California Community Colleges

Data Governance Advisory Workgroup (DGAW) February Meeting Recap

February 2025

Executive Summary (1 of 2)

On February 26, 2025, the Data Governance Advisory Workgroup met virtually for the second workgroup meeting. The discussion focused on data governance discovery findings, vision and mission statements, and data governance opportunities for DGAW to engage. Workgroup members discussed the following:

- Associations are interested in DGAW work and recognize the importance of the group's work.
- Draft vision and mission statements capture the group's priorities and require minor language adjustments to ensure DGAW's work has long-term impact.
- Data governance discovery efforts were launched to inform DGAW of current state findings to identify areas of opportunity and priority.
- Data governance discovery efforts found some examples of data governance practices, but no statewide data governance leading practices across six data governance pillars
- Discovery findings uncovered three policy areas where DGAW can focus their effort.
- Over the next two months, DGAW tactical groups dedicated to each policy will develop draft documents for statewide use.

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Executive Summary (2 of 2)

Key Takeaways

Workgroup members:

1. Shared association feedback on DGAW work and priorities.
2. Refined vision and mission statements provided by tri-chairs to represent DGAW's work and impact.
3. Discussed current state data discovery findings, sharing examples from own experience and identifying areas for further exploration and consideration.
4. Identified three areas of opportunity for immediate action by DGAW:
    1. Creating a statewide data quality standard
    2. Reviewing and developing statewide data sharing agreement template
    3. Reviewing and refining a metric data dictionary to be socialized for statewide adoption.
5. Formed three tactical groups to create standards and policies for the three opportunities using existing examples.

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Final Vision and Mission Statements

Vision

Empower the California Community College System with trusted, secure, and well-governed data to consistently deliver meaningful insights that support student success and achieve Vision 2030 goals.

Mission

Establish robust data governance guidelines, policies, and practices through a collaborative culture of continuous improvement and transparency to ensure data integrity, quality, accessibility, and security, effectively empowering local and systemwide stakeholders to support informed decision-making for equitable student outcomes and institutional effectiveness.

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Meeting Attendance

#	Member Name	Organization*
1	Rebecca Bocchicchio	CCCCIO
2	Stuart Davis	CISOA
3	Dulce Delgadillo	RP Group
4	Victor DeVore	CACCRAO
5	Thanh Do	4CS
6	John Hetts	Chancellor's Office
7	Mikki Johnson	CCCSFAAA
8	Xiaohong Li	CISOA
9	Pam Mery	RP Group
10	Chris Dela Rosa	ACBO
11	Christopher Sweeten	CSSO
12	James Temple	CISOA
13	Eric Wada	ASCCC
14	Aeron Zentner	RP Group

#	Chancellor's Office Member Staff Attendance
15	Erik Cooper
16	Ernest Shih

*One new member nominated by ASCCC (since November meeting).
Pending nomination of two additional Data Governance Advisory Workgroup members (one from CSEA and one from ACHRO)

Association Share-outs: Menti Summary

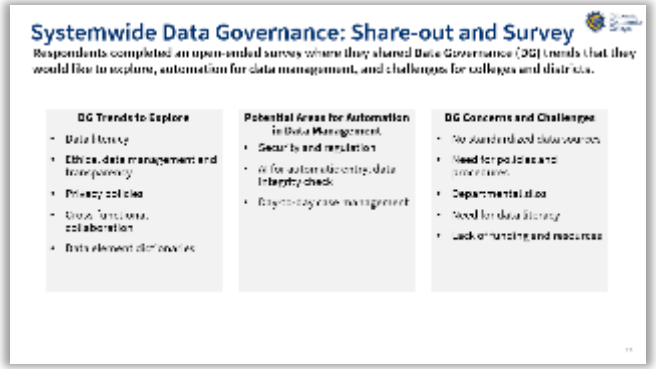
Discussion Points:

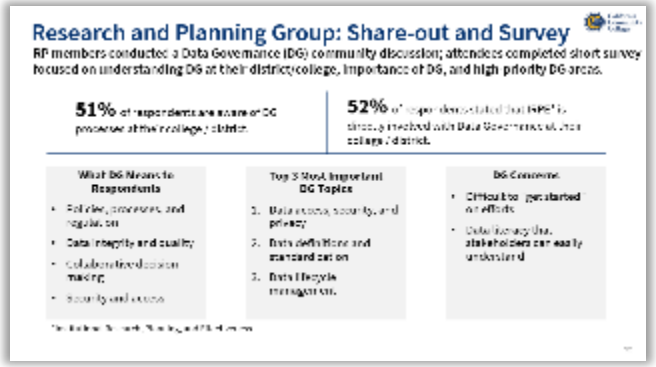
- Members participated in a short survey to share information gathered from associations after DGAW kick-off.
- 13 participants confirmed they shared kick-off meeting information with associations; 3 participants will be sharing in the upcoming weeks.
- Summary of responses:
  - Feedback and questions received:
    - Needing to understand data governance definition and DGAW's scope (e.g., policy creation, data definitions)
    - Positive feedback on importance of DGAW's work
    - Need to consider local and system perspective, coordinate with other groups (e.g., TTAC), and confirm process is inclusive
    - Some groups had no questions or comments
  - Resources for future share-outs:
    - Existing resources: presentations, notes, dictionary of acronyms and terms
    - New resources: elevator talking points / executive summary, targeted questions
  - Worked well:
    - Having or finding time on association / committee schedule
    - Using materials provided for share-outs
    - Sharing the timelines and purpose of the group
    - Creating collaborative, structured environment to collect feedback

Association Share-outs: Tri-chair Experience

Discussion Points:

- Tri-chairs shared experience of sharing data governance efforts with their associations and results from brief data governance survey.
- Tri-chair Jim Temple reviewed survey results including data governance trends participants observed with peers and in institutions, areas of opportunity, and challenges.
- Tri-chair Pam Mery shared overview of report out to the RP Group, which was also facilitated by Aeron Zentner and Dulce Delgadillo. Survey revealed existence of some, but not widespread, awareness of data governance within institutions.

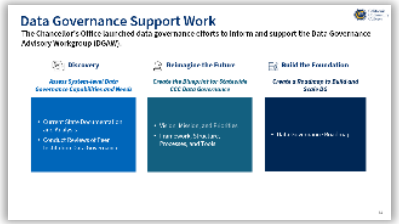


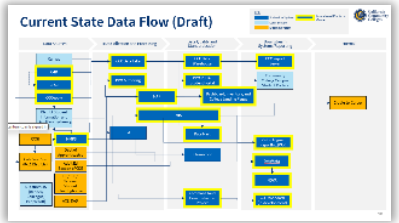


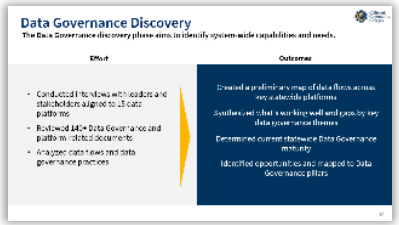
Where We Have Been

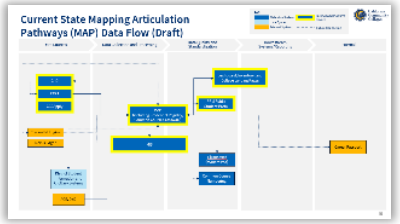
Discussion Points:

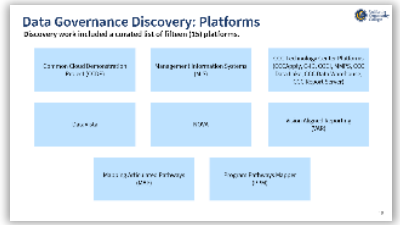
- Data governance discovery efforts launched in January by the Chancellor's Office to support DGAW efforts and inform the Data Governance roadmap.
- Discovery efforts focused on interviews with stakeholders across fifteen (15) platforms, review of 140+ documents, and analysis of data flows and data governance practices.
  - Platforms reviewed ranged from Chancellor's Office programs and other efforts across the state.
  - Synthesized findings helped ascertain statewide data governance maturity level and opportunities.
- Draft current state data flow developed based on documentation for platforms involved in discovery effort.
  - An overview of data flow structure provided; data first acquired from local and external sources, data is processed and checked for quality and standardization, then made available for reporting and sharing externally.
  - Current state data flow captures statewide complexities – multiple platforms, multi-directional data sharing.
  - Draft data flow is living map that will be further refined with addition of other platforms and details. DGAW members suggested including Fusion Reporting and DMV. Continued conversation on DMV; potential recruitment point.
- Example of detailed data flow for one of the platforms provided: Mapping Articulation Pathways (MAP). MAP is key contributor to discovery efforts.

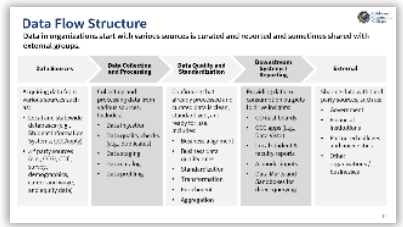








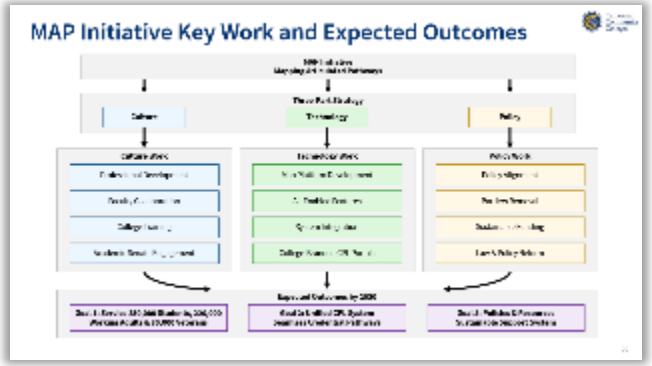


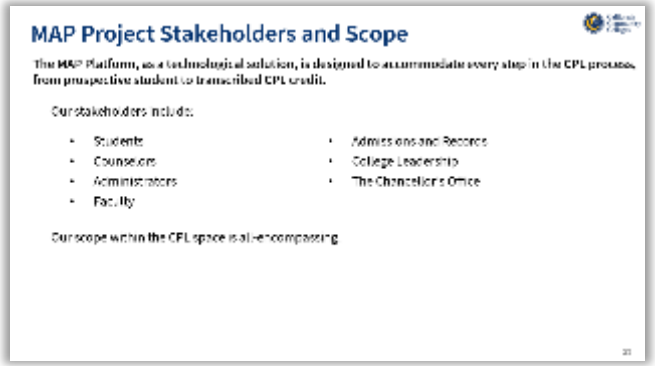


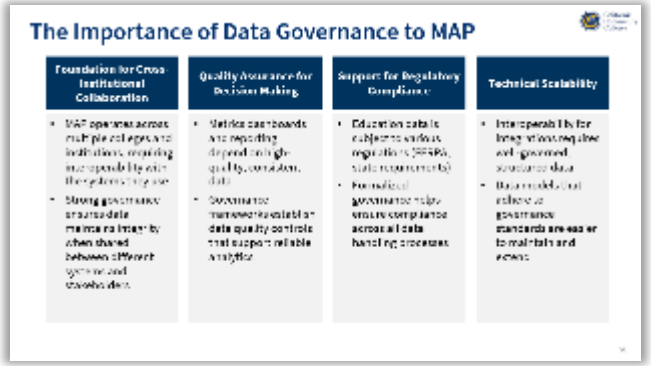
Mapping Articulated Pathways (MAP)

Discussion Points:

- Mapping Articulated Pathways (MAP) Initiative representatives shared an overview of initiative and platform.
- MAP provides Credit for Prior Learning (CPL) for adults, apprentices, veterans, and students working in CCC and beyond.
- With its three-part strategy, MAP aims to accomplish the following by 2030:
  - Service 250,000 students, 220,000 working adults & 30,000 veterans
  - Have unified CPL System with seamless credential pathways
  - Have policies and resources for sustainable support system
- Data governance can help MAP with cross-institutional collaboration, quality assurance for decision making, support for regulatory compliance and technical stability.
- MAP's next steps in data governance include developing a data dictionary, determining access control frameworks, implementing data quality monitoring, managing data lifecycle, and creating integration standards.
- MAP team shared https://credentialengine.org/, a non-profit that maps credentials, qualifications, and skills to create resources that help people discover and pursue learning and career pathways
- MAP team is seeking support from volunteers to further their work; advice or guidance is welcomed.



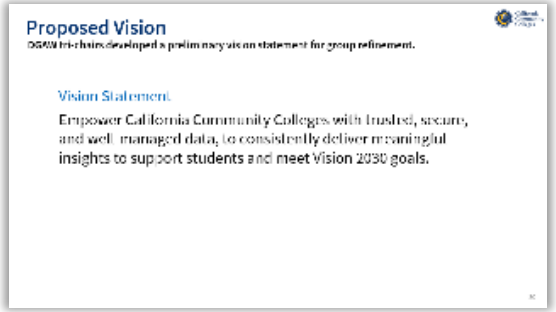




Vision Activity

Discussion Points:

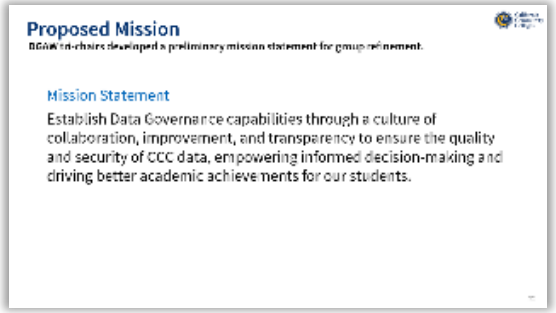
- Tri-chairs created a preliminary vision statement; members discussed and refined. Discussions focused on:
  - Meaning of “trusted,” and “shared”; pervasive mistrust in the data that colleges send to the state. However, a member shared that data is mostly trusted, but data needs to be refined.
  - Ability to access data that Chancellor’s Office uses, which may include using data from multiple colleges to inform local data-driven decisions.
  - Meaning of words such as “well-managed,” “standardized,” and “consistent” were discussed; deliberated about which groups are being “empowered.”
  - Adding language for supporting students and student success, and “ensuring consistent access.”
  - Including “everyone” as part of the system that uses data, and the need to define data.
  - Exploring use of AI to refine the vision.
- When groups reconvened, members:
  - Shared ideas on language, emphasizing that trust needs to be bi-directional, and that everyone who works with data is empowered, including 3rd parties.
  - Discussed the use of “CCC” in the statement and whether it should be changed to encompass both internal and external users.
  - Suggested edits to focus on supporting student success and achieving Vision 2030 goals.
- Members agreed the original vision statement captures the correct sentiment. Minor language updates needed.



Mission Activity

Discussion Points:

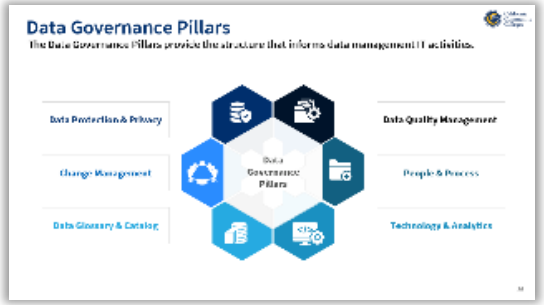
- Tri-chairs created a preliminary mission; members discussed and refined the statement focusing on:
  - CCC being reflective of all data users and data types. Consensus that data governance needs to represent end-to-end global data, whether it is grantee data or data from the Chancellor's Office. Data governance also needs to be applied to all data, even 3rd party data.
  - Adding the word "protection" to encompass security and privacy.
  - Including staff and faculty in statement.
  - Addition of continuous improvement, robust, integrity, and accessibility. Also considered replacing the word "better" with "equitable."
  - Addition of "continued improvement" and replacing "better" with "vigorous and strong" to signify that DGAW's work will not stop when data governance gets "better."
  - Capturing "local and systemwide stakeholders" as users of data for informed decision-making.
  - Broadening the scope beyond student outcomes and including operational outcomes.
- When groups reconvened, members shared refinements above.
- Members agreed the original mission statement captures the correct sentiment. Minor language updates needed.
- Members agreed finalization of vision and mission statements to occur after the meeting to allow for appropriate reflection time. Goal to asynchronously finalize by end of March .

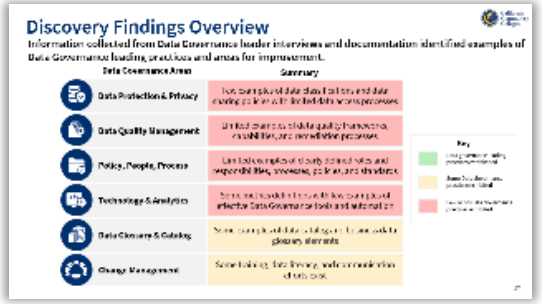


Data Governance Discovery Findings Overview

Discussion Points:

- Data governance discovery work based on six pillars:
  - Data Protection & Privacy: Establishes rules for secure access, management, and sharing to protect personal information and other security threats.
  - Data Quality Management: Maintains integrity and usability of data for decision-making, operational efficiency, compliance, risk management, and user satisfaction.
  - Policy, People & Process: Clarifies what and how data and stakeholders interact and creates consistent rules for creating, using, and sharing data.
  - Technology & Analytics: Reduces manual efforts, decreases time constraints, increase transparency, and provides common, consistent mechanisms for data management and sharing.
  - Data Glossary & Catalog: Increases data quality by establishing a common understanding of data assets and their use.
  - Change Management: Educates and informs groups about standards, policies, procedures, and practices to create effective data governance.
- Discovery work revealed data governance practices and areas of opportunity for each pillar.
- While some data governance practices exist, no statewide leading practice is established across any of the six data governance pillars.

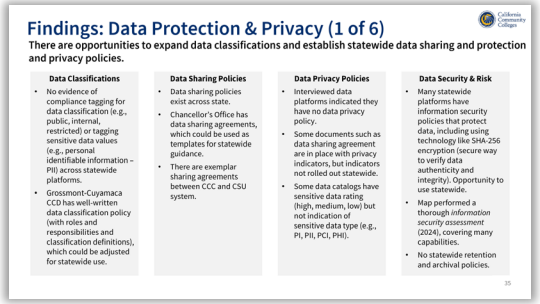


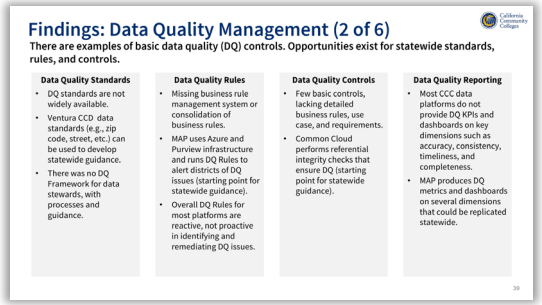


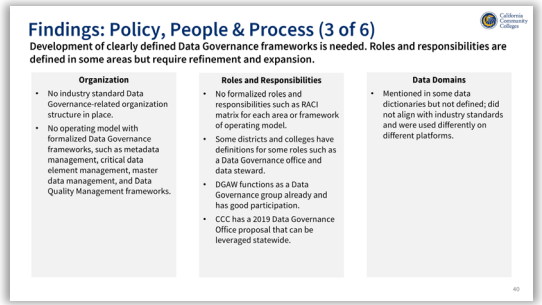
Data Governance Discovery Findings Details (1 of 2)

Discussion Points:

- Members joined breakout rooms to discuss detailed findings. Overall, members were not surprised by findings based on system experiences. Discussion focused on:
- Data Protection & Privacy
  - Discussed experiences with data sharing policies, specifically with dual enrollment data from high schools.
  - How to verify that practices and policies are followed, and accountability for 3rd parties that access data. Creation of preventative measure for data safety.
    - Discussion of write-ups and corporate punishments for those that do not follow "must" language, and having rulesets for data to ensure everyone is in alignment.
    - For 3rd parties, there is an honor system for using data, but there is lack of follow up, and data auditing if data is deleted.
  - Discussed difficulty of individual colleges / districts to create data sharing agreements without examples. Reinforced need for data retention policy templates.
  - Members discussed role-based access to data and regular reviews, such as who has access to Tech Center data on a quarterly basis.
- Data Quality Management
  - Potential need for data normalization for data segmentation and hierarchical databases; data normalization falls under a broader data strategy framework.
- Policy, People, & Process
  - Need to consider variation in college/ district business practices and differences in data governance maturity levels. Roadmaps should be developed based on maturity levels.



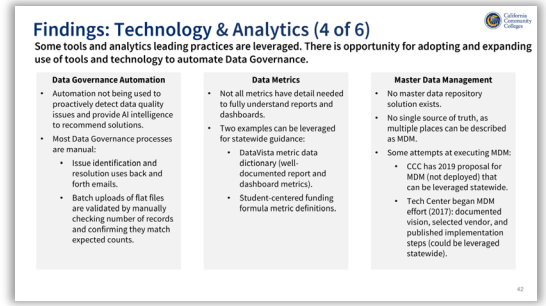


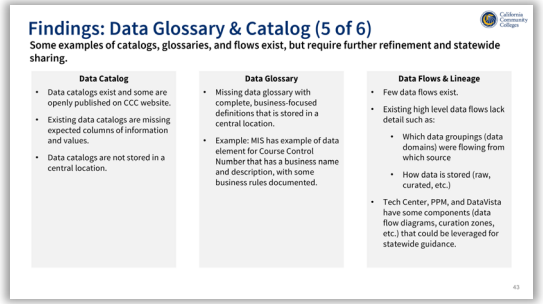


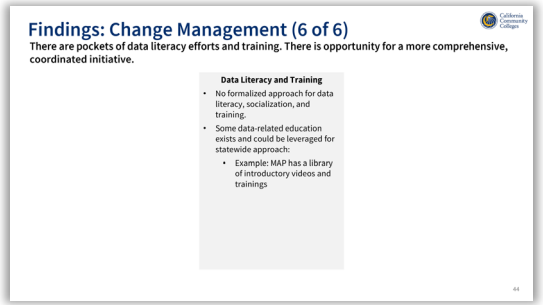
Data Governance Discovery Findings Details (2 of 2)

Discussion Points:

- Technology & Analytics
  - Discussed expanding the master data management definition to include how to manage and centralize transactional data.
  - Group discussed data governance automation and its relation to scrubbing and data cleanliness of college data and system data.
  - In relation to data metrics, discussed platform purpose and their relationship with each other and other reporting structures. Example: Data Mart functions like a query while DataVista provides a central location for services.
- Data Glossary & Catalog
  - Having a data excellence team for data catalogs would be useful.
  - Having a cheat sheet for data dashboards; MIS has good explanations of data at state level, but not at granular level.
  - Group discussed need to create definitions that work at college system level; many college definitions do not exist at the system level, such as term enrollment.
- Change Management
  - Need for marketing and communications plan; data findings are important but how they are communicated requires structure to address both business and tech needs.
  - Data governance efforts require data literacy and communications to be effective.



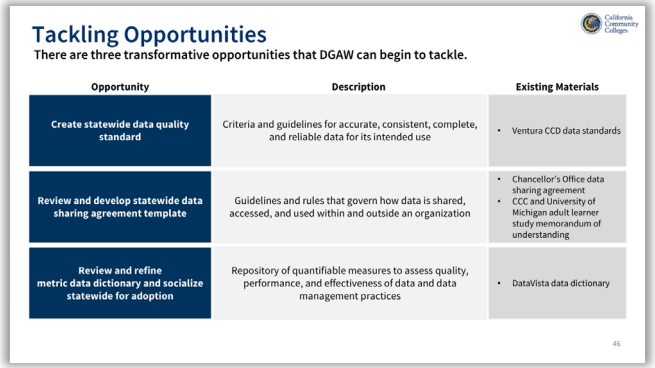


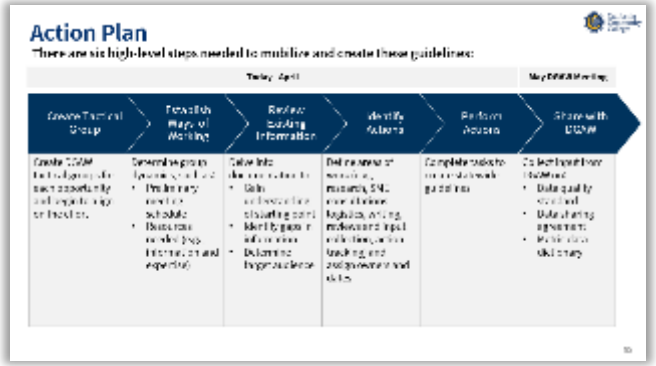


Opportunities and Action Plan

Discussion Points:

- Discovery work helped identify four transformative areas that address local, system, and statewide needs:
  - Some opportunities require establishing an organizational structure with clear roles and responsibilities; other opportunities require the development of statewide policies, standards, frameworks, templates
- DGAW can deliver value quickly with three opportunities:
  1. Creating statewide data quality standard.
  2. Developing statewide data sharing agreement.
  3. Extending metric data dictionary.
- DGAW launched three tactical groups to develop each opportunity; co-leads for each group were identified before meeting.
- During meeting, DGAW members asked to participate in at least one group. Additional volunteers to be requested following meeting.
- Tactical groups will leverage existing documentation (good examples), identified during discovery work, to build the three standards and policies. Action plan provided to develop documents.
- Co-leads will coordinate meetings. Draft materials to be shared by each tactical group before May meeting.
- Documents will provide templates for statewide use, addressing key needs identified during discovery work.





Next Steps for DGAW

Discussion Points:

Tactical Groups

- Additional volunteers needed for tactical groups; volunteer requests to be sent to members; target of 3-4 members per group.
- Co-leads will coordinate meetings with individual groups.
- Groups will meet from March through May to work on respective prioritized opportunities and prepare to share drafts prior to May meeting.

Vision and Mission

- Based on group discussion, updated versions of vision and mission statements will be sent to members for voting and finalization.

Association Share-outs

- Materials to be provided to members to use in association share-outs.

May Meeting

- Meeting to be held in-person in Sacramento on May 7.

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Data Governance Advisory Workgroup (DGAW) - February Meeting Presentation

February 26, 2025

Agenda

Time	Activity
1:00 PM	Welcome
	Agenda, Objectives, Agreements
	Kick-Off Recap
	Activity: Group Share-outs
	Where We Have Been
2:25 PM	BREAK
2:35 PM	Where We Want to Go
	What is Next
	Recap, Next Steps, Q&A
4:00 PM	Meeting End

Objectives

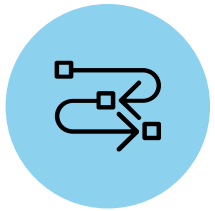
1. Review Data Strategy Discovery work
2. Finalize vision and mission for DGAW
3. Further refine opportunities and barriers for DGAW work, understanding and considering system and local needs
4. Agree on DGAW action items

Ground Rules

Adhere to timebox

G E L M O
"Good Enough
Let's Move On"

Use parking lot



Trust the process
(be present and inclusive)

Be curious and solution-oriented

Give grace and assume positive intent

Kick-Off Recap

DGAW Kick-off Recap

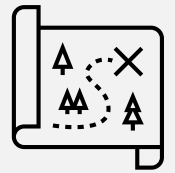
The DGAW kick-off in November 2024 helped establish ways of working, review data governance fundamentals, and begin exploring key areas of impact for the workgroup.

17 Participants across **10** Associations and groups

Discussed why data governance matters for local and system needs

Anchored local and system experiences in governance framework

Explored systemwide data governance scope and focus for 2024-25



Identified need for group's vision, mission, purpose, and clear timeline

Next Step: DGAW Members asked to share-out with associations.

Systemwide Data Governance: Share-out and Survey

Respondents completed an open-ended survey where they shared data governance (DG) trends that they would like to explore, automation for data management, and challenges for colleges and districts.

DG Trends to Explore

- Data literacy
- Ethical data management and transparency
- Privacy policies
- Cross-functional collaboration
- Data element dictionaries

Potential Areas for Automation in Data Management

- Security and regulation
- AI for automatic entry; data integrity check
- Day-to-day case management

DG Concerns and Challenges

- No standardized data sources
- Need for policies and procedures
- Departmental silos
- Need for data literacy
- Lack of funding and resources

Research and Planning Group: Share-out and Survey

RP members conducted a data governance (DG) community discussion; attendees completed short survey focused on understanding DG at their district/college, importance of DG, and high-priority DG areas.

51% of respondents are aware of DG processes at their college / district.

52% of respondents stated that IRPE* is directly involved with data governance at their college / district.

What DG Means to Respondents

- Policies, processes, and regulation
- Data integrity and quality
- Collaborative decision-making
- Security and access

Top 3 Most Important DG Topics

1. Data access, security, and privacy
2. Data definitions and standardization
3. Data lifecycle management

DG Concerns

- Difficult to "get started" on efforts
- Data literacy that stakeholders can easily understand

*Institutional Research, Planning, and Effectiveness

Where We’ve Been

Data Governance Support Work

The Chancellor's Office launched data governance efforts to inform and support the Data Governance Advisory Workgroup (DGAW).

Discovery

Assess System-level Data Governance Capabilities and Needs

- Current state documentation and analysis
- Conduct reviews of peer institution data governance

Reimagine the Future

Create the Blueprint for Statewide CCC Data Governance

- Vision, mission, and priorities
- Framework, structure, processes, and tools

Build the Foundation

Create a Roadmap to Build and Scale DG

- Data governance roadmap

Data Governance Discovery

The data governance discovery phase aims to identify system-wide capabilities and needs.

Effort	Outcomes
• Conducted interviews with leaders and stakeholders aligned to 15 data platforms • Reviewed 140+ data governance and platform-related documents • Analyzed data flows and data governance practices	Created a preliminary map of data flows across key statewide platforms Synthesized what's working well and gaps by key data governance themes Determined current statewide data governance maturity Identified opportunities and mapped to data governance pillars

Data Governance Discovery: Platforms

Discovery work included a curated list of fifteen (15) platforms.

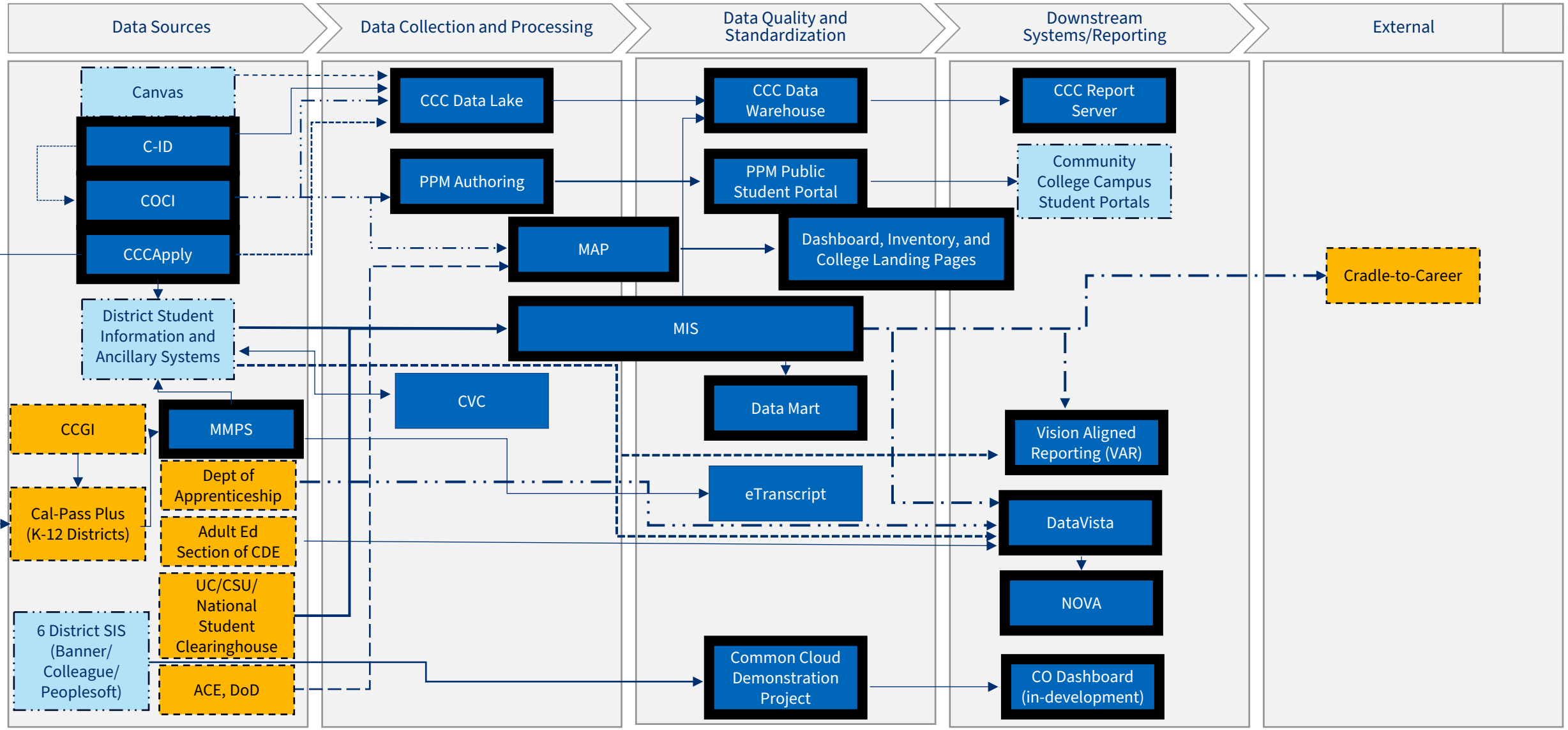
Common Cloud Demonstration Project (CCDP)	Management Information Systems (MIS)	CCC Technology Center Platforms (CCCApply, C-ID, COCI, MMPS, CCC Data Lake, CCC Data Warehouse, CCC Report Server)
DataVista	NOVA	Vision Aligned Reporting (VAR)
Mapping Articulated Pathways (MAP)	Program Pathways Mapper (PPM)	

Data Flow Structure

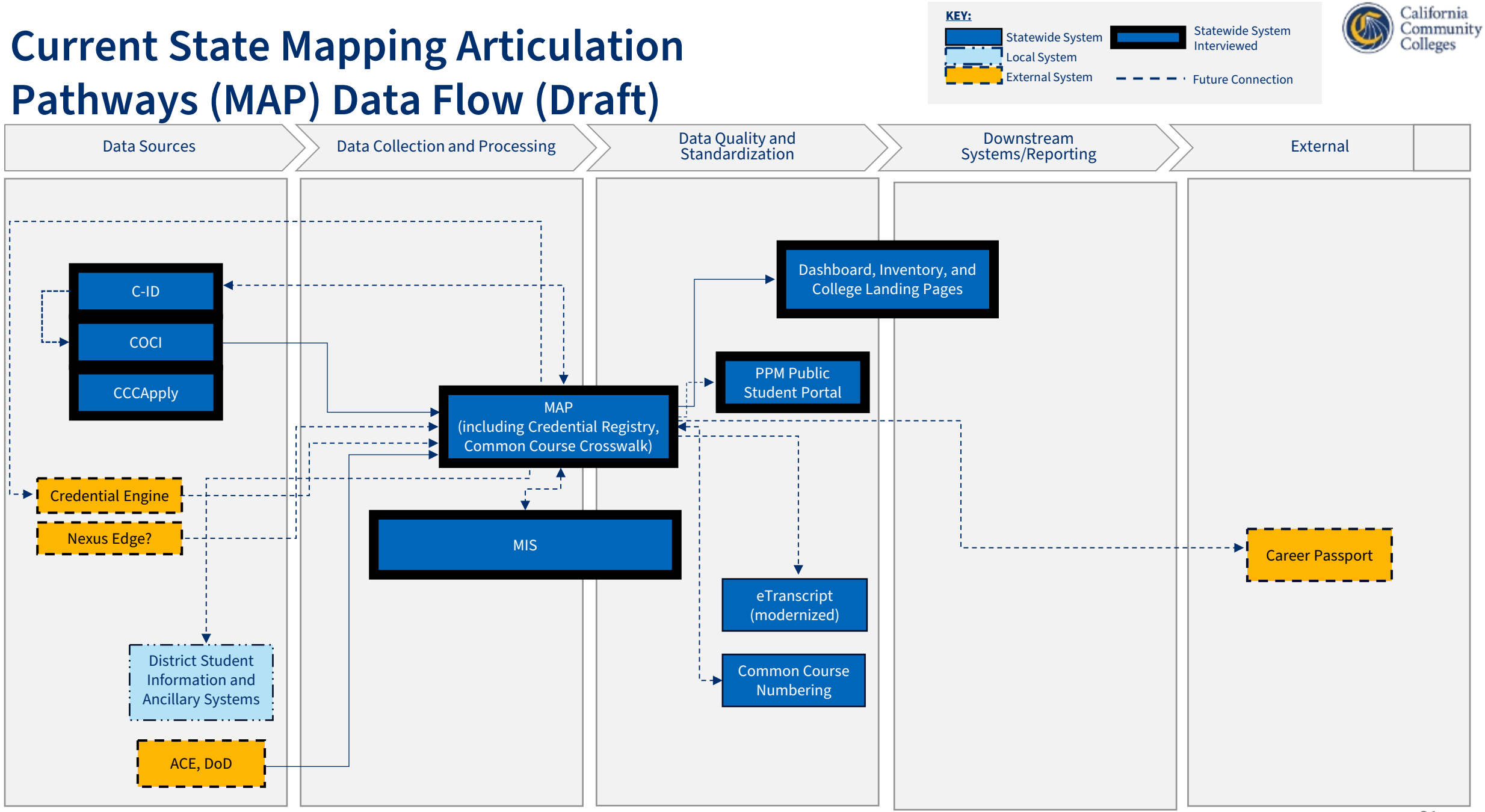
Data in organizations start with various sources is curated and reported and sometimes shared with external groups.

Data Sources	Data Collection and Processing	Data Quality and Standardization	Downstream Systems / Reporting	External
Acquiring data from various sources such as: • Local and statewide databases (e.g., Student Information Systems, CCCApply) • 3rd party sources (e.g., CCGI, CDE, survey, demographics, career and wage, and equity data)	Collecting and processing data from various sources. Includes: • Data ingestion • Data quality checks (e.g., duplicates) • Data staging • Data catalog • Data profiling	Confirming that already processed and curated data is clean, standardized, and ready for use. Includes: • Business alignment • Business data quality rules • Standardization • Transformation • Enrichment • Aggregation	Providing data to consumption outputs to drive insights: • CO dashboards • CCC apps (E.g., Data Vista) • Local student & faculty reports • AI model inputs • Data Marts and Sandboxes for direct querying	Sharing data with third party sources, such as: • Government • Financial institutions • Partnered colleges and universities • Other organizations / businesses

Current State Data Flow (Draft)



Current State Mapping Articulation Pathways (MAP) Data Flow (Draft)



Mapping Articulation Pathways (MAP) Initiative

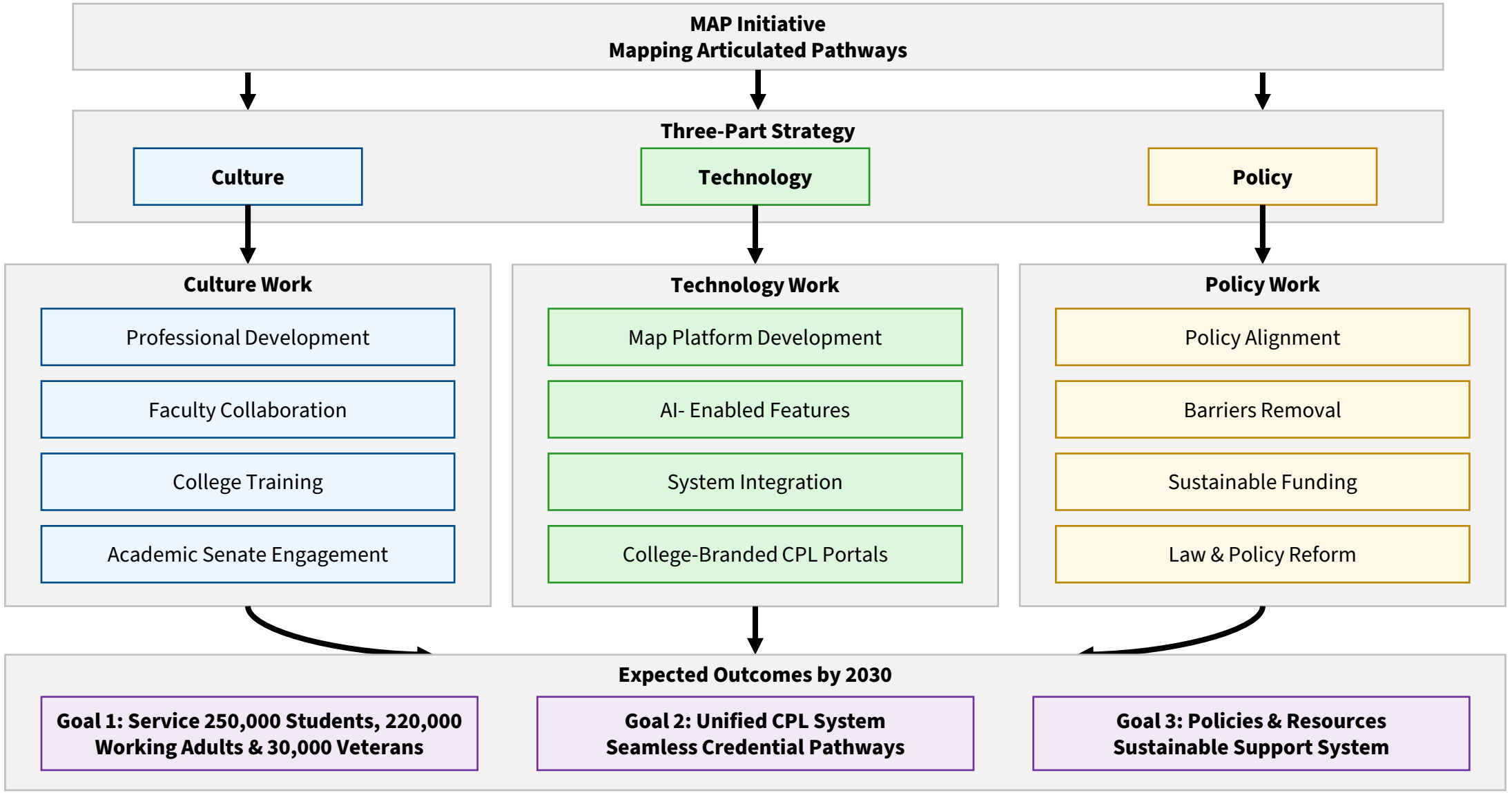
MAP Project Overview

The mission of the MAP Initiative is to maximize credit for prior learning (CPL) for working adults, apprentices, and veterans and students in the California Community College system and beyond.

We are now available to all 116 California Community Colleges.

The MAP Initiative works in concert with the California Community Colleges Chancellor's Office to accomplish this undertaking.

MAP Initiative Key Work and Expected Outcomes



MAP Project Stakeholders and Scope

The MAP Platform, as a technological solution, is designed to accommodate every step in the CPL process, from prospective student to transcribed CPL credit.

Our stakeholders include:

- Students
- Counselors
- Administrators
- Faculty
- Admissions and Records
- College Leadership
- The Chancellor's Office

Our scope within the CPL space is all-encompassing.

MAP Technology Key Strategic Work Areas

California Community Colleges

Student-Centered Experience

- Student Portal & Authentication
- Portfolio Building System
- Document Management
- Progress Tracking Dashboard

Institutional Integration

- College Landing Pages
- Articulation Management
- Data Exchange & Reporting
- Metrics Dashboards

Core Platform Enhancement

- Exhibit Module Modernization
- Data Model Refactoring
- System Performance & Security
- AI & External System Integration

Strategic focus areas representing 258+ development tickets and roadmap initiatives

MAP Technology Expected Outcomes

For Students	For Colleges	For System Administration
Streamlined portfolio creation and submission	Enhanced articulation workflows	Scalable, maintainable architecture
Clear visibility into CPL status and opportunities	Improved data insights and reporting	Enhanced security and performance
Secure, intuitive authentication	Customizable landing pages	Comprehensive analytics
Personalized guidance through the CPL process	Efficient faculty management	Extensible integration framework

Delivering value across all stakeholder groups with a unified platform approach.

The Importance of Data Governance to MAP

Foundation for Cross-Institutional Collaboration	Quality Assurance for Decision Making	Support for Regulatory Compliance	Technical Scalability
• MAP operates across multiple colleges and institutions, requiring interoperability with the systems they use • Strong governance ensures data maintains integrity when shared between different systems and stakeholders	• Metrics dashboards and reporting depend on high-quality, consistent data • Governance frameworks establish data quality controls that support reliable analytics	• Education data is subject to various regulations (FERPA, state requirements) • Formalized governance helps ensure compliance across all data handling processes	• Interoperability for integrations requires well-governed, structured data • Data models that adhere to governance standards are easier to maintain and extend

Project Next Steps With Regard to Data Governance

- **Data Dictionary Development:** Establishing consistent definitions for key data elements across articulation, portfolio, and student interfaces
- **Access Control Frameworks:** Determining appropriate data access for different roles (students, faculty, administrators)
- **Data Quality Monitoring:** Implementing processes to detect and address data inconsistencies
- **Lifecycle Management:** Managing how data moves through the system from creation to archival
- **Integration Standards:** Creating governance for how systems exchange information

Mission and Vision

Vision and Mission Considerations

The vision statement focuses on the impact delivered, while the mission statement focuses on how to deliver the impact.

Vision	Mission
Our reason for being (how success will look and feel)	What we are trying to achieve (what the group does)

Considerations:

- ✓ Capture strategic priorities and path for the future (tough to attain)
- ✓ Communicate values, strengths, and aspirations (impact)
- ✓ Make it easy to understand and timeless (allow for changes)

Considerations:

- ✓ Expresses the group's core values and purpose
- ✓ Describes what the group does, how it does it, and why
- ✓ States the problem that the group aims to solve

Proposed Vision

DGAW tri-chairs developed a preliminary vision statement for group refinement.

Vision Statement

Empower California Community Colleges with trusted, secure, and well-managed data, to consistently deliver meaningful insights to support students and meet Vision 2030 goals.

Activity: Vision Refinement

Through group discussion, the proposed vision will be refined.

INSTRUCTIONS:

In your breakout groups, discuss:

1. How does the vision capture DGAW's definition of success? Does it include "what" is being done "for whom" and "why?"

2. Are there any components that should be added or removed?

If your group has desired changes, create one (1) updated vision statement.

Proposed Mission

DGAW tri-chairs developed a preliminary mission statement for group refinement.

Mission Statement

Establish Data Governance capabilities through a culture of collaboration, improvement, and transparency to ensure the quality and security of CCC data, empowering informed decision-making and driving better academic achievements for our students.

Activity: Mission Refinement

Through group discussion, the proposed mission will be refined.

INSTRUCTIONS:

In your breakout groups, discuss:

1. Does the mission capture DGAW's purpose?

2. Recall, data governance has various dimensions across people, process / policy, and technology; data protection and privacy, data quality management, and data literacy are a few examples.

   Are these data governance dimensions reflected in the mission?

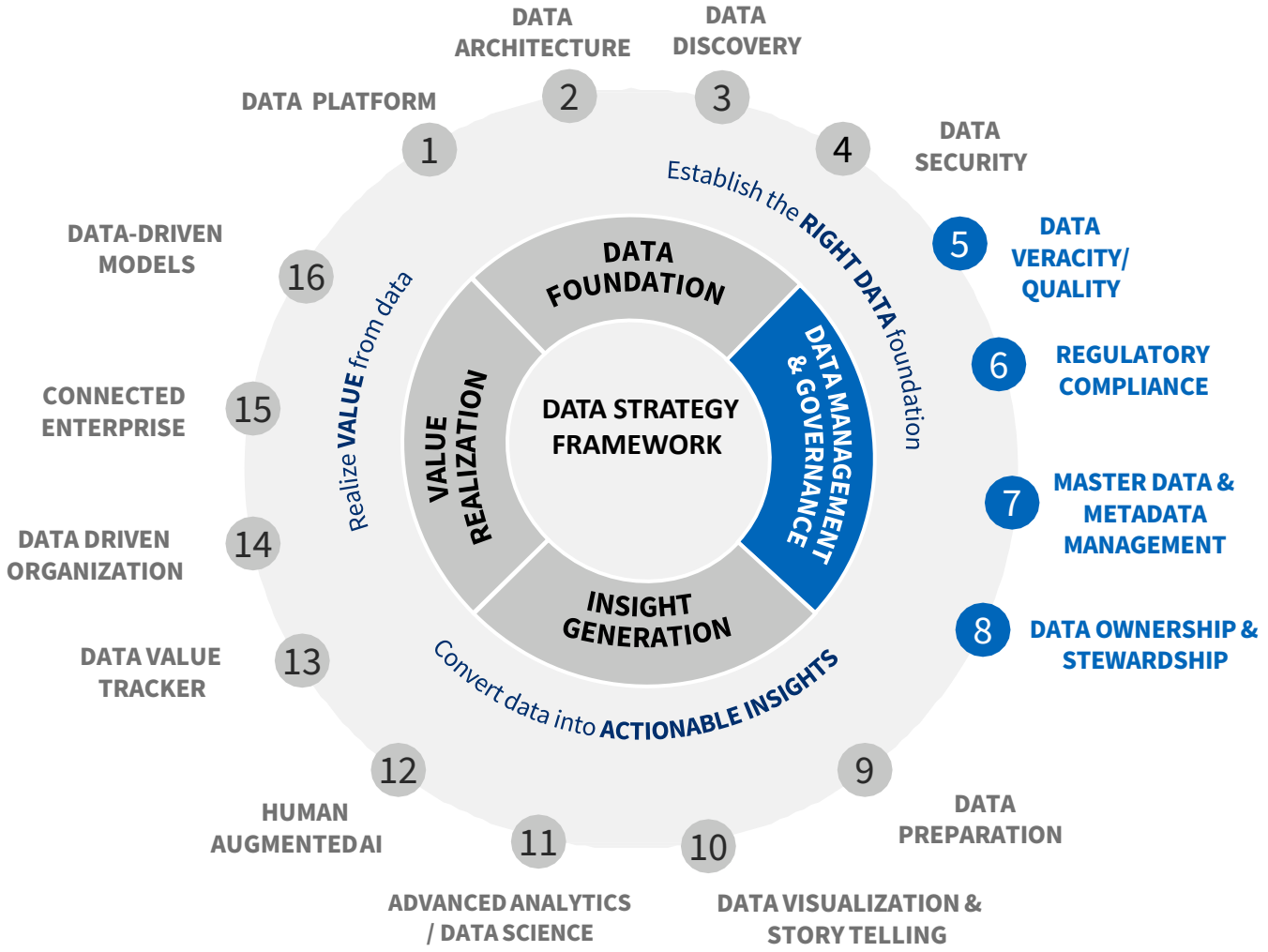
If your group has desired changes, create one (1) updated mission statement.

BREAK
10 Minutes

Data Governance Discovery Findings

Data Strategy Framework: Data Management & Governance

Capabilities in Data Foundation, Data Management, and Governance are at the core of developing a Data and Analytics North Star Vision.



Data Governance Pillars

The data governance pillars provide the structure that informs data management IT activities.

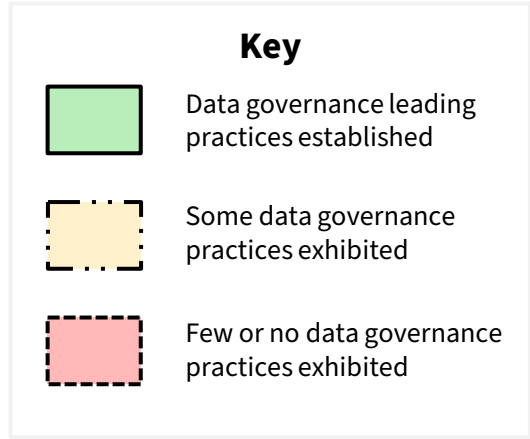
- **Data Protection & Privacy**
- **Change Management**
- **Data Glossary & Catalog**

- **Data Quality Management**
- **Policy, People & Process**
- **Technology & Analytics**

Discovery Findings Overview

Information collected from data governance leader interviews and documentation identified examples of data governance leading practices and areas for improvement.

Data Governance Areas	Summary
Data Protection & Privacy	Few examples of data classifications and data sharing policies with limited data access processes
Data Quality Management	Limited examples of data quality frameworks, capabilities, and remediation processes
Policy, People, Process	Limited examples of clearly defined roles and responsibilities, processes, policies, and standards
Technology & Analytics	Some metrics definitions with few examples of effective data governance tools and automation
Data Glossary & Catalog	Some examples of data catalog and business data glossary elements
Change Management	Some training, data literacy, and communication efforts exist



Findings: Data Protection & Privacy (1 of 6)

There are opportunities to expand data classifications and establish statewide data sharing and protection and privacy policies.

Data Classifications

- No evidence of compliance tagging for data classification (e.g., public, internal, restricted) or tagging sensitive data values (e.g., personal identifiable information – PII) across statewide platforms.
- Grossmont-Cuyamaca CCD has well-written data classification policy (with roles and responsibilities and classification definitions), which could be adjusted for statewide use.

Data Sharing Policies

- Data sharing policies exist across state.
- Chancellor's Office has data sharing agreements, which could be used as templates for statewide guidance.
- There are exemplar sharing agreements between CCC and CSU system.

Data Privacy Policies

- Interviewed data platforms indicated they have no data privacy policy.
- Some documents such as data sharing agreement are in place with privacy indicators, but indicators not rolled out statewide.
- Some data catalogs have sensitive data rating (high, medium, low) but not indication of sensitive data type (e.g., PI, PII, PCI, PHI).

Data Security & Risk

- Many statewide platforms have information security policies that protect data, including using technology like SHA-256 encryption (secure way to verify data authenticity and integrity). Opportunity to use statewide.
- Map performed a thorough *information security assessment* (2024), covering many capabilities.
- No statewide retention and archival policies.

Findings: Data Quality Management (2 of 6)

There are examples of basic data quality (DQ) controls. Opportunities exist for statewide standards, rules, and controls.

Data Quality Standards

- DQ standards are not widely available.
- Ventura CCD data standards (e.g., zip code, street, etc.) can be used to develop statewide guidance.
- There was no DQ Framework for data stewards, with processes and guidance.

Data Quality Rules

- Missing business rule management system or consolidation of business rules.
- MAP uses Azure and Purview infrastructure and runs DQ Rules to alert districts of DQ issues (starting point for statewide guidance).
- Overall DQ Rules for most platforms are reactive, not proactive in identifying and remediating DQ issues.

Data Quality Controls

- Few basic controls, lacking detailed business rules, use case, and requirements.
- Common Cloud performs referential integrity checks that ensure DQ (starting point for statewide guidance).

Data Quality Reporting

- Most CCC data platforms do not provide DQ KPIs and dashboards on key dimensions such as accuracy, consistency, timeliness, and completeness.
- MAP produces DQ metrics and dashboards on several dimensions that could be replicated statewide.

Findings: Policy, People & Process (3 of 6)

Development of clearly defined data governance frameworks is needed. Roles and responsibilities are defined in some areas but require refinement and expansion.

Organization

- No industry standard data governance-related organization structure in place.
- No operating model with formalized data governance frameworks, such as metadata management, critical data element management, master data management, and Data Quality Management frameworks.

Roles and Responsibilities

- No formalized roles and responsibilities such as RACI matrix for each area or framework of operating model.
- Some districts and colleges have definitions for some roles such as a data governance office and data steward.
- DGAW functions as a data governance group already and has good participation.
- CCC has a 2019 Data Governance Office proposal that can be leveraged statewide.

Data Domains

- Mentioned in some data dictionaries but not defined; did not align with industry standards and were used differently on different platforms.

Activity: Findings Discussion

INSTRUCTIONS:

In your breakout groups, discuss:

1. Are there any findings you expected to see but are not listed? Were you surprised by any findings?
2. Do any of the findings resonate with your experiences?
3. Which findings should be prioritized or addressed because they align best with DGAW's mission and vision?

Findings: Technology & Analytics (4 of 6)

Some tools and analytics leading practices are leveraged. There is opportunity for adopting and expanding use of tools and technology to automate data governance.

Data Governance Automation

- Automation not being used to proactively detect data quality issues and provide AI intelligence to recommend solutions.
- Most data governance processes are manual:
  - Issue identification and resolution uses back and forth emails.
  - Batch uploads of flat files are validated by manually checking number of records and confirming they match expected counts.

Data Metrics

- Not all metrics have detail needed to fully understand reports and dashboards.
- Two examples can be leveraged for statewide guidance:
  - DataVista metric data dictionary (well-documented report and dashboard metrics).
  - Student-centered funding formula metric definitions.

Master Data Management

- No master data repository solution exists.
- No single source of truth, as multiple places can be described as MDM.
- Some attempts at executing MDM:
  - CCC has 2019 proposal for MDM (not deployed) that can be leveraged statewide.
  - Tech Center began MDM effort (2017): documented vision, selected vendor, and published implementation steps (could be leveraged statewide).

Findings: Data Glossary & Catalog (5 of 6)

Some examples of catalogs, glossaries, and flows exist, but require further refinement and statewide sharing.

Data Catalog

- Data catalogs exist and some are openly published on CCC website.
- Existing data catalogs are missing expected columns of information and values.
- Data catalogs are not stored in a central location.

Data Glossary

- Missing data glossary with complete, business-focused definitions that is stored in a central location.
- Example: MIS has example of data element for Course Control Number that has a business name and description, with some business rules documented.

Data Flows & Lineage

- Few data flows exist.
- Existing high level data flows lack detail such as:
  - Which data groupings (data domains) were flowing from which source
  - How data is stored (raw, curated, etc.)
- Tech Center, PPM, and DataVista have some components (data flow diagrams, curation zones, etc.) that could be leveraged for statewide guidance.

Findings: Change Management (6 of 6)

There are pockets of data literacy efforts and training. There is opportunity for a more comprehensive, coordinated initiative.

Data Literacy and Training

- No formalized approach for data literacy, socialization, and training.
- Some data-related education exists and could be leveraged for statewide approach:
  - Example: MAP has a library of introductory videos and trainings

Activity: Findings Discussion Continued

INSTRUCTIONS:

In your breakout groups, discuss:

1. Are there any findings you expected to see but are not listed? Were you surprised by any findings?
2. Do any of the findings resonate with your experiences?
3. Which findings should be prioritized or addressed because they align best with DGAW's mission and vision?

Where We Are Going

Opportunities

Transformative Opportunities

There are four opportunity areas with measurable actions that have local, system, and statewide benefits.

Ways of Working

- Define data governance organizational structure
- Create data governance roles and responsibilities template
- Define data domains

Statewide Data Policies and Standards

- Create data classification policy
- **Create the data quality standard**
- Create data retention policy
- Develop data lineage standard and guidance
- **Develop data sharing agreement**

Statewide Frameworks & Templates

- Define meta data management vision and framework (glossary, catalog, rules)
- Build data glossary template
- **Extend metric data dictionary**
- Develop data quality framework
- Identify critical data elements
- Define data quality rules and tool
- Establish data quality confidence scores

Change Management

- Conduct data literacy awareness campaign, starting with leadership
- Socialize policies, standards, frameworks, and templates statewide

Tackling Opportunities

There are three transformative opportunities that DGAW can begin to tackle.

Opportunity	Description	Existing Materials
Create statewide data quality standard	Criteria and guidelines for accurate, consistent, complete, and reliable data for its intended use	• Ventura CCD data standards
Review and develop statewide data sharing agreement template	Guidelines and rules that govern how data is shared, accessed, and used within and outside an organization	• Chancellor's Office data sharing agreement • CCC and University of Michigan adult learner study memorandum of understanding
Review and refine metric data dictionary and socialize statewide for adoption	Repository of quantifiable measures to assess quality, performance, and effectiveness of data and data management practices	• DataVista data dictionary

Action Plan

There are six high-level steps needed to mobilize and create these guidelines:

Today - April					May DGAW Meeting
Create Tactical Group	Establish Ways of Working	Review Existing Information	Identify Actions	Perform Actions	Share with DGAW
Create DGAW tactical groups for each opportunity and begin to align on the effort	Determine group dynamics, such as: • Preliminary meeting schedule • Resources needed (e.g., information and expertise)	Delve into documentation to • Gain understanding of starting point • Identify gaps in information • Determine target audience	Define areas of work (e.g., research, SME consultations logistics, writing, reviews and input collection, action tracking) and assign owners and dates	Complete tasks to create statewide guidelines	Collect input from DGAW on: • Data quality standard • Data sharing agreement • Metric data dictionary

What is Next?

Recap

Next Steps

- Share-out with your associations for feedback, covering:
  - Overview of discovery findings
  - DGAW next steps:
    - Launch of DGAW tactical groups focused on development of statewide data quality standard, data sharing agreement, metric data dictionary
- Develop guidelines above and share by May DGAW meeting with all members
- Attend the next DGAW meeting on May 7 (*date requires confirmation*)

Questions and Answers

Appendix A: Flow chart for Possible Paths for Current State Data Flow (Draft):

The flow chart found earlier in the document has the various paths described below. A table has been included after to lists each of the flow chart items specific system and category

Chart items are one of four System types:

- Statewide System
- Local System
- External System
- Statewide System Interviewed

Chart items are also categorized into five sections reading right to left

1. Data Sources
2. Data Collection and Processing
3. Data Quality and Standardization
4. Downstream Systems/Reporting
5. External

Table below lists each of the items and the system and category details. The various paths that the flow chart takes are listed after the Table.

Stand Alone Flow

This is a one-way flow from start to end with no external connections:

1. 6 District SIS (Banner/Colleague/Peoplesoft)
2. Common Cloud Demonstration Project
3. CO Dashboard (in-development) (end of flow)

Starting Flows

Canvas Flow

1. Canvas
2. CCC Data Lake (See Extended Flow)

C- ID Flow

1. C-ID (Note two flow options)
    a. CCC Data Lake (See Extended Flow)
    b. COCI (See Extended Flow)

CCC Apply Flow (three options)

1. CCC Data Lake (See Extended Flow)

2. District Student Information and Ancillary Systems (See Extended Flow)
3. Cal-Pass Plus (K-12 Districts) (Note: Other flows connect to Cal-Pass Plus)
    a. MMPS
        i. eTranscript (end of flow)
        ii. District Student Information and Ancillary Systems (Extended Flow)

CCGI Flow

1. CCGI Flow
2. Cal-Pass Plus (K-12 Districts) (Note: Other flows connect to Cal-Pass Plus)
    a. MMPS
        i. eTranscript (end of flow)
        ii. District Student Information and Ancillary Systems (Extended Flow)

Dept of Apprenticeship Flow

1. Dept of Apprenticeship
2. DataVista (Note: other flows connect to Data Vista):
3. NOVA (end of flow)

Adult Ed Section of CDE Flow

1. Adult Ed Section of CDE
2. DataVista (Note: other flows connect to Data Vista)
3. NOVA (end of flow)

UC/CSU/National Student Clearinghouse Flow

1. UC/CSU/National Student Clearinghouse
2. MIS (see extended flow)

ACE, DoD Flow

1. ACE, DoD
2. MAP (Note: Other flows connect to MAP)
3. Dashboard, Inventory, & College Landing Pages (end of flow)

Details of Extended Flows

Extended Flow for COCI

1. COCI (must flow from C-ID)
    a. CCC Data Lake (see extended flow)
    b. PPM Authoring
        i. PPM Public Student Portal

1. Community College Campus Student Portals (end of flow)

c. MAP (Note: Other flows connect MAP)
    i. Dashboard, Inventory, and College Landing Pages (end of flow).

Extended CCC Data Lake Flow

1. CCC Data Warehouse (Note: Other flows connect to CCC Data Warehouse)
2. CCC Report Server (end of flow)

Extended Flow for MIS

1. MIS
    a. Data Mart (end of flow)
    b. Cradle-to-Career (end of flow)
    c. Vision Aligned Reporting (VAR) (end of flow) (Note: Other flows connect to VAR)
    d. DataVista (Note: Other flows connect to DataVista)
        i. NOVA (end of flow)
    e. CCC Data Warehouse(Note: Other flows connect to CCC Data Warehouse)
        i. CCC Report Server (end of flow)

Extended District Student Information and Ancillary Systems

1. District Student Information and Ancillary Systems
    a. MIS (see Extended flow)
    b. CVC (end of flow)
        i. Note: CVC can flow back to District Student Information and Ancillary Systems
    c. Vision Aligned Reporting (VAR) (end of flow) (Note: Other flows connect to VAR)
    a. DataVista (Note: Other flows connect to DataVista)
        i. NOVA (end of flow)

Table of Details for Possible Paths for Current State Data Flow Items

Flow Chart Item	Category	System Type
Canvas	Data Sources	Local System
C-ID	Data Sources	Statewide System Interviewed
COCI	Data Sources	Statewide System Interviewed
CCCApply	Data Sources	Statewide System Interviewed
District Student Information and Ancillary Systems	Data Sources	Local System
CCGI	Data Sources	External Systems

Flow Chart Item	Category	System Type
Cal-Pass Plus (K-12 Districts)	Data Sources	External Systems
MMPS	Data Sources	Statewide System Interviewed
Dept of Apprenticeship	Data Sources	External Systems
Adult Ed Section of CDE	Data Sources	External Systems
UC/CSU/ National Student Clearinghouse	Data Sources	External Systems
ACE, DoD	Data Sources	External System
6 District SIS (Banner/ Colleague/ Peoplesoft)	Data Sources	Local System
CCC Data Lake	Data Collection and Processing	Statewide System Interviewed
PPM Authoring	Data Collection and Processing	Statewide System Interviewed
CVC	Data Collection and Processing	Statewide System
MAP	Data Collection and Processing & Data Quality and Standardization	Statewide System Interviewed
MIS	Data Collection and Processing & Data Quality and Standardization	Statewide System Interviewed
CCC Data Warehouse	Data Quality and Standardization	Statewide System Interviewed
PPM Public Student Portal	Data Quality and Standardization	Statewide System Interviewed
Data Mart	Data Quality and Standardization	Statewide System Interviewed
eTranscript	Data Quality and Standardization	Statewide System
Common Cloud Demonstration Project	Data Quality and Standardization	Statewide System Interviewed
Dashboard, Inventory, and College Landing Pages	Data Quality and Standardization & Downstream Systems/Reporting	Statewide System Interviewed
CCC Report Server	Downstream Systems/Reporting	Statewide System Interviewed
Community College Campus Student Portals	Downstream Systems/Reporting	Statewide System
Vision Aligned Reporting (VAR)	Downstream Systems/Reporting	Statewide System Interviewed
DataVista	Downstream Systems/Reporting	Statewide System Interviewed

Flow Chart Item	Category	System Type
NOVA	Downstream Systems/Reporting	Statewide System Interviewed
CO Dashboard (in-development)	Downstream Systems/Reporting	Statewide System Interviewed
Cradle-to-Career	External	External System

Appendix B: Details of Flow Chart for Possible Paths for Current State Mapping Articulation Pathways (MAP) Data Flow (Draft)

The flow chart found earlier in the document has the various paths described below. A table has been included after to lists each of the flow chart items specific system and category.

Chart items are one of four System types:

- Statewide System
- Local System
- External System
- Statewide System Interviewed

Chart items are also categorized into five sections reading right to left

1. Data Sources
2. Data Collection and Processing
3. Data Quality and Standardization
4. Downstream Systems/Reporting
5. External

TBD CCCApply

Note: Item "MAP (including Credential Registry, Common Course Crosswalk)" will be referred to in shorthand as MAP Below.

<u>One-way Relationship to MAP</u>

A. One way future connection to MAP:

   1. **Nexus Edge?**
   2. **MAP**

B. One way connection (not a future connection) to MAP:

   1. **ACE, Dod**
   2. **MAP**

C. One way connection (not a future connection) to MAP:

   1. **COCI**
      a. Note: **COCI** could have been reached via one-way future connection from **C-ID**
   2. **MAP**

<u>Two way connections with MAP</u>

A. Two way future connection:

   1. **MAP**

2. **C-ID**
    a. Note: **C-ID** also has a one way future connection to **COCI**, which could return to **MAP**

B. Two way future connection:

3. **MAP**
4. **MIS**

C. Two way future connection:

1. **MAP**
2. **Common Course Numbering**
    a. **Note: Common Course Numbering** points back to **MAP**

<u>Circular Connection with MAP</u>

A. Circular future connection with MAP

1. Begins at **MAP**
2. **Credential Engine**
3. Returns to **MAP**

<u>One Way Connections from Map to end of flow chart</u>

A. One way future connection:

1. **MAP**
2. **District Student Information and Ancillary Systems**

B. One way connection (not a future connection):

1. **MAP**
2. **Dashboard, Inventory, and College Landing Pages**

C. One way future connection:

1. **MAP**
2. **PPM Public Student Portal**

D. One way future connection:

1. **MAP**
2. **eTranscript (modernized)**

E. One way future connection:

1. **MAP**
2. **Career Passport**

<u>Table of Details for Current State MAP Data Flow Items</u>

Flow Chart Item	Category	System Type
C-ID	Data Sources	Statewide System Interviewed
COCI	Data Sources	Statewide System Interviewed
CCCApply	Data Sources	Statewide System Interviewed
Credential Engine	Data Sources	External System
Nexus Edge?	Data Sources	External System
District Student Information and Ancillary Systems	Data Sources	Local System
ACE, DoD	Data Sources	External System
MAP (including Credential Registry, Common Course Crosswalk)	Data Collection and Processing & Data Quality and Standardization	Statewide System Interviewed
MIS	Data Collection and Processing & Data Quality and Standardization	Statewide System Interviewed
Dashboard, Inventory, and College Landing Pages	Data Collection and Processing & Downstream Systems/Reporting	Statewide System Interviewed
PPM Public Student Portal	Data Quality and Standardization	Statewide System Interviewed
eTranscript (modernized)	Data Quality and Standardization	Statewide System
Common Course Numbering	Data Quality and Standardization	Statewide System
Career Passport	External	External System