Objective
Develop a deeper understanding within the UC Libraries of the potential benefits of adopting a Linked Data approach to exposing and/or managing metadata in various environments, and the infrastructure required to support implementation of Linked Data system-wide projects in the future.

Background
Among the promises of Linked Data is that it will make digital collections more discoverable, meaningful, and reusable. Along with some national peer institutions and organizations, some UC campus libraries have begun utilizing and experimenting with Linked Data, an approach to data modeling and publication that uses the Resource Description Framework (RDF) of the Semantic Web. A study of UC’s Linked Data projects recently completed, currently underway, and in the planning stages might illuminate common interests and strategic directions.

The “UC Libraries DAMS Technology Report: Assessment of a Long-Term Solution for the UC Libraries Systemwide DAMS” (November 2016) recommended that a project team be created to investigate the use cases for, and potential benefits of, adopting a Linked Data approach to exposing and/or managing metadata. Both the UCLAS Direction & Oversight Committee (DOC, Jan 2017) and the UC Council of University Librarians (CoUL, Feb 2017) accepted that recommendation. There is also interest in considering Linked Data in relation to other library contexts such as data from records in integrated library systems and content on web sites.

One focus of the investigation is to understand Linked Data use cases as they relate to the users of digital content and metadata managed by the UC Libraries, especially at the system-wide level. Of particular interest to the project team are end-user and digital repository administrator needs that can potentially be better met by implementing Linked Data applications for managing and/or exposing data. Can the expected benefits for users of Linked Data be described and prioritized, e.g., the grouping of and relationship between objects, discoverability through search engines, user interface opportunities or data reuse? Conversely, are there opportunity costs of not adopting Linked Data? What are the non-technical obstacles associated with effort and resources required to implement Linked Data?

Linked Data is only one aspect of a broader technical strategy for enhancing the discovery and usability of digital collections writ large. The report and recommendations of the Linked Data Project will inform the definition of a future exploration of a system-wide UC Libraries project, such as in a shared ILS or shared DAMS. For now, the focus of the Linked Data Project Team is enumerating and understanding those Linked Data use cases with the potential to significantly advance the UC Libraries’ capabilities in meeting the diverse needs of their patrons and stakeholders and/or create back-end efficiencies in the creation and management of the metadata. This will involve understanding current descriptive practices
and discovery functions as well as imagining how they might be enhanced through Linked Data. Another focus is articulating the infrastructure that would support the implementation of Linked Data in our UC Libraries environments, including but not limited to the policies, staffing, framework, and adoption of certain schema.

Tasks
The project team should perform the following activities:

- Identify and review key documents from the UCs and other reputable organizations that articulate how Linked Data might support UC Libraries’ strategic priorities.
- Conduct a high-level survey of Linked Data projects recently completed, currently underway, or in the planning stage at UC campus libraries (including those involving collaborations with external organizations).
- Gather descriptive examples of Linked Data approaches to metadata creation and management as employed in large-scale and/or distributed environments (relevant to a UC Libraries system-wide scale).
- Define a set of use cases related to how metadata and/or digital content managed by UC libraries is being, or can be, utilized by users of that content. Use cases should include both current practices as well as potential Linked Data-enabled practices. The design and structure of the use cases will be determined by the project team drawing from best practices in the area of user experience (UX) design.
- Articulate the infrastructure elements required to support the implementation and successful adoption of Linked Data in UC Libraries environments (e.g. digital asset management systems, integrated library systems, data integrations, general web user interfaces, etc.)

Deliverable
The project team will draft a report that at minimum includes:

- Summaries of notable definitions and projects as articulated by peer institutions/organizations
- Snapshot of Linked Data practices and projects completed, underway, or in the planning stages across the UC Libraries
- Snapshot of Linked Data applications for large-scale metadata creation and management
- Set of 4-8 use cases relevant to the UC Libraries, including some relevant at a system-wide level.
- Summaries of infrastructure issues and recommendations for the effective implementation in the UC Libraries, especially in contemplating Linked Data projects at the system-wide level.
- Recommendations for developing an ongoing community of practice within the UC Libraries focused on Linked Data

The project team will develop a short series of webinar presentations, showcasing UC campus projects and broadening our collective understanding about the potential benefits and applications of Linked Data within the UC Libraries, including at the system-wide level, for highlighting our collections.
Membership
Reporting to DOC, the team charged to undertake the Linked Data Project is comprised of individuals from the UC Libraries and California Digital Library with expertise in areas such as digital object workflows, descriptive metadata practices, digital repositories, discovery functions and technologies and practices, and emerging digital library trends. The task force may involve additional staff from both the campuses and CDL to assist in information gathering and to serve in an advisory capacity as needed.

UCSD: Arwen Hutt, Head of Digital Object Metadata Management (team leader)
CDL: Kathryn Stine, Manager, Digital Content Development and Strategy
UCB: Haiqing Lin, Head of Technical Services, East Asian Library
UCD: Carl Stahmer, Director of Data and Digital Scholarship
UCLA: Kevin Balster, ERM/Cont. Resources Metadata Librarian, Cataloging & Metadata Center
UCR: Noah Geraci, Digital Assets Metadata Librarian
UCSB: Chrissy Rissmeyer, Coordinator for Digital Content /Metadata Librarian
UCSC: Rachel Jaffe, Metadata Librarian

Timeline and Process
Full participation on this team is estimated to require approximately .10 FTE of each member’s time. The webinars may begin in fall 2017 and will be completed before March 1, 2018. The report of the project team should be completed by May 1, 2018. The final report, and any updates or questions during the team’s work, shall be directed to the DOC liaison Beth Dupuis at edupuis@berkeley.edu.