

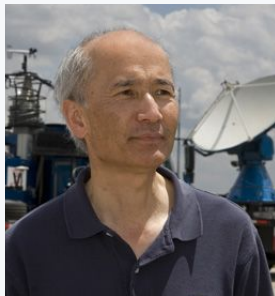


RESEARCH DATA ROADMAP OVERVIEW

WINTER/SPRING 2023

EXECUTIVE SPONSORS

In early 2021, five UCLA administrators charged a Research Data Working Group to develop a high-level roadmap for research data services and infrastructure at UCLA.



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Vice Chancellor for
Research & Creative
Activities



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CIO, UCLA Health Sciences;
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ROADMAP EXECUTIVE SUMMARY

To ensure excellence in the future, UCLA needs to make a standing commitment to invest in research data services and infrastructure, and we need to take action immediately. Providing faculty with access to fundamental research infrastructure and data services that support their ability to generate, store, manipulate, and analyze data is an institutional imperative if UCLA wants to continue to lead in this new era of open research. Investing in central services enhances distributed efforts, supports compliance, and simplifies collaboration.

STATE OF THE RDWG ROADMAP

The RDWG's draft roadmap is a great starting point for conversations with the campus about the research data services and infrastructure needed to ensure UCLA's future success.

FACULTY ALIGNMENT

The RDWG is embarking on a series of meetings to ensure that the roadmap recommendations are aligned with faculty needs and priorities, and, if not, gather the information required to revise the document as necessary.

ADMINISTRATIVE BUY-IN

Simultaneously, the RDWG is working to build consensus at the administrative level on the desirability of centralized research data services and infrastructure in support of distributed data-intensive research and partnerships.

BASIC PRINCIPLES

Past efforts to build research data services and infrastructure at UCLA failed to gain traction for any number of reasons including lack of faculty support and the tension between centralization and decentralization. With that in mind, the roadmap emphasizes:



MODELING ON CAPABILITIES AT PEER INSTITUTIONS



THE IMPORTANCE OF BOTH PEOPLE AND TECHNOLOGY



STREAMLINING THE FACULTY EXPERIENCE



COMMON TECHNOLOGIES, TOOLS, AND NEEDS



SUPPORTING UCLA'S UNIQUE ENVIRONMENT

OUR VISION

The key elements of our vision for research data services and infrastructure are centered on a full lifecycle approach to open science and scholarship that will position UCLA faculty and researchers to continue to be competitive for larger, multi-institutional proposals built on the principles of sharing, collaboration, training, and best practices.



BLENDDED SUPPORT MODEL

Research support that combines discipline-specific resources at the local level with central baseline offerings and services.



GUIDANCE FOR RESEARCHERS

Coherent and cohesive information about available research data services and resources, and policy requirements and practices.



BASELINE INFRASTRUCTURE

Baseline research data storage, management, computation, and access through infrastructure available at no cost to all faculty.



STREAMLINED ACCESS

Clear pathways to resources and services for faculty with appointments both on campus and in the Health Sciences.



ACCOUNTABILITY

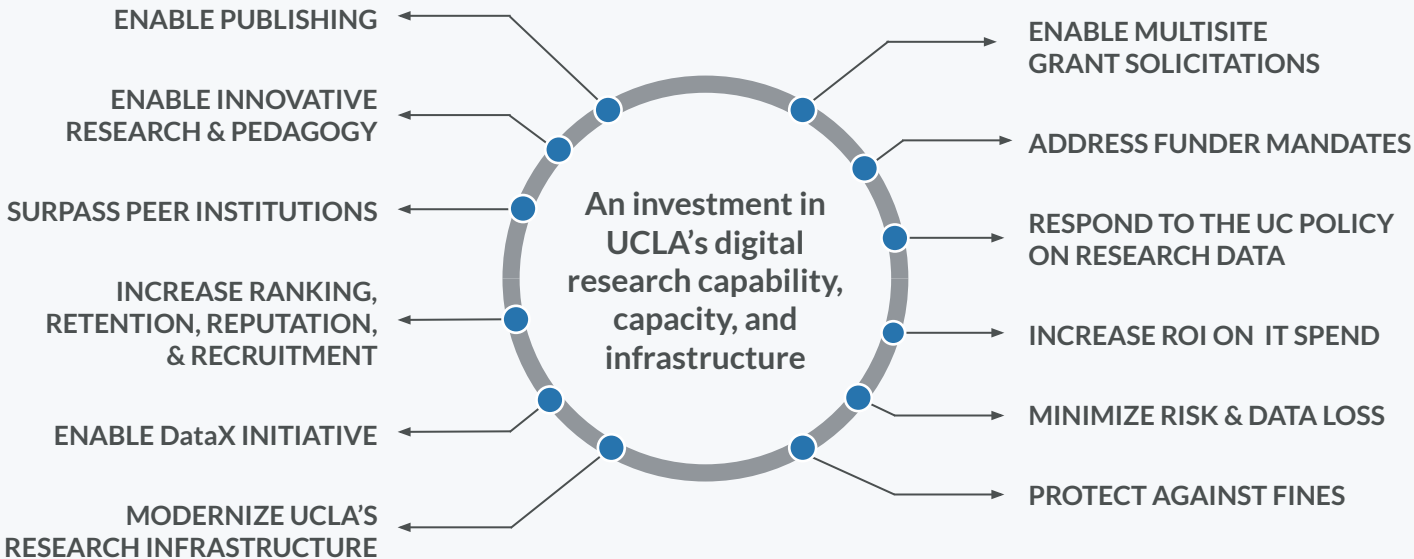
Clear administrative responsibility for research infrastructure and data services aligned with faculty governance.



DATA PROTECTIONS

Security, privacy and accessibility integrated with research needs and focused on protecting UC's most valuable data assets and IP.

KEY BENEFITS AND OPPORTUNITIES



PROBLEM STATEMENTS & ISSUES

The fundamental problems are relatively straightforward, but any discussions about possible solutions need to address the many confounding issues that have hobbled past efforts to develop campuswide research data services and infrastructure.



SHIFT IN RESEARCH CULTURE

UCLA is not prepared to support faculty in our new era of scholarship that prioritizes interdisciplinarity, collaboration, open science, open data, and new requirements for security, privacy, and compliance.



DATA-SHARING REQUIREMENTS

Changes are required to meet the institutional responsibility for compliance with the policies federal funding agencies have set for mandatory data sharing to promote open research.



FACULTY NEEDS

An imperative for UCLA is to ensure that the needs of faculty and researchers in all units are met by a blend of local and central campus infrastructure and services.



DECENTRALIZATION

The result of a funding model built on subsidiarity is that support for faculty varies widely across campus with isolated systems that limit collaboration and transparency.



DEFERRED COMMITMENT AND INVESTMENT

The longer we wait to address these challenges, the harder it will be to build the necessary services and resources.



POTENTIAL FOR UC/AGENCY ACTION

Promised services and the potential for outside funding have prevented action at the scale needed at UCLA.



COORDINATION AND ORGANIZATION

Ownership, authority, and responsibility related to research data are still outstanding questions for discussion.



MAIN ROADMAP ELEMENTS



1

RESEARCH DATA ROCKSTAR

RESEARCH DATA ROCKSTAR (& TEAM)

The Research Data Working Group's first assertion is that the campus needs to formally consolidate and clarify ownership, responsibility, and accountability for initiatives related to research infrastructure and research data services. One of the key challenges of our currently decentralized research support network is that there is no clarity about ownership of issues or situations with campuswide implications.

SUPPORT FACULTY AND DATA-ENABLED RESEARCH

- Continue planning for expansion of campus research data services and infrastructure
- Develop faculty incentives program
- Coordinate research facilitation
- Appoint a data-sharing compliance lead/officer
- Represent UCLA in data-related national/international organizations

FACULTY-FOCUSED MATERIALS AND GUIDES

- Create a cohesive research-related service catalog and web presence
- Create a funder and compliance requirements educational campaign
- Develop guidance on discipline- and domain-specific repositories
- Develop data- and security-related outreach and training programs

TRANSPARENCY AND ACCOUNTABILITY

- Review and streamline processes that negatively impact research
- Create a long-term plan to restructure compliance-related efforts
- Streamline compliance requirements
- Convene Accountability Board

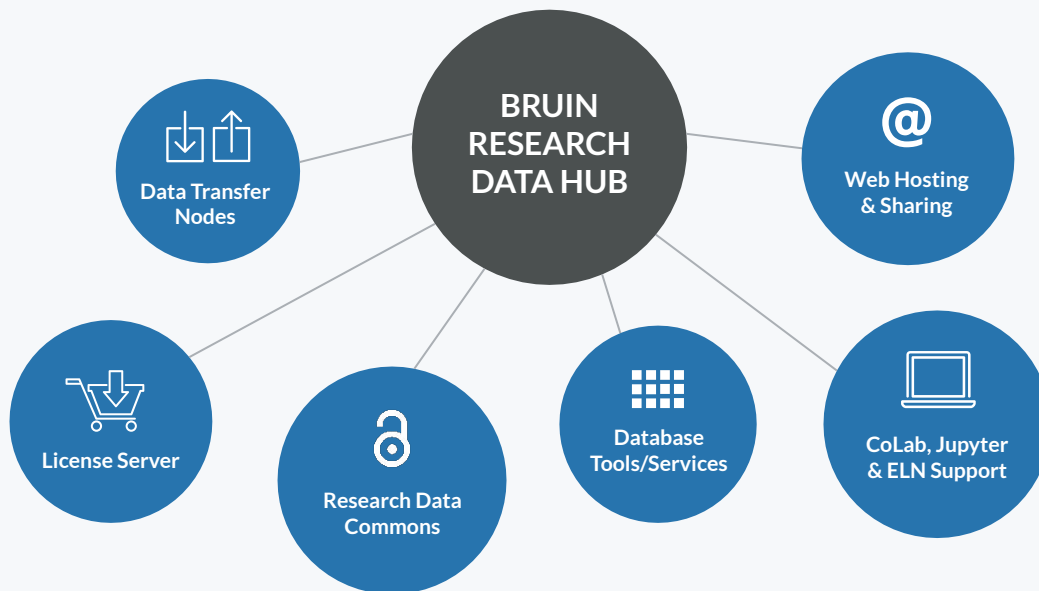
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STORAGE/TECHNOLOGY SOLUTIONS



STORAGE/TECHNOLOGY SOLUTION

The RDWG recommends equipping the campus with a technology platform that combines high-performance storage and software to create a hybrid on-premises and cloud solution that is scalable to meet current and future research data needs. As envisioned, this platform will be the home for campuswide research data services, include tools to facilitate interdisciplinary work, and provide storage space for members of the UCLA research community with shareable lab directories for PIs.





3

EXPAND EXISTING RESEARCH DATA SERVICES

EXPAND RESEARCH DATA SERVICES

Expanding and streamlining existing research data services is necessary to respond to funder and scholar mandates and expectations. While many of these services have been recently piloted at UCLA, they will need to be expanded and fully funded to meet expectations as outlined in this roadmap.



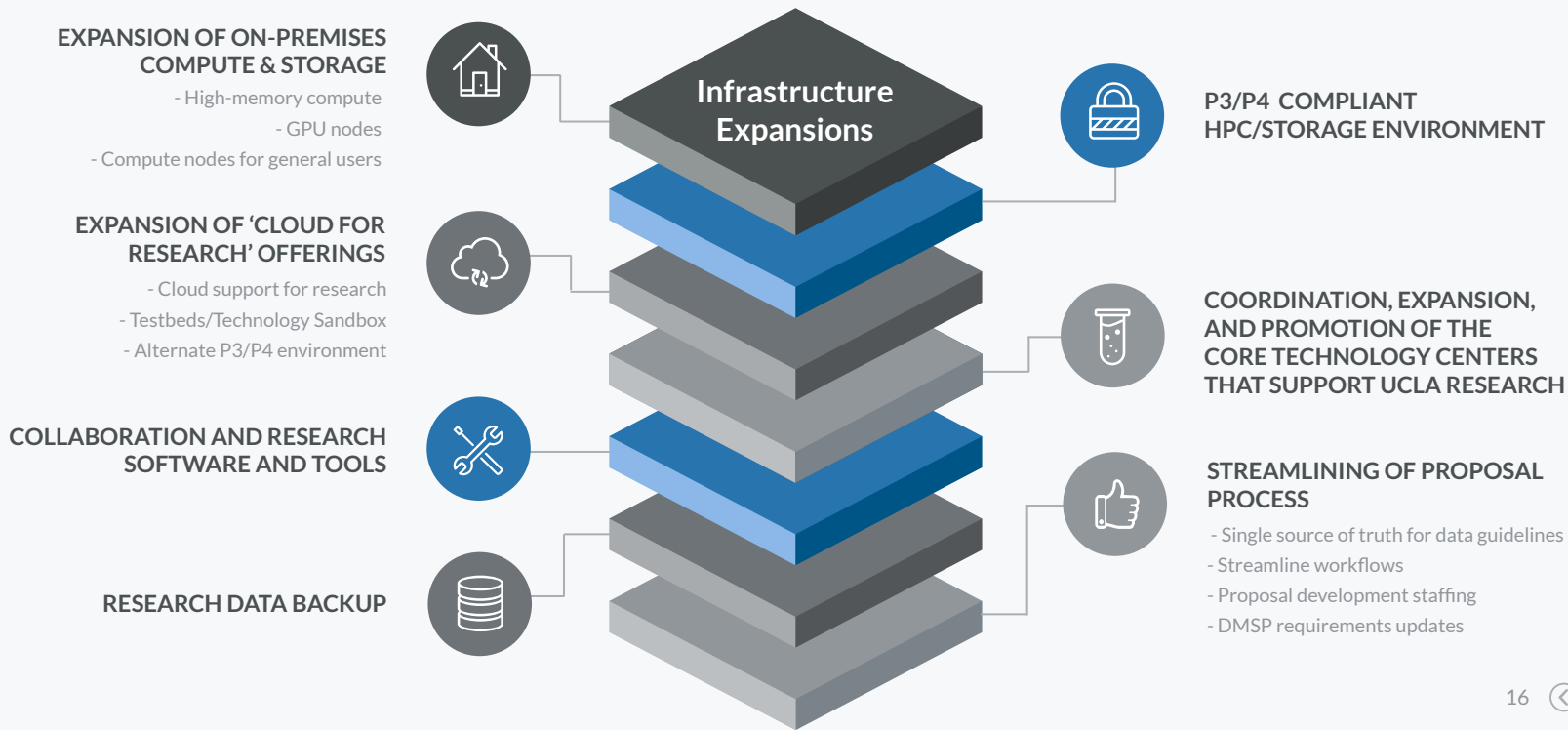
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EXPAND EXISTING
RESEARCH INFRASTRUCTURE



EXPAND RESEARCH INFRASTRUCTURE

In addition to the development of a new storage and technology platform, supporting research at UCLA will also require a commitment to expanded investment in existing infrastructure and the development of much-needed services that address specific research support gaps.

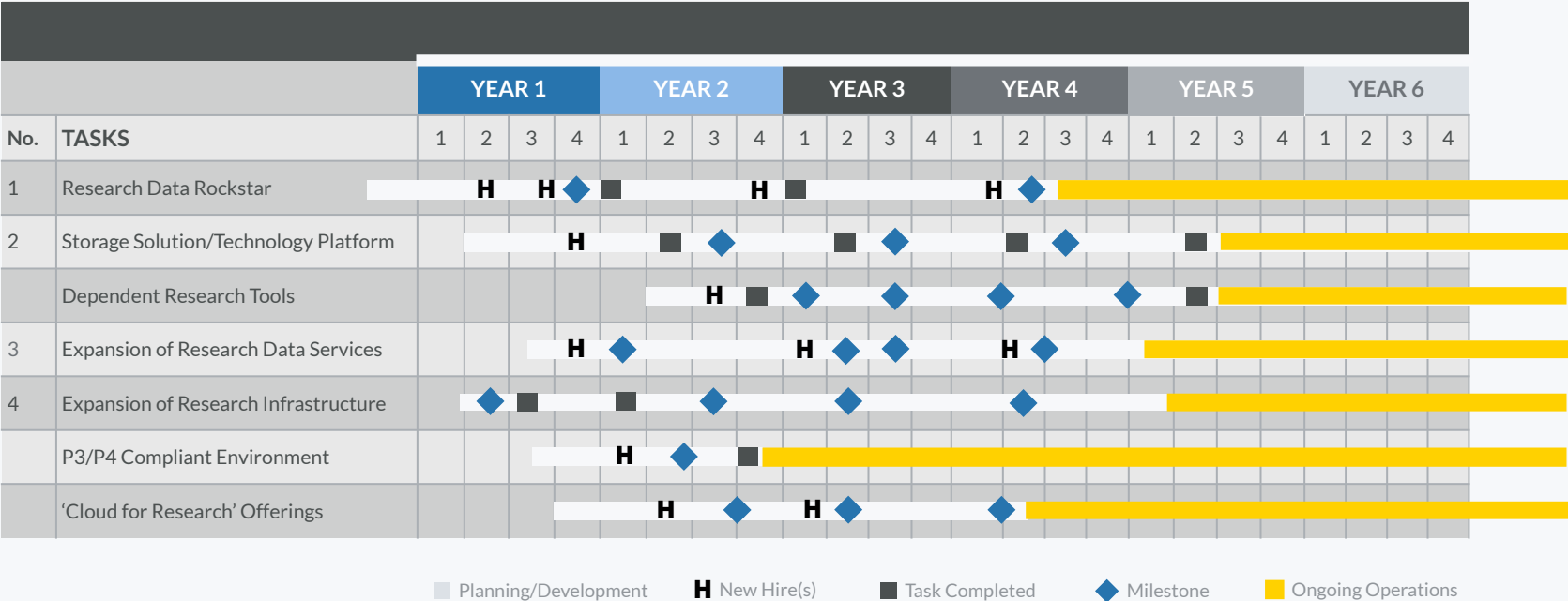




IMPLEMENTATION

PROJECT TIMELINE IF FULLY IMPLEMENTED

From the moment of authorization, full implementation of the roadmap would require concurrent development of each of the major elements.



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**UCLA HAS EXPERIENCED AN ASTONISHING
ASCENT IN ITS FIRST HUNDRED YEARS, AND IN
OUR SECOND CENTURY WE CONTINUE TO RISE,
MAKING AN EVEN GREATER IMPACT UPON THE
COMMUNITIES WE SERVE.**

”

GENE D. BLOCK

RESEARCH DATA ROADMAP DISCUSSION

WINTER/SPRING 2023