

19 May 2021 * euroCRIS webinar series

Research Information Management Practices at US Institutions

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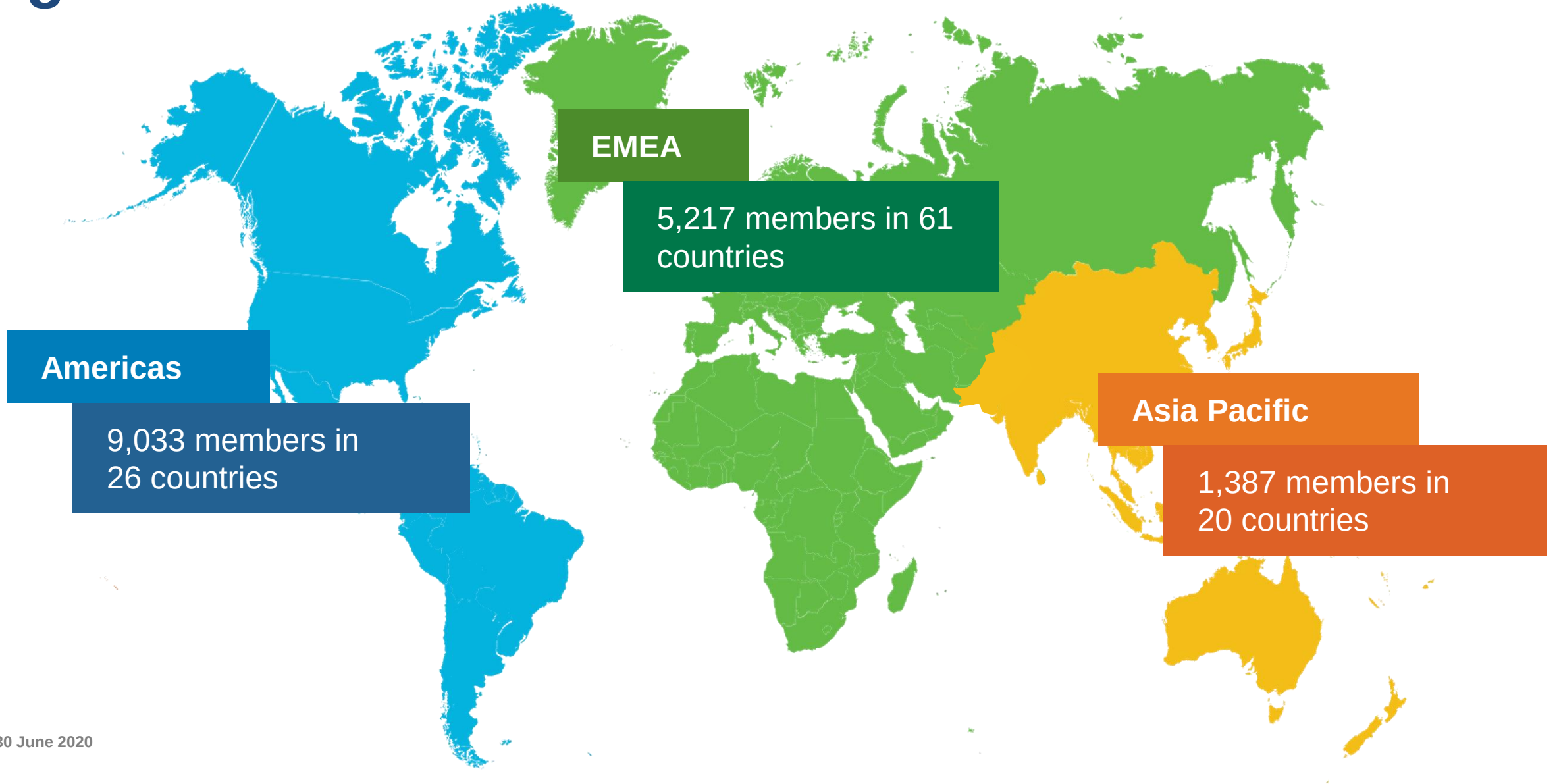
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***We acknowledge and celebrate the
Indigenous people on whose
traditional land and airways we
meet, and pay our respect to the
elders past and present***

*If you are unsure whose land you are currently residing upon, we
encourage you to visit native-land.ca*

A global network of libraries

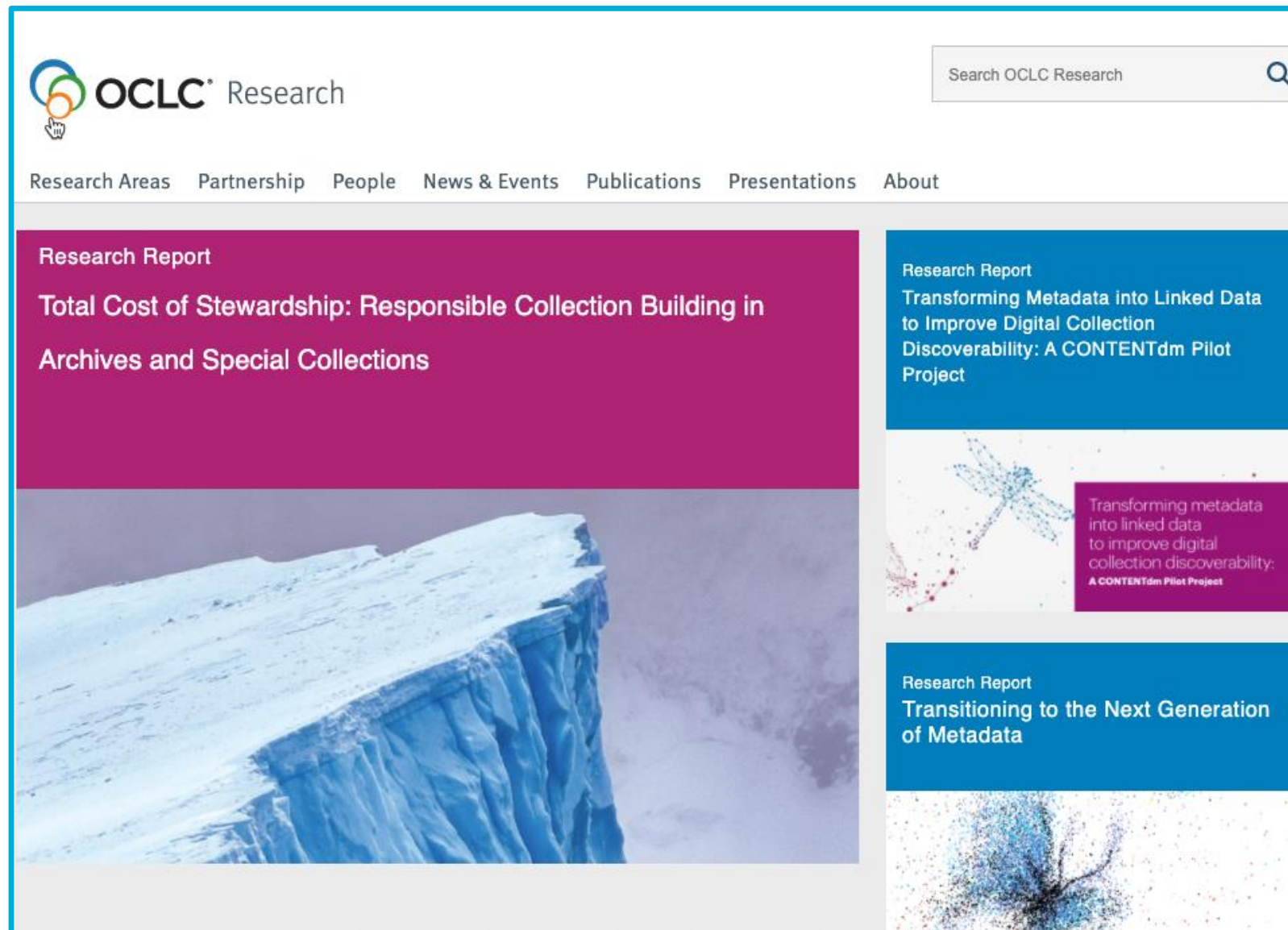


As of 30 June 2020

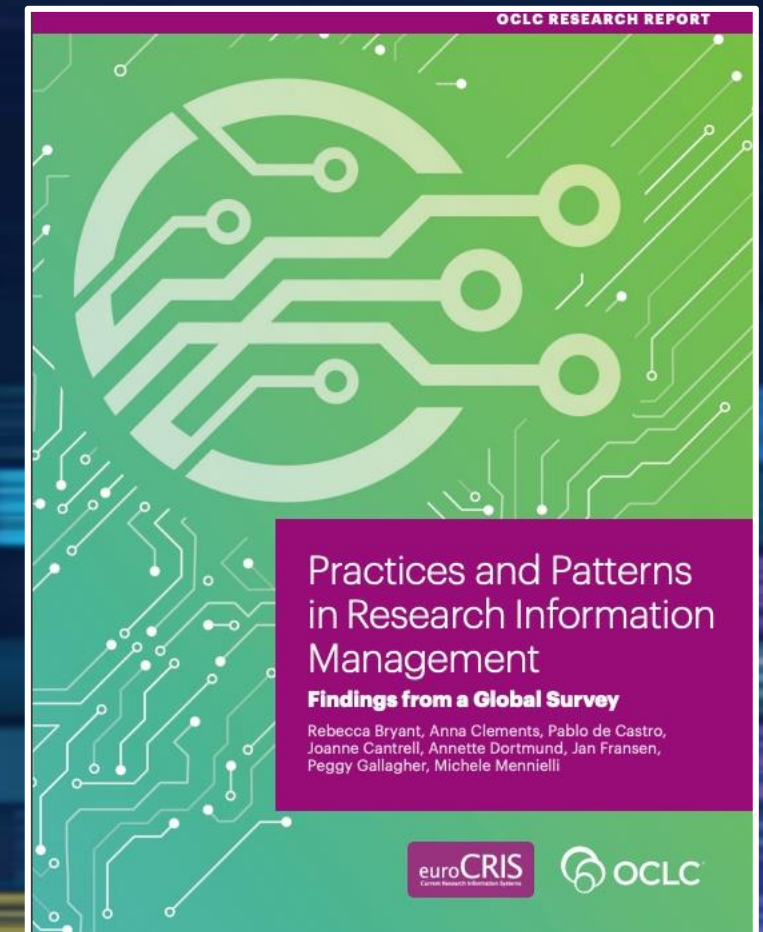
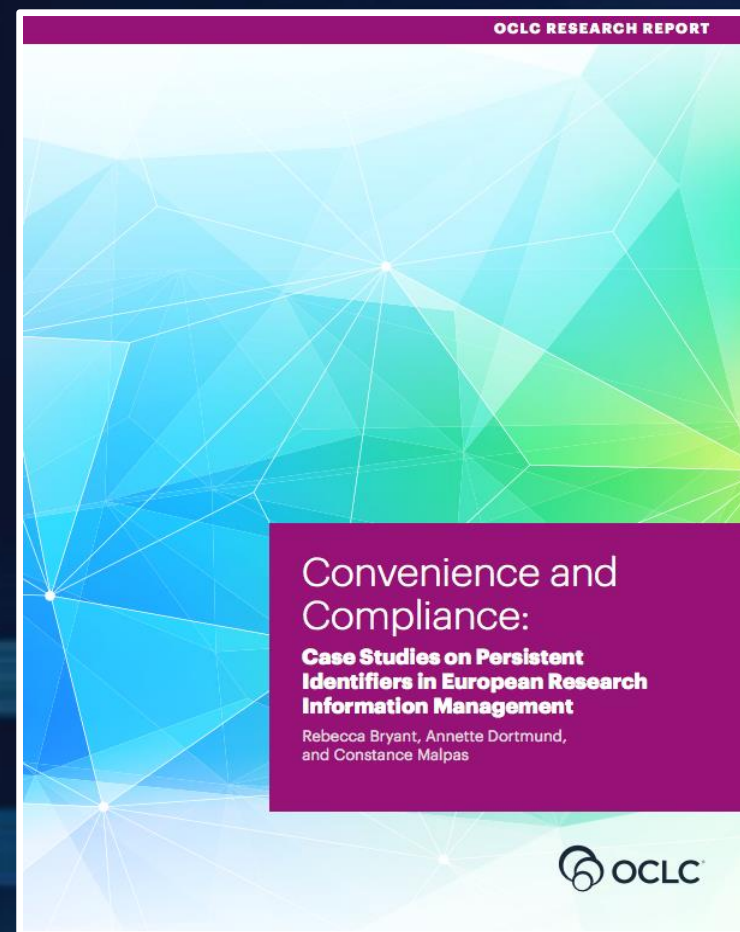
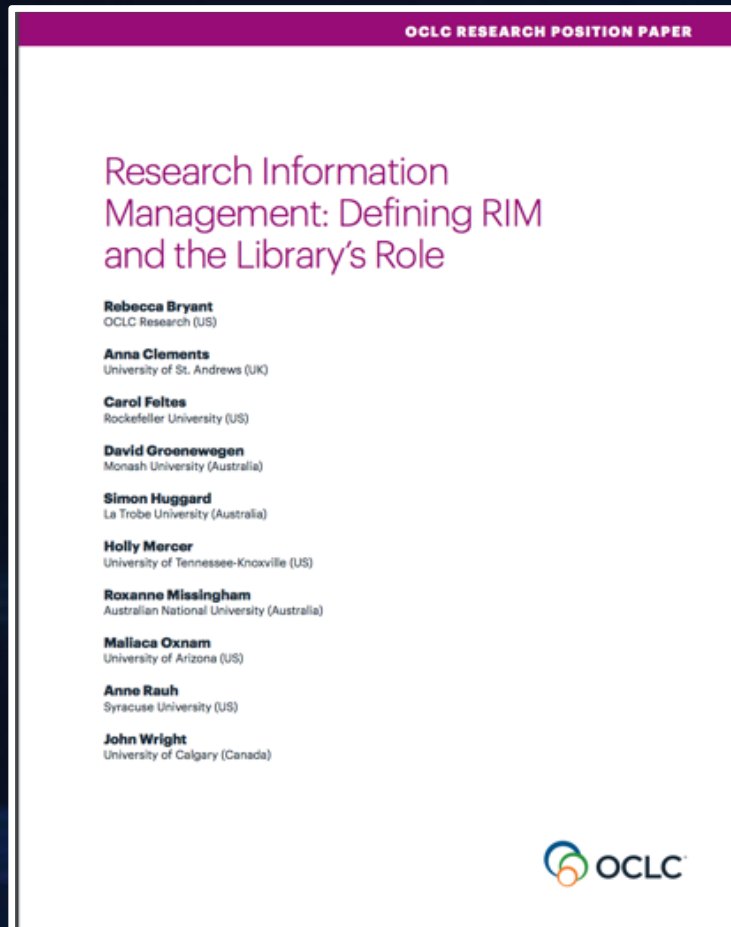
- Devoted to challenges facing [libraries and archives since 1978](#)
- Aims to scale and accelerate library learning, innovation, and collaboration
- oclc.org/research

The OCLC Research Library Partnership supports collaboration and learning among a transnational group of research libraries

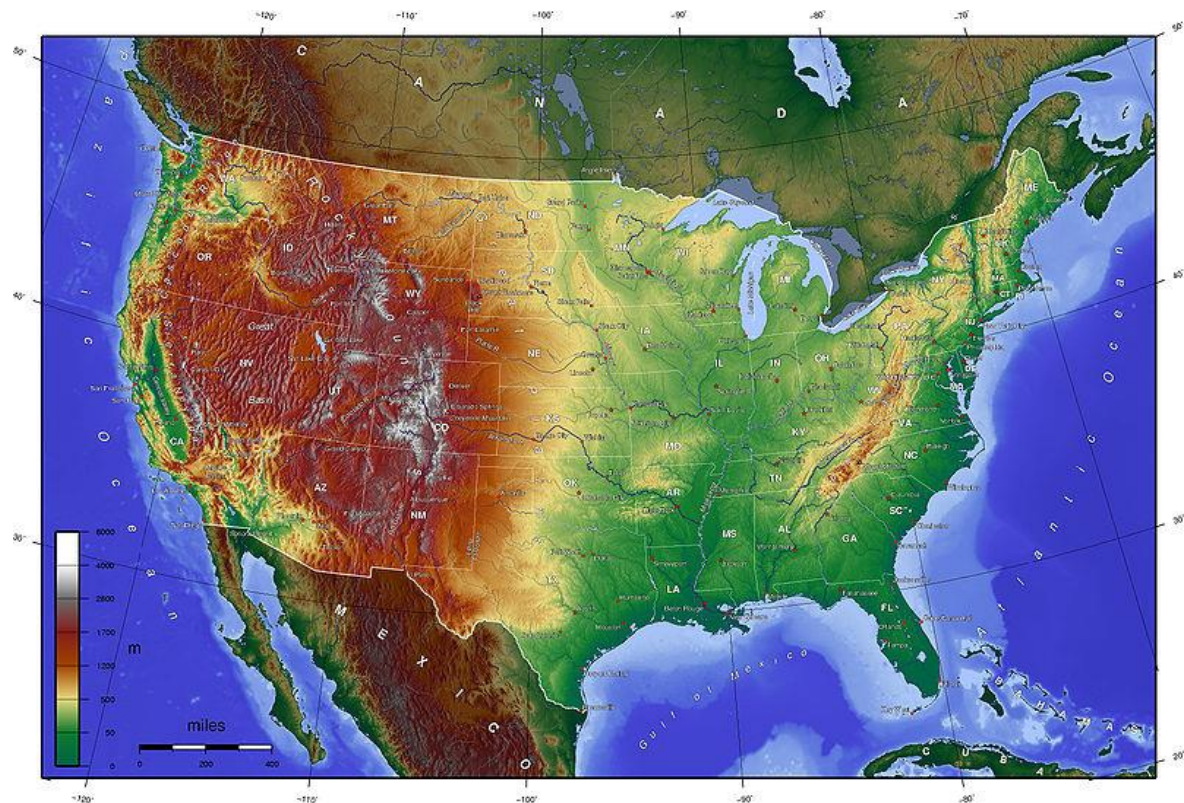
- oclc.org/joinRLP



OCLC Research publications on Research Information Management



Research Information Management in the United States



oclc.us-rim-project

Project Team



Rebecca Bryant, PhD, OCLC Research
co-PI



Jan Fransen, University of Minnesota
co-PI



Pablo de Castro, euroCRIS & Strathclyde
University



Brenna Helmstutler, Syracuse University



David Scherer, Carnegie Mellon
University

Project overview



Scope

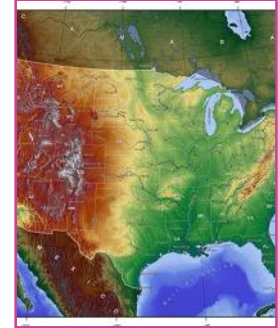
5 US research universities with a diversity of:

- RIM use cases
- Products
- Scale & scope
- Stakeholders



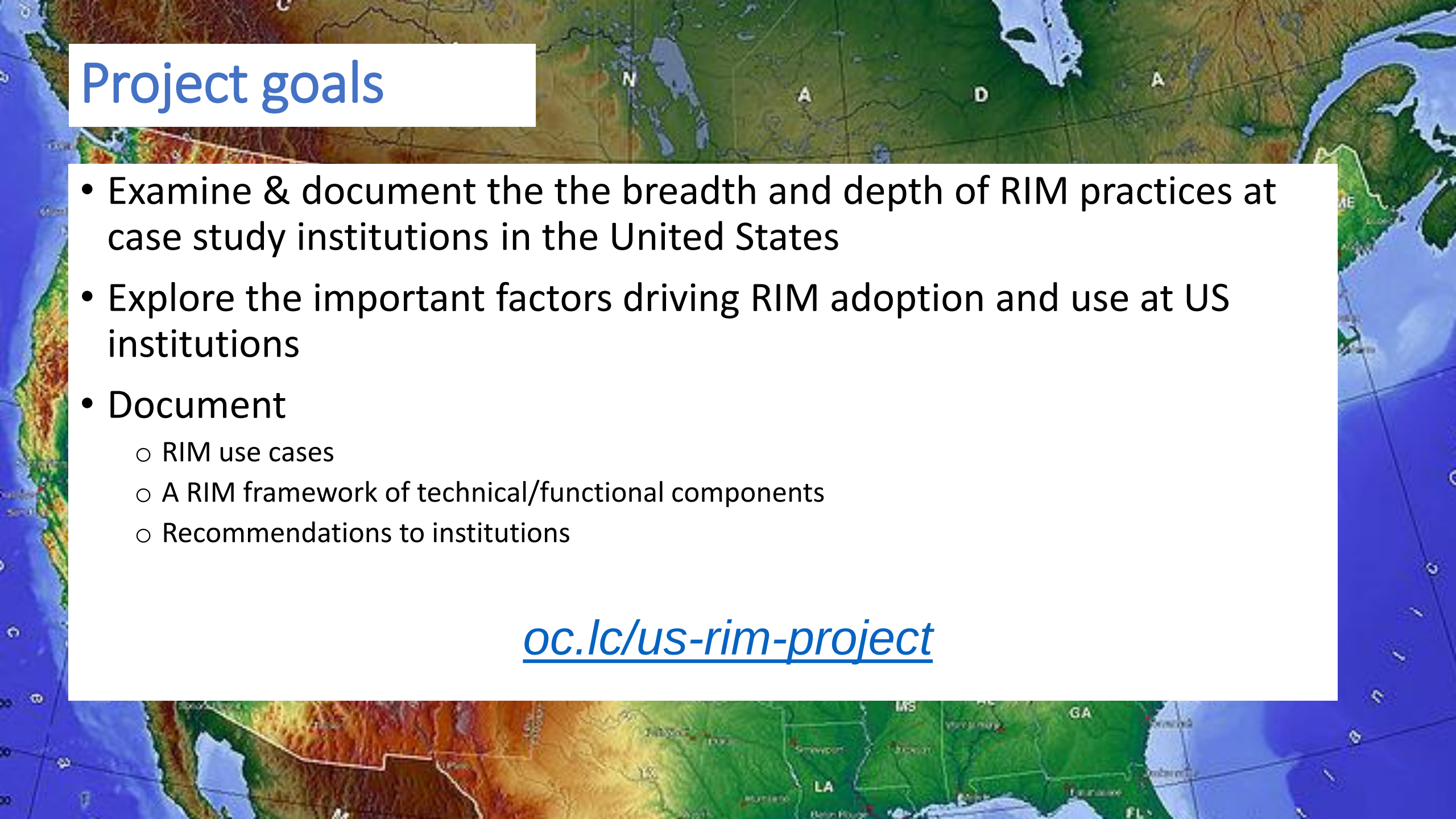
Methodology

- Case study approach
- Semi-structured interviews with 39 individuals at 7 institutions



Outputs

- Forthcoming OCLC Research report, expected ~September 2021
- Webinars & conference presentations
- Blogs & discussions

A topographic map of the United States serves as the background for the slide. It shows state boundaries, major cities, and geographical features like mountains and water bodies. The map is color-coded by elevation, with greens for lower elevations and browns/yellows for higher elevations.

Project goals

- Examine & document the the breadth and depth of RIM practices at case study institutions in the United States
- Explore the important factors driving RIM adoption and use at US institutions
- Document
 - RIM use cases
 - A RIM framework of technical/functional components
 - Recommendations to institutions

oc.lc/us-rim-project

Institutions	Use case(s)	Relevant products used	Are there implementations above the institutional level?
Penn State	• Public profiles • Reporting • Faculty Activity Reporting • OA policy support	• Elsevier Pure, • Digital Measures FAR, • Home grown Researcher Metadata Database	All systems are implemented at the university <i>system</i> level, across 24 campuses
Texas A&M	• Public profiles • Reporting • repository integration	• VIVO • Symplectic Elements • MySQL	no
Virginia Tech	• Faculty Activity Reporting, • Public profiles • repository integration • Reporting	• Symplectic Elements • Symplectic Elements Discovery module	no
UCLA (and University of California)	• FAR (Opus) • public profiles • OA policy support/repository	• Home grown FAR system • Interfolio • Symplectic Elements • Profiles RNS	OA policy and publication management system at the <i>system</i> level
University of Miami	• Public profiles/repository • Public profiles • FAR	• Ex Libris Esploro • Elsevier Pure	Florida ExpertNet

oc.lc/us-rim-project

RIM =

The transparent
aggregation, curation,
and utilization of
(meta)data about
institutional research
activities

These systems might be called:

- Research Information Management System
- Researcher Profile System
- Expert Finder System
- Research Information System (RIS)
- Research Networking System (RNS)
- Faculty Activity Reporting (FAR) system
- Faculty Information System (FIS)
- Current Research Information System (CRIS) *(if used, not used in the same way as in Europe)*

Why is there so little agreement on what we call these things?

Disparate use cases

- Faculty activity reporting
- Public portal: Expertise discovery &/or Research showcase
- Supporting campus OA policies
- Strategic reporting & decision support
- Metadata reuse

Lots of stakeholders

- . . . in a complex adaptive university system

Few national mandates

- RIM systems rarely used for compliance monitoring (at this time)

RIM

- Faculty Activity Reporting
- HR/Academic Affairs sectors to support workflows



interfolio

Digital Measures
by Watermark™



Home grown



– ELSEVIER – **Pure**



Elements

- CRIS systems
- Publishing sector

PROFILES
Research Networking Software

VIVO

- Open source, seeded by NIH
- Public portals

ExLibris
Esploro

- New entrant, with institutional repository at the core
- Library sector

USE CASES

Six Primary US RIM Use Cases

Faculty Activity Reporting (FAR)

Public Portal: Expertise Discovery &/or
Research Showcase

Open Access Workflow

Strategic Reporting & Decision Support

Metadata Reuse

Compliance Monitoring

RIM Use Cases at Case Study Institutions

	Texas A&M	Penn State	Virginia Tech	UCLA	Miami
Faculty Activity Reporting (FAR)	decentralized	✓	✓	✓	decentralized
Public Portal: Expertise Discovery &/or Research Showcase	✓	✓	in progress	✓	✓
Open Access Workflow		✓	✓	✓	
Strategic Reporting & Decision Support	✓	✓	✓	✓	
Metadata Reuse		✓	✓	✓	
Compliance Monitoring				✓	

What happens when you have multiple drivers, use cases, & stakeholders?

. . . And in a highly autonomous & decentralized ecosystem

A photograph of several large, blue, corrugated metal silos or storage tanks. They are arranged in a row, receding into the distance. In the background, a brick building is visible under a clear blue sky. A green speech bubble is overlaid on the right side of the image, containing text.

“We have six or seven research profiling systems [on our campus]. That is duplication of service, for sure.”

Silos & duplication

In the US:

- FAR, public portals, and other systems/workflows are still largely separate
- While we documented institutions with centralized FAR systems, many units still maintain their own processes

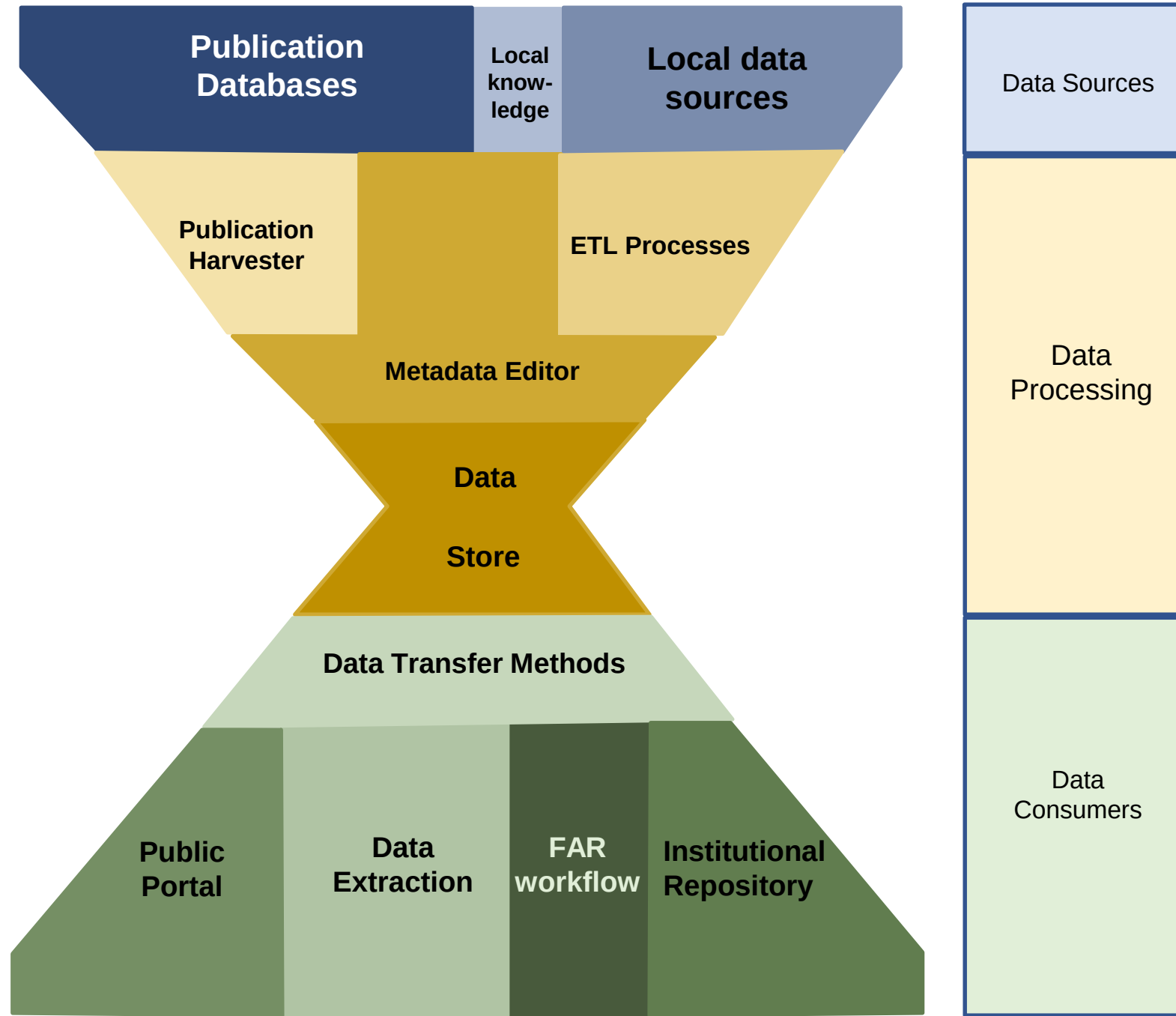
Why does this matter?

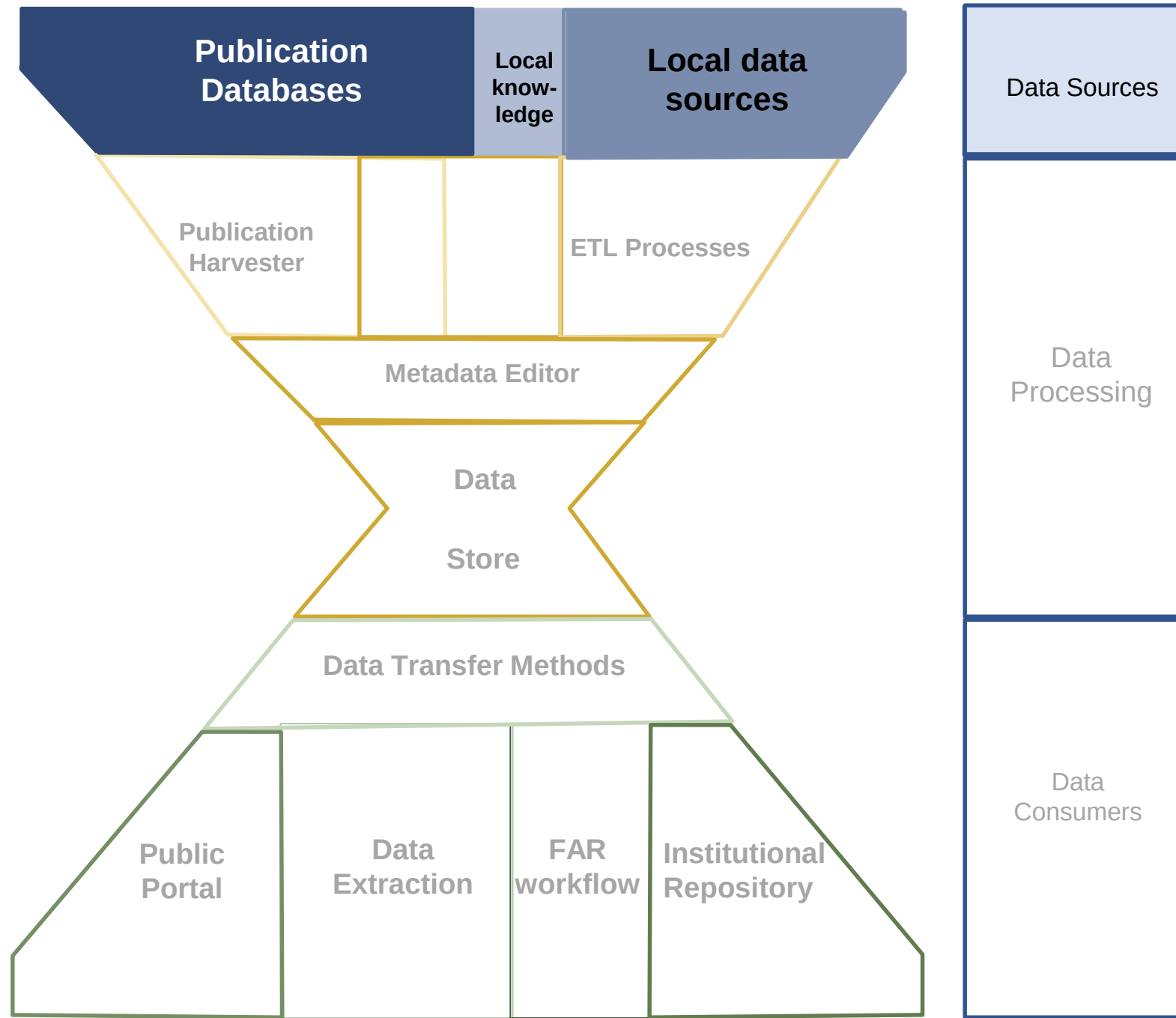
- The data often can't be aggregated for a consistent, enterprise-level view
- And data that is "good enough" for profiles may be incomplete for other purposes (hello! reporting?)
- Faculty are still being asked to enter information into multiple systems.

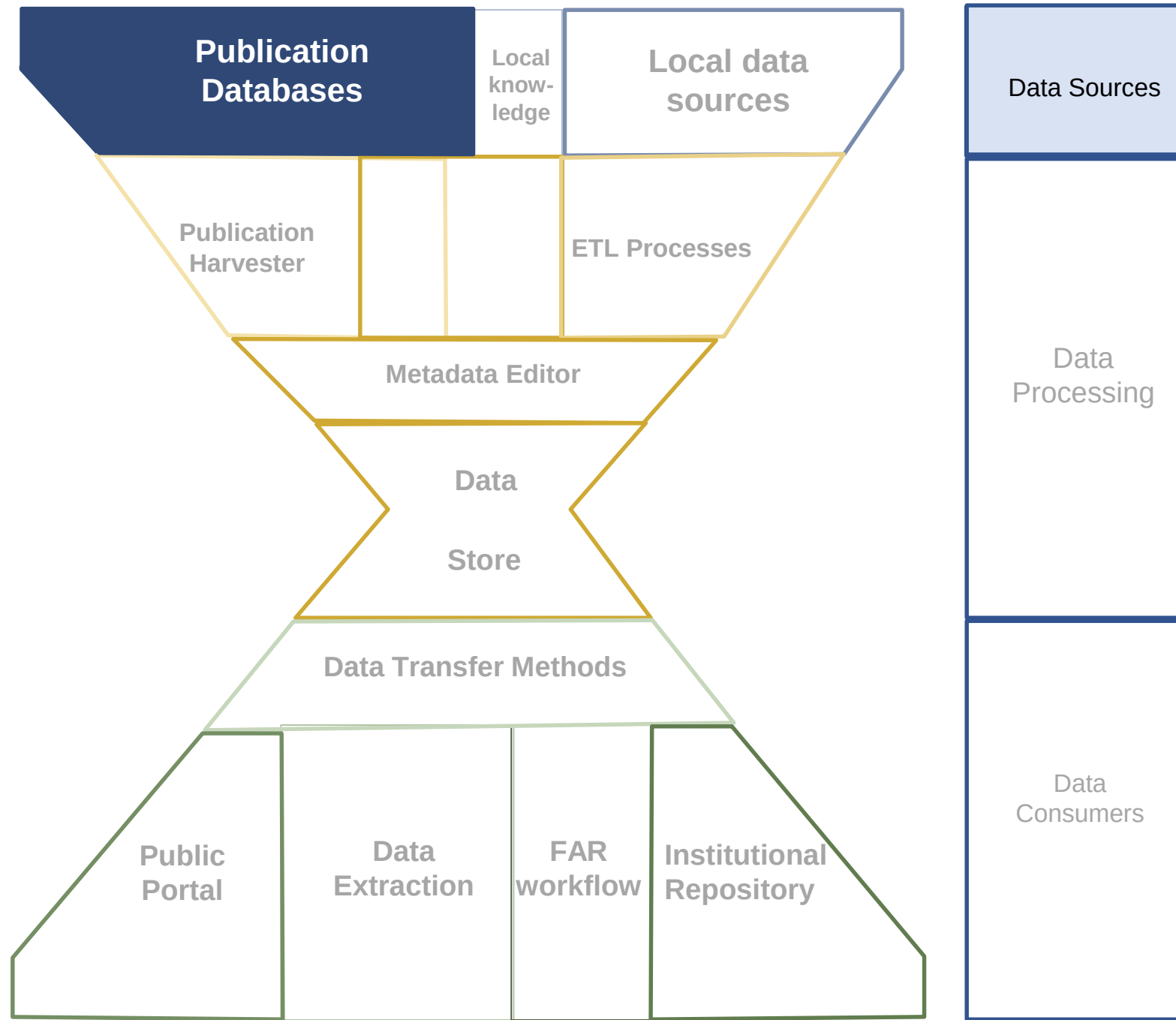
Silos & duplication

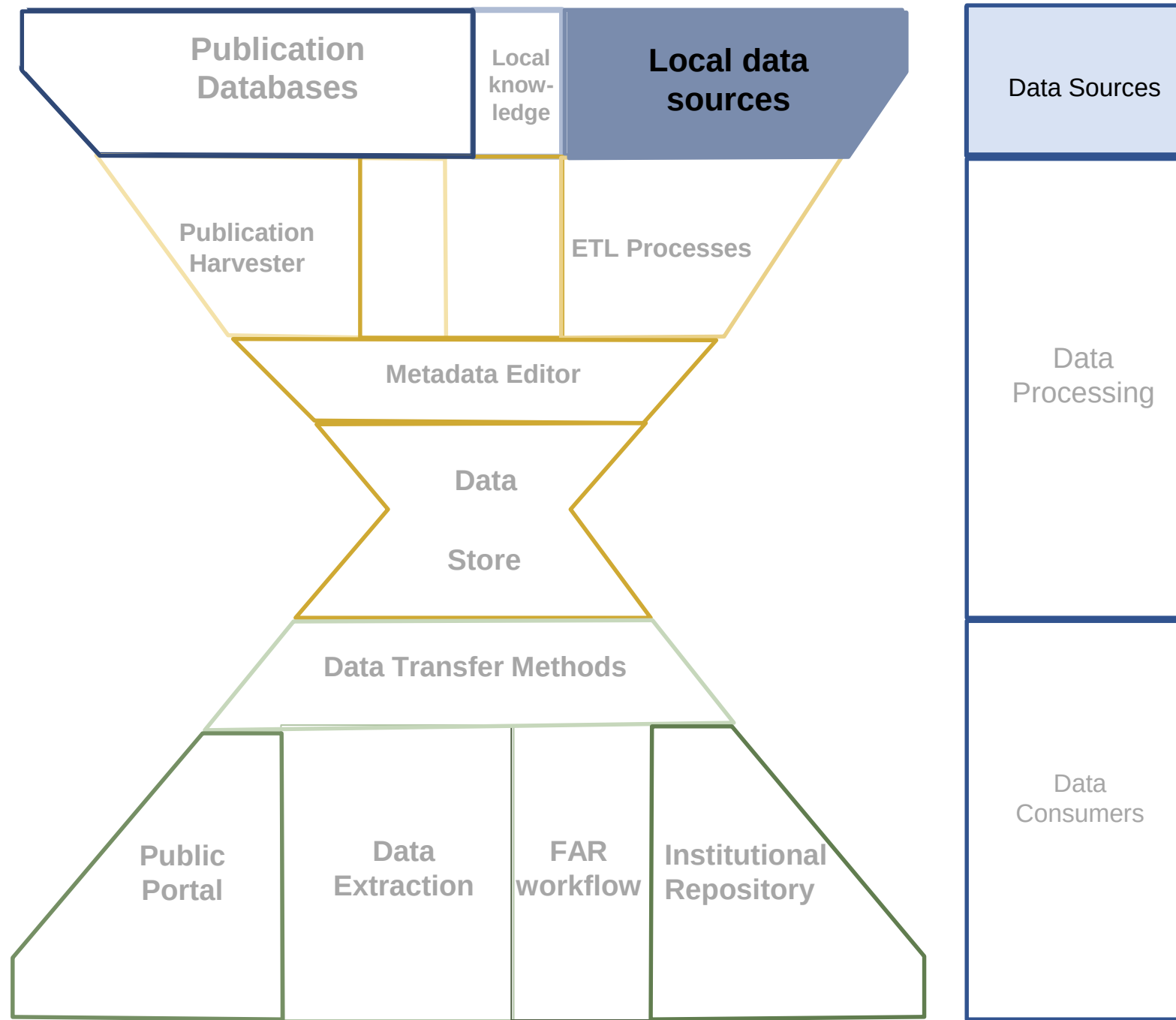
RIM SYSTEM FRAMEWORK

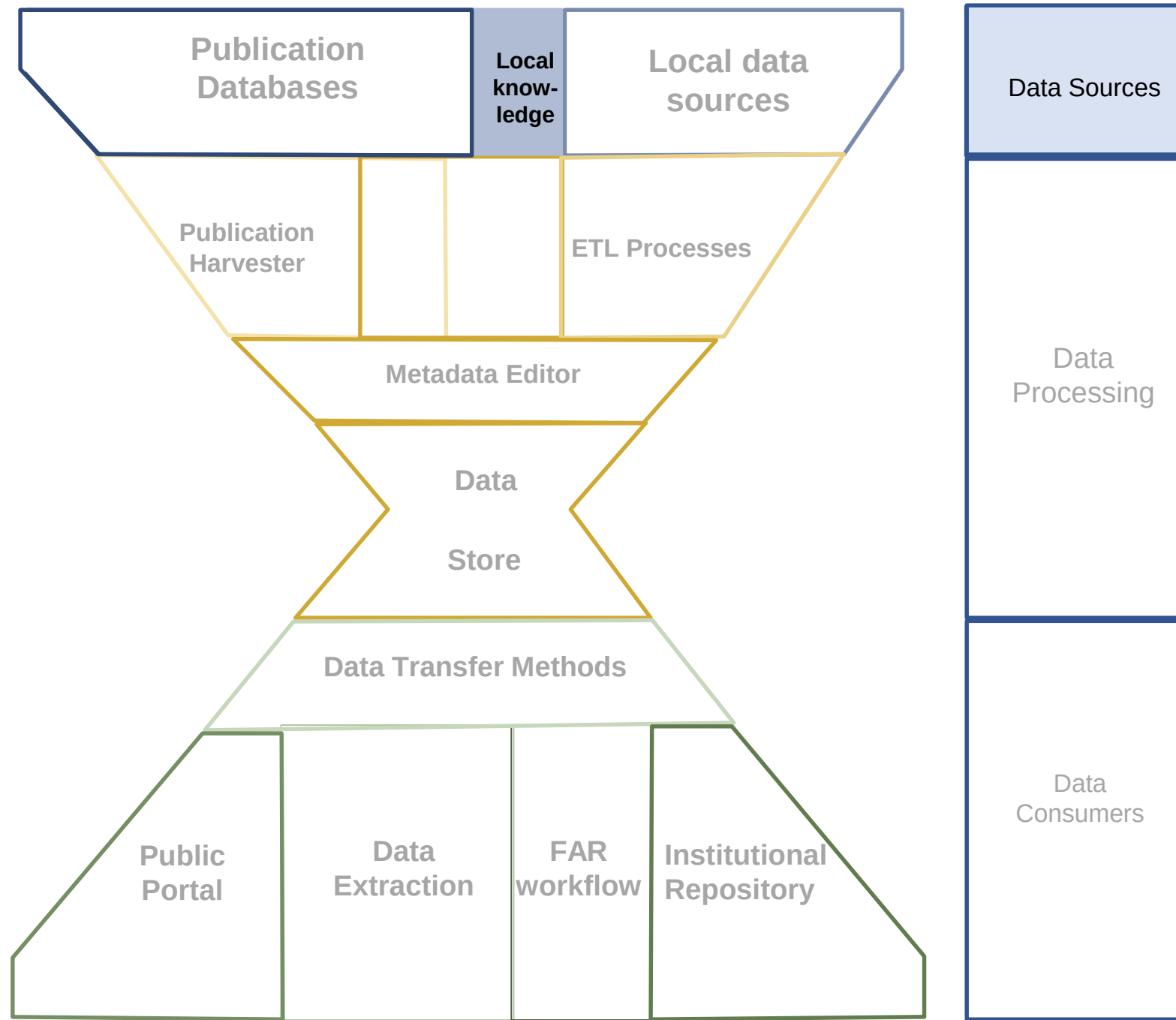
RIM SYSTEM FRAMEWORK MASTER TEMPLATE

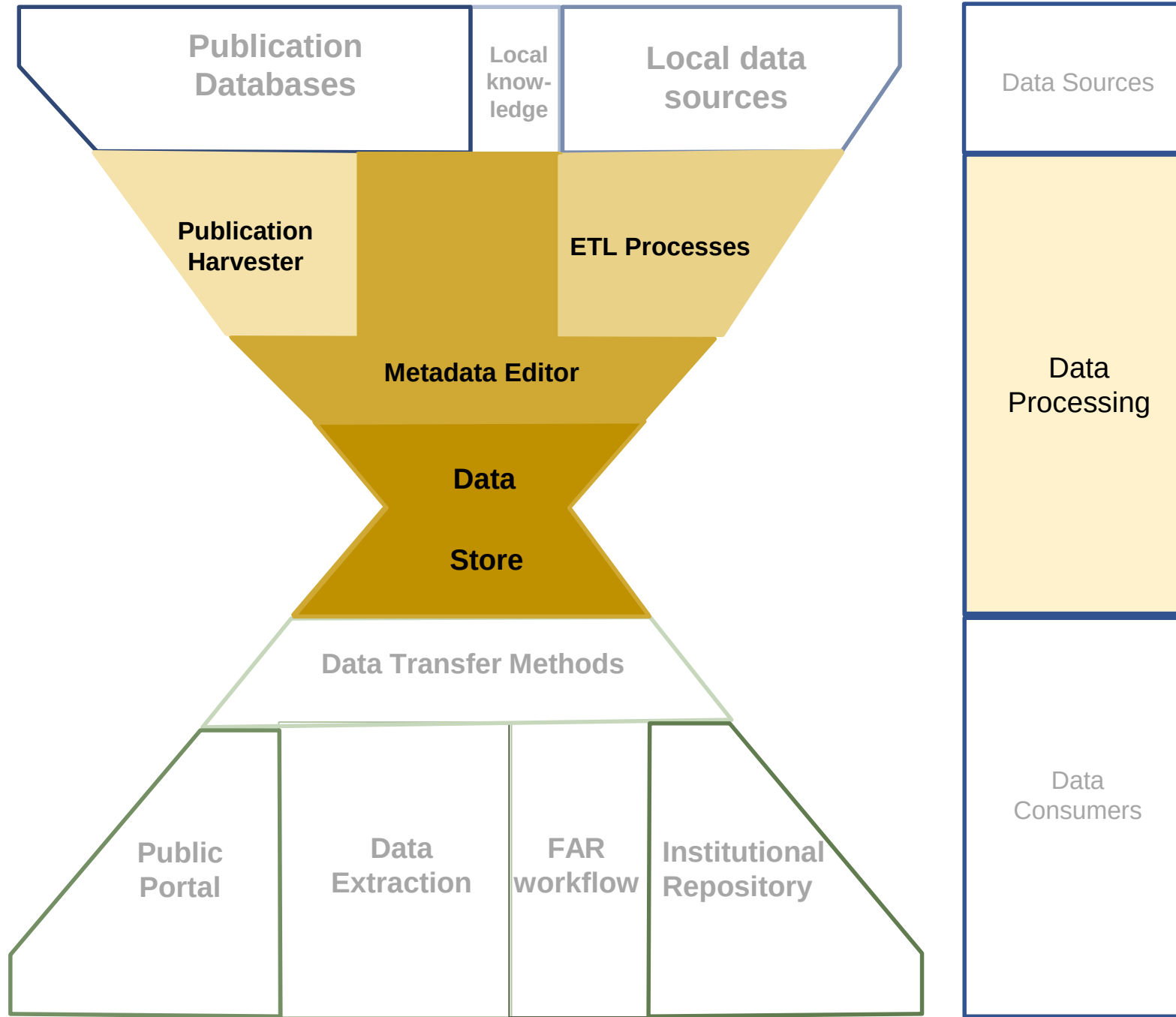


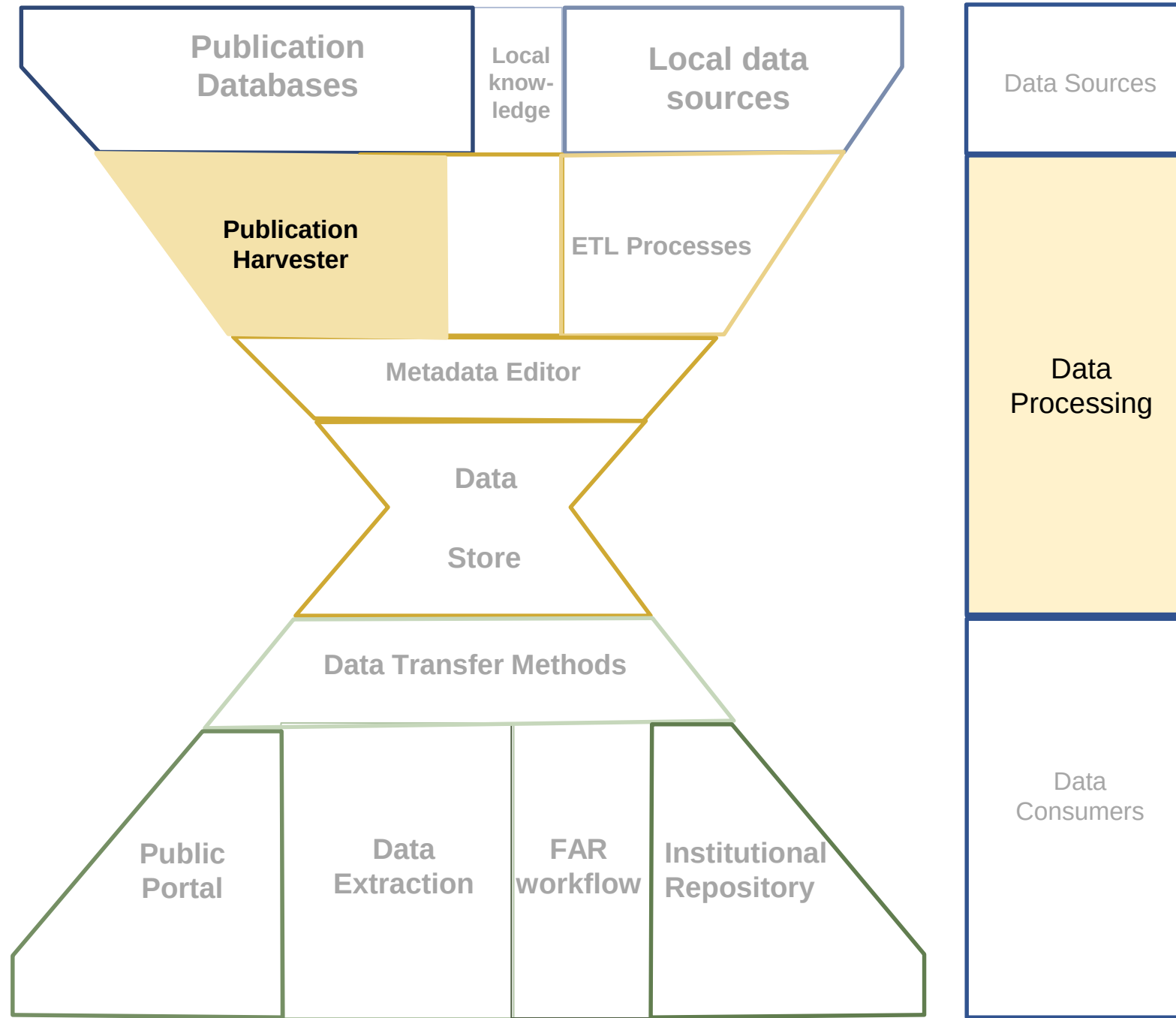


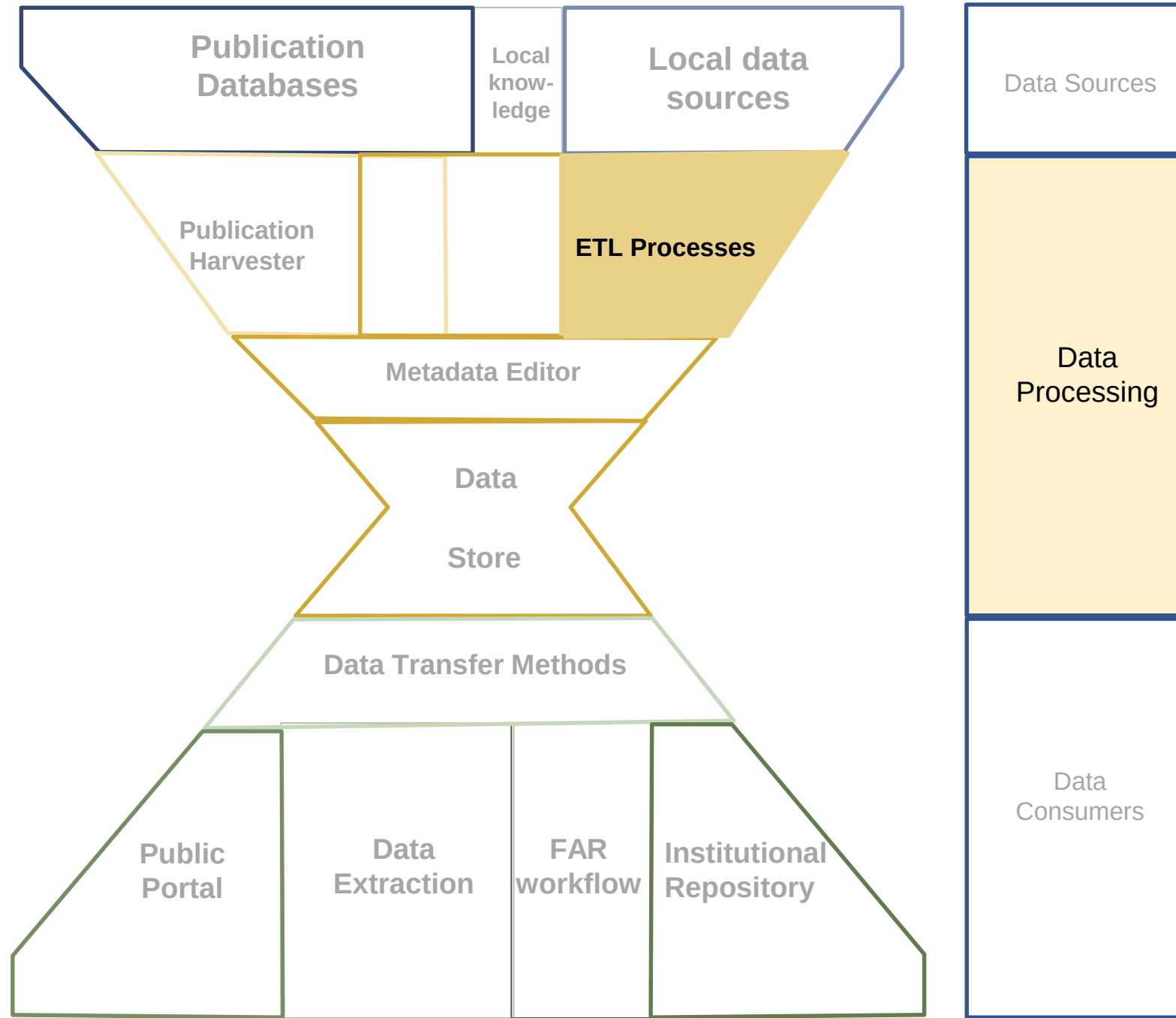


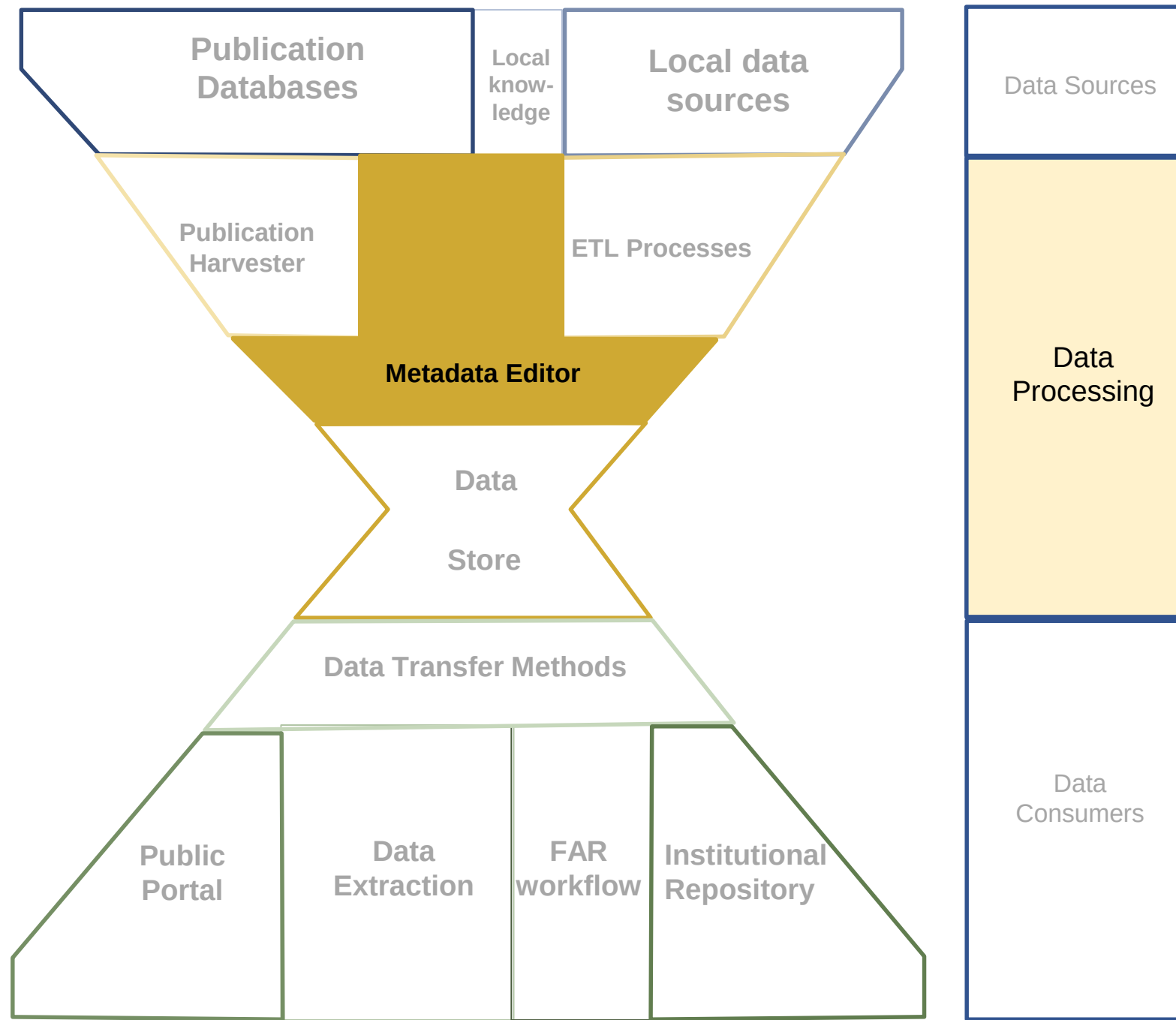


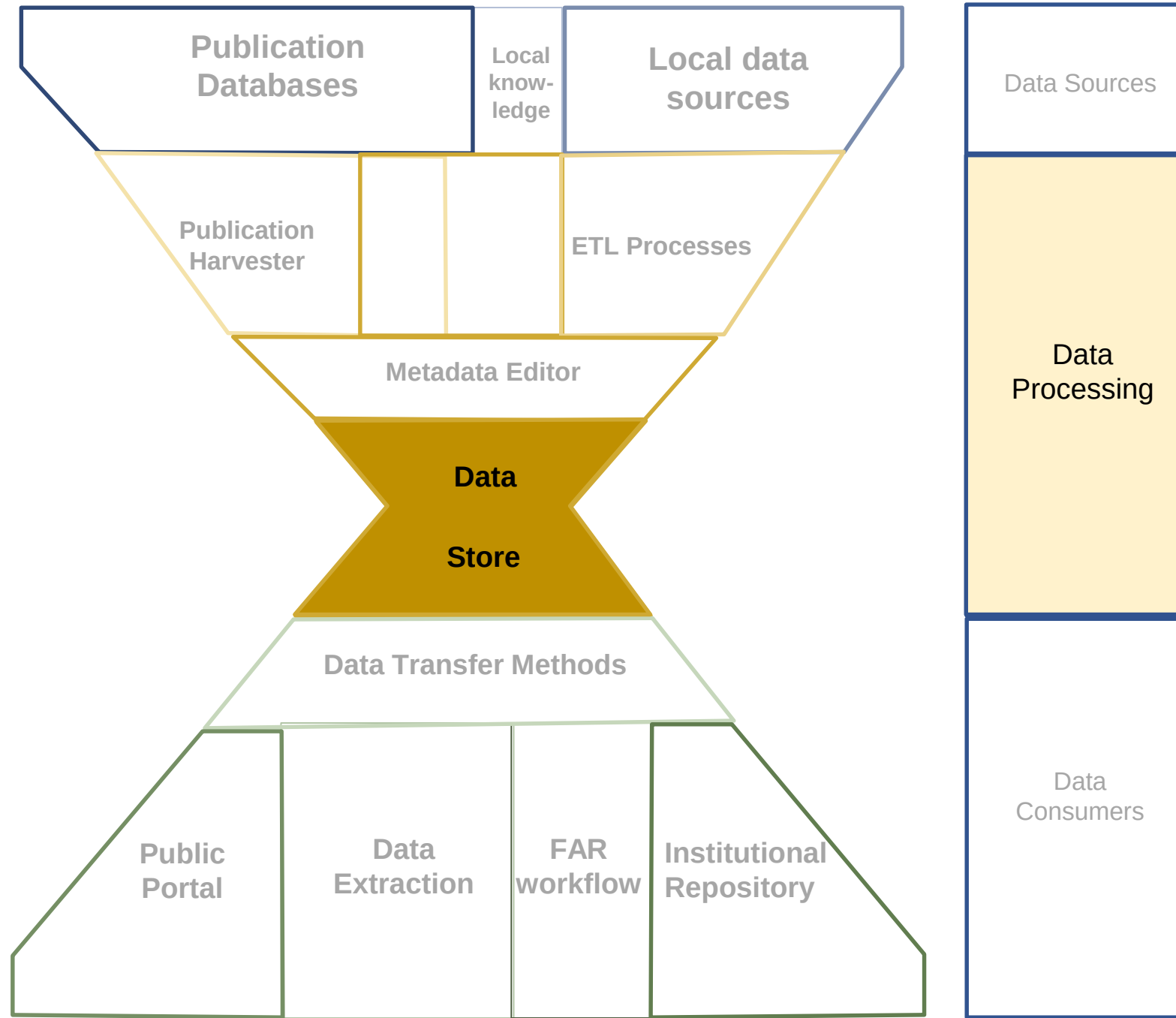


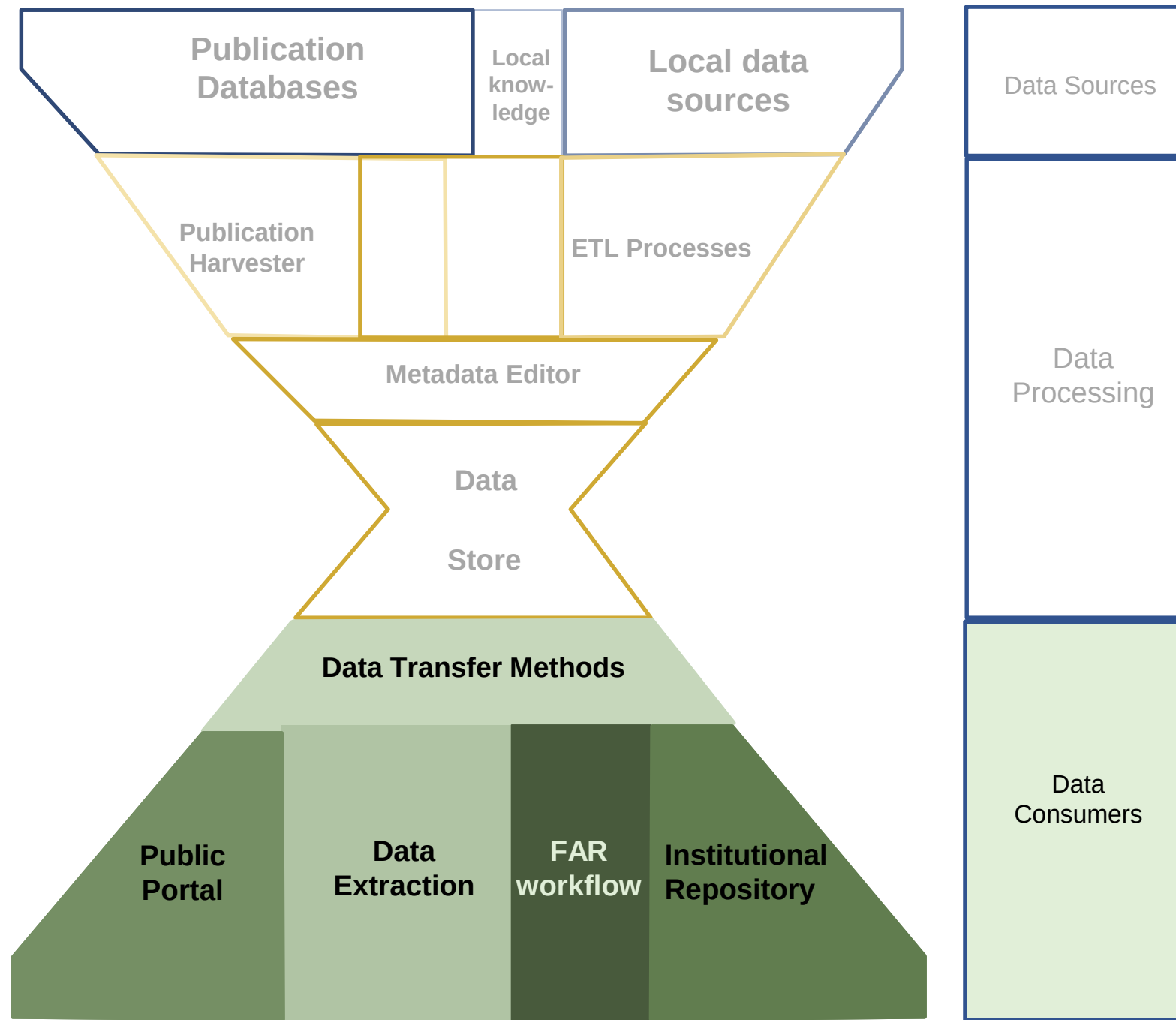


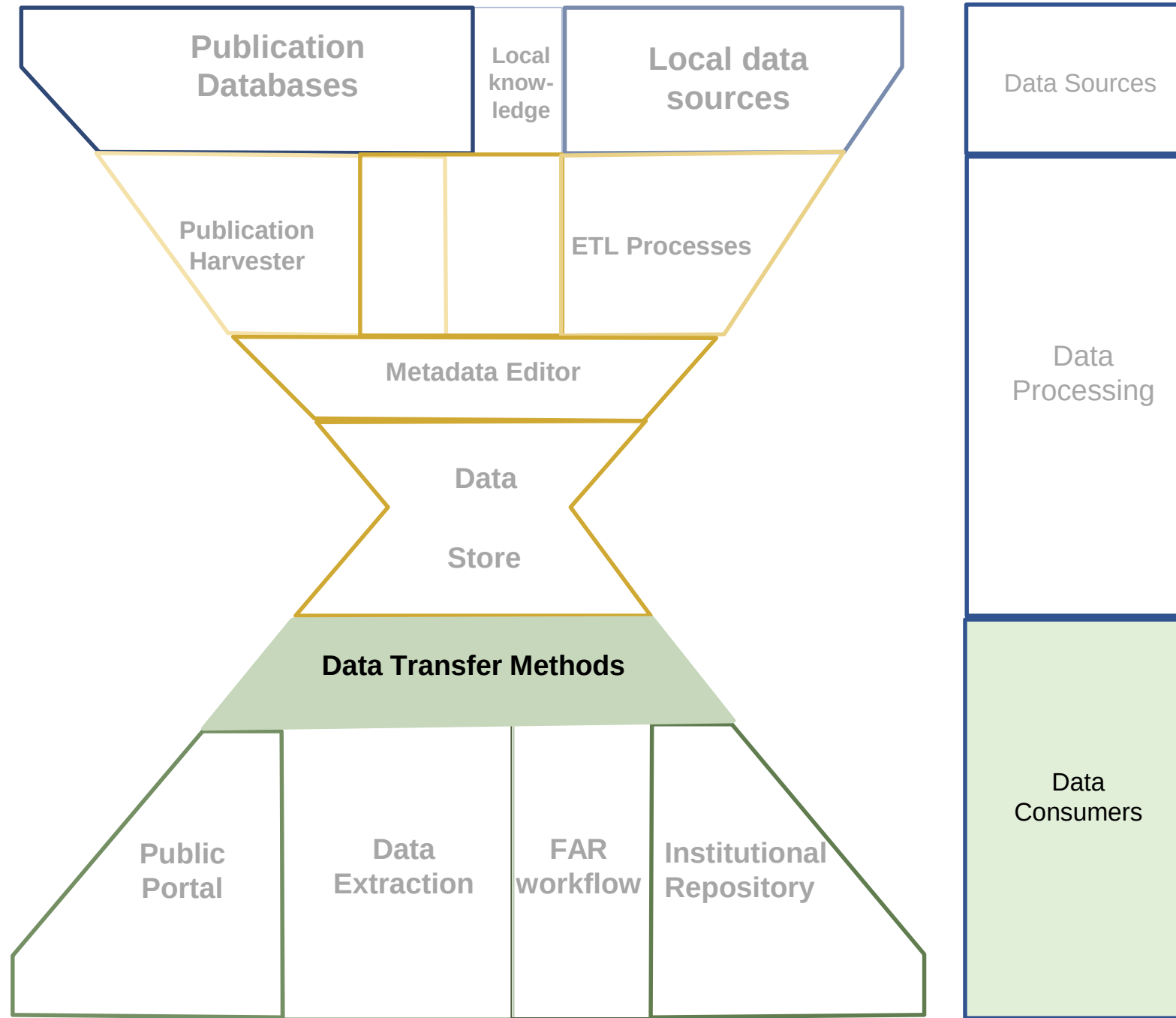


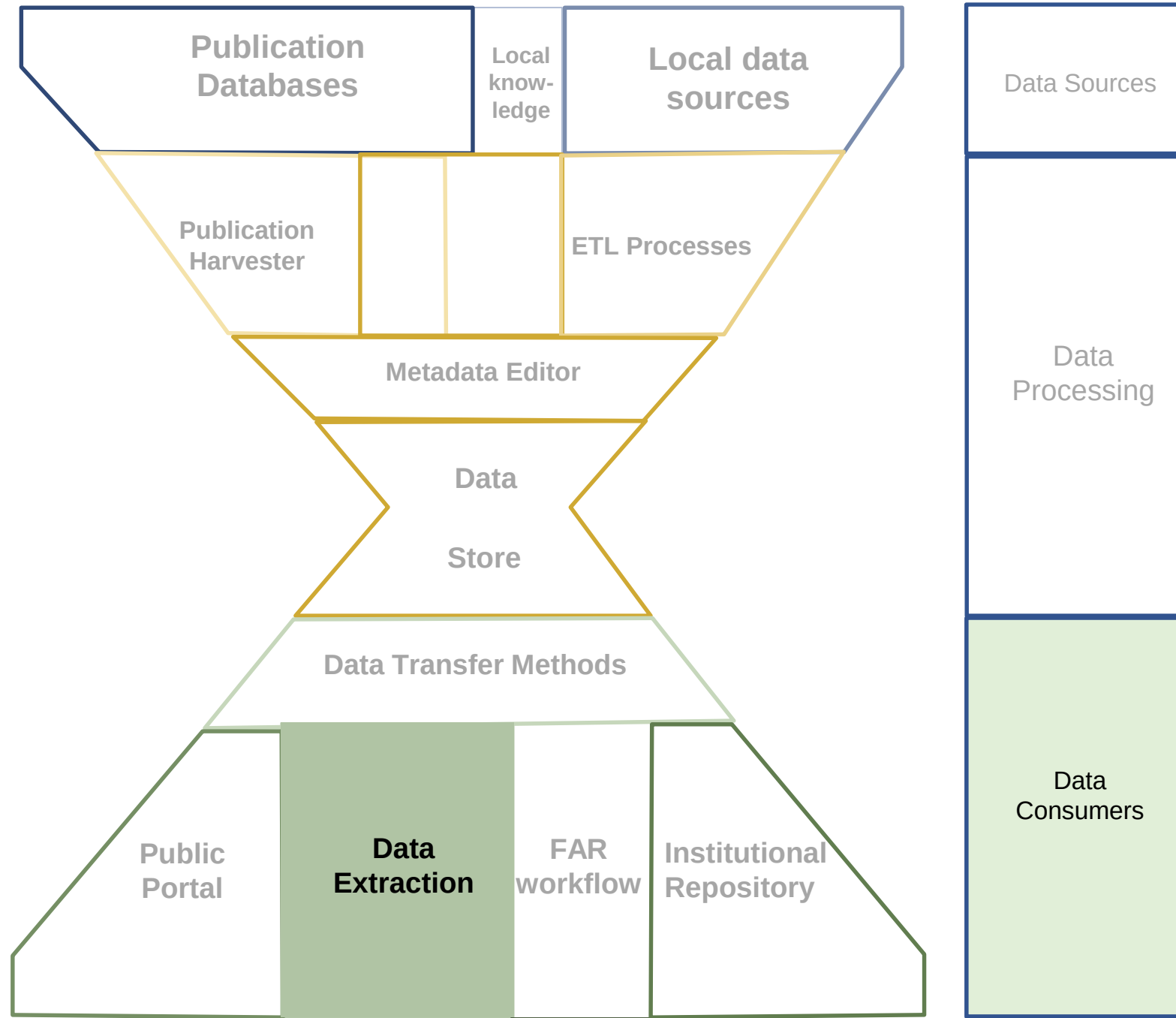


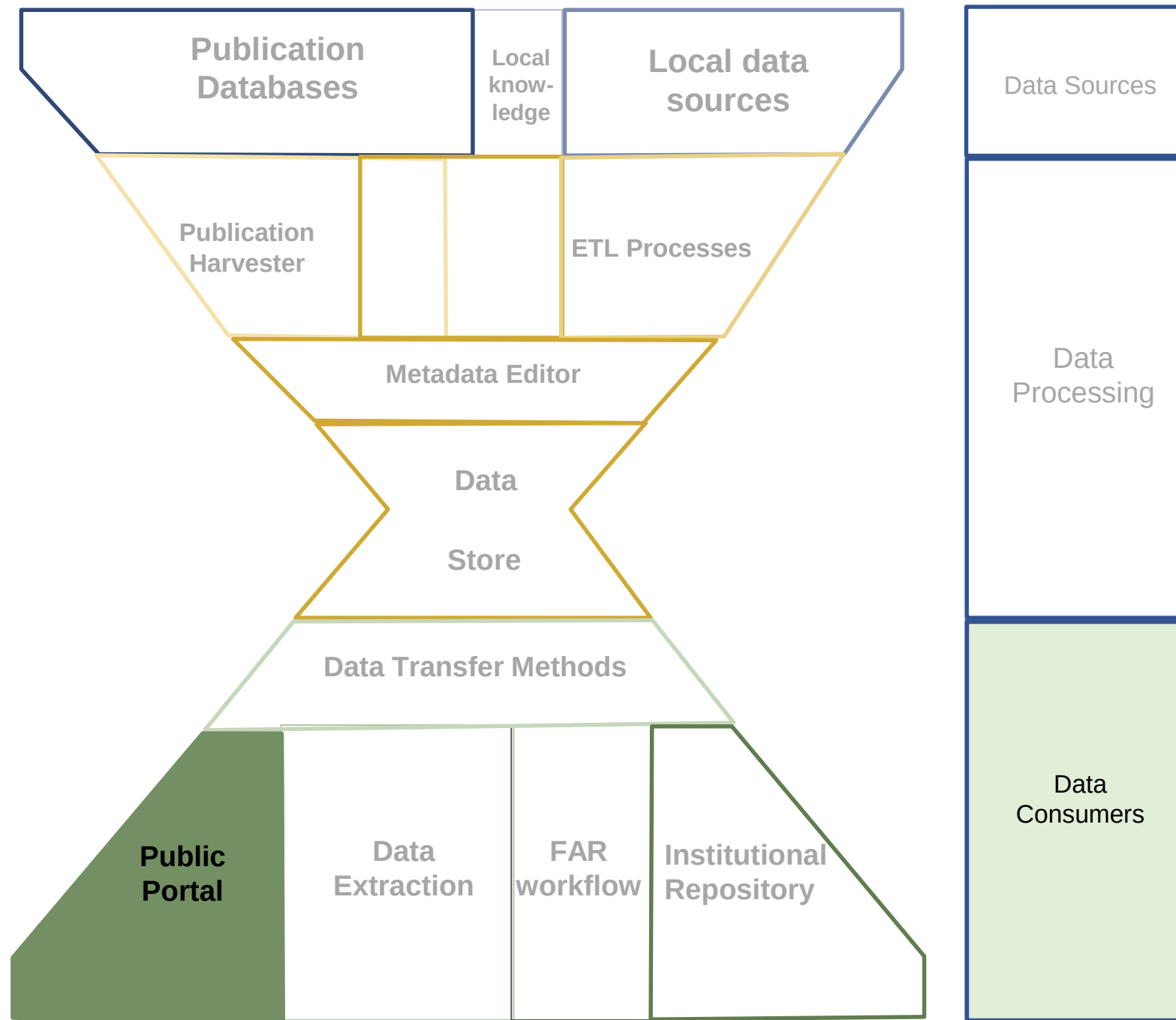


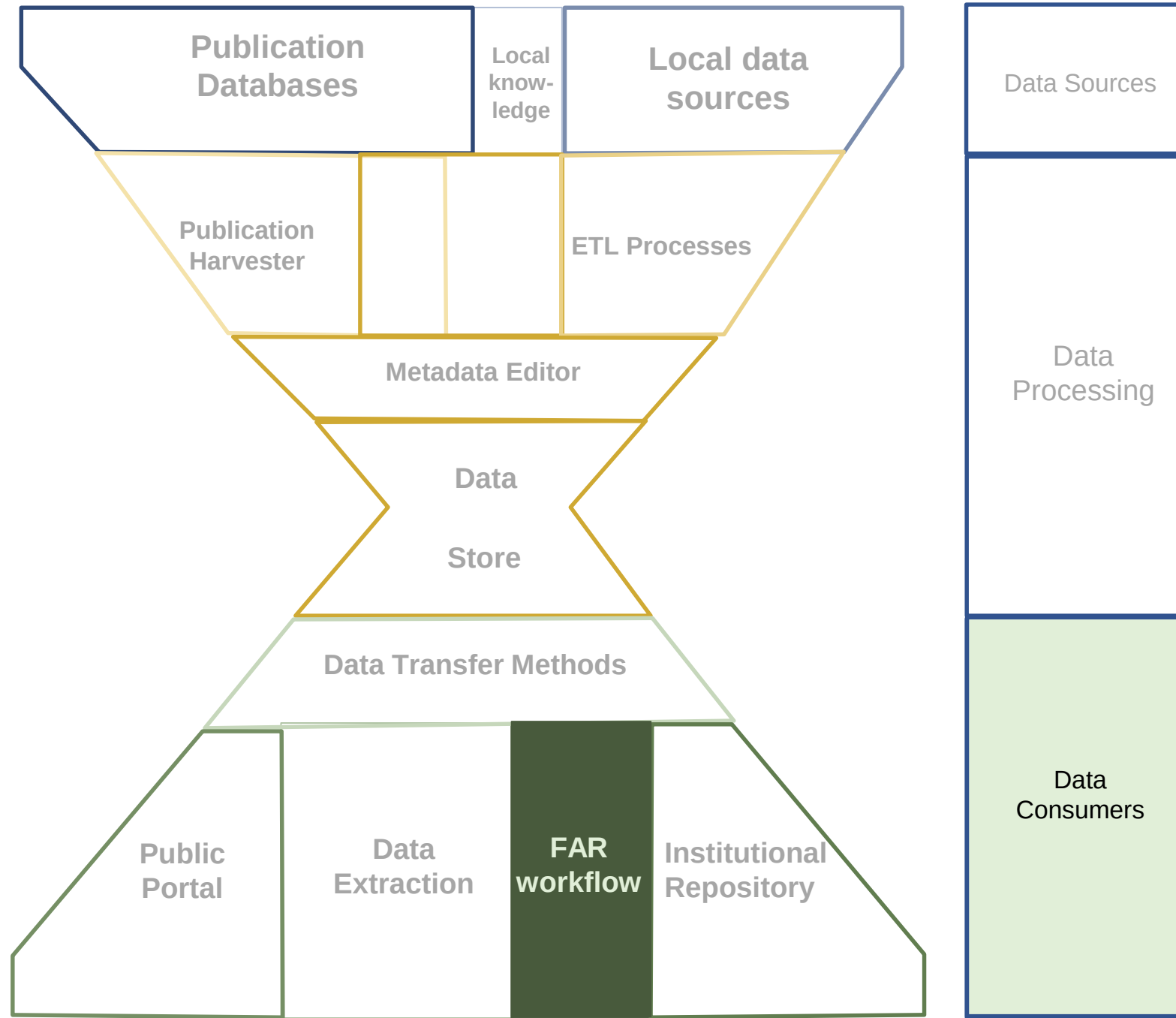


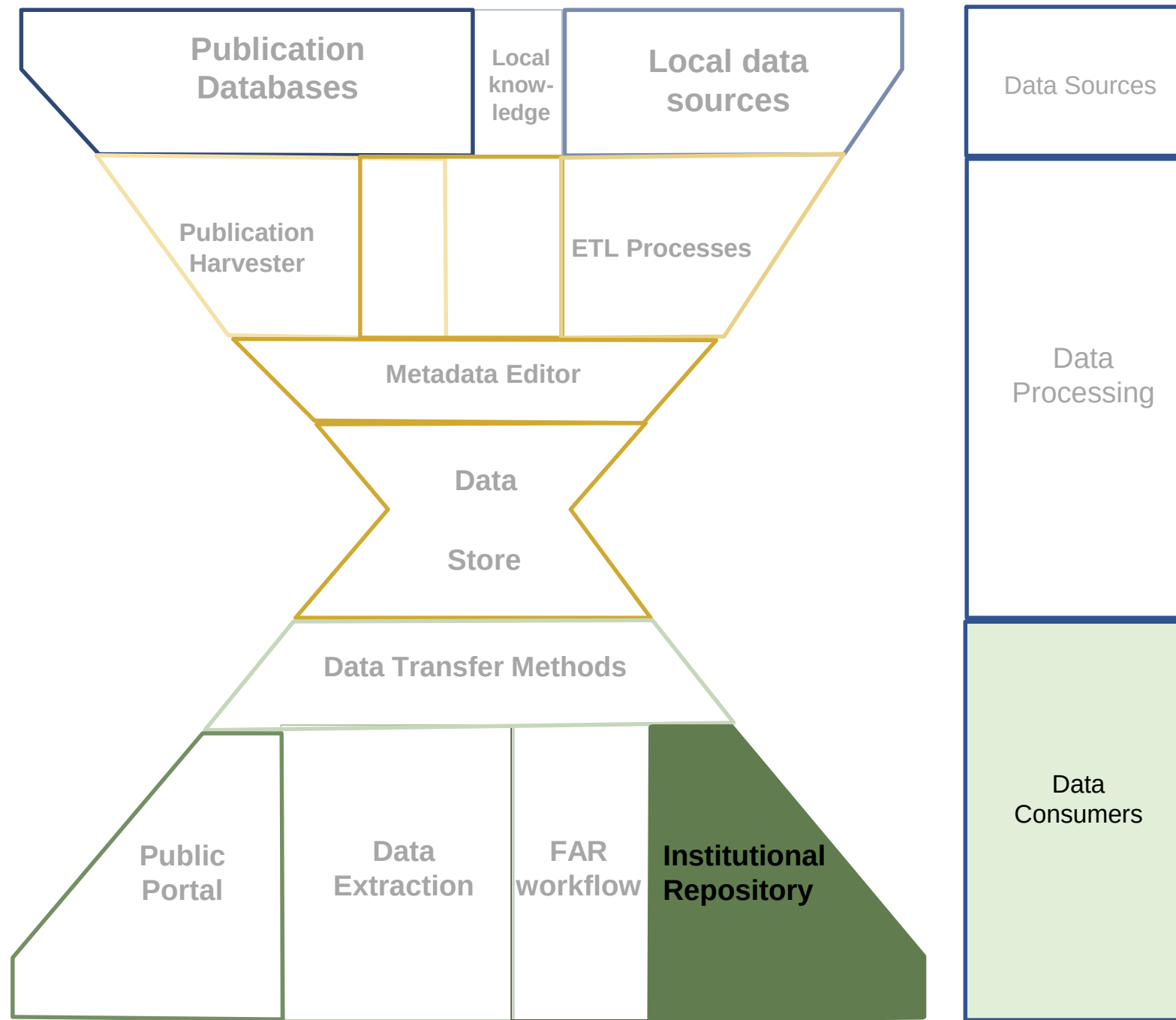




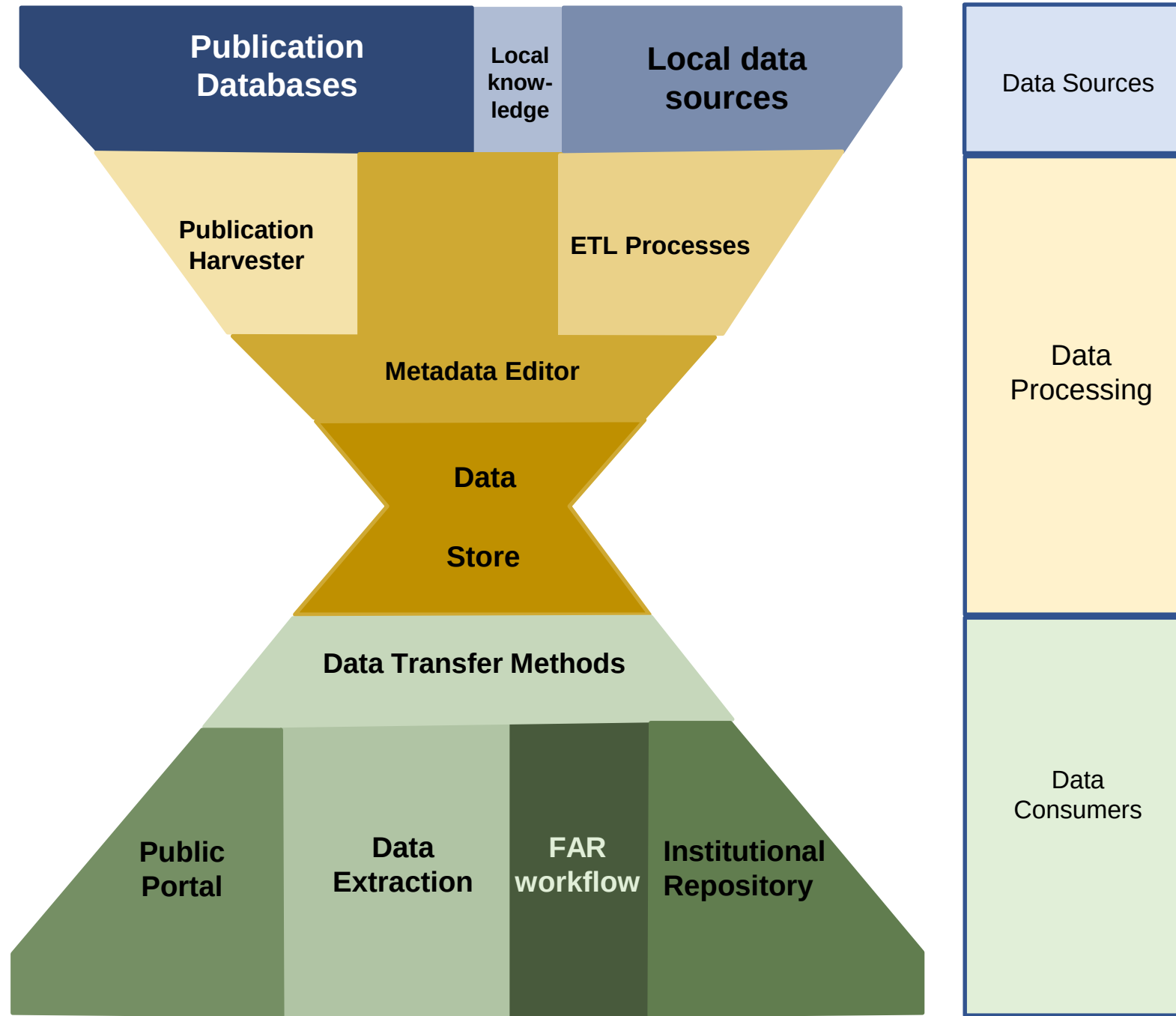








RIM SYSTEM FRAMEWORK MASTER TEMPLATE



CASE STUDIES

PENN STATE UNIVERSITY

About Penn State University

- The Pennsylvania State University (“Penn State”) is a state-related research-intensive university
- Enrollment:
 - ~75,000 undergraduates
 - > 15,000 graduate and professional students
- 24 campuses



Penn State—3 distinct systems

Elsevier Pure

- Public portal: expertise discovery & research showcase
- Public profiles for about 5,500 researchers
- Managed by research office & medical college

Activity Insight

- Supports Faculty Activity Reporting (FAR) for >7,000 faculty on 24 campuses
- Managed by library
 - Library supports data entry

Researcher Metadata Database (RMD)

- Supports institutional open access policy/workshop
- Aggregates metadata from Pure & AI
- Supports reporting & data reuse
- Managed by library



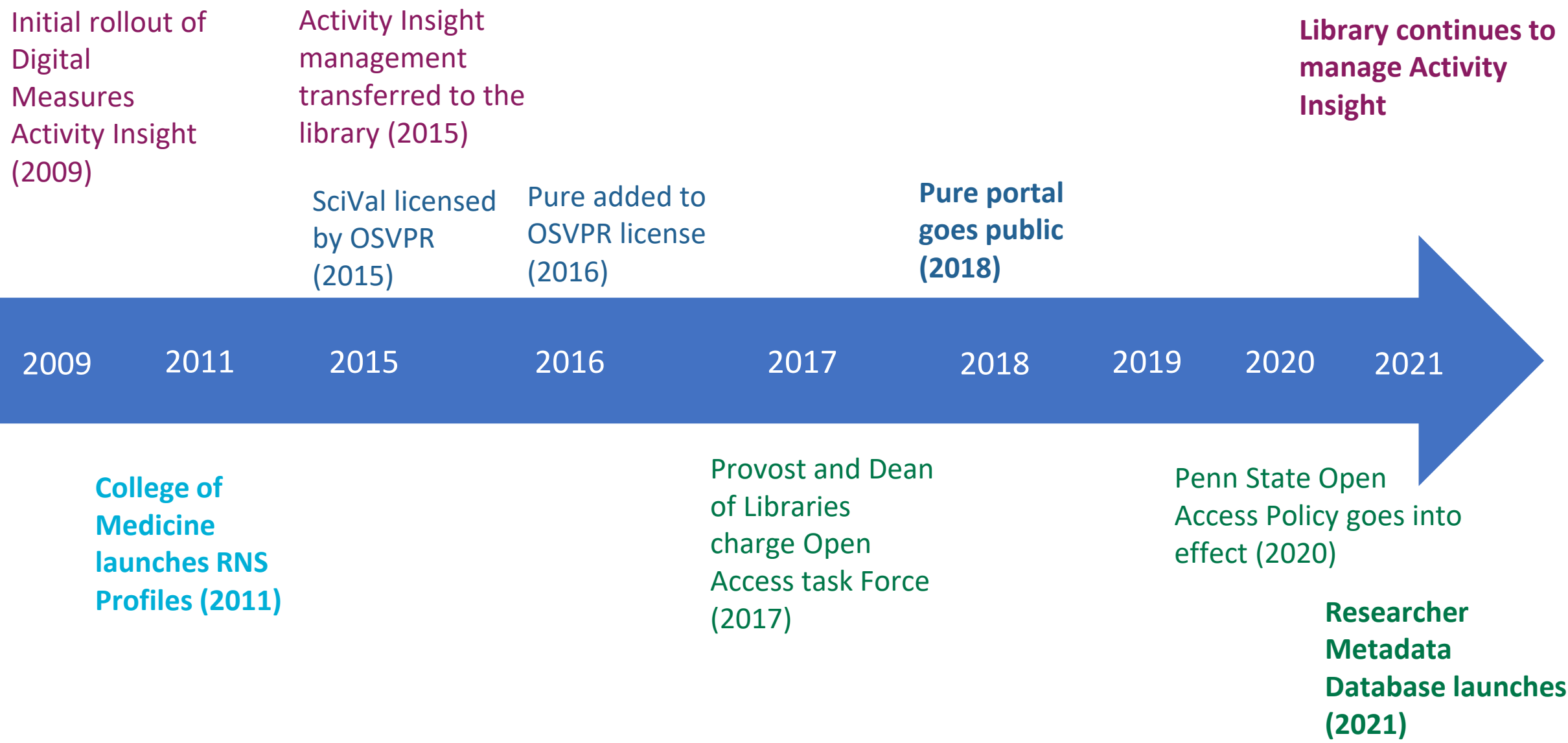
Home grown



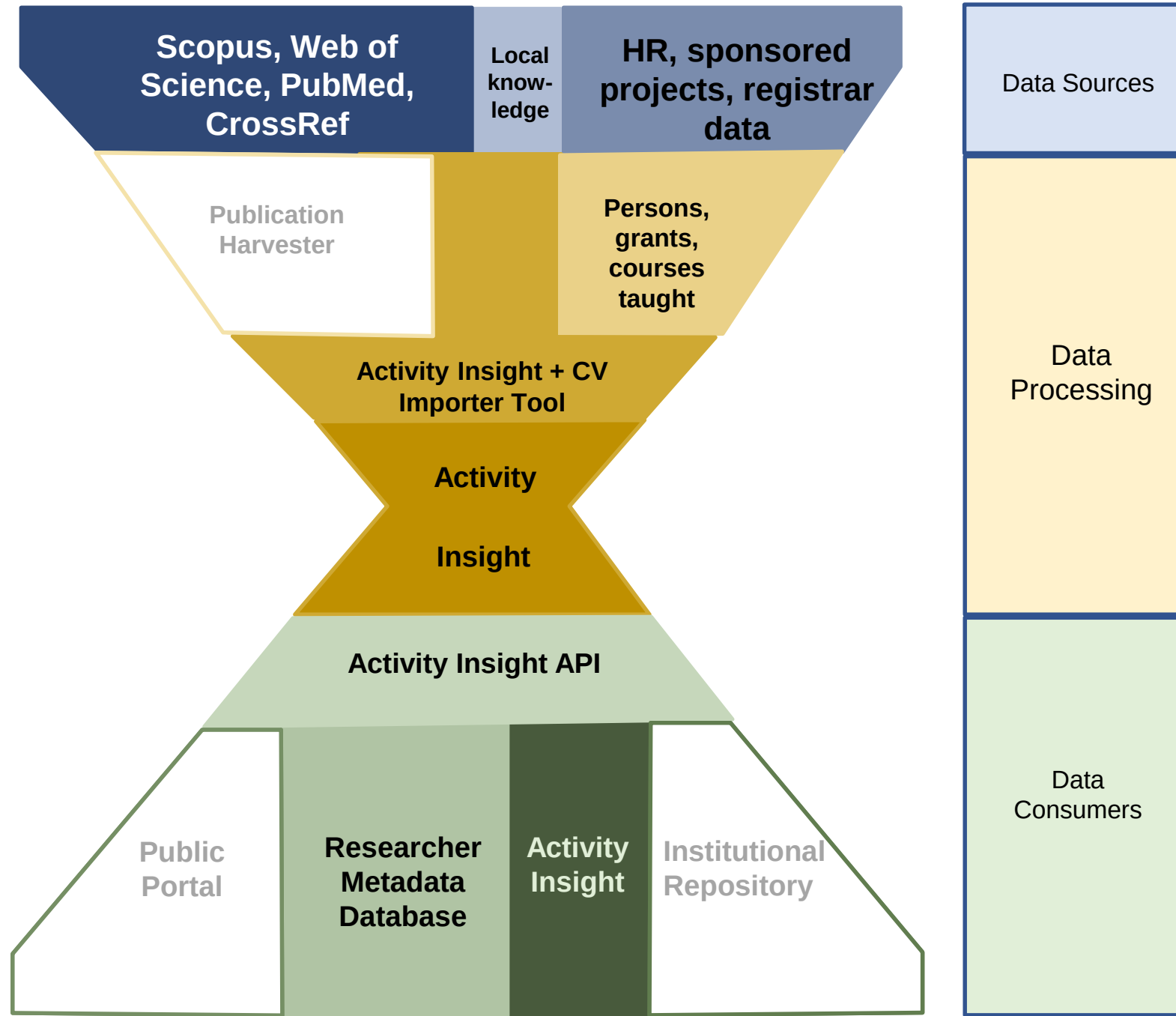
RIM Use Cases Penn State

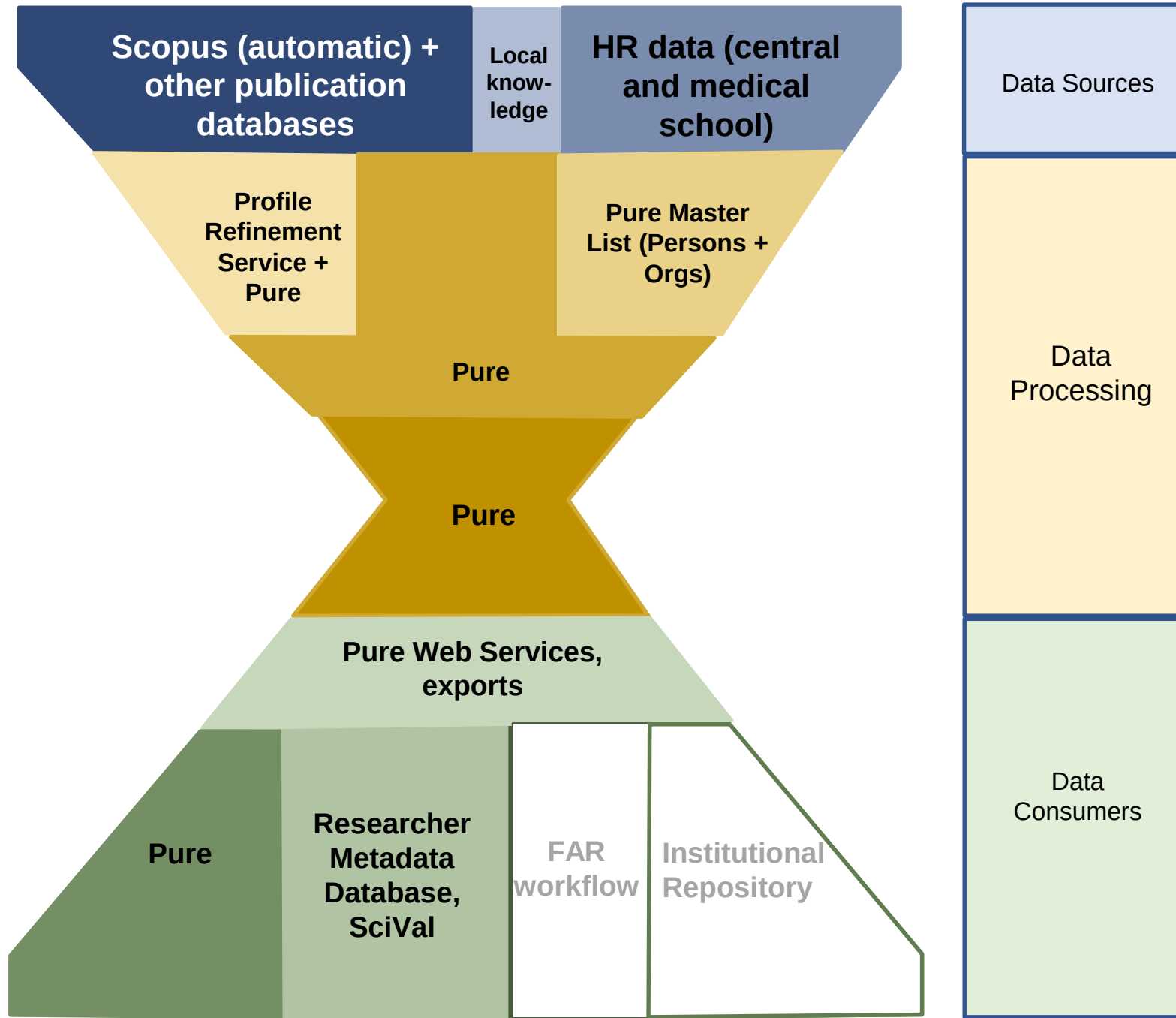
	Penn State	
Faculty Activity Reporting (FAR)	✓	Library manages Activity Insight FAR system for 24 campuses
Public Portal: Expertise Discovery &/or Research Showcase	✓	Elsevier Pure portal includes 5,500 faculty profiles for all campuses and colleges - Managed jointly by Office of Research and College of Medicine
Open Access Workflow	✓	Home grown Research Metadata Database (RMD) supports institutional OA policy
Strategic Reporting & Decision Support	✓	Research Metadata Database (RMD) supports reporting
Metadata Reuse	✓	Research Metadata Database (RMD) supports data sharing
Compliance Monitoring		

Simplified timeline for Penn State

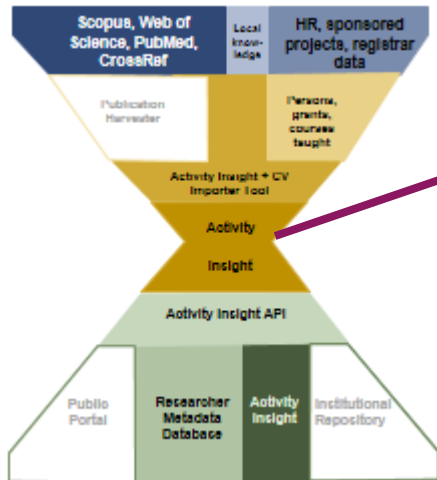


Penn State Activity Insight

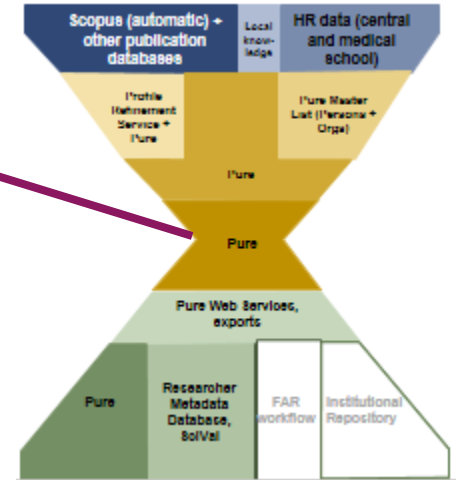




Researcher Metadata Database



Activity Insight



Pure

UCLA

About UCLA



- University of California, Los Angeles (UCLA)
 - Public research institution
 - Enrollment: 31,000 undergraduate students & 13,000 postgraduate students in > 300 degree programs
 - One of 10 campuses of the University of California System
- University of California (system)
 - Largest higher education system in the US
 - Comprised by 10 research universities, including UCLA
 - In total, >250,000 students, 22,000 faculty members, 150,000 staff
- The California Digital Library (CDL) serves as a central library hub to support UC-wide efforts



University of California

CDL

California Digital Library

UCLA—3 distinct systems

Opus:

- Home grown system aggregating faculty information, coupled with
- Interfolio systems for tenure/promotion & annual reviews
- Managed by UCLA personnel office



Created by Logit Design
from House Project

Home grown



interfolio

UC Publication Management System (PMS)

- Supports institutional OA policy for 22,000 faculty and thousands of other researchers
- Elements for metadata harvesting
- Managed by California Digital Library



Elements

UCLA Profiles

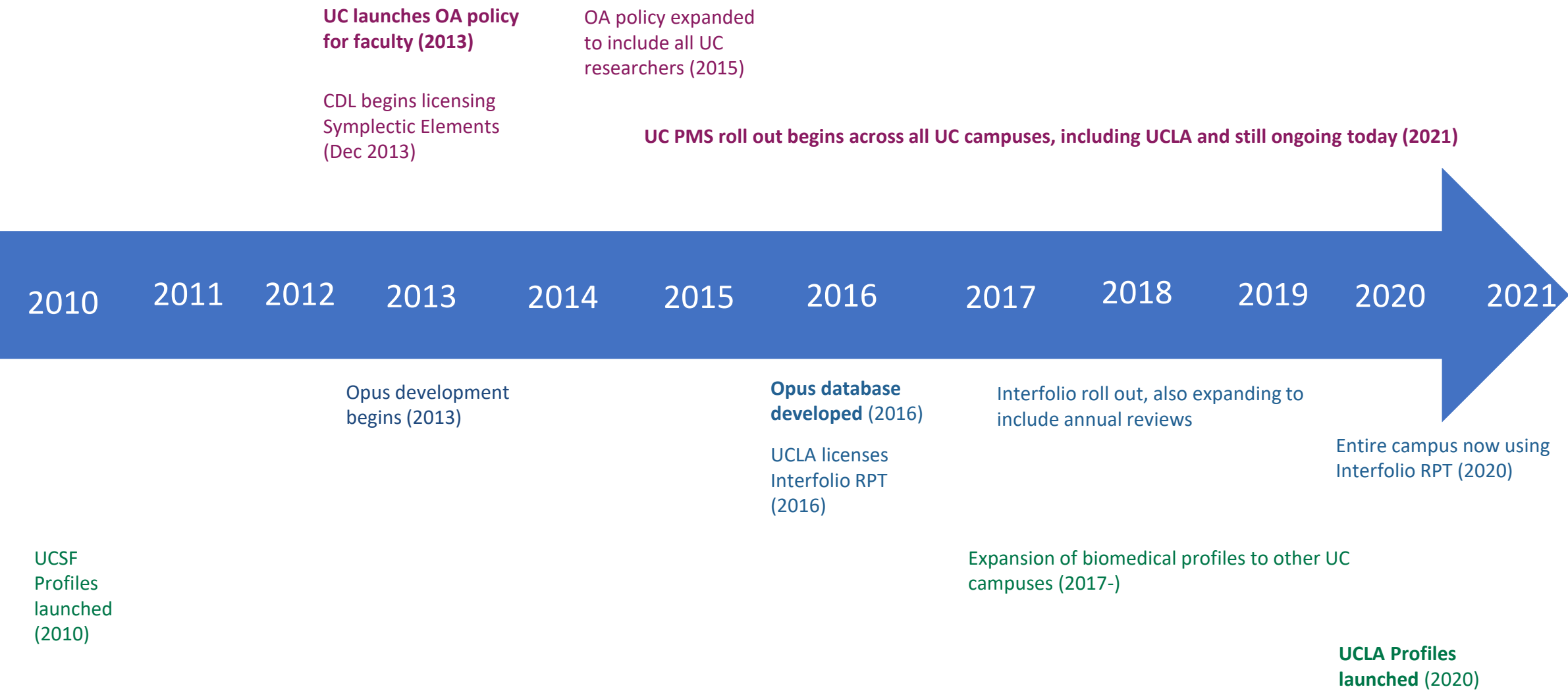
- Profiles RNS
- 1,000+ public profiles of biomedical researchers
- Managed by Clinical & Translational Science Institutes at UCLA and UCSF



RIM Use Cases at UCLA

	UCLA	
Faculty Activity Reporting (FAR)	✓	Opus & Interfolio systems on UCLA campus
Public Portal: Expertise Discovery &/or Research Showcase	✓	UCLA Profiles includes only biomedical researchers. Supported by the UCSF campus
Open Access Workflow	✓	UC Publication Management System notifies researchers of publications eligible for OA deposit
Strategic Reporting & Decision Support	✓	
Metadata Reuse	✓	
Compliance Monitoring	✓	Discrete uses to manage compliance with federal grant requirements, thru UC PMS.

Simplified timeline for UCLA





UC Publication Management

Enables you to

- Manage your publications.
- Participate in the UC Open Access Policy.
- Increase the impact of your work.

Select your campus to get started:

UC BERKELEY

UC RIVERSIDE

UC DAVIS

UC SANTA BARBARA

UC IRVINE

UC SANTA CRUZ

UCLA

UC SAN DIEGO

UC MERCED

UCSF

LBL

NON-UC

Managing your publications

-  We'll scan the web for publications you've authored.
-  Log in (at left) to review what we've found.
-  Claim publications that are yours; reject those that aren't.
-  Upload your manuscript for public display on [eScholarship](#).

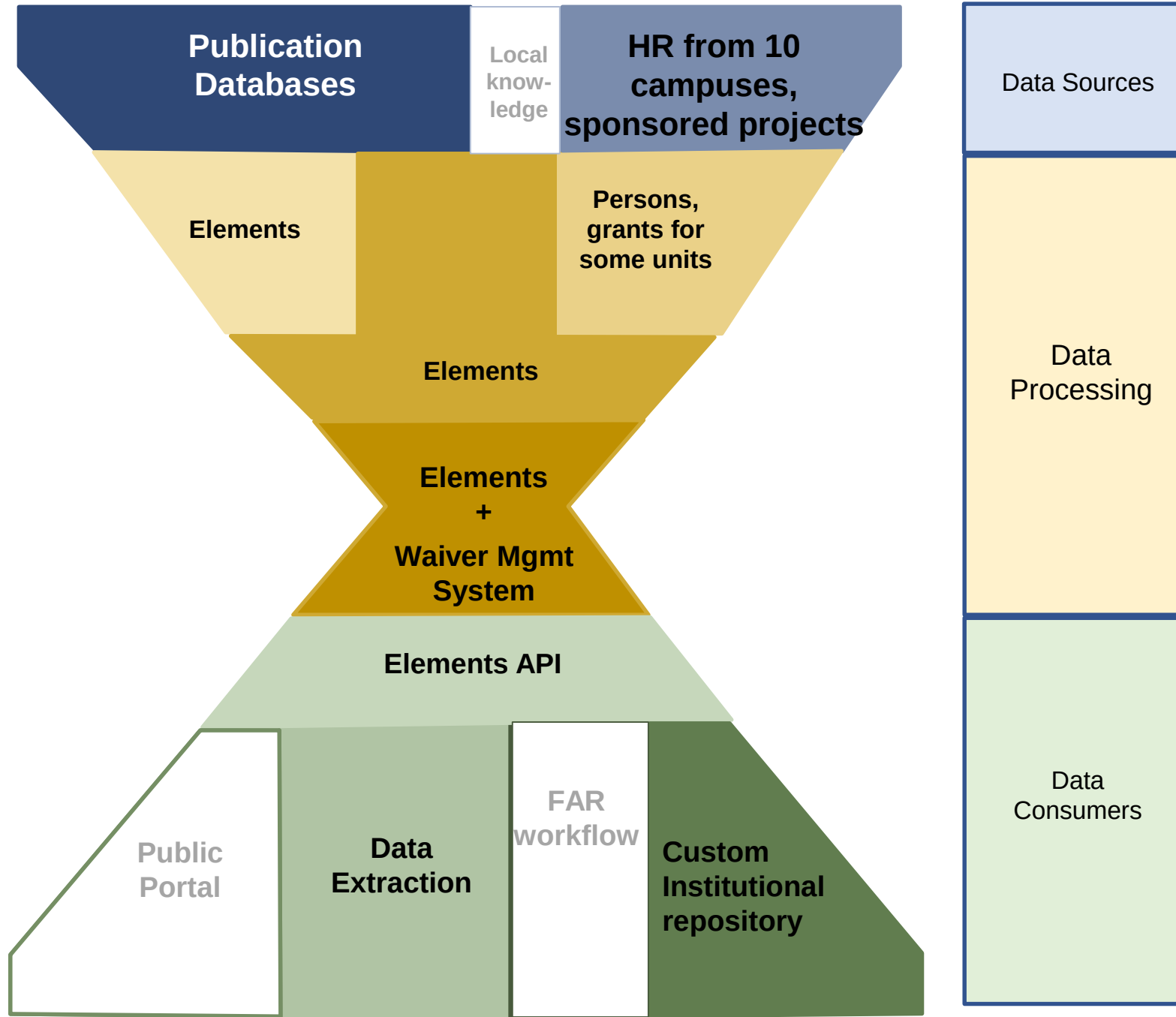
Resources and support

- Learn more about the [UC Open Access Policy](#).
- Get answers to [Frequently Asked Questions](#).
- Find out who to contact for [additional support](#).

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To protect your accounts from unauthorized access, please lock your workstation or exit your browser after logging out of this site.





TEXAS A&M

About Texas A&M University

- Public research university in College Station, Texas
- Enrollment:
 - > 56,000 undergraduate students
 - ~16,000 postgraduate & professional students



TAMU—Multi-component system

Scholars@TAMU

- Multiple components:
 - Elements:
metadata harvester
 - MySQL: data store
 - VIVO (open source): public portal
- Managed by library



Note:

- TAMU also conducts faculty reviews, but these are in several systems across multiple colleges
- We chose not to document decentralized FAR systems in this study
- However, do note that this decentralization seems common in the US at this time



SCHOLARS@TAMU

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People

Organizations

Research

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Find Research at Texas A&M University

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Discovery | Search Tips

worldwide collaboration

3.2k

People

5.6k

Organizations

188.4k

Research

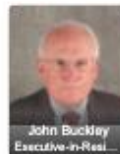
Tutorials: How To Update

Thank you for visiting Scholars@TAMU. We have worked to create the first version of your profile and continue to explore additional data sources to enhance your profile. We request your participation to update your profile and improve its accuracy. If you have any questions or concerns about your profile page, please contact us at scholars@library.tamu.edu

Most recently updated
faculty profiles by Texas
A&M University



Ana Goulart
Associate Professor



John Buckley
Executive in-Residence



Virender Sharma
Professor



Jay Maddock
Chief Wellness Officer



Matthew Kuttalamadom
Associate Professor



Donald Curtis
Assistant Dean for...



Dennis Gorman
Professor and Head

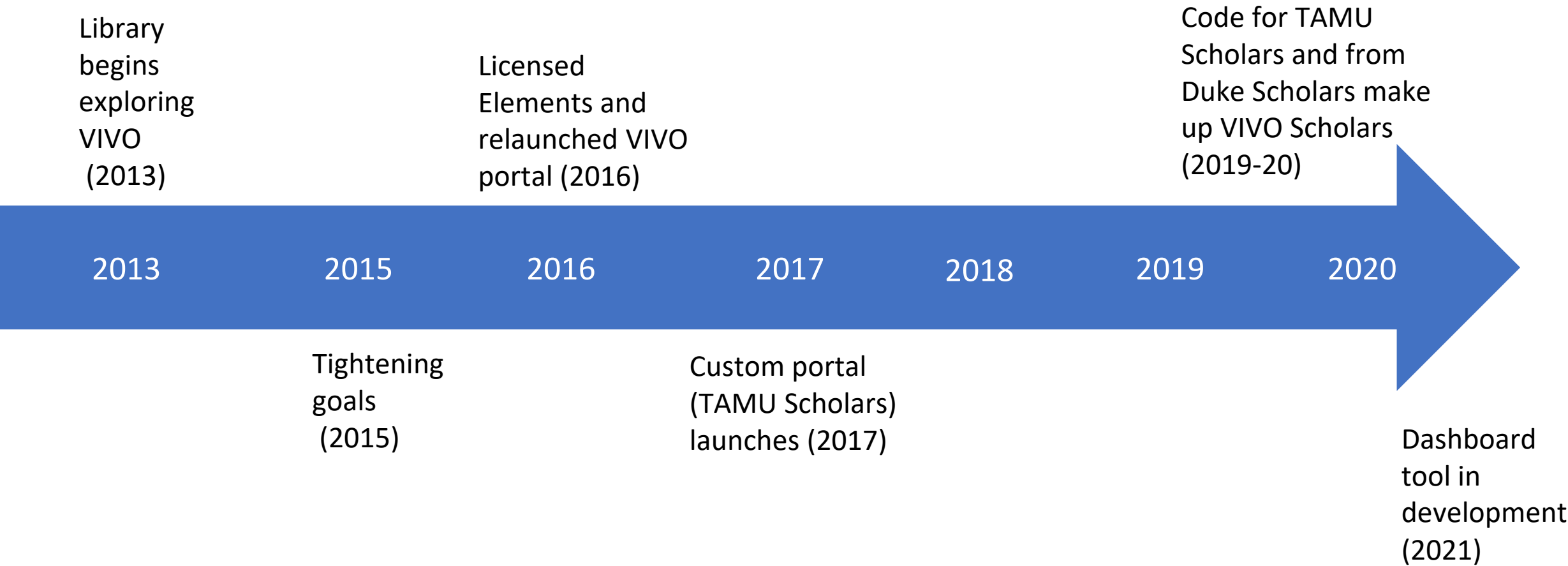
Click to see the faculty
profile

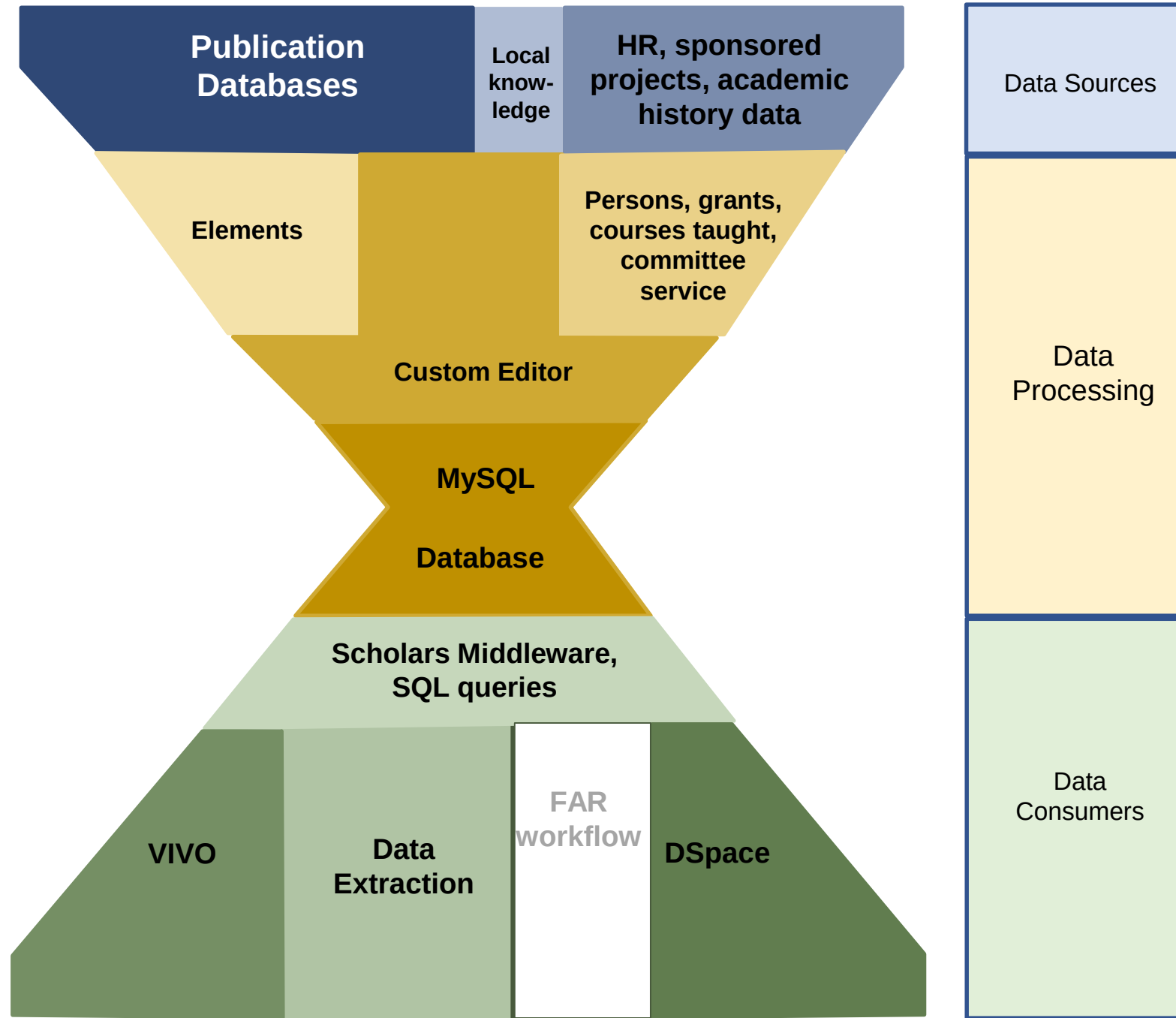
<https://scholars.library.tamu.edu/vivo/>

RIM Use Cases at Texas A&M

Faculty Activity Reporting		Currently no campus-wide system in place, but moving to Interfolio RPT.
Public Portal: Expertise Discovery & Research Showcase	✓	- Catalyze interdisciplinary collaboration - Showcase research to maximize the reputation of both the university and its faculty - Display outputs/people by unit (including centers)
Open Access Workflow		
Strategic Reporting & Decision Support	✓	- Developed an authoritative data store for frequently requested information about faculty contributions to the University and assist leaders in making strategic decisions. Decision support dashboard for VP Research in development
Metadata Reuse	in progress	Campus is implementing Interfolio FAR; plan to populate FAR system with Scholars information
Compliance Monitoring		

Simplified timeline for Texas A&M





CONCLUSIONS

Recommendations

Metadata quality matters

Must be complete,
transparent if used for
reporting

Don't rely on faculty

Humanities metadata
gap

Persistent Identifiers (PIDs) are essential infrastructure

DOIs, ORCIDs, RORs,
RAIDs, etc.

Allow us to link:

- Researcher
- Publication
- Grant
- Project
- Institutional affiliation
- Collaborators

Support a future of "enter
once, reuse often"

These are not turn-key systems

EVERYONE struggles to
manage the institutional
hierarchy

Inclusion of centers &
institutes isn't easy

Team-based, enterprise approach is best

Array of skills—and social
interoperability—needed

- Technical
- Metadata
- Project management
- Communications

Don't scrimp on
dedicated staff

Plan for multiple use
cases to > buy-in and <
faculty burden

We'd like to hear from you

1. What's your response to our description of the US RIM ecosystem?
 - Is there anything that surprises you?
2. What seems most different (or similar!) from the European CRIS/RIM landscape?
3. Do you have any comments on the RIM System Framework?
4. Advice
 - What advice would you give to institutional leaders in the US?
 - To RIM practitioners?

References

- Bryant, Rebecca, Annette Dortmund, and Brian Lavoie. 2020. *Social Interoperability in Research Support: Cross-Campus Partnerships and the University Research Enterprise*. Dublin, OH: OCLC Research. <https://doi.org/10.25333/wyrd-n586>
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