Six-Year Planning: Initiative Summary
Western Libraries

To facilitate discussion of initiatives and the updating of the Planning Units’ Six-Year Plans, please use the following template to outline the initiative you are proposing. It is not expected that the initiative will be a fully developed proposal at this point, so estimates are expected, but excessive detail is not.

Title: Addressing Western’s Digital Preservation and Data Management Needs

Initiative Description, including statement of purpose and anticipated outcomes:

Western Libraries proposes to collaborate with other university units to design and implement a system to provide for the sustainable management of digital records and research data produced by Western faculty, staff, and students. While, this function is a university-wide concern, the Libraries has responsibility for Western’s records management functions, and increasingly through its investment in scholarly communications, the dissemination and preservation of the university’s research output--often stored in digital data sets residing on servers in academic departments.

Currently, Western Washington University is not meeting legal mandates for public records management and preservation, particularly for digital records, nor is it efficiently managing research data as required by many granting agencies.\(^1\) Western employees and programs have implemented many good-faith efforts to address these requirements, but these approaches are hindered by the absence of a university-wide framework for institutional records and research data in the digital environment.

The proposed initiative will develop and implement an enterprise-level framework supporting the systematic identification and efficient management of digital records in a manner that is both integrated with users’ normal workflows and consistent with public records and grant requirements. Moreover, the university has contractual obligations to federal funders to assure the effective management of digital data resulting from federally funded projects. In 2013, the

\(^1\) The following are representative legal mandates, not comprehensive:

- RCW 40.14 governs intellectual/physical control, retention, disposition, and preservation of public records
- RCW 42.56 governs public disclosure for public records
- WAC 434-662 governs preservation of electronic public records
- WAC 434-663 governs digitization of hard copy records and requirements for retaining digital images
- Federal mandates include data management plans required by granting agencies (e.g. National Science Foundation), recordkeeping and format requirements in laws such as FERPA and HIPAA, and protocols governing the handling of electronically stored information in the Federal Rules for Civil Procedure.
White House Office of Science and Technology Policy issued a directive to all agencies to develop plans to increase access to federally funded scientific research and to improve the management of research data. The proposed system will include a university-wide data management plan and services that prioritizes data created under federal and other grant funding programs, replacing the current practice of leaving the planning to each academic department. These services will include a catalog of research data accompanied by standards-compliant metadata designed to ensure long-term access to and preservation of the research products produced by university faculty and staff.

This scalable and extendable digital preservation environment will be built on existing WWU resources in combination with new open source tools. The proposed infrastructure will include and expand upon planned modifications to WWU’s existing SharePoint environment, the implementation of Archivematica (standards-compliant, open-source digital preservation tool), and expanded WWU cloud-based storage for digital records of long-term value. Additional planning and system modifications will be required to sustainably address data management needs, especially in the area of storage.

What University units (depts., colleges, etc.) will be involved?
Western Libraries, Public Records Working Group, Digital Records Compliance and Preservation Working Group, ATUS, President’s Office (Public Records Officer), Senate Library Committee, and the Office of Research and Sponsored Programs. In addition we anticipate partnering with selected colleges, departments, and administrative offices to test the functionality of record-keeping and data management in the proposed preservation environments.

How does the initiative support the University Mission and Strategic Plan?
This initiative aligns well with the Western Washington University Strategic Plan. It builds upon and enhances staff expertise and technological infrastructure to address critical needs in record keeping compliance and digital preservation. The project will serve as a model for organizational effectiveness, innovation, and sustainability at other institutions of higher education across the state and region. Moreover, if supported, this initiative will improve institutional capability and capacity through the effective management and responsible stewardship of permanent and non-permanent records produced by that the University in the course of its daily business activities and the data sets produced in the course of faculty and student research. This enhanced capacity will ensure that the University is able to provide long-term access the records and research data sets it is legally mandated to preserve.

2 On February 22, 2013, OSTP Director John P. Holdren directed Federal agencies with more than $100 million in R&D expenditures to develop plans to make the published results of federally funded research freely available to the public within one year of publication and requiring researchers to better account for and manage the digital data resulting from federally funded research. (http://www.whitehouse.gov/administration/eop/ostp)
Are there potential partnerships with external organizations/institutions?

Several State level entities have collaborated to define the functional requirements for compliant digital record keeping. These include: Washington State Records Committee, Washington State Archives, Attorney General’s Office, and grant funding agencies who operate under legislative mandates for data management.

Anticipated new positions needed to implement the initiative:

Faculty:

• Digital Infrastructure Librarian (2017): Lead the design and implementation of digital library systems for the preservation and delivery of Western Libraries’ digital assets in collaboration with the Libraries departments of Scholarly Communications, Heritage Resources, University Archives and Records Management, Technical Services, and Library IT. Gather requirements and develop specifications for digital library architectures. Implement workflow tools and functionality for the deposit, storage and delivery of digital assets and associated metadata. Collaborate with campus-wide technology services to ensure proper implementation and management of security policies and authentication/authorization procedures, and write and maintain documentation for systems architecture and application code for internal and external users and stakeholders.

• Data/GIS Librarian (2018) The GIS Data Librarian will work closely with the Scholarly Communications Librarian (CEDAR) and Digital Infrastructure Librarian to build and curate growing spatial and non-spatial data collections, to recommend the acquisition of relevant application software programs, and to instruct faculty, staff, and students in their use. The position will collaborate with academic units across WWU in support of their data management and geospatial research and teaching needs.

Staff:

• Systems Consultant (one year, 2016). Working closely with ATUS, this position will configure the necessary systems for compliant recordkeeping.

• Data Wrangler (2017). Will analyze, design, program, debug, test, implement and modify metadata, software enhancements and/or new applications used for access and preservation of digital content. May interact with users to define system requirements and/or necessary modifications. Supports launched applications in the production environment.

Graduate Students (supported): Click here to enter text.

Space needs (boldface one; attach note from Space Administration):

• Existing space is sufficient
• Existing space will be sufficient after modification
• New space may be required (work stations)

New equipment or other one-time costs:
2015-16: Training $1,500, Temporary Project Systems Coordinator $88,000

Recurring operating costs: Estimated: $10,000 annually for storage and systems maintenance. Addition of 2 faculty and 1 staff FTE listed above (approx. $250,000).

Estimated timeline for implementation:
• 2015-2016: Hire temporary systems project developer to configure the necessary systems for compliant digital recordkeeping. Pilot implementation of proposed system.
• 2016-2017: Build content ingested in the system by targeting departments most at risk for legal compliance issues, public records requests, and limited or over-extended storage capacity. Develop system requirements for data management and test. Once the implementation and testing phases are complete, proactively expand the number of participating departments by building system capacity and training department faculty and staff in proficient operation.
• 2016-2018: Assess and evaluate system based on defined metrics, including (but not limited to) user satisfaction, auditability and retrieval of records, security, metadata, and compliance with preservation standards.
• 2018-2021: Continued development and refinement of the proposed system.

Potential funding sources (boldface all that apply; attach notes from University Advancement and University Relations)
• State operating budget (decision package)
• New enrollments (tuition-based)
• External Education (fee-based)
• Reallocation
• Federal Support (agency: ____ )
• Grants
• Partnerships (organizations/institutions: ____ )
• Private Funds
• Other (please specify)