project was cancelled by Flickr. The proof of concept UC portal prototype was well received but did not progress with its UCOP sponsors, nor did the Faculty Expert Finder initiative. Lessons learned from all of these efforts were valuable and will inform future work.

This last point also illustrates that, when efforts are dependent on partnerships, they may take a different direction due to external factors. On the other hand, partnerships have been critical in advancing much of our work in the past year and will continue to do so. Each partnership has opportunities and constraints that influence the direction and outcomes.

Toward 2010-2011

Many of the same themes will carry forward in 2010-2011. eBooks will continue to be an area of engagement through licensing priorities in collaboration with campus libraries, and through HathiTrust as content and services grow. Another area of emphasis will be work on integrating CDL's technical infrastructure, in particular to support ingest for eScholarship that is integrated with Merritt, the digital preservation service. Curation services will continue to evolve, with a special interest in connecting data to publications, likely to be an area for research and development. In support of these efforts, the next

phase of microservices for curation will be developed. Cost savings in licensing are a priority of the University Librarians which CDL will champion. The dispute with the Nature Publishing Group in summer of 2010 emerged as a key negotiation for challenging the existing licensing model.

This year will also be devoted to a formal review of CDL as well as an examination of shared library services. Both of these initiatives along with the completion of the University Librarians' focus on Next Generation Technical Services are expected to inform future priorities for CDL. Continuing emphasis on sustainability and business planning for new services in particular is another critical focus.

With no slowdown in sight for technology innovations, evolution of library roles, and unfortunately, the financial crisis facing UC, there is no time to waste in making progress. CDL is well aligned with major issues facing research libraries and with the help of campus libraries and other partners, we expect to accomplish a great deal in the coming year.

Goals and Objectives for 2010-2011

A. Support the UC scholarly research and teaching life cycle.

By focusing on the scholarly research and teaching life cycle, CDL has identified areas of importance to researchers. By considering the life cycle for managing digital objects, CDL can ensure that all life cycle activities are supported for formats or types of materials. This goal also addresses the “deeply local” part of the vision by extending support for digital materials produced or owned by UC that have been less visible and accessible.

a. Provide life cycle support for the following priority formats

This process will include standards, access, preservation, and publishing and will begin with the development of a strategy.

- *Video and audio or multimedia content.*

CDL will develop a road map for supporting these formats including the following:

- Publishing will extend support for publishing and access to multimedia in eScholarship. (On hold, pending UC Publishing Services planning outcome)
- Digital Special Collections will extend its services to support materials in audio-visual formats.
 - Draft specifications have been developed for production master file formats. The drafts will be refined based on test ingest and streaming of A/V files
 - DSC is in the process of obtaining sample A/V files from the California Preservation Program for ingest and streaming.
 - Also in-progress is development of a tool whereby the California Preservation Program can provide METS/metadata records to DSC, using Django technical infrastructure.
- Preservation can already support these formats as they are contributed.

- *Electronic Theses and Dissertations (ETDs).*

Publishing will launch access services to ETDs and will work with University of California Curation Center (UC3) to ensure a logical and smooth workflow between the two services. *Update:* Pilot project ongoing. Access template is done. The integration between Merritt and eScholarship systems is expected in Q.1-2, 2011.

- *eBooks* (licensed and mass digitized books).

Discovery and Delivery, Collections and UC Curation Center programs supported by Information Services and User Experience Design Services share responsibility for a range of activities related to eBooks including the following:

- Develop a strategy for assessing the impact of licensed and mass digitized books within the academic environment and scholarly workflow. Promote, plan and implement projects to study whether access to digital copies influences interlibrary loan behavior and/or satisfaction. If efficiencies are achievable, make sure they are targeted to the academic workflow.
- Actively participate in shaping and furthering a robust service environment around mass digitized material within HathiTrust and other relevant services (e.g. Melvyl and Next Generation Melvyl).
- Develop a full range of help and user support services for ebooks and associated services such as print on demand.
- Shape collection development strategies to support user needs and preferences for print vs. electronic monographs.
 - Collections will conduct a major assessment project for the Springer ebook pilot.
 - Collections will participate in an outreach process with major scholarly societies to better understand scholarly needs for access to monographic content and help shape emerging

strategies for support in key book-intensive disciplines such as history, language and literature.

- Convert as much of the UC book collection to digital form as possible within available resource constraints for improved discovery, access and collection management purposes.
- Implement the next phase of UC's Google partnership including expansion to additional campuses.
- Experiment with digitization of special collections books and develop necessary competencies and procedures to handle this material. (Delayed)
- Undertake responsible stewardship of mass digitized content for shared preservation and access, including quality control procedures and appropriate decisions about de-duplication.
 - The Technical Lead for Collections chairs the joint Google-Library Partner Quality Working Group, which works with Google on improvements to its quality control procedures and metrics.
 - Collections will make recommendations regarding duplicate retention within HathiTrust via participation in the HathiTrust Collections Committee.
- *Research data supporting scholarly initiatives.*

The UC Curation Center will roll out new Merritt and EZID services that support the sharing, management, preservation, and access to data that support scholarly research.

b. Develop comprehensive digital curation services

- Design Data Curation support services.
 - The UC Curation Center will continue to work with key stakeholders to further develop and refine Data Management guidelines and best practices and promote their use. Specific activities include monitoring and evaluating funding agency requirements related to data management practices; identifying key stakeholders within UC for expertise, input, and implementation of data management guidelines; working with national and international partners to develop tools that can be used by researchers to more easily meet funding requirements.
 - The UC Curation Center will develop a "Consultation Data Framework" that can be used by the community to guide users in understanding how to use Merritt and EZID.
- Publishing will extend eScholarship's ability to link publications to their relevant to data sets.
- UC Curation Center will work with Microsoft Research to develop an add-in to make Excel data persistent, shareable, and publishable.
- The UC Curation Center will promote and deploy Merritt and EZID services that enable the UC community and beyond to share, manage, preserve, and provide access to digital content.
- The UC Curation Center will investigate and deploy as necessary the infrastructure to support research data that has privacy and access restrictions.
- Collections will work with UC Curation Center to identify and address at-risk collections to ensure preservation of collected materials.
 - Plans are underway to form a cross-functional Collections Group within the CDL to address these and other areas of shared interest.

c. Connect workflows

This objective ensures that the full life cycle for managing digital objects [from creation to submission to access to preservation] is supported for contributors.

- Publishing will complete integration project with UC Curation Center and Open Journal Systems (OJS), developing in-house submission/preservation system

for eScholarship publishing platform. The integration between Merritt and eScholarship systems is expected in Q.1-2, 2011.

- OJS integration slated to be done by the end of Spring 2011.

d. Support collaborative public services.

Information Services, User Experience Design Services and Strategic Planning will work with the Executive Director to research and develop the following, in consultation with HOPS.

- Create models for providing and investing in collaborative services.

e. Orient services toward the research and teaching life cycle and academic workflow.

- Publishing will amplify eScholarship publishing services and content by raising the visibility of and integrating publishing services into the scholarly workflow for authors and by emphasizing publishing services rather than infrastructure. *Update:* Completed and ongoing. Now folded into larger UC Publishing Services discussion with UC Press.
- Discovery and Delivery will identify areas within their services to streamline the end user experience and implement solutions, especially in connection with open access content and electronic books.
- Publishing will launch the undergraduate repository pilot, working with UCLA, UCSD, and UCB, with the positioning to extend to all campuses. *Update:* Working group established. Pilot to be completed by December 2010.
- The UC Curation Center will work with a range of UC content producers to exploit their research content workflows in order to efficiently ingest content into Merritt.

B. Expand worldwide researchers' access to UC's scholarship and digital resources whenever and wherever possible.

This goal supports UC's public service mission by expanding access to collections, in particular by increasing open access content and making it more accessible and usable. It reflects the desire of UC faculty to disseminate their scholarship as widely as possible. Another aspect of this goal emphasizes making licensed materials more easily available to UC researchers wherever they may encounter content.

a. Increase open access content:

- Publishing will track the results of the eScholarship outreach and marketing to the campuses
- Publishing will extend services to accommodate new content creation, i.e., conferences, journals, etc. *Update:* Journals continue to represent a major growth area for eScholarship. New service development is now rolled up with UC Publishing Services discussion with UC Press.
- Digital Special Collections will provide support and tools to contributors in order to build shared collections and (where needed) help contributors to create and manage their digital content.
 - New OAC contributors will be made available in 2011.
 - An expanded search widget for OAC and Calisphere contributors with local branding capability is in development. Market research and initial specifications have been completed; development of the search widget will be completed in Fall 2011.
- Digital Special Collections will increase the Calisphere/OAC contributor base.
 - New LHDRP collections will be ingested in summer 2011.
- Digital Special Collections will update legacy contributor ingest tools.
 - A minimum collection description template for OAC will be developed in 2010-2011.
- Collections will advance sustainable open access strategies for published content that is licensed.

- The UC Curation Center will work with campus stakeholders, California State staff, and beyond to increase the use of Web Archiving Service to provide access to open access content including federal, state and local government information.
- The UC Curation Center will work with the Minnesota Historical Society, and the California Legislative Analyst's Office to manage, preserve, and provide access to historical California legislation.
- The UC Curation Center will promote the use of EZID as a service to provide persistent and open access to research data that support scholarly publication.
- The UC Curation Center will evaluate and implement Merritt as a DataONE node thereby providing increased access to research data that informs climate change.

b. Develop a copyright/intellectual property approach

This approach aims to support broad access while protecting UC interests.

- Collections will develop a rights-clearing mechanism for mass digitized content.
- Discovery and Delivery will promote and support initiatives to test the legal boundaries of Digital Interlibrary Loan (ILL) for in copyright, out of print works with a trusted academic partner like the HathiTrust.
- Publishing will integrate the eScholarship site with copyright education resources to help faculty understand options and protect interests.
- UC Curation Center will investigate and develop best practices for rights related to research data.
- Digital Special Collections will make these available to contributors on the DSC website. (Some documents are already available on the UC Shared Images wiki).

c. Reduce access barriers

The intent is to make collections and services more visible and available.

- Discovery and Delivery will provide leadership and a strategic plan for making better use of metadata to make content more accessible, especially via WorldCat Local and HathiTrust.
- Digital Special Collections will create new themed collections and topics in Calisphere to provide more accessible paths into the content.
- Digital Special Collections will establish new outlets with third parties to our content at the network level.
 - A tool is in development to create OAI-PMH record sets for contributors to share with OCLC's new Digital Collections Gateway and other external services as desired. DSC is working with D&D to determine the best path for submitting contributor content to OCLC as part of the Next Generation Melvyl project.
 - DSC is investigating development of an application programming interface (API) to OAC and Calisphere, JCR is currently being investigated as a possible framework.
 - DSC is investigating options for search engine optimization (SEO). A methodology has been developed for creating keyword-loaded descriptions; this will be tested with a discrete number of static pages to evaluate their utility, with a goal of developing a more strategic and scalable approach to SEO,
- Digital Special collections will expand content made available via the image pan and zoom tool.
 - Additional images capable of supporting this feature will be sought from existing contributors in 2011 in conjunction with updates to the digital asset submission agreements.
- Collections will maintain equitable access to collections across the libraries during a difficult period through preservation of systemwide access to the extent possible, expanded ILL rights for electronic journals (including wider adoption of electronic ILL), and appropriate investments in open access.
- Collections will develop shared print in place policies to facilitate sharing and persistence of campus-based collections

- Collections will implement print-on-demand services for mass digitized public domain books.
- The UC Curation Center will expose (e.g. via Google) and make available (as appropriate) content in Merritt.
- The UC Curation Center will expose (e.g. via Google) EZID metadata.
- The UC Curation Center will begin work with the publishing community and scholarly societies to promote the exposure of metadata in EZID thereby linking research data to publications.
- UC Curation Center will investigate and implement tools that will enable users to provide refined access to Merritt content.
- The UC Curation Center will investigate access and integration of materials in Merritt (e.g. integrating WAS content with other deposited material via the WAS public access).
- *Mobile access.*
Discovery and Delivery Services, Information Services and User Experience Design Services share responsibility for a range of activities related to Mobile Access including the following:
 - Discovery and Delivery will identify when and where the users of their services are moving their research and learning activities to the mobile space, and then implement appropriate solutions for mobile devices in order to be in the user flow.
 - Information Services will assess and support access to CDL services and systemwide vendor resources from mobile devices as the campuses adopt their use; determine the most effective means of providing Information Services help in the mobile environment.
 - User Experience Design Services will continue to build on the research begun in 2010 on the use of mobile devices within the academic environment.

C. Provide trusted and enduring access to California’s cultural and intellectual heritage.

This goal focuses on demonstrating the CDL’s commitment to stewardship of scholarly resources. It also seeks to demonstrate accountability for the university’s resources that are invested in services provided by CDL. Although the life cycle approach in goal A encompasses developing long term preservation and curation, it is necessary to provide evidence that those services are achieving their purpose, along with reassurance that access is reliable and trustworthy. Some of the objectives here also relate to goal E.

a. Provide objective evidence of performance and reliability for CDL services.

- Provide independent certification (where available) of the “home-grown” CDL services.
 - Strategic and Project Planning will broaden the use of the executive dashboard of program performance measures based on CDL and program goals and objectives. User Experience Design Services will design this dashboard for inclusion in the CDL web site.
 - Collections will develop accountability metrics for shared collections.
 - Collections will continue to refine its weighted value algorithm and related metrics for evaluating the effectiveness of licensed resources.
 - The UC Curation Center will evaluate and implement policies for Merritt as recommended by the Audit Checklist for the Certification of Trusted Digital Repositories.
 - The UC Curation Center will evaluate and implement trusted user access and an information sharing and collaboration environment for Merritt and EZID.
 - The UC Curation Center will investigate and implement the necessary infrastructure to manage, and preserve data with restrictions.
 - Infrastructure will design and promulgate an explicit, auditable IT security framework based upon relevant Federal, state, UC and UCOP policies and produce quarterly Security Status reports.

- Information Services will gather statistics on a regular granular level to report back to CDL programs and services with the goals of improving interfaces, vendor resources; tracking usage of CDL services; identifying and tracking trouble spots, especially for vendor resources.
 - Digital Special Collections will update its reporting capability to provide more useful performance metrics.
 - DSC will implement Google Analytics for OAC and for contributing members.
 - Planning is underway to mount a pop-up self-identifying survey on Calisphere to obtain better information about user types and affiliations.
- b. **Establish service level agreements with the customers for CDL services.**
- Discovery and Delivery will establish operational service level agreements with our customers where appropriate.
- c. **Establish service level agreements for every external partnership or service.**
- Collections will develop a shared approval plan with a major primary monograph vendor, including relevant infrastructure.
 - The future shape of a shared approval project is subject to decisions that are underway by CDC and the campus libraries.
 - Discovery and Delivery will develop an SLA for the provider of Next Generation Melvyl services.
 - The UC Curation Center will develop and expose service level agreements for EZID and Merritt.
 - Collections will develop an MOU for the WEST partnership.
- d. **Increase internal capacity for performance and reliability**
- Increase capacity in the following areas:
 - Tech Council will adopt practices for:
 - Quality assurance and functional acceptance and unit testing
 - Code review and security testing
 - Digital Special Collections will consolidate its server environment for improved efficiency and effectiveness, including performance logging as part of this process.
 - Create new resources for :
 - Authentication best practices
 - Collections will add Shibboleth support to its vendor technical requirements document.
 - IAS will work with LTAG and UC Trust to begin implementation of Shibboleth.
- e. **Refresh the CDL's privacy policy and the disclosure of policy elements and responsibilities to contributors and end-users of CDL services.**

D. Advance digital library development.

This goal acknowledges CDL's unique responsibility for evolving the digital library through its own initiatives as well as in a complementary relationship to digital developments on UC campuses. It also addresses the need for strategically applied research to explore new development areas, new models of collection building, and the commitment to share knowledge with the digital library community.

- a. **Identify opportunities for applied research**
Focus on identifying gaps in the academic information resource marketplace.
- b. **Foster partnerships between and among campus representatives to solve new problems.**
- Digital Special Collections will support and facilitate collaborative collection building with UC libraries, archives, museums, and VR collections.

- DSC is coordinating a major CLIR grant to describe California collections relating to the environment. This project will extend through 2011.
 - DSC continues its annual participation in the LSTA-funded Local History Digital Resources project.
 - DSC continues to work with VR curators to evaluate next steps for UC Shared Images
 - DSC will work with campus stakeholders to develop standards and tools for ingesting and delivering materials in audio-visual formats.
 - DSC will continue to work with UC campus libraries, museums, and archives, as well as cultural and archival organizations throughout the state to support the description of and access to digital special collections
 - Digital Special Collections will assess the feasibility of creating and implementing a systemwide collection development policy (working with interested parties, such as: HOSC, CDC, and/or SOPAG Task Force on Digital Libraries)
 - This project is subject to further engagement with the UC Libraries Digital Library Services task force
 - Digital Special Collections in collaboration with campus visual resource curators and art librarians will increase the UC Shared Images contributor base.
 - The trajectory of this objective has changed in light of the release of ARTstor's Shared Shelf service and is now focused on a decision whether to participate in Shared Shelf or pursue an alternative shared image strategy. Further study will be undertaken in 2010-2011
 - The UC Curation Center will support collaborative collection building with the Libraries, state agencies, UC research units, faculty, and researchers through use of Merritt and the Web Archiving Service.
 - UC Curation Center will continue to explore partnerships with UC libraries, research institutes, and information technology organizations for using and in some case co-developing the program's micro-services.
 - UC Curation Center will work collaboratively with UCB (IS&T) to integrate Media Hub data into Merritt.
 - The UC Curation Center will explore the integration of Merritt with Chronopolis to exploit Chronopolis' storage capacity.
 - Publishing will initiate outreach and marketing campaign to engage with specific user needs, supported by the operations coordinator to investigate solutions and drawing upon a user satisfaction survey.
 - Information Services will support UC Curation Center's marketing and sustainability plan to make its services visible and familiar to the campuses and partners.
- c. **Seek external partnerships and alliances to extend our capacity and expertise.**
- Discovery and Delivery will build, promote and champion a public developer community for Hathi APIs.
 - Discovery and Delivery will develop the Hathi Trust Metadata Management System in order to develop new ways of handling digital content in collaborative partnerships.
 - Digital Special Collections will investigate JCR Tools as a possible framework for an API to OAC and Calisphere. This was functionality developed in partnership with Northwestern University.
 - Digital Special Collections will explore the feasibility of integrating OAC-hosted finding aids with a University of Virginia authority system, extending discovery of collection guide repositories.
 - Publishing will maintain eScholarship production services and position for potential transition of services as determined by UC Publisher initiative, as of FY11-12. At the same time, work to reposition publishing group activities to include broader engagement in access services activity at CDL.

- UC Curation Center will position CDL as leader in DataONE and other cyberinfrastructure and e-science initiatives to establish roles for libraries in digital curation.
- With funding from the Gordon and Betty Moore Foundation the UC Curation Center will explore the infrastructure and policies needed to fully support data curation activities.
- With funding from Microsoft Research and potentially the Gordon and Betty Moore Foundation the UC Curation Center will explore the software needed to support the sharing, publication, and preservation of MS Excel data.
- Infrastructure will work with CDL programs to identify technology partnerships that improve IT capacity and responsiveness.
 - Infrastructure will resume discussions with Oracle/Sun and HP on storage and other issues.

d. **Increase communication channels for sharing outcomes of digital library development broadly.**

- Publishing will increase community (local and national) visibility for eScholarship through presentations, publications and marketing collateral (video, print, etc.).
- UC Curation Center will develop its Curation and Preservation Services in an open fashion to encourage community comment, input, and contribution.
- The UC Curation Center will continue to develop services publicly and expose specifications to the broader community thereby enabling other institutions to benefit from CDL's expertise.
- The UC Curation Center will explore hosting another "curation camp" in 2011 in collaboration with the UC Curation Center Community.

E. Extend our efficiencies and effectiveness.

Because CDL was established under the premise that collaborative efforts to acquire collections and provide services would create substantial savings, it has been a fundamental part of CDL's approach to demonstrate that assumption. In an era of diminished resources and increased attention to accountability, it is even more important to commit to this goal. In tandem with many of the activities outlined in C., CDL will continue to demonstrate value for UC.

a. **Develop sustainable business models**

In particular, these models should support life cycle activities and encourage wide dissemination of knowledge.

- Collections will produce campus cost savings for licensed resources via better consortial discounts, lowered prices, and reductions in annual increases.
- Collections will adjust licensed collections portfolio (including targeted cancellations) in light of new budget realities and changing user needs, while maintaining and enhancing access to important content.
 - Databases will be reviewed again for potential cancellations in 2011 (an earlier cancellation round was conducted in 2008)
- UC Curation Center will develop sound administrative, financial and technical procedures to ensure that WAS continues to operate on a sustainable basis. *Update*; WAS has a pricing structure in place and is currently bringing in customers.
- The UC Curation Center will develop and implement a cost model for the EZID service.
- The UC Curation Center will develop and implement a cost model for Merritt.
- The UC Curation Center will explore the feasibility of an endowment to support UC the management and preservation of UC collections.

b. Adopt a business development approach to proposals and negotiations.

- Collections will implement a campus discount program and assess its success in achieving cost savings, shareability, and campus flexibility.
 - *Update:* The campus discount program is in place. Assessment is planned.
- The UC Curation Center will extend offerings of preservation services and WAS to a wider range of clients both within and external to the University of California by promoting and increasing their visibility.
- Infrastructure will analyze costs, benefits, and efficiencies related to virtual machine architecture based on deployments to date and develop a migration plan to a more virtualized environment, if warranted.

c. Participate in large scale resource sharing arrangements

The focus should be on freeing up resources for local unique collections, such as regional or national shared print initiatives.

- Collections will foster extramural collaboration and resource-sharing in support of Collection goals.
 - Collections will focus on collaborative collection development concerns for HathiTrust via participation in the HathiTrust Collections Committee (chaired by CDL)
- Publishing will establish coherent collaborative roles, processes and business plan with UC Press and other Information, Publishing and Broadcast services entities.
- Collections will engage in extramural partnerships for shared print collection management, such as WEST (Western Region Storage Trust) and CRL prospective journals archive project.
- Discovery and Delivery will develop a national print archives registry and decision support system in conjunction with CRL and WEST, in order to promote the efficient use of space at UC and reduce the amount of redundancy in widely held print holdings.

d. Improve internal CDL efficiencies

- Discovery and Delivery will continue developing processes to identify and remove barriers within Discovery and Delivery to improve internal efficiencies and effectiveness.
- Digital Special Collections will improve systems for customer relationship management for contributors.
- Strategic and Project Planning will increase the operational effectiveness of CDL project managers by promoting methods and practices, fostering collaboration, and communication, seeking and introducing new tools and approaches, and providing leadership and mentoring.
- Strategic and Project Planning will engage unpaid graduate student internships and consultancies for project specific work.
- Infrastructure will ensure 2008-2009 levels of IT support and coverage in the face of reduced resources.
- Collections with the support of Information Services will continue to support and streamline the processes of the electronic resource management system for improved management of critical business information for licensed resources and better communication of key information to campus stakeholders.
 - A workflow efficiency task force is in progress (based at UC San Diego) with a final report targeted for spring 2011.

e. Contribute to systemwide efficiencies

- Discovery and Delivery will work with the appropriate UC-wide task forces and all campus groups to improve Resource Sharing workflow, process and policies, as well as examine innovative approaches to delivering electronic content.

- Information Services will work with the Request Technical team to provide triage and feedback support for a streamlined Request workflow and interface redesign.
- CDL will participate in the SLASIAC Task Force to examine systemwide investments in library services.

Note: CDL will undergo a review during 2010-2011 that has the potential to influence all areas of its strategic plan.

Appendix 1 - Program Goals for 2010-11

Each program area developed its own overarching goals to guide development of objectives that were mapped to CDL's organization-wide goals.

Discovery and Delivery Services

1. In order to promote the efficient use of space at UC and reduce the amount of redundancy in widely held print holdings, develop a national print archives registry and decision support system in conjunction with CRL and WEST.
2. As open access content and electronic books become more available, identify the areas where D2D services can streamline the end user experience and act upon those.
3. As UC focuses on efficiencies and reductions in costs, work with the appropriate UC-wide task forces and all campus groups to improve Resource Sharing workflow, process and policies, as well as examine innovative approaches to delivering electronic content.
4. As our end users move their research and learning activities to the mobile space, deploy the appropriate D2D services in order to be in the user flow.
5. In order to advance UC's goals in sharing digitized content in the Hathi Trust, develop the Hathi Trust metadata management system.

Collections

1. Continue careful evaluation of and adjustments to UC's licensing portfolio to respond to major budget challenges
2. Further refine CDL's weighted value metrics in consultation with academic experts (e.g. an economist and/or statistician)
3. Expand our portfolio of licensed e-books and rationalize collection development approaches for electronic and print books in light of increasing space and budgetary pressures and evolving user needs and preferences
4. Continue to pursue transformative business models for online resources, including alternative funding models and open access publishing, to address long-term structural problems in the funding of research publication and respond to evolving user needs for unfettered access to the research literature
5. Investigate licensing opportunities for external communities
6. Continue to evaluate and provide support as needed for new technologies such as mobile technology and Shibboleth
7. Seek additional workflow efficiencies to increase the effectiveness of the CDL ERMS and eliminate redundant efforts
8. Pursue collaborative approaches to the development and management of shared print monographic collections both within and beyond UC in order to free up library space and resources for newer, transformative uses, working with CDC and other groups and external stakeholders
9. Contribute to the development of collection-related policies and strategies for HathiTrust to ensure a robust collections environment for this developing initiative
10. Continue mass digitization efforts and expand as resources allow to additional campuses and types of collections,
11. Implement a print-on-demand service for mass digitized content
12. Implement a rights-clearing mechanism for mass digitized content
13. Participate / coordinate UC participation in the HathiTrust CRMS (Copyright Review Management System) project

Digital Special Collections

1. Develop short- and long-term editorial plans for Calisphere, including an assessment of the current service
2. Work with UC campuses to develop additional systemwide approaches to description, management, and access for special collections materials
3. Enhance contributor and end-user tools for interacting with DSC content and services
4. Explore integration of tools and services with UC3 to enhance overall efficiency and effectiveness, including use of the UC3 storage service for DSC content and coordinated account management
5. Conduct preliminary research on approaches to sustainability for DSC services
6. Expand outreach and engagement with DSC contributors
7. Transition UC Shared Images to its next phase
8. Participate in the ArchivesSpace Mellon grant as a hosting and testing partner if the grant is awarded
9. Participate in the next phase of the SNAC project (SONAAR) if a grant is awarded to expand that work.
10. 2011-2012: explore options for further development of Calisphere to support more advanced research needs

UC Curation Center

1. UC Center Organization: Strengthen the extended 10-campus UC Curation Center Partnership to promote greater buy-in and efficiencies from campus libraries, faculty, staff, IT centers, and labs. To achieve greater efficiencies, members of the partnership will co-develop and co-invest in its value, which will reside in repository and identifier services, storage centers, guidelines, documentation, and community.
 - a. Identify and engage key UC3 stakeholders (libraries, faculty, researchers, data centers, CDL programs, external stakeholders).
 - b. Develop and promote UC3's value proposition.
 - c. Develop UC3 outreach and marketing materials.
 - d. Develop and implement a plan to expand the UC3 community to other UC communities (Libraries, data centers etc).
 - e. Develop a strategic plan that communicates UC3's mission, vision, goals, and strategic path.
2. Merritt Services: In order to enable the UC campuses to share, manage, save, preserve, and make available their valuable digital assets in an efficient manner release and promote the effective use of Merritt Services to the UC community and beyond.
 - a. Identify content holders that would benefit from using Merritt.
 - b. Develop and promote Merritt's value proposition to community of stakeholders.
 - c. Develop and promote Merritt training and outreach materials
 - d. Develop processes to enable new customers use the service (include CDL programs and UC libraries as service providers)
 - e. Evaluate and implement new methods and workflows to efficiently acquire content (atom feed, Plone, etc.)
 - f. Evaluate and implement Merritt as a DataONE node.
 - g. Investigate and implement as necessary the ability to integrate Merritt's infrastructure with Chronopolis and thereby exploit Chronopolis' storage environment.
 - h. Work with the UC3 community to evaluate, prioritize Merritt service enhancements and implement.
 - i. Investigate rights issues associated research data and ability of Merritt to comply.
 - j. Investigate security and privacy issues associated with research data and the ability of Merritt to comply.
 - k. Investigate means to financially support and extend the service.
3. EZID: In order to enable researchers to take control of the management and distribution of their research, share and get credit for it release and promote the effective use of the EZID service to the UC community and beyond.

- a. Identify UC and external stakeholders that would benefit from using the EZID service.
 - b. Develop and promote EZID's value proposition to community of stakeholders.
 - c. Develop and promote EZID outreach and training materials.
 - d. Develop processes to enable new customers use the service.
 - e. Work internally and with the UC3 community and beyond (as necessary) to evaluate, prioritize EZID's service enhancements and implement.
 - f. Investigate means to financially support and extend the service.
4. Data Management: As managing the output of scholarly research becomes an increasingly important activity for researchers work collaboratively with key stakeholder to develop and implement guidelines and best practice recommendations for researchers to enhance the inherent amenability of data for long-term preservation and use.
 - a. Monitor and evaluate funding agency requirements related to data management practices.
 - b. Identify key stakeholders within UC for expertise, input, and implementation of data management guidelines.
 - c. Work with national and international partners to develop tools that can be used by UC scientists to more easily meet NSF and NIH funding requirements.
 5. Web Archiving Service: In order to increase the collection, management, preservation, and access to web-published materials continue to engage new WAS customers.
 - a. Identify key UC stakeholders
 - b. Develop
 6. Develop data management guidelines and best practice recommendations for researchers to enhance the inherent amenability of data for long-term preservation and use. Work with national and international partners to develop tools that can be used by UC scientists to more easily meet NSF and NIH funding requirements.
 7. Within the context of DataCite and DataONE, work with MicroSoft Research, private foundations, data scientists, data archives, and publishers to archive as citable objects both datasets and "data papers" (technical appendices and data documentation)

Publishing

1. Complete integration project with UC Curation Center and OJS, developing in-house submission/preservation system for eScholarship publishing platform. This project, once completed, will dramatically reduce the costs of providing the eScholarship service by eliminating the bepress license and increasing opportunities to extend the platform to provide access to a whole host of different kinds of content.
2. Apropos of goal #1, launch the undergraduate repository pilot in November with UCLA, UCSD and UCB and plan to be positioned to extend the service, as requested, to all UC campuses by May 2011.
3. Launch access services for ETDs, integrating with preservation services and supporting embargo and policies as defined by the campuses.
4. XTF: Develop and launch XTF website, consolidating all information that has been distributed across various platforms and websites. Scope and possibly release XTF version 3.0.
5. Maintain eScholarship production services and position for potential transition of services as determined by UC Publisher initiative, as of FY11-12. At the same time, work to reposition publishing group activities to include broader engagement in access services activity at CDL.

Appendix 2 - Completed Objectives from 2009-2010

Overall

- Mapped both the scholarly research and teaching life cycle and for the information assets that UC scholars produce and that CDL, UC libraries and other UC organizations manage and will identify existing support and gaps. Includes dissemination options available through research and teaching.
 - Depicted on the CDL website
 - Framed a position for approaching mobile services.

Discovery and Delivery Services

- Built support into existing services (e.g., UC-eLinks) for detecting when users are outside of licensed IP ranges.
- To enable usage tracking of electronic delivery of non-returnable items, rolled out Document Delivery as part of VDX upgrade.
- Learned how users are moving their research and learning activities into the mobile space and have started tracking usage within D&D services.
- Identified areas within D&D services for implementation of a mobile service, and will continue to monitor to see if the situation changes.
- Provided analytical and programming support for UC Faculty Expertise before the project was put on hold by its UCOP sponsor.
- Supported the analysis of Springer ebooks in several ad hoc projects, and included Springer ebooks in UC-eLinks.
- Established and published an SLA for the Resource Sharing services, as well as for the Hathi Trust Metadata Management Service.

Collections

- Worked with the Springer ebook task force to update its faculty outreach document regarding Springer electronic textbooks.
- Worked with D&D to analyze ILL activity for Springer books.
- Mass digitization passed the 3 million book milestone in the fall of 2010
- Mass digitization operations were launched at UCLA in the spring of 2010.
- Developed guidelines for campuses working with Internet Archive who wish to ingest their locally-digitized materials into HathiTrust
- Coordinated UC participation in 2010 in an assessment of Google's duplicate detection algorithms that was coordinated by the joint Google-Library Partner Metadata Working Group.
- Further developed and refined value-based metrics for journals and other licensed content.
- Worked with Information Services to update the Technical Requirements for vendors for any licensed resources in Video and audio or multimedia formats.
- Developed a search box widget for use with HathiTrust. The tool was made available on the HathiTrust website in November 2010.
- Led a national project to develop language to include in content licenses for author rights retention and self-archiving.
- Continued to support and assess the two-year Springer open access pilot in 2009-2010 and will continue to pursue this and similar strategies.
- Collections reduced systemwide licensed expenditures by 8% in 2009-2010 (journal expenditures were reduced by 12%) with minimal loss of content.
- f. Joint prospective journals archive project with CRL proposed and vetted, but CRL member interest mixed. CRL did not advance the project.

Digital Special Collections

- Facilitated a process for establishing guidelines for preparing and delivering digital audio/visual file formats to CDL systems for access and preservation.

- Made Archivist's Toolkit and Archon available to the UC community and other DSC contributors in March 2010. Archivist's Toolkit was subsequently enhanced to allow for more customization and functionality.
- Released a contributor dashboard and OAC search widget in May 2010 to assist DSC contributors in managing and providing access to their content, with plans to make additional tools available in 2011.
- Developed a prototype metadata editor using Django technical infrastructure.
- Developed tools for contributors to share content with OCLC's ArchiveGrid
- Tested direct ingest of MARC21 records utilizing samples from UC San Francisco.
- Contributors and content:
 - 17 new contributors registered for DSC services in 2009-2010.
 - Ingested more than 1550 new EAD finding aids into OAC in 2009-2010. During the same time period, updated 3143 finding aids.
 - Added over 1300 new Calisphere objects since July 2009.
 - Developed four new themed collection topics in 2009-2010.
- Launched an outreach campaign for Calisphere via Facebook and Twitter, attracting over 700 followers
- Created a report on Calisphere usage since inception.
- Developed a reporting mechanism for ingest and contributor statistics and refined the reports prepared for the CDL dashboard.
- Completed involvement with the JCR project grant.
- Managed primary contacts and institution account information using SugarCRM collaboratively with UC3.
- Cancelled the Flickr Commons project because Flickr is no longer supporting new participants in that initiative
- Completed work on the UC portal project with development of a working prototype.

Infrastructure and Application Support

- Piloted a streaming media server and created a production streaming media server as well.
- IAS manager chaired a Shibboleth/InCommon/UCTrust Task Force, which produced two reports and a set of implementation recommendations and guidelines.
- Implemented Groundwork/Nagios monitoring system across all environments.
- Implemented AmChart-powered dashboard infrastructure.
- IAS manager participated in a HathiTrust Design Working Group; implementation pending HathiTrust deliberations and resolution of the Google settlement.
- Began deployment of virtual machines for development and stage/QA.
- Maintained processing and network capacity, and increased storage capacity while reducing staff (-1FTE DBA) and reducing Infrastructure expenditures 24% (based on 08-09 and 09-10 IAS budgets).

UC Curation Center

- Web Archiving Service has fully functional access component providing curators with the ability to make their collections public. To date, 29 public archives available.
- Developed the Data Management Guidelines, version 1, working collaboratively with the UC3 community.
- CDL joined international DataCite consortium initiative.
- Created the means to persistently link data sets and publications by developing and launching a service (EZID) to create and manage unique, persistent identifiers.
- To date many institutions developed services based on UC Curation Center specifications. BagIt, micro-services, and JHOVE2 now used by many in the digital library community

Publishing

- Contributed significantly to the University as Publisher initiative by establishing coherent collaborative roles, processes and business plan with UC Press and other Strategic Publishing and Broadcast Services entities.
- Revised the Office of Scholarly Communication site.
- Developed and implemented eScholarship outreach and marketing to the campuses to encourage participation in the Publishing services program.
- Redesigned eScholarship to raise its profile as an access point for UC research output by providing a unified user interface to maximize functionality and indexing capabilities, and better contextualizing the content for all users
- Developed usage reporting system for eScholarship services, to be rolled out with new release.
- Actively monitored the worldwide user group that gives immediate and detailed feedback on XTF releases.
- In order to support better faceted searching, explored the possibility of working with JSTOR to develop a robust subject tagging tool for content in eScholarship.
- Engaged in an analysis of tiered peer review to determine the level of specificity necessary when distinguishing among materials at various levels of external review.
- Developed and launched the XTF website, consolidating all information that has been distributed across various platforms and websites. Publishing will scope and possibly release XTF version 3.0.
- Evaluated the rights and liability issues in the eScholarship submission agreement.

Strategic and Project Planning

- Created an executive dashboard of program performance measures based on CDL and program goals and objectives launched in July, 2010.
- Chaired a SOPAG Project Management Skills Task Force, which produced two reports and a draft charge for a new CIG.
- Facilitated the engagement of 4 graduate school interns during 2010.

User Experience Design Services

- Assessment, Design and Production Services renamed “User Experience Design Services.”
- Oversaw the complete redesign of CDL web presence, launched in January 2010. The redesign included a complete reorganization of the site’s content, implementation of a range of Web 2.0 functionalities, updated site navigation, a new “System Status” page, and a CDL logo redesign.
- Completed a significant piece of research on the use of mobile technologies within the UC academic environment.

Information Services

- With Collections, updated the Technical Requirements for Vendors for any licensed resources in Video and audio or multimedia formats.
- Launched a UC systemwide eLearning tutorial under the leadership of HOPS.
- Cross-functional CDL team (Resource Wranglers) developed policies and guidelines for mobile support for licensed resources. URLs for mobile access that meet CDL guidelines now distributed by the Shared Cataloging Program.
- Worked with DSC to provide more direct help to users of OAC.
- Achieved quicker analysis of problems by gathering statistics at a more granular level.