Memo

To: Laurie Sharp, Associate Provost – Academic Programs and Assessment

From: Laura Busby, Director – Business Intelligence & Research Services

cc: Nathan Gerber, Associate Vice President – Partner Solutions and Technology
Support

Christina Baum, Vice President – Digital Transformation, CIO

Date: April 2, 2024

Re: Evidence for NWCCU Year 7 Self Study

Overview

Evidence gathered is related to the following excerpt from the report:

*Key performance indicators are openly available to the public, ensuring
transparency for university stakeholders to collect and analyze data. While
university stakeholders still have the option to submit data requests through a
service portal housed on the Business Intelligence and Research Services
Department's website, the data dashboards significantly expedite the process
and provide users with the necessary data more promptly and efficiently.*

UVU publishes dashboards and documentation related to its key performance indicators on its
public website: https://www.uvu.edu/birs/ . Key indicators related to Academic Programs and
other topics are represented by Tableau dashboards. Institutional indicators are included in the
annual fact books.

BIRS is currently assembling and documenting institutional Key Performance Indicators (KPIs)
and Measures, as identified through existing dashboards and executive presentations. We
expect this list of KPIs and Measures to be one of the first action items of the newly established
Data Governance Council, provided to other executive governance groups for comment, and
approved by President's cabinet.

The Digital Transformation Division's Beach Picture, describes the future state of technology at
UVU from the perspective of the user. Dx divisional leadership, directors, and staff goals roll up
to the Vice President's annual goals which correspond to the Beach Picture.

Notable Milestones in Data Governance and Management Transformation

UVU's digital transformation efforts with data began with data governance and process change. Several key initiatives were completed by these two departments in partnership with the Business Intelligence Platform department and Dx leadership prior to the reorganization.

January 2022	Collibra Data Intelligence Platform - Contract signed
May 2022	Collibra Data Intelligence Platform - implementation and basic configuration complete. Included metadata ingestion for primary Banner SIS and select operational data store Oracle schemas.
	Collibra - Tableau Server metadata ingested
	Collibra - Power BI governed workspaces metadata ingested
November 2022	Use of Atlassian Jira platform standardized across IR and BI Services to track service requests and projects
February 2023	2nd Annual UVU Data Summit – Introduced Data Visualization Style Guide
November 2023	3rd Annual UVU Data Summit View Recordings
March 2024	Policy 445 – Institutional Data Governance and Management approved by Board of Trustees

Business Intelligence and Research Services

The attached evidence describes and supports the work performed at UVU to improve the accuracy of business intelligence and reporting, reduce dependency on manual changes and corrections to existing dashboards through automation, and implement a modern data governance program. Several teams and individuals within the digital transformation division have been involved in this effort, along with our partners throughout the university. However, the attached documents are related specifically to the work performed by the Business Intelligence and Research Services department since January 1, 2023. This date is just before a reorganization was initiated to combine the Institutional Research and Business Intelligence Services departments to better align resources and reduce duplication of effort.

After this reorganization, we necessarily focused some effort to document expected deliverables (see included BIRS Reporting Calendar.xlsx) and to stabilize and repair issues with existing business intelligence assets quickly. Included documents describing processes are current state, with the expectation of continuous improvement. Additional documents are included that list calendar items related to process discussions and presentations, completed projects that specifically support key performance indicators and building capacity in the BIRS team to be able to respond more effectively and quickly to new data needs. I have also included documentation related to the upskilling of BIRS analysts.

Key BIRS Accomplishments since January 2023

- August 2023: Completion of minimum skills training in Power BI, data visualization, communication, and customer service using Pluralsight and Linked In systems.

- November 2023: Reduction of project request backlog from 497 to 293 projects, through partnerships with divisional leaders.
- December 2023 – to date: BIRS has held staff meetings where pertinent topics on process and technical questions were discussed and answered. In December 2023, we instituted regular meetings in order to provide additional support and to reinforce through repetition some concepts and to continue to assist team members in leveling up with the MS Azure platform and tools, and other technologies.
- February 2024: Completed review of multiple data repositories and filing methods, and movement of relevant code and documentation to a MS Sharepoint team site repository. Documents not in use were retained in an archive, or deleted if not relevant or past a seven year retention period.
- March 2024: Final approval of updated position descriptions and relevant reclassifications.

Included Files

- BIRS Director_Calendar Entries related to Key Performance Indicators and Data Process Improvement.pdf
- BIRS Learning Path – Foundations.pdf
- BIRS Projects and Requests supporting KPIs – Complete.xlsx
- BIRS Project Request Summary – 11102023 – Cabinet Update.xlsx
- BIRS Reporting Calendar.xlsx
- BIRS Retreat Documents:
    - BIRS Retreat 2023_0519.docx
    - BIRS Retreat BI Process.pptx
    - Commenting Our Code.pptx
    - SQL Code Comment Header Example.txt
    - Values, Virtues, and the Beach_051923.pptx
- BIRS Systems and Process Meeting Summary.pdf
- Cabinet Data Presentation for 20231016.pptx
- Collibra Implementation _Screenshots.docx
- Dx Beach Picture 20221121.pdf
- Institutional Measures and KPIs – Working Document as of 20240329.xlsx
- KPI List for Cabinet_20231012.xlsx
- UVU Data Visualization Style Guide_v4.1.pdf

Director, BIRS Calendar Items Relevant to KPIs and Data Process   **January 1, 2023 – April 1, 2024**

Subject	Location	Start	End
Board of Trustees - Policy 445 - Data Governance and Management	FG Trustee's Room	3/28/2024 12:00 AM	3/29/2024 12:00 AM
Public Webpage Data	Conf Room BA214	3/25/2024 3:00 PM	3/25/2024 4:00 PM
Processes, Standard Definitions & Procedures to Freeze Data	DX 219	3/18/2024 2:00 PM	3/18/2024 2:45 PM
High Yield Programs ETL Project	DX 109	3/11/2024 11:00 AM	3/11/2024 11:30 AM
Executive Data Coordination	Microsoft Teams Meeting	3/7/2024 2:30 PM	3/7/2024 3:20 PM
High Yield Program tables and ETL Development - Scoping	DX 109	2/14/2024 8:00 AM	2/14/2024 8:50 AM
Dx Priority Dashboard Adjustments	DX 101H	2/12/2024 3:30 PM	2/12/2024 4:20 PM
Data Processes & Cabinet Deliverables	DX 101D	2/5/2024 8:00 AM	2/5/2024 8:50 AM
Data and Information JSM Form	DX 216	1/24/2024 4:00 PM	1/24/2024 4:50 PM
Discuss Data Processes	Teams	1/23/2024 3:00 PM	1/23/2024 3:50 PM
Data Requests and Whiteboarding	DX 101H	1/18/2024 8:00 AM	1/18/2024 9:50 AM
Data Platform, Reporting, and Dashboards	Dx 101H	1/8/2024 3:00 PM	1/8/2024 3:50 PM
Balanced Scorecard	Microsoft Teams Meeting	1/4/2024 2:30 PM	1/4/2024 3:00 PM
Ingesting of new data sources	Teams	12/14/2023 9:00 AM	12/14/2023 9:25 AM
BIRS Prioritization and Data Governance	Microsoft Teams Meeting	12/5/2023 4:30 PM	12/5/2023 5:00 PM
Cabinet Priorities and KPIs	Microsoft Teams Meeting	11/9/2023 4:00 PM	11/9/2023 4:50 PM
Certified Data Mark Brainstorm	Microsoft Teams Meeting	11/8/2023 2:00 PM	11/8/2023 2:30 PM
Data Governance / PowerBI	Microsoft Teams Meeting	11/2/2023 3:00 PM	11/2/2023 3:45 PM
High Impact Practices Data	Microsoft Teams Meeting	11/1/2023 11:30 AM	11/1/2023 12:25 PM
Collibra & Data Stewardship	Microsoft Teams Meeting	10/31/2023 10:00 AM	10/31/2023 10:50 AM
Data discussion	Microsoft Teams Meeting	10/30/2023 4:15 PM	10/30/2023 5:05 PM
Inclusion-Related Data Dashboard Discussion	Microsoft Teams Meeting	10/25/2023 11:30 AM	10/25/2023 12:00 PM
Executive Data Coordination	Microsoft Teams Meeting	10/24/2023 11:30 AM	10/24/2023 11:55 AM
Data Platform, Reporting, and Dashboards	Dx 101H	10/23/2023 1:00 PM	10/23/2023 1:50 PM
Prioritization of Data Project Requests for BIRS	DX 101H	10/18/2023 2:00 PM	10/18/2023 2:50 PM
Data KPI's, Reports, and Quisitive Engagement	DX 101H	10/13/2023 9:00 AM	10/13/2023 9:50 AM
Census Data Stabilization	DX 216	10/3/2023 11:00 AM	10/3/2023 11:25 AM
Data Source Audit	Microsoft Teams Meeting	9/29/2023 10:00 AM	9/29/2023 10:50 AM
Partnership Directors/Cabinet Dashboard - look and feel	Microsoft Teams Meeting	9/27/2023 9:00 AM	9/27/2023 9:50 AM
Dashboards, Data Sources, and Collibra	Laura's Office	9/18/2023 1:00 PM	9/18/2023 2:00 PM
Datasource Audit touchpoint	Microsoft Teams Meeting	9/15/2023 10:00 AM	9/15/2023 11:00 AM
Discussion - Jira data into PowerBi and Data Lake	Microsoft Teams Meeting	9/14/2023 4:00 PM	9/14/2023 4:25 PM
Latino/Latina data for Val Peterson / President's Office	Microsoft Teams Meeting	8/9/2023 10:00 AM	8/9/2023 10:30 AM
Executive Data Coordination	Microsoft Teams Meeting	8/4/2023 2:00 PM	8/4/2023 2:50 PM
Evolve FM System Data	Microsoft Teams Meeting	8/3/2023 1:30 PM	8/3/2023 1:55 PM
Data Platform 101 Follow Up	DX 117	7/31/2023 3:00 PM	7/31/2023 4:50 PM
USHE Space Utilization / Transition	Microsoft Teams Meeting	7/14/2023 11:00 AM	7/14/2023 11:45 AM
Balanced Scorecard	Microsoft Teams Meeting	7/13/2023 10:30 AM	7/13/2023 11:00 AM

P&C Balanced Scorecard Data	Microsoft Teams Meeting	7/13/2023 8:00 AM	7/13/2023 10:00 AM
President's data	Microsoft Teams Meeting	7/12/2023 2:30 PM	7/12/2023 4:00 PM
Data Governance Policy Workshop	Riverside Country Club	7/11/2023 9:00 AM	7/11/2023 4:00 PM
IA Data for Balanced Scorecard	Microsoft Teams Meeting	6/21/2023 9:00 AM	6/21/2023 9:50 AM
Data Presentation for Cabinet	Microsoft Teams Meeting	6/7/2023 2:00 PM	6/7/2023 2:50 PM
UVU Space Utilization	Zoom Meeting	6/6/2023 3:00 PM	6/6/2023 4:00 PM
Data Strategies for Cabinet / UVU	Teams	5/30/2023 1:00 PM	5/30/2023 1:50 PM
IR and BIS Alignment, Structure, and Processes Meeting (Mandatory)	CB 512	2/10/2023 2:00 PM	2/10/2023 3:00 PM
Balanced Scorecard	Microsoft Teams Meeting	1/18/2023 2:30 PM	1/18/2023 2:55 PM
Balanced Scorecard Review	Conf Room BA214	1/11/2023 11:30 AM	1/11/2023 1:00 PM

UVU Cabinet Meeting Dates where KPIs and Data Process were on agenda:

10/16/2023
11/13/2023
12/4/2023

The agendas for cabinet meetings are not available to staff. But, several of the meetings above were used to prepare for and respond to cabinet questions related to data processes.

UVU BUSINESS INTELLIGENCE & RESEARCH SERVICES

Learning Path — Foundations

May 19, 2023 ● Due August 15, 2023

Technical Skills

TASK	RESOURCE	DESCRIPTION	GOAL
REQUIRED Power BI Overview	PluralSight's "Microsoft Power BI for Analysts" path & learning IQ assessment	• Beginners? Complete "Modeling Data in Power BI" course by Stacia Misner Varga, then take the Skills IQ Assessment. Note the additional training suggested and complete it if score is below goal. • Experience with PBI? You could take Skill IQ and then complete the additional training suggested.	80% or higher in Skills IQ Assessment
REQUIRED DAX	PluralSight	Complete at least one DAX-related course. We recommend this course from Microsoft Training: https://learn.microsoft.com/en-us/training/paths/dax-power-bi/	Successfully complete
OPTIONAL	Microsoft Partners	Dashboard in a Day • 7-8 hour virtual training • Good experience, plus ability to ask instructors questions; however, the "Modeling Data in Power BI" by Stacia Misner Varga course in Pluralsight covers a lot of the data modeling material they cover in the Dashboard in a Day. However, it does give users a thorough experience on using, designing, and manipulating visuals in Power BI. • URL for upcoming workshops: https://events.microsoft.com/en-us/allevents/?search=Dashboard%20in%20a%20Day&view=list&clientTimeZone=1	
REQUIRED Data Visualization	PluralSight	• Take the "Data Visualization Literacy" skills assessment and complete the recommended training to close gaps in learning. • Once any additional training is complete, retake the skills assessment.	A passing score is "Average" or above.

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TASK	RESOURCE	DESCRIPTION	GOAL
OPTIONAL Data Visualization	Linked In Learning	• "Data Visualization for Data Analysis and Analytics" by Bill Shander • High level overview, with concepts needed to consider in dashboard design.	
OPTIONAL Data Storytelling	Book	• "Storytelling with Data" by Cole Nussbaumer Knaflic • We will have a limited number of copies for check out.	

Soft Skills

TASK	RESOURCE	DESCRIPTION	GOAL
REQUIRED Communication	Linked In Learning	• "Giving and Receiving Feedback" by Dr. Gemma Leigh Roberts – 48 mins: https://www.linkedin.com/lear ning/giving-and-receiving-feedback-2017?contextUrn=urn%3Ali%3AlyndaLearningPath%3A1~AAAAAAfm4Q%3D562280&u=2071428 • If you can't find it through this link, it is the first course listed in the UVU curated courses.	Complete course, pass quizzes.
REQUIRED Customer Service	Linked In Learning	• "Customer Service Foundations" by Jeff Toister and Madecraft – 1 hour, 11 mins. https://www.linkedin.com/learning-login/share?account=2071428&forceAccount=false&redirect=https%3A%2F%2Fwww.linkedin.com%2Flearning%2Fcustomer-service-foundations-21620021%3Ftrk%3Dshare_ent_url%26shareId%3DbdmNi6pRSs%252BaFCgwcyfOSA%253D%253D	Successfully complete

Data Projects (and related stories) - Key Performance Indicators or Supporting Dashboards - Completed
January 1, 2023 through April 2, 2024 | Atlassian Jira System
Report prepared by L. Busby, Director, BIRS

Issue key	Summary	Reporter	Status	Status Category Changed	Created
BIRS-1426	Val Peterson slides - Latino Initiative & Demographics	Dawn Gross	Resolved	3/25/2024	8/14/2023
BIRS-1904	Create 2023 UVU Fact Book	Cortney Brewerton	Resolved	3/25/2024	2/8/2024
BIRS-1425	Executive Data for Presentations - Fall 2023	Dawn Gross	Resolved	3/25/2024	8/14/2023
BIRS-1913	Create/Compile Faculty for 2023 Fact Book	Cortney Brewerton	Resolved	3/20/2024	2/8/2024
BIRS-1556	Inclusion Executive Dashboard	Rasha Qudisat	Resolved	3/19/2024	9/27/2023
BIRS-1892	Summer 2024 Enrollment Comparison Report	Eric Wilding	Resolved	3/19/2024	2/7/2024
BIRS-1909	Create/Compile Applicants for 2023 Fact Book	Cortney Brewerton	Resolved	3/18/2024	2/8/2024
BIRS-1377	2023 Alumni Survey	Kara Schneck	Resolved	3/11/2024	8/4/2023
BIRS-1914	Create/Compile Survey Results for 2023 Fact Book	Cortney Brewerton	Resolved	3/8/2024	2/8/2024
BIRS-1912	Create/Compile Programs for 2023 Fact Book	Cortney Brewerton	Resolved	3/5/2024	2/8/2024
BIRS-1911	Create/Compile Outcomes for 2023 Fact Book	Cortney Brewerton	Resolved	3/5/2024	2/8/2024
BIRS-1908	Create/Compile Places of Origin for 2023 Fact Book	Cortney Brewerton	Resolved	3/5/2024	2/8/2024
BIRS-1907	Create/Compile Academic Demographics for 2023 Fact Book	Cortney Brewerton	Resolved	3/5/2024	2/8/2024
BIRS-1906	Create/Compile Student Demographics for 2023 Fact Book	Cortney Brewerton	Resolved	3/5/2024	2/8/2024
BIRS-1905	Create/Compile Fast Facts for 2023 Fact Book	Cortney Brewerton	Resolved	3/5/2024	2/8/2024
BIRS-1910	Create/Compile Financial Aid for 2023 Fact Book	Cortney Brewerton	Resolved	3/5/2024	2/8/2024
BIRS-1723	Current Academic Programs and High Yield Award Status	Laurie Sharp	Resolved	3/1/2024	11/22/2023
BIRS-1915	Create/Compile Facilities for 2023 Fact Book	Cortney Brewerton	Resolved	2/14/2024	2/8/2024
BIRS-1789	Balanced Scorecard: remove FAFSA and Remove Fully Online Programs KPI from Top Indicators Page	Kari Gary	Resolved	2/14/2024	1/16/2024
BIRS-1931	Add STVADVR and SGRADVR to Physical Dictionary	Kari Gary	Resolved	2/12/2024	2/12/2024
BIRS-1788	Balanced Scorecard Updates January 2024 Iteration	Wayne Vaught	Resolved	2/6/2024	1/16/2024
BIRS-1833	VBS Add Last Date Updated Field	Kari Gary	Resolved	2/6/2024	1/26/2024
BIRS-1810	VBS 2030 Achieve - Seamless	Ben Anderson	Resolved	2/1/2024	1/19/2024
BIRS-1830	VBS 2023 Achieve-Excellence in Teaching - Build SRI Gauages	Kari Gary	Resolved	2/1/2024	1/25/2024
BIRS-1831	VBS 2030 Engage Strengthen Ongoing Giving - Rebuild Page to New Data Source	Kari Gary	Resolved	2/1/2024	1/25/2024
BIRS-1815	VBS 2030-Include-Increase Access-Program Offering	Ben Anderson	Resolved	2/1/2024	1/22/2024
BIRS-1817	VBS 2030-Include-Sustain Affordability-FASA Completion	Ben Anderson	Resolved	2/1/2024	1/22/2024
BIRS-1832	VBS Operational Effectiveness - Financial Health - Activate Tab with Placeholder Text	Kari Gary	Resolved	2/1/2024	1/26/2024
BIRS-1802	VBS 2030-Engage-Enhance Engagement	Ben Anderson	Resolved	2/1/2024	1/18/2024
BIRS-1797	VBS 2030-Top Indicators-Remove Top Indicators KPIs	Ben Anderson	Resolved	2/1/2024	1/18/2024
BIRS-1812	VBS 2030-Top Indicators-8 Yr Outcomes underrep Students	Ben Anderson	Resolved	1/26/2024	1/22/2024
BIRS-1803	VBS 2030-Achieve-Excellence in Teaching	Ben Anderson	Resolved	1/25/2024	1/18/2024
BIRS-1800	VBS 2030-Include-underrep students 6 yr grad rate and 8 Yr Outcome Measure	Ben Anderson	Resolved	1/25/2024	1/18/2024
BIRS-1736	Update Vision 2030 Balanced Scorecard Dec 2023 Iteration	Laurie Sharp	Resolved	1/25/2024	12/6/2023
BIRS-1814	VBS 2030-Include-Increase Access-Space Utilization	Ben Anderson	Resolved	1/25/2024	1/22/2024
BIRS-1798	VBS 2030-Top Indicator- USHE Timely Completions KPI	Ben Anderson	Resolved	1/25/2024	1/18/2024
BIRS-1799	VBS 2030-Top Indicators-USHE High Yield KPI	Ben Anderson	Resolved	1/25/2024	1/18/2024
BIRS-1816	VBS 2030-Include-Sustain Affordability-Resident Tuition	Ben Anderson	Resolved	1/25/2024	1/22/2024
BIRS-1819	VBS 2030-Achieve-Increase Completion-Prior Learning Credits	Ben Anderson	Resolved	1/25/2024	1/22/2024
BIRS-1813	VBS 2030-Include-Increase Access-Course Delivery	Ben Anderson	Resolved	1/25/2024	1/22/2024
BIRS-1731	Innovation Academy Data Analysis	Tammy Clark	Resolved	1/9/2024	11/30/2023
BIRS-1732	High Yield Award Detail for 2022	Laurie Sharp	Resolved	1/9/2024	11/22/2023
BIRS-1372	Student Headcount by College/Department assigning majors to current college/department assignment	Geoff Matthews	Resolved	12/18/2023	7/27/2023
BIRS-1367	2AB FTE Recreation	Geoff Matthews	Resolved	12/18/2023	7/27/2023
BIRS-1368	2AB Headcount Recreation	Geoff Matthews	Resolved	12/18/2023	7/27/2023
BIRS-1747	Assess Automation Readiness of Balanced Scorecard Metrics	Laura Busby	Resolved	12/15/2023	12/12/2023
BIRS-1704	Info for PBA - Innovation Academy	Tammy Clark	Resolved	12/14/2023	11/7/2023
BIRS-1696	PBA HIPs Analysis	Ben Anderson	Resolved	12/14/2023	11/8/2023
BIRS-1684	2024 Legislative Session - Data Needed by Execs and for USHE	Dawn Gross	Resolved	12/12/2023	10/24/2023
BIRS-1724	Check if Completions Dashboard is up to date & correct	Ben Anderson	Resolved	12/5/2023	11/30/2023
BIRS-1517	2023 Stewardship Conversation Data	Scott Wood	Resolved	11/28/2023	9/15/2023
BIRS-598	Add TIMS data to UVU ODS / Warehouse	Laura Busby	Resolved	11/8/2023	11/15/2021
BIRS-1647	Academic Program Review - Info on Graduates - Students enrolling in other institutions (National Student Clearing house)	Cortney Brewerton	Resolved	10/23/2023	10/17/2023
BIRS-1646	Academic Program Review - Info on Graduates - Number of years and terms to graduation, excess credits, age etc.	Cortney Brewerton	Resolved	10/23/2023	10/17/2023
BIRS-1442	Update Exclusions based on Missionary File	Michelle Kearns	Resolved	10/18/2023	8/18/2023
BIRS-1638	Information on Students: Student demographics	Cortney Brewerton	Resolved	10/18/2023	10/16/2023
BIRS-1637	Information on Students: Number of Enrolled Majors review	Cortney Brewerton	Resolved	10/18/2023	10/16/2023
BIRS-1651	Academic Program Review - Other Information - Students changing majors	Cortney Brewerton	Resolved	10/17/2023	10/17/2023
BIRS-1178	High-Yield Graduates Metric	Geoff Matthews	Resolved	10/12/2023	8/15/2022
BIRS-1365	Graduation Counts - Degrees Awarded	Geoff Matthews	Resolved	10/9/2023	7/27/2023
BIRS-1366	Graduation Counts - Students Receiving Awards	Geoff Matthews	Resolved	10/9/2023	7/27/2023
BIRS-78	Collibra Configurations	Laura Busby	Resolved	10/5/2023	11/3/2022
BIRS-220	Acquisition and Implementation of a Data Governance System	Laura Busby	Resolved	10/4/2023	1/12/2022
BIRS-1345	Facilities and Instructional Data	Laura Busby	Resolved	9/12/2023	7/19/2023
BIRS-987	Update IRIMGR tables with 202320 cohort data	Mark Leany	Resolved	9/12/2023	3/13/2023
BIRS-1371	Student count by Sex	Geoff Matthews	Resolved	8/23/2023	7/27/2023
BIRS-1369	Student count by IPEDS Race Ethnicity	Geoff Matthews	Resolved	8/23/2023	7/27/2023
BIRS-1370	High School Student Count	Geoff Matthews	Resolved	8/23/2023	7/27/2023
BIRS-914	2022 Factbook	Geoff Matthews	Resolved	8/15/2023	5/15/2023
BIRS-325	Total Completions in AY	Derek Kent	Resolved	7/26/2023	7/6/2023
BIRS-86	Automated Edge Server activation and deactivation	Laura Busby	Resolved	7/20/2023	11/3/2022
BIRS-327	Add student belonging benchmarks	Kari Gary	Resolved	7/14/2023	7/6/2023
BIRS-977	Student Demographic Dashboard	Geoff Matthews	Closed	7/11/2023	7/11/2023
BIRS-960	Fall 2023 showing, no data because the term hasn't started - Enrollment from Within and Outside...	Geoff Matthews	Closed	6/15/2023	6/13/2023
BIRS-784	Completions	Geoff Matthews	Closed	6/6/2023	6/1/2023
BIRS-782	Course FTE	Geoff Matthews	Closed	6/6/2023	6/1/2023
BIRS-781	Headcount	Geoff Matthews	Closed	6/6/2023	6/1/2023
BIRS-1006	FTE for 2020-2021	Geoff Matthews	Closed	5/18/2023	5/18/2023
BIRS-951	7 Year Program Review - Coordinated Filters	Geoff Matthews	Closed	5/16/2023	2/10/2023
BIRS-1191	IRIMGR.SPACE INVENTORY	Evelyn Ho-Wisniewski	Closed	5/12/2023	5/12/2023
BIRS-1189	IRIMGR.BUILDING INVENTORY	Evelyn Ho-Wisniewski	Closed	5/12/2023	5/12/2023
BIRS-1090	Fact Book	Eric Wilding	Closed	5/12/2023	1/18/2023
BIRS-1169	Summer 2023 Enrollment Comparison report	Eric Wilding	Closed	5/12/2023	3/28/2023
BIRS-1000	Update Graduation Data for Annual Report	Geoff Matthews	Closed	5/12/2023	2/3/2023
BIRS-1207	Fall 2023 Enrollment Comparison report	Eric Wilding	Closed	5/5/2023	3/30/2023
BIRS-1199	IRIMGR.FACULTY WORKLOAD correction	Evelyn Ho-Wisniewski	Closed	5/3/2023	5/3/2023
BIRS-752	Executive Briefings/One-Pagers	Amy Ripplinger	Closed	4/20/2023	7/12/2021
BIRS-1175	Access Metric	Geoff Matthews	Closed	4/19/2023	8/15/2022
BIRS-1010	Update dashboards based on Fall 2022 data	Mark Leany	Closed	3/21/2023	1/19/2023
BIRS-1149	Update IRIMGR.space_inventory and building_inventory tables with latest Buildings and Rooms files from Facilities.	Evelyn Ho-Wisniewski	Closed	3/16/2023	9/1/2022
BIRS-306	Update to Race or Ethnicity Filter	David Connelly	Resolved	3/13/2023	10/28/2022
BIRS-925	Remedial Information for Fact Book	Eric Wilding	Closed	3/8/2023	3/8/2023
BIRS-284	Add Civitas Data to Dashboard	Katherine Brickey	Resolved	3/3/2023	7/9/2021
BIRS-1164	DFWI Rates	Geoff Matthews	Closed	2/24/2023	10/31/2022
BIRS-1024	Update Faculty Highest Degree dashboard	Geoff Matthews	Closed	2/13/2023	12/20/2022
BIRS-1008	Headcount on Main Campus face to face	Christian Brinton	Closed	1/30/2023	1/23/2023
BIRS-1107	Space Utilization Report	Geoff Matthews	Closed	1/27/2023	11/2/2022
BIRS-1188	Course Load Dashboard	Geoff Matthews	Closed	1/10/2023	1/9/2023
BIRS-945	Add AY as an option with Fall, Spring and Summer in the "Number of Enrolled Majors" report	Douglas Nielson	Closed	1/9/2023	12/14/2022
BIRS-1079	Head Count Dashboard Update	Geoff Matthews	Closed	1/3/2023	12/2/2022
BIRS-1095	Update Faculty Workload Dashboard	Geoff Matthews	Closed	1/3/2023	12/16/2022
BIRS-967	Update Finance Dashboard	Geoff Matthews	Closed	1/3/2023	12/20/2022
BIRS-1209	Fast Facts Fall 2022	Geoff Matthews	Closed	1/3/2023	10/28/2022

BIRS Open and Backlog Projects
Updated 11/11/2023

| | 10/12/2023 Cabinet Summary Table | 10/12/2023 Lists | 11/10/2023 | | | | Moved from Another | Moved to | Retained as Service | |
	Total Projects / Service Requests	Total Projects / Service Requests	Total Projects	Resolved	Cancelled	Added	Division	Another Division	Requests	Check Sum
Student Affairs	151	150	80	16	61	10	4	3		0
Academic Affairs	243	240	22	23	136			59	18	0
Administration	0	0	0							
People & Culture	12	12	2	1	0	2		11		0
Institutional Advancement	15	15	7	2	1	0		5		0
Digital Transformation	56	56	131				75			0
Finance	15	15	5	1	0	0		9		0
Marketing & Communications	5	5	2	0	4	1	1	0		0
Office of General Counsel	0	0	0				80	87		
		493	249						18	

UVU
BUSINESS INTELLIGENCE & RESEARCH SERVICES

Annual Deliverables - Detail View

Updated 01/21/2024

2023 Dates are listed in gray text until we have updated calendars from USHE and IPEDS for 2024-25

Report Name / Deliverable	Delivered to:	Received From / Dependency	Delivery Date (Month)	Month	BIRS Internal Review Date	Delivery Date (Day of Year)	Frequency	BIRS Area	Notes
Fall EOT (Student, Student Course, Course Files)	USHE	NSC, BIRS	January	1	1/5/2024	1/19/2024	Annual	Compliance	
Revisions: Summer EOT	USHE	BIRS	January	1	1/5/2024	1/19/2024	Annual	Compliance	
WAESO	USHE	BIRS	January	1	1/11/2024	1/18/2024	Annual	Compliance	
Finance Dashboard	Academics	Finance Division	January	1	1/16/2024	1/22/2024	Annual	Compliance	
Faculty Highest Degree Dashboard	Academics	Academic Affairs Division	January	1	1/16/2024	1/22/2024		Compliance	
Alumni	Non Specific Various Users	Alumni Services	January	1	1/22/2024	1/31/2024	Annually	Collection and Research	
CE Registration	Concurrent Enrollment	Enrollment	January	1		1/31/2024	Semi-annually	Collection and Research	
Non Returning Survey F2F (NRS)	SA	F NRS) Jalu	January	1		1/31/2024	Annually	Collection and Research	
150%/200% Graduation Rates	IPEDS	Finance Division	February	2			Annual	Compliance	
Student Financial Aid	IPEDS	Finance Division	February	2	1/22/2024 1/26/2024	2/7/2024	Annual	Compliance	
Financial Aid	USHE	Finance Division	February	2	1/26/2024	2/9/2024	Annual	Compliance	
Revisions: Historical Financial Aid	USHE	Finance Division	February	2	1/26/2024	2/9/2024	Annual	Compliance	
IPEDS Outcome Measures	IPEDS	Finance Division	February	2	2/7/2024	2/21/2024	Annual	Compliance	
Spring 3rd Week	USHE	NSC, BIRS	February	2	2/9/2024	2/16/2024	Annual	Compliance	
DWS Match: Q4 Waaes	USHE	DWS	February	2	2/16/2024	2/23/2024	Quarterly	Compliance	
CSRDE Section 1	Consortium of Schools for Retention and Data Exchange	BIRS	February	2	2/22/2024	2/29/2024	Annual	Compliance	
Clery Act		Campus Police	February	2		2/2/2024	Annual	Compliance	The office that requests this has changed each year, but we do expect to be asked to produce data for this report. We believe it will come from the university compliance area. Cortney to check.
New Student Onboarding Survey (NSOS) Canceled	SA	New	February	2		2/28/2024	Semi-annually	Collection and Research	
Fact Book	UVU	BIRS	March	3	2/14/2024	3/1/2024	Annual	Compliance	
Spring Missionary File	USHE	USHE	February	3	2/23/2024	3/1/2024	Semi-Annual	Compliance	
Spring Cohorts Creation (there are 2: First Time and Transfer)	none (updated in UVUOOS)	Student Affairs Division	March	3	3/6/2024	3/13/2024	Semi-Annual	Compliance	
Student Athlete Report	IPEDS	Athletics Division	March	3	3/8/2024	3/15/2024	Annual	Compliance	
Campus Climate Survey	CIDO/ Campus Inclusion Committees	Campus	May	3		5/1/2024	Every other year	Collection and Research	
Graduation Commencement Data	University Marketing	Instutional Advancement Division	April	4	3/24/2023	4/1/2023	Fall, Spring, Summer	Compliance	
Finance	IPEDS	Finance Division	April	4	3/28/2023	4/5/2023	Semi-Annual	Compliance	
Human Resources	IPEDS	People and Culture Division	April	4	3/28/2023	4/5/2023	Annual	Compliance	
Academic Libraries	IPEDS	Academic Affairs Division	April	4	3/28/2023	4/5/2023	Annual	Compliance	
Fall Enrollment	IPEDS	Admissions	April	4	10/12/2023	4/5/2023	Annual	Compliance	
IPEDS Spring Submissions	IPEDS	BIRS	April	4	4/3/2024	4/17/2024	Annual	Compliance	
Open Doors	International Student Services	BIRS	April	4	4/7/2024	4/15/2024	Annual	Compliance	
CSRDE Sections 2 and 3	Consortium of Schools for Retention and Data Exchange	BIRS	April	4	4/8/2024	4/15/2024	Annual	Compliance	
Enrollment Calls - Summer Canceled	Enrollment Services/ SA	Enrollment	April	4		4/30/2023		Collection and Research	
Cost of Attendance Survey (COA)	Financial Aid	Survey COA) Jpln	April	4		4/30/2023	Every other year	Collection and Research	
National College Health Assessment (NCHA)	Dean Of Students / SA	Assessment NCHA) Jplo	April	4		4/30/2023	Every other year	Collection and Research	
DWS Match: Q1 Waaes	USHE	DWS	May	5	5/17/2024	5/24/2024	Quarterly	Compliance	
General Employer Survey	None		May	5		5/31/2023	Every 3 years	Collection and Research	
Employer Supervisor Survey	None	Supervisor Survey Yale	May	5		5/31/2023	Every 3 years	Collection and Research	
Excelerate Calls	Innovation Academy / AA	Excelerate Calls Sala	May	5		5/31/2024	Annually	Collection and Research	
Student Opinion Survey (SOS) Spring	Multiple	Student	May	5		5/31/2024	Semi-annually	Collection and Research	
Great Colleges	People and Culture	Great Colleges Salo	May	5		5/31/2023	Every other year	Collection and Research	
Spring EOT	USHE	BIRS	June	6	6/7/2024	6/14/2024	Annual	Compliance	
Revisions: Fall EOT	USHE	BIRS	June	6	6/7/2024	6/14/2024	Annual	Compliance	
Graduation Web Survey	AA	Graduation	June	6		6/30/2024	Annually	Collection and Research	
Grade Updates	USHE	Registrar	July	7	6/23/2023	7/7/2023	Annual	Compliance	
Historical Financial Aid	USHE	Finance Division	July	7	7/14/2023	7/22/2023	Annual	Compliance	
HEA Student Right to Know	Athletics	HEA	1-Jul	7	6/23/24	7/1/2024	Annual	Compliance	Eric performs an annual review of the requirements to make sure nothing has changed. Has SQL queries to complete the report if it is the same. If not, Effort may increase. Athletics supplies a manual list, BUT
Healthy Minds Survey	Dean of Students / SA	Minds Survey Yulo	July	7		7/31/2024	Every other year	Collection and Research	
National Survey of Student Engagement (NSSE)	AA	Survey NSSE) Yulo	July	7		7/31/2022	Every other year	Collection and Research	currently not reaistered for Sorina 2024 need reaistration before OCT 1st 2023
Perkins list sent out	USHE	Finance Division	July	8	8/4/2023	8/11/2023	Annual	Compliance	
Program File	USHE	BIRS	August	8	8/4/2023	8/11/2023	Annual	Compliance	
DWS Match: Q2 Waaes	USHE	DWS	August	8	8/7/2023	8/25/2023	Quarterly	Compliance	
Fall Missionary File	USHE	Student Affairs Division	August	8	8/14/2023	8/25/2023	Semi-Annual	Compliance	
Register Key Holder	IPEDS	IPEDS	August	8	8/22/2023	8/31/2023	Annual	Compliance	
IPEDS Registration	IPEDS	IPEDS	August	8	8/22/2023	8/31/2023	Annual	Compliance	
Instutional Characteristics (IC) Header	IPEDS	BIRS	August	8	8/22/2023	8/31/2023	Annual/On-time	Compliance	
Report Mapping	IPEDS	BIRS	August	8	8/22/2023	8/31/2023	Annual	Compliance	
Enrollment Calls - Fall Canceled per discussion Andrew Stone	Enrollment Services/ SA	Enrollment	August	8		8/31/2023	3 times per year	Collection and Research	*File documentation on Andrew Stone's decision to cancel Enrollment calls before removing from calendar.*
Space Inventory	USHE	Academic Affairs Division	September	9	8/14/2023	9/1/2023	Annual	Compliance	
Summer EOT	USHE	NSC, BIRS	September	9	9/1/2023	9/15/2023	Annual	Compliance	
Revisions: Spring EOT	USHE	BIRS	September	9	9/7/2023	9/15/2023	Annual	Compliance	
Graduation Report	USHE	Registrar	September	9	9/15/2023	9/22/2023	Semi-Annual	Compliance	
Revisions: Graduation (Prior Year)	USHE	Registrar	September	9	9/15/2023	9/22/2023	Annual	Compliance	
Perkins Participants List	USHE	Finance Division	September	9	9/22/2023	9/29/2023	Annual	Compliance	
Timely Completions (TC) Exclusions	USHE	Academic Affairs Division	September	9	9/22/2023	9/29/2023	Annual	Compliance	
CE Registration	Concurrent Enrollment	Enrollment	September	9		9/30/2023	Semi-annually	Collection and Research	
Fall 3rd Week	USHE	NSC, BIRS	September	10	9/29/2023	10/6/2023	Annual	Compliance	
Institutional Characteristics	IPEDS	BIRS	October	10	10/12/2023	10/19/2023	Annual	Compliance	
Timely Completions	IPEDS	Academic Affairs Division	October	10	10/12/2023	10/19/2023	Semi-Annual	Compliance	
12 Month Enrollment	IPEDS	Admissions	October	10	10/12/2023	10/19/2023	Annual	Compliance	
TC Cohort	USHE	Academic Affairs Division	October	10	10/13/2023	10/20/2023	Annual	Compliance	
New Student Onboarding Survey (NSOS)	SA	New	October	10		10/31/2023	Semi-annually	Collection and Research	
DWS Match: Q3 Waaes	USHE	DWS	November	11	11/17/2023	11/24/2023	Quarterly	Compliance	
Summer and Fall Cohorts Creation (there are a total of 4)	BIRS, Student Affairs Division	BIRS	November	11	11/2/2024	11/9/2024	Annual	Compliance	
Moody's Report	Finance	Moody's	November	11	11/5/2024	11/12/2024	Annual	Compliance	
CUPA	People and Culture	BIRS	November	11	November	November	Annual	Compliance	
Faculty Workload Report -S11	USHE	Academic Affairs Division	December	12	12/1/2023	12/8/2023	Semi-Annual	Compliance	
Veterans Report	USHE	Admissions	December	12	12/1/2023	12/15/2023	Annual	Compliance	
Dean's Merit	Dean Of Students / SA	Budget Office	Fall Term (December)	12	12/7/2024	12/16/2024		Compliance	
Enrollment Calls - Spring Canceled	Enrollment Services/ SA	Enrollment	December	12		12/31/2023		Collection and Research	
Student Opinion Survey (SOS) Fall	Multiple	Student	December	12		12/31/2023	Semi-annually	Collection and Research	
OTL Data Services	Office of Teaching & Learning	BIRS	EOT	12, 5	December, May	December, May	2 X Semester	Compliance	
Graudation Report for Alumni and Institutional Advacement	Institutional Advancement	Graudation	December, June, September	6,9,12			Once Each Semester	Operational Reporting	
Budget Office FTE Report	Budget Office	Finance Division	3rd Week & EOT	8, 12. 1. 5	TBD	August. December. January. May	2 X Semester	Compliance	
Emergency Services	Emergency Services Supt	BIRS	Quarterly	8, 12, 1, 5		Upon Request	Quarterly	Compliance	Usually requested by Emergency Services; data provided upon request
Performance Goals	USHE	UVU Exec. Cmte.	Exact Date TBD	TBD	TBD	TBD	Annual	Compliance	
Common Data Set	IPEDS	BIRS	Exact Date TBD	TBD	TBD	TBD	Annual	Compliance	
SEGO High Impact Practice Survey	AA	SEGO					?	Collection and Research	
Transportation Survey (TS)	Facilities and Planning	Transportation					Every 10 years	Collection and Research	
Active Students with SOWK Attribute	College of Humanities	SOWK Attribute Eern	September, January, May				Once each semester	Operational Reporting	
ASD Student Graduation Data	Office of Accessibility Services	Graduation Data Aary	January, May, August				Once each semester	Operational Reporting	
Canvas Usage	AVP of Student Success	Canvas	September, February, June				Once each semester	Operational Reporting	
Civitas Usage Report	Academic Affairs / Student Affairs Leadership	Civitas	January, February, March, April, May, June, July, August, September, October, November, December				Monthly	Operational Reporting	
Developmental Math Prerequisites Audit Report	Math Department	Audit Report Turn	August, January, April				Once each semester	Operational Reporting	
Engagement Ops Dashboard	Academic Advising	Ops Dashboard Der	January, February, March, April, May, June, July, August, September, October, November, December				Monthly	Operational Reporting	
Enrolled Students from Hawaii High Schools	Multicultural Student Services	High Schools Ser	September, February, June			9/19/2022, 2/6/2023, 6/5/2023	Once each semester	Operational Reporting	
Enrolled Students with AS, CS, AD, CD, CP Academic Standing Report	Academic Standards	Standing Report Tare	May, July			5/22/2023, 7/14/2023	Summer Semester, twice	Operational Reporting	
New Faculty Users for Inspire	Academic Affairs	for Inspire Eer	January, February, March, April, May, June, July, August, September, October, November, December				Weekly	Operational Reporting	
Top 30 Course Engagement	AVP of Student Success	Top	January, February, March, April, May, June, July, August, September, October, November, December				Weekly	Operational Reporting	
Valedictorian Report	Graduation Office	Valedictorian Report Tere	February				2/15/2023 Spring semester only	Operational Reporting	
Vision 2030 Balanced Scorecard	University Executive Council						On Demand	Operational Reporting	
Credit Prior Learning Assessment	USHE	Credit	October				Annually	Operational Reporting	This is a USHE report that has been provided, collaborating with the Registrar's office and Academic Affairs.
School of Education and Secondary Enrollment Dashboard	School of Education	School	October. March. June				Once Each Semester	Operational Reporting	

LEGEND

DWS = Dept. of Workforce Services

DGI = Degree-granting Institution

EOT = End of Term

IPEDS = Integrated Postsecondary Education Data System (Federal)

TC = Timely Completions

USHE = Utah System of Higher Education (State)

NOTES

1/19/2024: USHE reporting calendar has not been released for 2024-25. Specific due dates will be missing until we receive the calendar.

UVU
BUSINESS INTELLIGENCE
& RESEARCH SERVICES

Annual Deliverables - Detail View

Report Name / Deliverable	Delivered to	Delivery Date (Month)	Month	Delivery Date (Day of Year)	Frequency	BIRS Uses	Current Effort (Small, Medium, Large)	Transformation Effort (Small, Medium, Large)	Impact (Low, Medium, High)	Start Month (If different then delivery)	Description / Purpose (Optional)	Is there additional documentation beyond the list?	Who has the list?	Data Domain (sub-domain)	Requestor / Sponsor	Notes

AGENDA

BIRS Retreat

May 19, 2023
8:00 AM – 4 PM

Rules of Engagement	Choose to be present. Be serious but have fun. Assume positive intent. Open minds. Everyone participate, no one dominate.
Location	SC 208, Bowling alley for activity
Materials	Data Visualization Style Guide, Dx Beach Picture, Development Process Docs

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8:00 AM   **Continental Breakfast**

Fresh Fruit Assortment, Pancakes, Hash Browns, 2 Strips of Bacon, Scrambled Eggs, Strawberries, Whipped Cream, Maple Syrup,
Water / Juice

8:30 – 9:00 AM   **Introduction**
Values, Virtues, and Going to the
Beach (Vision)   Facilitator: Laura

9:00 – 9:30 AM   **Exceptional Results:**
Documenting Our Code   Facilitator: Geoff

9:30 – 10:00 AM   **Exceptional Accountability & Results:**
Style Guide   Facilitator: Laura

10:00 – 10:15 AM   **Break**

10:15 – 11:15 AM   **Exceptional Results:**
Feedback on Development Process
Steps   Facilitator: Kari

11:15 – 11:45 AM   **Exceptional Care:**
Customer Service   Facilitator: Todd

11:45 AM – 12:15 PM   **Break and Get Lunch**
Chicken and Alfredo Pasta, Spinach Salad, Roll, Cookie, Water

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12:15 – 1:00 PM   **Learning Paths**   Facilitator: Laura

1:30 PM   **Activity**   UVU Bowling Alleys
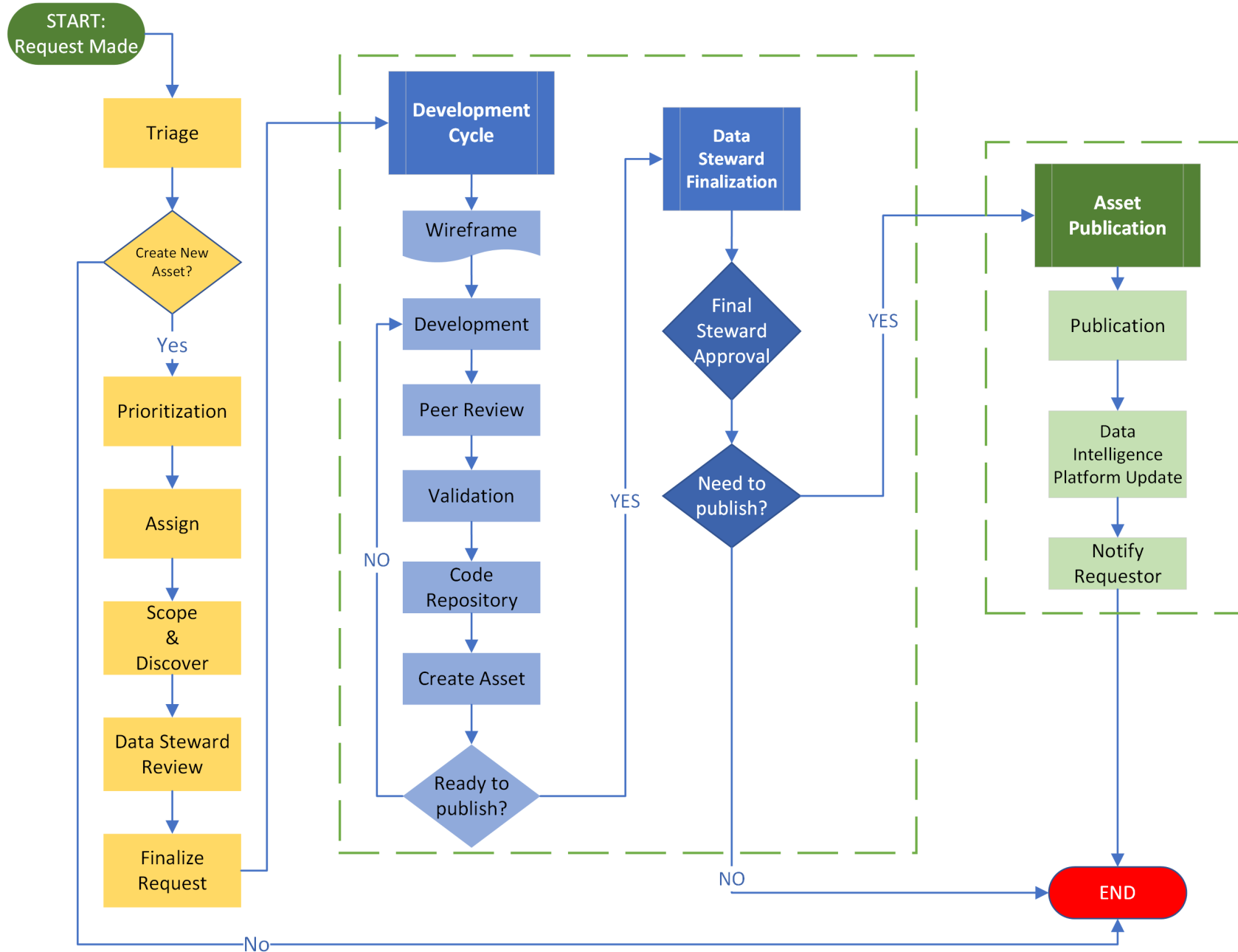Student Life & Wellness Center

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BI Development Process

BIRS Retreat

May 2023

Business Intelligence Development Flow v2 - *Developers*
Consumer Assets: Dashboards, Reports, and Data Sets

START:
Request Made

Triage

Create New Asset?

Yes

Prioritization

Assign

Scope & Discover

Data Steward Review

Finalize Request

No

Development Cycle

Wireframe

Development

Peer Review

Validation

Code Repository

Create Asset

Ready to publish?

NO

YES

Data Steward Finalization

Final Steward Approval

Need to publish?

YES

NO

Asset Publication

Publication

Data Intelligence Platform Update

Notify Requestor

END

What is it?

- Standardized process data developers follow to complete data projects.

- Data developers can be any employee authoring a data asset which will be published and shared with others
  - Not just BIRS Employees

Outcomes / Benefits

- Consistency in development of data assets

- Reduce redundant work – avoid redevelopment

- Other outcomes?
  - Clarity
  - Getting expectations upfront from customer

Process...

- Developer does not surrender professional judgment on how to complete project.

- External Partners should not be unduly burdened by process
  - Developer needs input and subject matter expertise from External Partners

Order of Steps

- Steps may be re-ordered or merged as necessary for a specific project

- Examples:
    - You use SQL already peer reviewed and validated in another project; "peer review" phase in your project may be colleague reviewing final product.
    - Wireframe was completed earlier in project by another analyst

"Skipping" Steps

- Not all steps need to be "completed" but should still be acknowledged; Examples:
  - Wireframe wasn't drawn because customer's needs were simple enough to be described over text. (I need a table with these three filters)
  - Wireframe step was merged with Scope and Discovery step
  - Data steward's review was collected during Triage or Prioritization phase

- Data Stewards should review and approve. Developer should not be setting customer priorities.

Commenting Our Code

Business Intelligence & Research Services

Why Comments

- Better Process
- Easier to migrate
- Empathy

- Do Not Say:
  - "My Code is self commenting."

Where To Comment

- Header
  - Title for Query/Report
  - Brief Description
  - Parameters, if any
  - Database Source
    - Banner Prod
    - Banner Reports
    - UVUODS
    - MS Azure
  - Audience

- Author & Date
  - As changes are made, add the contributor and when
- Change Control
  - What changes were made, and when were they made?

In-Line Comments

- Focus on 'What' is happening – such as with
  - *Case Statements*
  - *Sub Queries*
  - *Calculations*
  - *WHERE statements that need updating*

```
/*
    TITLE OF QUERY/REPORT
    Advisor Assignment Audit Report

    BRIEF DESC - WHAT THE QUERY IS INTENDED TO DO, THE DATA ELEMENTS RETURNED IN THE
RESULT SET
    Generates a list of currently enrolled students and the Advisors who are assigned to them.

    PARAMETERS - DATA ELEMENTS USED TO FILTER OR RESTRICT THE QUERY RESULTS
    :Term_Code - Term Code of the Enrollment Semester

    DATA SOURCE/INSTANCE
    Banner PROD/REPORTS

    AUDIENCE AND REQUESTOR
    Advisors, Katherine Brickey / Vincent Dreyer / Elaine Lewis

    AUTHOR, DATE
    D. Palmer
    L. Busby          10/21/2022 Adapted for Mongoose Cadence File Upload
    K.Gary and T.McKell   4/27/2023 Added Preferred First Name; adjusted for FERPA confidentiality

    ---- CHANGE CONTROL ----
    DATE      CHANGE MADE
    10/21/2022   Removed fields not needed, added phone number
    4/27/2023    Updated first name to default to preferred name; changed phone numbers to "confidential" where
confidentiality requested

*/
```

Values, Virtues, and Going to the Beach

Retreat ● May 19, 2023

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Dx Values

ACCOUNTABILITY	INTEGRITY	EMPATHY	EFFECTIVE COMMUNICATION	DRIVEN TO EXCELLENCE
• Results • Goal Oriented	• Trust • Loyalty • Teamwork	• Service Oriented • Caring • People Smart	• Transparency • Respect	• Improvement • Growth • Innovative • Explorative

Dx Leadership Retreat,

Dx Values

ACCOUNTABILITY	INTEGRITY	EMPATHY	EFFECTIVE COMMUNICATION	DRIVEN TO EXCELLENCE
• Results • Goal Oriented	• Trust • Loyalty • Teamwork	• Service Oriented • Caring • People Smart	• Transparency • Respect	• Improvement • Growth • Innovative • Explorative

Dx Leadership Retreat,

Team Player Virtues

HUMBLE
Lack excessive ego or concerns about status
Share credit, emphasize team over self, and define success collectively

HUNGRY
Self-motivated and diligent
Constantly thinking about the next step and the next opportunity

SMART
Common sense about people
Interpersonally appropriate and aware

The Ideal Team Player, Lencioni, pp. 157-60
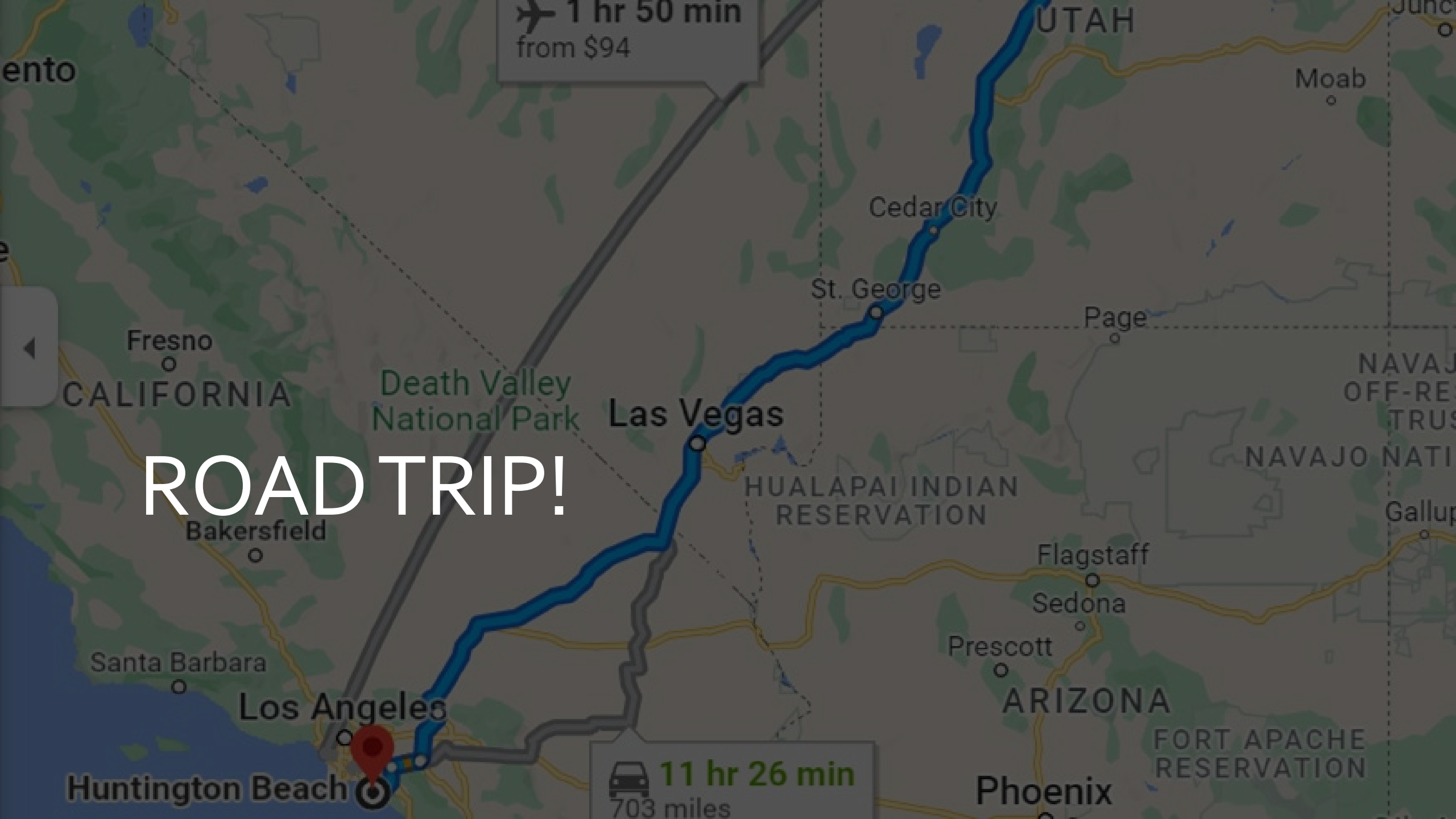
Data Management Alignment

A UVU is a recognized innovator and **thought leader** in higher education digital transformation

H **Employees** can easily access and act on information via their **intranet/mobile apps**

K Employees can access personalized and **curated data** to make informed decisions

M Individuals can get **real-time answers** to their questions

P Users access **standard technologies** via self-service and request exceptions via a clear process

S All **workflows** are optimized, documented, and digitized

T **Data is governed**, reliable, secure, and available via self-service

W Products and services are designed with an **"end-user-first" approach**

Y **Architecture standards** are documented, published, and followed

UVU DIGITAL TRANSFORMATION
UTAH VALLEY UNIVERSITY

Governance & Strategy

- Division Partners
- Policy & Standards
- Priorities
- Indicators

Compliance Reporting

- Definitions
- Validation
- Data Quality

Collection & Research

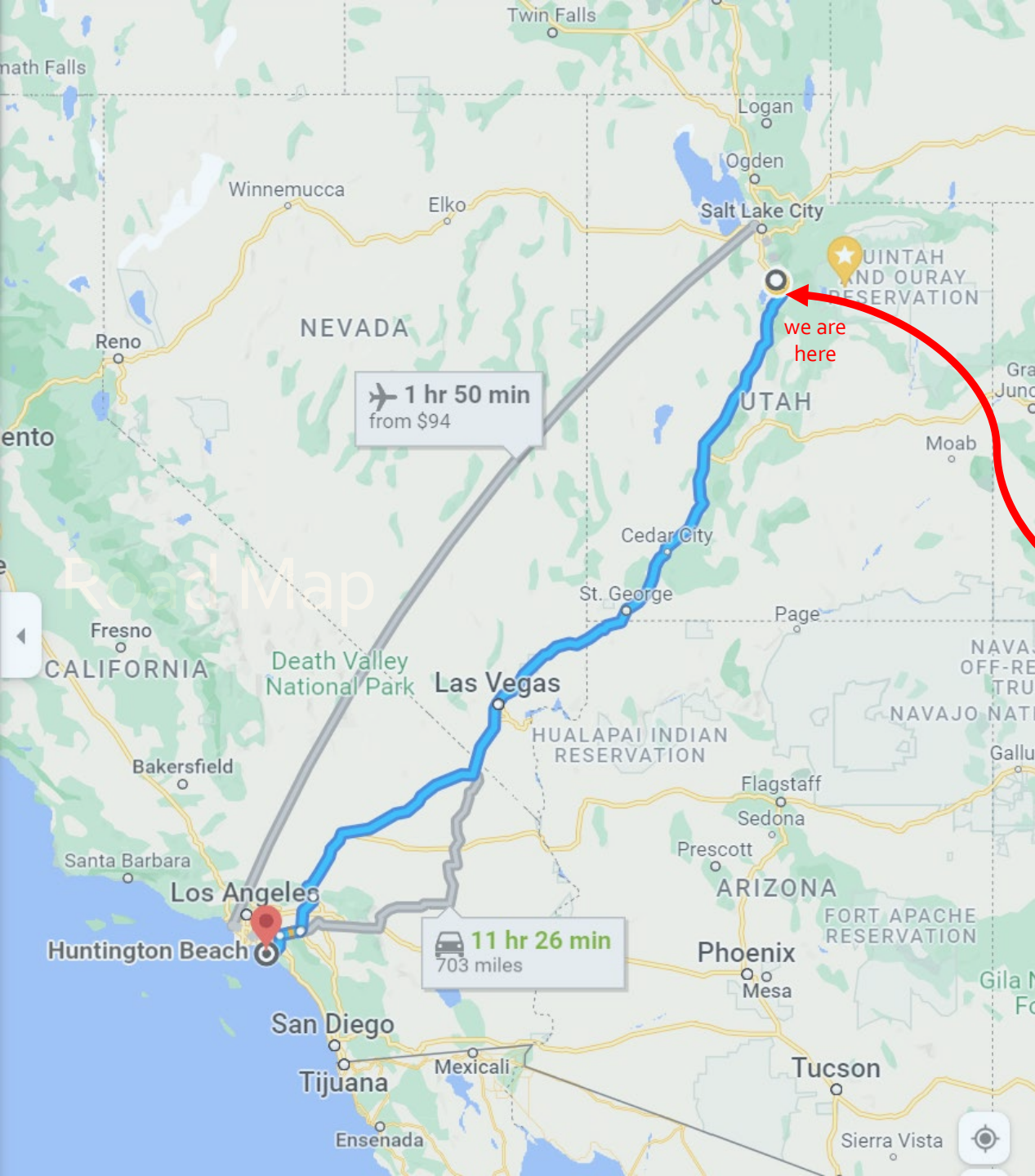- Survey
- UX Research Lab
- Market Research
- Consulting

Business Intelligence

- Key Insights
- Self-Service Ops Reporting
- Dashboards

STANDARDS & PROCEDURES ● SKILLS & TRAINING ● DATA COLLECTION SYSTEMS ● DATA PLATFORM TOOLS ● DATA LITERACY INITIATIVES

DATA QUALITY & GOVERNANCE ● SELF-SERVICE REPORTING ● DATA STRATEGY & PLANNING ● DATA COLLECTION & RESEARCH

FEB	Announce Reorg, 1 on 1 mtgs, Budgets, Planning, Access
MAR	PDs for Sr. BI Analyst & Leadership, Project Calendar, Ideal Team Player
APR	Annual Reviews, Position Descriptions
MAY	Organization & EOY Budget, Calendar to Stakeholders, Sr. BI Analyst AA, Pluralsight access
JUN	Complete Position Descriptions, Learning Path (Foundation), SharePoint, Q3 Project Priorities, USHE definitions in Collibra, DG Retreat
JULY	Jira Consolidation
AUG	Data Summit Call for Presentations, LP Foundation Complete

Opportunities and Partnerships

- Dx Priorities to Cabinet: Transformation
  - High Priority Data Silos
  - Reduce Ad hoc, Increase Self-Service
  - Governance Policy, Business Definitions
  - Data Summit
- Market Research, Other Data Research Tools, UX Lab, and Grant Support
- Data quality assessment; business process support
- Balanced Scorecard & Key Indicators
- Website & Dashboard Refreshes
- Metric Publication, Accountability to Cabinet
- Formal Reporting for Strategic Planning & Assessment
- Data Intelligence Platform Maturity
- Civitas filters and updates
- SRI Pilot → BIRS external peer review, Mature and maintain
- Define data models for Azure

Are we there yet?

Laura, these are the training topics covered in the BIRS training and process series. Did you also want information on the onboarding / foundational training we standardized in the past year?

BIRS Systems and Process Training Past Topics and Future Topics

December
- 12/11/2023: SQL and introduced training resources.

January
- 1/08/2024: SQL: levels of proficiency in SQL; discussed basic to intermediate concepts.
- 1/22/2024: Using JIRA; Processes for using JIRA; when to use statuses
- 1/29/2024: Advanced SQL; discussed aggregation and analytic functions.

February
- 2/05/2024: Using JIRA for logging time in order to estimate work.
- 2/12/2024: Open Q&A for team.
- 2/26/2024: Customer Service Principles and Practices for BIRS.

March
- 3/25/2024: Power BI

Future Training Planned
- April 2024: Power BI
- May 2024: Data Governance System

KARI GARY
UTAH VALLEY UNIVERSITY
Manager BI Development and Operational Reporting
Business Intelligence and Research Services
Kari.Gary@uvu.edu
(801) 863-5935

From: Kari Gary
Sent: Wednesday, February 14, 2024 11:09 AM
To: Laura Busby <Laura.Busby@uvu.edu>; Todd Harper <THarper@uvu.edu>; Cortney Brewerton <Cortney.Brewerton@uvu.edu>

Subject: BIRS Systems and Process Meeting Summary

All, this is a summary of the past topics we've held. Todd and Cortney, please add any details I may have missed. Laura, is this generally what you are looking for from the BIRS leadership team for summaries?

BIRS Systems and Process Training Topics Covered as of 2/14/2024
December
- 12/11/2023: Introducing meeting series; discussed SQL and introduced training resources.

January
- 1/08/2024: SQL
  - Discussed levels of proficiency in SQL; discussed basic to intermediate concepts.
- 1/22/2024: Using JIRA
  - Processes for using JIRA; when to use statuses
- 1/29/2024: Advanced SQL
  - Recapped previous topic; discussed aggregation, analytic functions.

February
- 2/05/2024: Logging time in JIRA and discussion on future topics team would like to see in training.
- 2/12/2024: Open Q&A for team – experimental time; what questions do you have, are you struggling with anything.
  - Team seemed to like the format, but requested advanced notice on when we'll have a Q&A session.

BIRS Leadership to meet 2/15/2024 to plot out next 4 – 6 training weeks.

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DIGITAL
CHANGE IN ACTION
TRANSFORMATION

Today's Agenda

- Data Strategy
- Priorities
- Project requests by Division
- Top 10 Priorities
- 73 KPIs
- "Certified Data"
- Automation

UVU DIGITAL TRANSFORMATION
UTAH VALLEY UNIVERSITY

BIRS and Data Requests

Data to AI Maturity

1 Manual Data Drudgery

Manual reports

Spreadsheets & PowerPoints communicate status

Disagreements on how data was processed

2 Death by Dashboards

Shadow data teams

Only privileged employees can create reports

Big spend on reporting, dashboarding or BI systems

Employees flooded with irrelevant data

Multiple, inconsistent sources of truth

3 Data Tells A Story

Glance-able answers start to simplify employee processes

Multi-source data merging

Consistent view of info up & down the organization

IT & business leadership coordinate work

Measurable results emerge

4 Emerging Intelligence

Consistent measurable results

Proactive information supports employees

Experience tuned for each customer and employee

Smart systems know what to look for

Data crosses silos

5 Transformed Organization

AI/ML is real

New ways of working

Employees focused on high value work, all low value work automated

Recommendations are right for the employee

New business models emerge

LEXITECH

Desired Future State Maturity

INNOVATOR
Information and Technology as a Competitive Advantage

BUSINESS PARTNER
Effective Delivery of Strategic Business Projects

TRUSTED OPERATOR
Enablement of Business through Applications and Work Orders

FIREFIGHTER
Reliable Infrastructure and IT Service Desk

UNSTABLE
Inability to Consistently Deliver Basic Services

Future-2024

Current-2023

BIRS and Data Requests

Data Project Requests

Department	Data Project Requests
Academic Affairs	243
Digital Transformation	56
Finance	15
Institutional Advancement	15
Marketing and Communications	5
Office of General Counsel	0
People and Culture	12
Student Affairs	151
TOTAL	497*

*Note: The same team is also supporting break fix/tickets for Civitas, SRIs, and Faculty Success/Watermark

UVU DIGITAL TRANSFORMATION
UTAH VALLEY UNIVERSITY

Each Department to Prioritize their "Top 10"

E.g., Academic Affairs Top 5

Priority	Project	Date Needed
1	USHE 3-year follow-up data	October 17
2	Gray Associates	October 20
3	Timely completion & high-yield awards	October 17
4	Aggregated data for external partnerships on Balanced Scorecard	March 2024
5	Faculty master spreadsheet	March 2024

UVU DIGITAL TRANSFORMATION
UTAH VALLEY UNIVERSITY

Merging Priorities

What are our priorities?

ACCURACY

SPEED

UVU DIGITAL TRANSFORMATION
UTAH VALLEY UNIVERSITY

Top KPIs (73 identified, 32 "certified")

Row Labels	Count of Primary Measure	Count of Validated
⊟ Christina Baum	6	
⊞ Employment - Hours per Week	1	
⊞ Employment - Status	1	
⊞ Family Status	1	
⊞ Marital Status	1	
⊞ Service Area Economic Statistics - Unemployment	1	
⊞ UVU Service Desk First Response Time	1	
⊟ Jim Mortensen	1	1
⊞ UVU Comparative Tuition & Fee Rate	1	1
⊟ Kara Schneck	3	
⊞ Community Awareness (MarComm)	1	
⊞ Engagement (MarComm)	1	
⊞ Sentiment (MarComm)	1	
⊟ Kyle Reyes	5	4
⊞ Fundraising: Annual Number of Alumni Gifts	1	1
⊞ Fundraising: Major Gifts	1	1
⊞ Fundraising: Principal Gifts	1	1
⊞ Fundraising: Total Annual Gifts	1	1
⊞ UVU Alumni Residency	1	
⊟ Marilyn Meyer	2	
⊞ Full-Time Employee Internal Hire	1	
⊞ Full-Time Employee Turnover Ratio	1	

Top KPIs (73 identified, 32 "certified")

	34	12
⊟ **Michelle Kearns**		
⊞ **4 Year Graduation Rates**	1	
⊞ **6 Year Graduation Rate**	1	
⊞ **6 Year Graduation Rate (Outcome Measure) for Underrepresented Students**	1	1
⊞ **6 Year Graduation Rate by Race/Ethnicity and International**	1	1
⊞ **8 Year Graduation Rate (Outcome Measure)**	2	
⊞ **8 Year Graduation Rate (Outcome Measure) By Award Type, Gender, and Award Year**	1	
⊞ **8 Year Graduation Rate (Outcome Measure) for Underrepresented Students**	1	1
⊞ **8 Year Graduation Rate (Outcome Measure) Trendline and Predictions**	1	
⊞ **8 Year Graduation Rate (Outcome Measure) vs. Peers**	1	
⊞ **Enrollment Rate for Underrepresented Students**	1	1
⊞ **FAFSA Completion**	1	1
⊞ **First Generation**	1	
⊞ **Gender**	1	1
⊞ **Institutional Open Admissions Status**	3	
⊞ **Outcome Measure Impact**	1	1
⊞ **Participation in PK-12 Programs**	1	
⊞ **Pell-eligible Students**	1	
⊞ **Performance Funding: Access**	1	
⊞ **Potential Completion Rates**	2	
⊞ **Race/Ethnicity**	1	1
⊞ **Remediation - Math**	1	
⊞ **Student Age Groups / Adult Learners**	1	
⊞ **Student Belonging - UVU**	1	1
⊞ **Student Belonging - UVU Community/Social**	1	1
⊞ **Student Culture - Debt?**	1	
⊞ **Student Enrollment / Population by Race and Ethnicity**	1	1
⊞ **Student Enrollment / Population by Residency Status**	1	1
⊞ **Student Time Status**	1	
⊞ **Top Student Barriers to completion**	1	
⊞ **Total Fall XXXX Enrollment Comparison to Peer Institutions**	1	

UVU DIGITAL TRANSFORMATION
UTAH VALLEY UNIVERSITY

Top KPIs (73 identified, 32 "certified")

Val Peterson	**2**	**2**
⊞ **Room Utilization Rate by Room Type**	1	1
⊞ **Seat Occupancy Rate by Room Type**	1	1
Wayne Vaught	**20**	**13**
⊞ **Awards - by USHE Institution**	1	1
⊞ **Awards - by USHE Institution, Year over Year Change**	1	1
⊞ **Awards - UVU**	1	1
⊞ **Comparison of Awards to Cost**	1	
⊞ **Completions by Academic Year**	1	1
⊞ **Coordinating 6-Year and 8-Year Bachelor Graduation Rates**	1	
⊞ **External Partnerships**	1	
⊞ **Fully Online Programs**	1	1
⊞ **General Education Average Fill Rate by Course Modality**	1	1
⊞ **Graduates**	1	1
⊞ **Graduation Outcome Measure Comparison to USHE PBF Timely Completion**	1	
⊞ **High Impact Practices (HIPs) Completion**	1	1
⊞ **Number of Graduates**	1	1
⊞ **Performance Funding: High Yield Awards - All**	1	1
⊞ **Performance Funding: High Yield Awards - Underrepresented Students**	1	1
⊞ **Performance Funding: Timely Completion**	1	1
⊞ **Prior Learning Credits**	1	
⊞ **Retention Rate (overall)**	1	
⊞ **Retention Rate by Cohort, vs. Peers**	1	
⊞ **Student Retention Rate by Race and Ethnicity, International**	1	1
Grand Total	**73**	**32**

Marketing Symbols

Unique Characteristics of UVU Students

- **37%** are first-generation students 🎗️
- **29%** are age 25 or older
- **37%** are married or in a partnership
- **14%** support at least one child
- **82%** are employed
- **28%** work more than 31 hours per week
- **19%** are students of color 🎗️

"UVU students are often balancing careers, school, and family...Supporting their need for flexibility through the use of **technology enhances student success**."

~ President Tuminez, 2022

Next Step – Automation (top 35 reports)

DISCUSSION

UVU's implementation of the Collibra Data Intelligence Platform – Basic Views

Employee Portal – Licensed for all UVU Employees
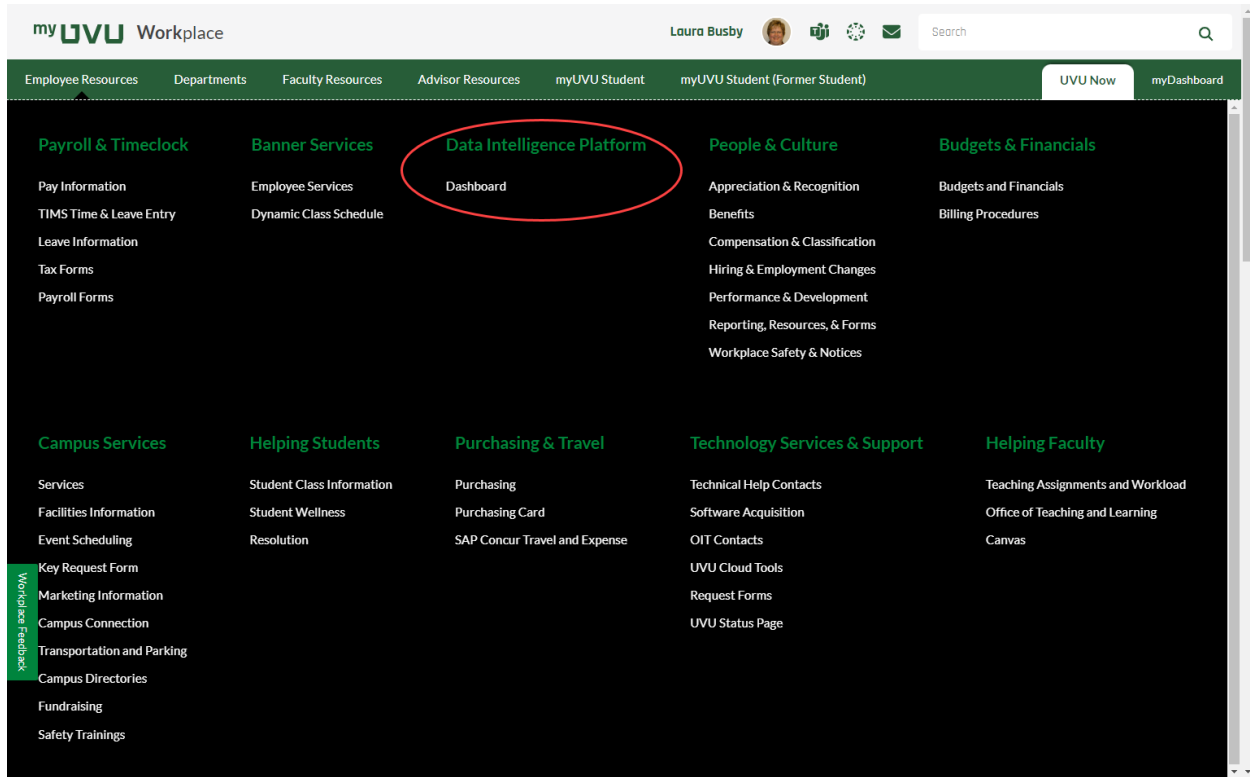
Collibra Welcome Dashboard
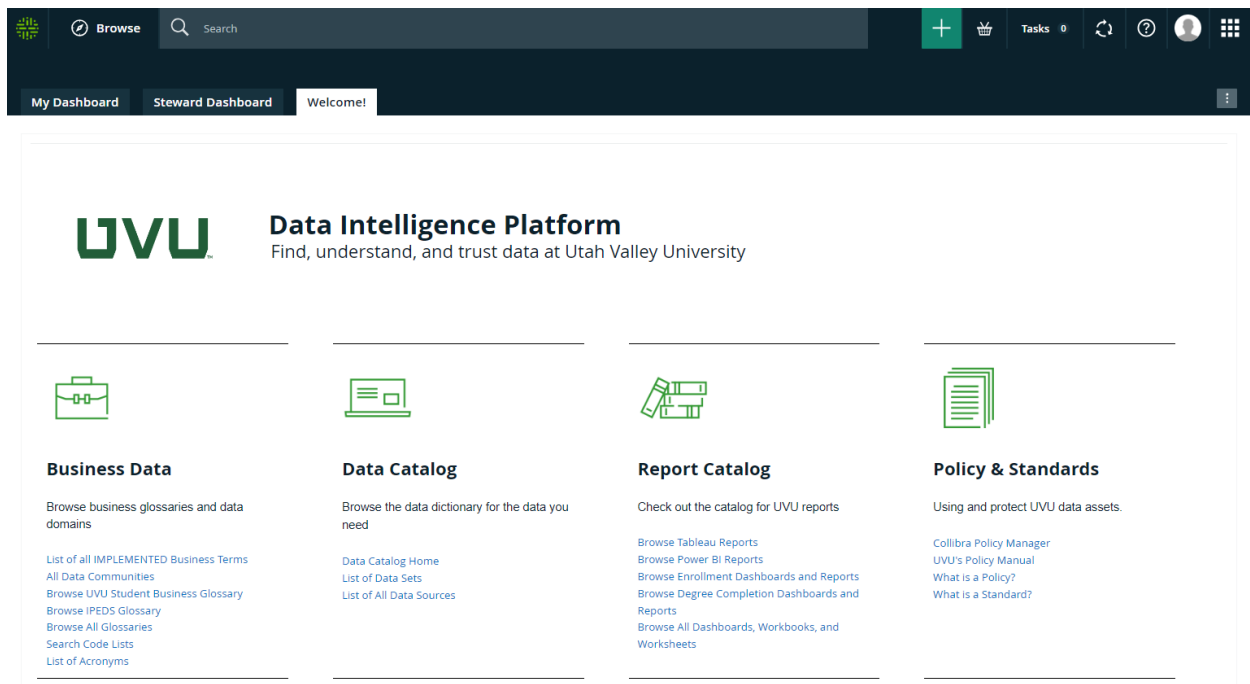
UVU data domains represented as Collibra communities; Institutional KPIs and Measures glossaries

DIGITAL TRANSFORMATION

BEACH PICTURE: A-Z

Our Mission is…

to **lead** UVU's digital transformation by providing **reliable, state-of-the-art** solutions for our **teaching, learning,** and **work** environments that are **intuitive, transparent,** and **delightful** to use.

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Community Outreach	A	UVU is a recognized innovator and **thought leader** in higher education digital transformation
	B	Dx provides substantial **engaged learning** experiences for students
	C	Dx employees engage socially and professionally at UVU and in the **technology community**
	D	Dx leverages the power of **artificial intelligence** and machine learning
User Experience	E	Students and faculty have a **consistent experience** with technology from class to class
	F	Technology is primed and **ready prior to the first day** of class or work
	G	**Students** can easily access and act on information via their **intranet/mobile apps**
	H	**Employees** can easily access and act on information via their **intranet/mobile apps**
	I	Students can access necessary technology **resources on and off campus**
	J	Users' **communication methods** are simplified, standardized, and consistent
	K	Employees can access personalized and **curated data** to make informed decisions
	L	**Hybrid meetings** are technologically seamless
Support & Service	M	Individuals can get **real-time answers** to their questions
	N	Dx **monitors systems' statuses** and fixes issues before users are adversely affected
	O	UVU campuses have reliable **networks and cellular coverage**
	P	Users access **standard technologies** via self-service and request exceptions via a clear process
Dx Internal Improvements	Q	All **IT assets are managed** in a central database
	R	All services have been documented and critical systems have tested **business continuity plans**
	S	All **workflows** are optimized, documented, and digitized
	T	**Data is governed**, reliable, secure, and available via self-service
	U	The directory, role, and **identity management** system is accurate and updates automatically
	V	Dx updates **infrastructure and classroom technology** in line with industry-standard life cycles
	W	Products and services are designed with a **"end-user-first" approach**
	X	**Dx competencies, skills, and practices** reflect industry best practices
	Y	**Architecture standards** are documented, published, and followed
	Z	Dx has a **strategic financial plan** to maintain and innovate product and service offerings

Measures Used to Tell UVU's Story

Gathered from Executive Slides, Internal Scorecards/Dashboards, and External Reporting Requirements for USHE and IPEDS - Potential Key Performance Indicators

	Key Performance Indicators (A Measure which has a baseline and a goal).	Measure: Can be calculated, show trends, etc. but UVU does not have a specific goal for the measure.		Total Measures: 76	Validated: 33	**43%**			Updated 02/04/2024

Primary Measure	Collibra Entry (UVU Community/Domain unless otherwise noted)	Description	Data Owner	Refresh Rate	Validated	Data Producer / Department	UVU Governs Measure Raw Data 100%?	External Data or Calculation Dependency?	TYPE
6 Year Graduation Rate (Outcome Measure) for Underrepresented Students	6 Year Graduation Rate for Underrepresented Students	6 Year Graduation Rate of Underrepresented Students (Cohort)	Michelle Kearns	Annual	Yes	BIRS / IPEDS	YES	IPEDS	MEASURE
6 Year Graduation Rate by Race/Ethnicity and International	6 Year Graduation Rate by Race/Ethnicity and International	6 Year Graduation Rate by Race/Ethnicity and International (Cohort)	Michelle Kearns	Annual	Yes	BIRS / IPEDS	YES	IPEDS	MEASURE
8 Year Graduation Rate (Outcome Measure) for Underrepresented Students	8 Year Graduation Rate for Underrepresented Students	Compare to 2012/13-2020 Cohort	Michelle Kearns	Annual	Yes	BIRS / IPEDS	YES	IPEDS	MEASURE
Awards - UVU	Total Awards	Number of Awards given to Students; USHE Academic Year	Michelle Kearns / Wayne Vaught	Annual	Yes	BIRS	YES		MEASURE
Completions by Academic Year	Completions	Number of students receiving an award; USHE Academic Year	Michelle Kearns / Wayne Vaught	Annual	Yes	BIRS	YES		MEASURE
Enrollment Rate for Underrepresented Students	Enrollment Rate for Underrepresented Students	% of UVU enrolled students who are in underrepresented / underserved population.	Michelle Kearns	Annual, Fall Semester	Yes	BIRS / Enrollment Mgmt	YES		MEASURE
Fully Online Programs	Fully Online Program Count	Number of Curriculum Programs Compared to Goal	Wayne Vaught	Annual	Yes	AA / Enrollment Mgmt	YES		MEASURE
Fundraising: Annual Number of Alumni Gifts	Fundraising: Annual Number of Alumni Gifts	Total number of gifts, annually	Kyle Reyes	Annual	Yes	Institutional Advancement	YES		KEY PERFORMANCE INDICATOR
Fundraising: Major Gifts	Fundraising: Major Gifts	Donation or gift of $25K to < $1 Million	Kyle Reyes	Annual	Yes	Institutional Advancement	YES		KEY PERFORMANCE INDICATOR
Fundraising: Principal Gifts	Fundraising: Principal Gifts	Donation or gift of $1 Million or above	Kyle Reyes	Annual	Yes	Institutional Advancement	YES		KEY PERFORMANCE INDICATOR
Fundraising: Total Annual Gifts	Fundraising: Total Annual Gifts	Donation or gift less than $25K	Kyle Reyes	Annual	Yes	Institutional Advancement	YES		KEY PERFORMANCE INDICATOR
Gender	Gender Ratios	% of Students Enrolled at third week census by Gender	Michelle Kearns	Annual, Fall Semester	Yes	BIRS	YES		MEASURE
General Education Average Fill Rate by Course Modality	General Education Fill Rate by Course Modality	Face to Face, Mixed, Online	Wayne Vaught	Annual, Fall Semester	Yes	BIRS, AA AVP Student Success	YES		MEASURE
Graduates	Graduate Count by Race/Ethnicity	Total number by USHE Academic Year, by Race/Ethnicity	Wayne Vaught / Michelle Kearns	Annual, USHE Academic Year	Yes	BIRS	YES		MEASURE
High Impact Practices (HIPs) Completion	High Impact Practices (HIPs) Completion	Distinct Students	Wayne Vaught	Annual	Yes	AA AVP Innovation	YES		KEY PERFORMANCE INDICATOR
Number of Graduates	AKA - POTENTIAL DUPLICATE. Which term should be used? Completions or Graduates?	Number of Students who Received an Award; USHE Academic Year	Wayne Vaught / Michelle Kearns	Annual	Yes	BIRS, Enrollment Mgmt	YES		MEASURE
Outcome Measure Impact	Outcome Measure Impact Percentage	Number of Students impacted by a single % point increase, dependent upon 8 year Outcome Measure.	Michelle Kearns	Annual	Yes	BIRS, Enrollment Mgmt	YES		MEASURE
Race/Ethnicity		% of Students Enrolled at third week census by Race / Ethnicity	Michelle Kearns	Annual, Fall Semester	Yes	BIRS, Enrollment Mgmt	YES		MEASURE
Room Utilization Rate by Room Type	Room Utilization Rate for Classrooms / Room Utilization Rate for Teaching Labs	Classrooms, Labs	Val Peterson / Wayne Vaught / Michelle Kearns	Annual, December 1 for previous USHE AY	Yes	BIRS, AA Class Scheduling, Facilities, SA Event Scheduling	YES	USHE	KEY PERFORMANCE INDICATOR
Seat Occupancy Rate by Room Type	Seat Occupancy Rate for Classrooms / Seat Occupancy Rate for Teaching Labs	Classrooms, Labs	Val Peterson / Wayne Vaught / Michelle Kearns	Annual, December 1 for previous USHE AY	Yes	BIRS, AA Class Scheduling, Facilities, SA Event Scheduling	YES	USHE	KEY PERFORMANCE INDICATOR
Student Belonging - UVU Community/Social		% of Students who responded "Yes" to "I have a group, community, or social circle at UVU where I feel I belong" on the Healthy Minds Survey, Fall 2020	Michelle Kearns / Christina Baum		Yes	BIRS Survey	YES		MEASURE
Student Enrollment / Population by Race and Ethnicity		Headcount, Full-time Equivalent (FTE), Budget Related FTE	Michelle Kearns	Annual, Fall Semester	Yes	BIRS, Enrollment Mgmt	YES		MEASURE
Student Enrollment / Population by Residency Status		Number of Students compared to Goal, Each Semester	Michelle Kearns	Annual, Fall Semester	Yes	BIRS, Enrollment Mgmt	YES		MEASURE
Student Retention Rate by Race and Ethnicity, International		% of Students Retained by Term, compared to Goal; First time, Full Time Bachelor Degree Seeking	Michelle Kearns / Wayne Vaught	Annual, Fall Semester	Yes	BIRS, Enrollment Mgmt, AA AVP Student Success	YES		MEASURE
4 Year graduation rate (Cohort)		4 Year graduation rate (Cohort)	Michelle Kearns	Annual		BIRS / IPEDS	YES		MEASURE
6 Year Graduation Rate		6 Year Graduation Rate (First-time, Full-time, Bachelor Degree seeking Cohort)	Michelle Kearns	Annual		BIRS / IPEDS	YES		6 MEASURE
8 Year Graduation Rate (Outcome Measure)	8 Year Graduation Rate	8 Year Graduation Rate, First-time, Full-time, Bachelor Degree Seeking Cohort)	Michelle Kearns	Annual		BIRS / IPEDS	YES		KEY PERFORMANCE INDICATOR
8 Year Graduation Rate (Outcome Measure)		8 Year Graduation Rate by Student Demographics (Mixed Demos): - BIPOC, Race/Ethnicity	Michelle Kearns	Annual		BIRS / IPEDS	YES		MEASURE
8 Year Graduation Rate (Outcome Measure) By Award Type, Gender, and Award Year		8 Year Graduation Rate By Award Type, Gender, and Award Year (Cohort)	Michelle Kearns	Annual		BIRS / IPEDS	YES		MEASURE
8 Year Graduation Rate (Outcome Measure) Trendline and Predictions		Trendline and predictions; by cohort	Michelle Kearns	Annual		BIRS / IPEDS	YES		MEASURE
8 Year Graduation Rate (Outcome Measure) vs. Peers		by Cohort; UVU vs. Peers	Michelle Kearns	Annual		BIRS / IPEDS	YES		MEASURE
Coordinating 6-Year and 8-Year Bachelor Graduation Rates		Using same starting Cohort (First-Time, Full-Time, Fall) to show trends each year	Michelle Kearns / Wayne Vaught	Annual		BIRS / Enrollment Mgmt	YES		MEASURE
Employment - Hours per Week		% of students who work 31 or more hours per week	Christina Baum / BIRS Survey	Annual		BIRS	YES		MEASURE
Employment - Status		% of students who are employed	Christina Baum / BIRS Survey	Annual		BIRS	YES		MEASURE
External Partnerships		External Partnerships data aggregated by One-time Engagements and Top Tier.	Wayne Vaught	Annual		BIRS / AA AVP Innovation	YES		MEASURE
Family Status		% of students who have children/dependents	Christina Baum / BIRS Survey	Annual		BIRS	YES		MEASURE
First Generation		% of students who report they are first generation. Should be based on third week census, Fall semester.	Michelle Kearns	Annual, Fall Semester		BIRS / Enrollment Mgmt	YES		MEASURE
Full-Time Employee Internal Hire		Percent of vacant positions filled by internal employee.	Marilyn Meyer	Annual		People & Culture (HRIS)	YES		MEASURE
Full-Time Employee Turnover Ratio		Percent of FT Employees whose employment at UVU ended in a fiscal year	Marilyn Meyer	Annual		People & Culture (HRIS)	YES		MEASURE
Graduation Outcome Measure Comparison to USHE PBF Timely Completion		6-Year Graduation Rate, 8-Year Graduation Rate, USHE Timely Completion	Michelle Kearns / Wayne Vaught	Annual, USHE Academic Year		BIRS, Enrollment Mgmt	YES		MEASURE
Marital Status		% of students who are married or in a partnership	Christina Baum / BIRS Survey	Annual		BIRS	YES		MEASURE
Potential Completion Rates		by Admission Requirements Category	Michelle Kearns	Annual		BIRS, Enrollment Mgmt	YES		MEASURE
Potential Completion Rates		by Admission Requirements Category; by Gender	Michelle Kearns	Annual		BIRS, Enrollment Mgmt	YES		MEASURE
Prior Learning Credits		Credits Awarded, Distinct Students Receiving Credits	Michelle Kearns / Wayne Vaught	Annual		BIRS, Enrollment Mgmt, AA AVP Student Success	YES		MEASURE
Remediation - Math		Required, based on admissions?	Michelle Kearns	Annual		BIRS, Enrollment Mgmt	YES		MEASURE
Retention Rate (overall)		First-time, Full-time, Bachelor Degree seeking	Michelle Kearns / Wayne Vaught	Annual		BIRS	YES		KEY PERFORMANCE INDICATOR
Student Age Groups / Adult Learners		% of Students Enrolled who are 25+	Michelle Kearns	Annual		BIRS	YES		MEASURE
Student Rating of Instruction Response Rate		Survey response rate for all UVU student rating of instruction surveys for a given semester. Surveys completed / total surveys issued = Response Rate	Wayne Vaught	Fall Semester	Yes	BIRS	YES		MEASURE
Student Time Status		% and number of students attending Part Time vs. Full Time, Fall Semester	Michelle Kearns	Annual, Fall Semester		BIRS, Enrollment Mgmt	YES		MEASURE
Top Student Barriers to completion		Top Reasons Why Students "Stop Out" or Leave, % responses by barrier	Michelle Kearns / Christina Baum			BIRS Survey, Enrollment Mgmt	YES		MEASURE
UVU Alumni Residency		% of Students remaining in Utah by Service Region, Elsewhere in Utah, and % of Alumni Outside of Utah after "X" number of years. Current reported metric is 10 years	Christina Baum / Kyle Reyes	Annual		BIRS Survey	YES		MEASURE
UVU Service Desk First Response Time		Average number of minutes to first response by Service Desk agents.	Christina Baum	Annual		Digital Transformation	YES		MEASURE

Measures Used to Tell UVU's Story

Gathered from Executive Slides, Internal Scorecards/Dashboards, and External Reporting Requirements for USHE and IPEDS - Potential Key Performance Indicators

Primary Measure	Description	Data Owner	Secondary Owner(s)	Refresh Rate	Validated	Reported T	Data Producer / Department
4 Year Graduation Rates	4 Year graduation rate (Cohort)	Michelle Kearns		Annual			BIRS / IPEDS
6 Year Graduation Rate	6 Year Graduation Rate (First-time, Full-time, Bachelor Degree seeking Cohort)	Michelle Kearns		Annual			BIRS / IPEDS
6 Year Graduation Rate (Outcome Measure) for Underrepresented Students	6 Year Graduation Rate of Underrepresented Students (Cohort)	Michelle Kearns		Annual	Yes		BIRS / IPEDS
6 Year Graduation Rate by Race/Ethnicity and International	6 Year Graduation Rate by Race/Ethnicity and International (Cohort)	Michelle Kearns		Annual	Yes		BIRS / IPEDS
8 Year Graduation Rate (Outcome Measure)	8 Year Graduation Rate, First-time, Full-time, Bachelor Degree Seeking Cohort)	Michelle Kearns		Annual			BIRS / IPEDS
8 Year Graduation Rate (Outcome Measure)	8 Year Graduation Rate by Student Demographics (Mixed Demos): - BIPOC, Race/Ethnicity	Michelle Kearns		Annual			BIRS / IPEDS
8 Year Graduation Rate (Outcome Measure) By Award Type, Gender, and Award Year	8 Year Graduation Rate By Award Type, Gender, and Award Year (Cohort)	Michelle Kearns		Annual			BIRS / IPEDS
8 Year Graduation Rate (Outcome Measure) for Underrepresented Students	Compare to 2012/13-2020 Cohort	Michelle Kearns		Annual	Yes		BIRS / IPEDS
8 Year Graduation Rate (Outcome Measure) Trendline and Predictions	Trendline and predictions; by cohort	Michelle Kearns		Annual			BIRS / IPEDS
8 Year Graduation Rate (Outcome Measure) vs. Peers	by Cohort; UVU vs. Peers	Michelle Kearns		Annual			BIRS / IPEDS
Awards - by USHE Institution	By USHE Degree- Granting Institution, for an Academic Year	Wayne Vaught	Michelle Kearns	Annual	Yes		BIRS / USHE
Awards - by USHE Institution, Year over Year Change	By USHE Degree- Granting Institution, # Change Year over Year	Wayne Vaught	Michelle Kearns	Annual	Yes		BIRS / USHE
Awards - UVU	Number of Awards given to Students; USHE Academic Year	Wayne Vaught	Michelle Kearns	Annual	Yes		BIRS
Community Awareness (MarComm)	Brand Impressions; Reach	Kara Schneck					MarComm
Comparison of Awards to Cost	By USHE Degree- Granting Institution, # Change Year over Year	Wayne Vaught	Jim Mortensen	Annual			BIRS, Finance/Budget
Completions by Academic Year	Number of students receiving an award; USHE Academic Year	Wayne Vaught	Michelle Kearns	Annual	Yes		BIRS
Coordinating 6-Year and 8-Year Bachelor Graduation Rates	Using same starting Cohort (First-Time, Full-Time, Fall) to show trends each year	Wayne Vaught	Michelle Kearns	Annual			BIRS / Enrollment Mgmt
Employment - Hours per Week	% of students who work 31 or more hours per week	Christina Baum		Annual			BIRS
Employment - Status	% of students who are employed	Christina Baum		Annual			BIRS
Engagement (MarComm)	Post Engagement; Mentions	Kara Schneck					MarComm
Enrollment Rate for Underrepresented Students	% of UVU enrolled students who are in underrepresented / underserved population.	Michelle Kearns		Annual, Fall Semester	Yes		BIRS / Enrollment Mgmt
External Partnerships	External Partnerships data aggregated by One-time Engagements and Top Tier.	Wayne Vaught		Annual			BIRS / AA AVP Innovation
FAFSA Completion	% of enrolled students who have completed a FAFSA, excluding high school, by semester	Michelle Kearns		Annual, Fall Semester	Yes		Financial Aid
Family Status	% of students who have children/dependents	Christina Baum	Michelle Kearns	Annual			BIRS
First Generation	% of students who report they are first generation. Should be based on third week census, Fall semester.	Michelle Kearns		Annual, Fall Semester			BIRS / Enrollment Mgmt
Full-Time Employee Internal Hire	Percent of vacant positions filled by internal employee.	Marilyn Meyer		Annual			People & Culture (HRIS)
Full-Time Employee Turnover Ratio	Percent of FT Employees whose employment at UVU ended in a fiscal year	Marilyn Meyer		Annual			People & Culture (HRIS)
Fully Online Programs	Number of Curriculum Programs Compared to Goal	Wayne Vaught		Annual	Yes		AA / Enrollment Mgmt
Fundraising: Annual Number of Alumni Gifts	Total number of gifts, annually	Kyle Reyes		Annual	Yes		Institutional Advancement
Fundraising: Major Gifts	Donation or gift of $25K to < $1 Million	Kyle Reyes		Annual	Yes		Institutional Advancement
Fundraising: Principal Gifts	Donation or gift of $1 Million or above	Kyle Reyes		Annual	Yes		Institutional Advancement
Fundraising: Total Annual Gifts	Donation or gift less than $25K	Kyle Reyes		Annual	Yes		Institutional Advancement
Gender	% of Students Enrolled at third week census by Gender	Michelle Kearns		Annual, Fall Semester	Yes		BIRS
General Education Average Fill Rate by Course Modality	Face to Face, Mixed, Online	Wayne Vaught		Annual, Fall Semester	Yes		BIRS, AA AVP Student Success
Graduates	Total number by USHE Academic Year, by Race/Ethnicity	Wayne Vaught	Michelle Kearns	Annual, USHE Academic Year	Yes		BIRS
Graduation Outcome Measure Comparison to USHE PBF Timely Completion	6-Year Graduation Rate, 8-Year Graduation Rate, USHE Timely Completion	Wayne Vaught	Michelle Kearns	Annual, USHE Academic Year			BIRS, Enrollment Mgmt
High Impact Practices (HIPs) Completion	Distinct Students	Wayne Vaught		Annual	Yes		AA AVP Innovation
Institutional Open Admissions Status	By US, public	Michelle Kearns		Annual			IPEDS, Enrollment Mgmt
Institutional Open Admissions Status	By US, public, bachelor offering, for 1st time UG	Michelle Kearns		Annual			IPEDS, Enrollment Mgmt
Institutional Open Admissions Status	By US, public, associate offering, for 1st time UG	Michelle Kearns		Annual			IPEDS, Enrollment Mgmt
Marital Status	% of students who are married or in a partnership	Christina Baum		Annual			BIRS
Number of Graduates	Number of Students who Received an Award; USHE Academic Year	Wayne Vaught	Michelle Kearns	Annual	Yes		BIRS, Enrollment Mgmt
Outcome Measure Impact	Number of Students impacted by a single % point increase, dependent upon 8 year Outcome Measure.	Michelle Kearns		Annual	Yes		BIRS, Enrollment Mgmt
Participation in PK-12 Programs	Number of Participants by Program	Michelle Kearns		Annual			SA AVP PreK-16/Outreach/Partnerships
Pell-eligible Students	% of enrolled students who are eligible to receive a Pell Grant.	Michelle Kearns		Annual			Financial Aid
Performance Funding: Access	USHE System Measure; UVU Contributing	Michelle Kearns	USHE	Annual			USHE
Performance Funding: High Yield Awards - All	Annual % Compared to Annual Goal	Wayne Vaught		Annual, USHE Academic Year	Yes		BIRS / USHE
Performance Funding: High Yield Awards - Underrepresented Students	Annual % Compared to Annual Goal	Wayne Vaught		Annual, USHE Academic Year	Yes		BIRS / USHE
Performance Funding: Timely Completion	Annual % achieved, Compared to Annual Goal	Wayne Vaught	Michelle Kearns	Annual, USHE Academic Year	Yes		USHE / BIRS
Potential Completion Rates	by Admission Requirements Category	Michelle Kearns		Annual			BIRS, Enrollment Mgmt
Potential Completion Rates	by Admission Requirements Category; by Gender	Michelle Kearns		Annual			BIRS, Enrollment Mgmt
Prior Learning Credits	Credits Awarded, Distinct Students Receiving Credits	Wayne Vaught	Michelle Kearns	Annual			BIRS, Enrollment Mgmt, AA AVP Student Success
Race/Ethnicity	% of Students Enrolled at third week census by Race / Ethnicity	Michelle Kearns		Annual, Fall Semester	Yes		BIRS, Enrollment Mgmt
Remediation - Math	Required, based on admissions?	Michelle Kearns		Annual			BIRS, Enrollment Mgmt
Retention Rate (overall)	First-time, Full-time, Bachelor Degree seeking	Wayne Vaught	Michelle Kearns	Annual			
Retention Rate by Cohort, vs. Peers	by Cohort; UVU vs. Peers	Wayne Vaught	Michelle Kearns	Annual			
Room Utilization Rate by Room Type	Classrooms, Labs	Val Peterson	Wayne Vaught, Michelle Kearns	Annual, December 1 for previous USHE AY	Yes		BIRS, AA Class Scheduling, Facilities, SA Event Scheduling
Seat Occupancy Rate by Room Type	Classrooms, Labs	Val Peterson	Wayne Vaught, Michelle Kearns	Annual, December 1 for previous USHE AY	Yes		BIRS, AA Class Scheduling, Facilities, SA Event Scheduling
Sentiment (MarComm)	Sentiment Categories compared to targets	Kara Schneck		Annual			MarComm
Service Area Economic Statistics - Unemployment	By Area Compared to State	Christina Baum		Annual			BIRS
Student Age Groups / Adult Learners	% of Students Enrolled who are 25+	Christina Baum		Annual			BIRS
Student Belonging - UVU	% of Students who responded "Yes" to "I feel that I belong at my College/University" on the ACHA/NCHA III Survey, Spring 2023	Michelle Kearns	Christina Baum		Yes		BIRS Survey, Other Surveys
Student Belonging - UVU Community/Social	% of Students who responded "Yes" to "I have a group, community, or social circle at UVU where I feel I belong" on the Healthy Minds Survey, Fall 2020	Michelle Kearns	Christina Baum		Yes		BIRS Survey, Other Surveys
Student Culture - Debt?	Statement on Student sentiment toward debt; Cannot confirm data or survey to support.	Michelle Kearns					
Student Enrollment / Population by Race and Ethnicity	Headcount, Full-time Equivalent (FTE), Budget Related FTE	Michelle Kearns		Annual, Fall Semester	Yes		BIRS, Enrollment Mgmt
Student Enrollment / Population by Residency Status	Number of Students compared to Goal, Each Semester	Michelle Kearns		Annual, Fall Semester	Yes		BIRS, Enrollment Mgmt
Student Retention Rate by Race and Ethnicity, International	% of Students Retained by Term, compared to Goal; First time, Full Time Bachelor Degree Seeking	Wayne Vaught	Michelle Kearns	Annual, Fall Semester	Yes		BIRS, Enrollment Mgmt, AA AVP Student Success
Student Time Status	% and number of students attending Part Time vs. Full Time, Fall Semester	Michelle Kearns		Annual, Fall Semester			BIRS, Enrollment Mgmt
Top Student Barriers to completion	Top Reasons Why Students "Stop Out" or Leave, % responses by barrier	Michelle Kearns	Christina Baum				BIRS Survey, Enrollment Mgmt
Total Fall XXXX Enrollment Comparison to Peer Institutions	Total Fall XXXX Enrollment Comparison to Peer Institutions	Michelle Kearns		Annual, Fall Semester			USHE / BIRS
UVU Alumni Residency	% of Students remaining in Utah by Service Region, Elsewhere in Utah, and % of Alumni Outside of Utah after "X" number of years. Current reported metric is 10 years	Kyle Reyes	Christina Baum	Annual			BIRS Survey
UVU Comparative Tuition & Fee Rate	Compare to Peers	Jim Mortensen		Annual	Yes		USHE
UVU Service Desk First Response Time	Average number of minutes to first response by Service Desk agents.	Christina Baum		Annual			Digital Transformation

Row Labels	Count of Primary Measure	Count of Validated
Christina Baum	**6**	
Employment - Hours per Week	1	
Employment - Status	1	
Family Status	1	
Marital Status	1	
Service Area Economic Statistics - Unemployment	1	
UVU Service Desk First Response Time	1	
Jim Mortensen	**1**	**1**
UVU Comparative Tuition & Fee Rate	1	1
Kara Schneck	**3**	
Community Awareness (MarComm)	1	
Engagement (MarComm)	1	
Sentiment (MarComm)	1	
Kyle Reyes	**5**	**4**
Fundraising: Annual Number of Alumni Gifts	1	1
Fundraising: Major Gifts	1	1
Fundraising: Principal Gifts	1	1
Fundraising: Total Annual Gifts	1	1
UVU Alumni Residency	1	
Marilyn Meyer	**2**	
Full-Time Employee Internal Hire	1	
Full-Time Employee Turnover Ratio	1	
Michelle Kearns	**34**	**12**
4 Year Graduation Rates	1	
6 Year Graduation Rate	1	
6 Year Graduation Rate (Outcome Measure) for Underrepresented Students	1	1
6 Year Graduation Rate by Race/Ethnicity and International	1	1
8 Year Graduation Rate (Outcome Measure)	2	
8 Year Graduation Rate (Outcome Measure) By Award Type, Gender, and Award Year	1	
8 Year Graduation Rate (Outcome Measure) for Underrepresented Students	1	1
8 Year Graduation Rate (Outcome Measure) Trendline and Predictions	1	
8 Year Graduation Rate (Outcome Measure) vs. Peers	1	
Enrollment Rate for Underrepresented Students	1	1
FAFSA Completion	1	1
First Generation	1	
Gender	1	1
Institutional Open Admissions Status	3	
Outcome Measure Impact	1	1
Participation in PK-12 Programs	1	
Pell-eligible Students	1	
Performance Funding: Access	1	
Potential Completion Rates	2	
Race/Ethnicity	1	1
Remediation - Math	1	
Student Age Groups / Adult Learners	1	
Student Belonging - UVU	1	1
Student Belonging - UVU Community/Social	1	1
Student Culture - Debt?	1	
Student Enrollment / Population by Race and Ethnicity	1	1
Student Enrollment / Population by Residency Status	1	1
Student Time Status	1	
Top Student Barriers to completion	1	
Total Fall XXXX Enrollment Comparison to Peer Institutions	1	
Val Peterson	**2**	**2**
Room Utilization Rate by Room Type	1	1
Seat Occupancy Rate by Room Type	1	1
Wayne Vaught	**20**	**13**
Awards - by USHE Institution	1	1
Awards - by USHE Institution, Year over Year Change	1	1
Awards - UVU	1	1
Comparison of Awards to Cost	1	
Completions by Academic Year	1	1
Coordinating 6-Year and 8-Year Bachelor Graduation Rates	1	
External Partnerships	1	
Fully Online Programs	1	1
General Education Average Fill Rate by Course Modality	1	1
Graduates	1	1
Graduation Outcome Measure Comparison to USHE PBF Timely Completion	1	
High Impact Practices (HIPs) Completion	1	1
Number of Graduates	1	1
Performance Funding: High Yield Awards - All	1	1
Performance Funding: High Yield Awards - Underrepresented Students	1	1
Performance Funding: Timely Completion	1	1
Prior Learning Credits	1	
Retention Rate (overall)	1	
Retention Rate by Cohort, vs. Peers	1	
Student Retention Rate by Race and Ethnicity, International	1	1
Grand Total	**73**	**32**

SUPPORTING STYLE GUIDE FOR

DATA VISUALIZATION

UVU UTAH VALLEY
UNIVERSITY™

TABLE OF CONTENTS

UVU

The data visualization brand guide follows the guidelines set for the university with additional design elements relevant to the display of data. Take a moment to familiarize yourself with the overall policies of the UVU brand that also apply to your department. The UVU brand voice and style guide can be reviewed at uvu.edu/marketing/branding

Purpose of a Data Visualization Style Guide

Introduction

If you are a business intelligence developer, research analyst, or anyone else who has a role or interest in telling the UVU story using data, read on. Application of the principles and design concepts in this guide will help enable better decision making at Utah Valley University, and remove data literacy barriers caused by inconsistency in design for all of UVU's stakeholders.

This style guide fits within the "umbrella" of UVU's overall marketing and communication style guide. So, using this guide should complement any document or other presentation that includes the use of data to communicate.

The application of these principles should take much less time than is spent on acquiring and analyzing a set of data. So, templates for common software programs are also provided to get you started.

Typography

The fonts shown here are recommended for use in data visualization.

STRATUM

Stratum is the Institutional Primary font for the University. This font may be used in data visualization, but should be reserved for titles and headers (not for numbers or small captions).

RAJDHANI

Rajdhani is the web-safe alternative for Stratum. You can download this font for free on **fonts.google.com**.

ARIAL

Use Arial for most text in data visualization. Arial may be bolded to draw attention to or emphasize important information. Reserve italicizing text for when citing sources.

SERIF FONT

Note: in data visualization, never use a **serif font**.

Color Palette

In data visualizatoin, color has meaning. Use this guide to make sure you're correctly applying University colors to data visualization.

Primary Color Palette

All data visualization should consist of primarily the 2 colors to the right. Use Charcoal first, and add UVU Green to emphasize a neutral indicator. Use the tints below each primary hue to add contrast when needed (e.g., in a stacked bar graph or area map).

See examples on the following page.

Primary Charcoal

Charcoal | #BEBEBE | RGB: 190 190 190

Charcoal 1 - 100%	**Charcoal 2** - 80%	**Charcoal 3** - 60%	**Charcoal 4** - 20%
#464646	#6B6B6B	#909090	#DADADA
RGB: 70 70 70	RGB: 107 107 107	RGB: 144 144 144	RGB: 218 218 218

Neutral Indicator: UVU Green

UVU Green | #275D38 | RGB: 39 93 56

Green 1 - Dark	**Green 2** - 80%	**Green 3** - 55%	**Green 4** - 25%
#27442B	#527D60	#88A692	#C9D6CD
RGB: 39 68 43	RGB: 82 125 96	RGB: 136 166 146	RGB: 201 214 205

Primary Value Indicators

Colors from this palette should be used intentionally — i.e., only use these colors for their specified purposes defined on the right. These colors should only be used to convey the meaning of a given indicator and not for decoration.

Note: use blue and orange when comparing two categories that have neutral values (e.g., comparing male v. female).

Value Indicators

Positive Green
#00843D | RGB: 3 132 66

Use to highlight good indicators

Negative Red
#E3533C | RGB: 227 83 60

Use to highlight bad indicators

At-Risk Yellow
#FDB52B | RGB: 253 181 43

Use to highlight at-risk indicators

Comparison Blue
#0295C8 | RGB: 2 149 200

Use with orange when comparing values

Comparison Orange
#D15F27 | RGB: 209 95 39

Use with blue when comparing values

UVU

Secondary Data Visualization Color Palette

An additional color palette has been provided for comparing categories across different charts. For example, one application could be comparing the enrollment numbers of different demographic groups in different years. In a chart showing the numbers for 2013, the value for "married students" could be represented in yellow and the same category would also be shown in yellow on similar charts that show the numbers for the years 2017 and 2021.

Secondary Color Palette

These secondary colors should be used sparingly and are only to be used when color is necessary to compare multiple categories over multiple different charts. These colors are not to be used decoratively. Determine if the data can be communicated in only one chart before using this color palette. If the data can be displayed in only one chart, there is no need to use color to distinguish category.

Categorical Colors

Purple	Teal
#595478	RGB: 89 84 120	#87C8BC	RGB: 135 200 188

Pale Yellow	Light Green
#FBDB65	RGB: 251 219 101	#C5DC70	RGB: 197 220 112

Color Implementation
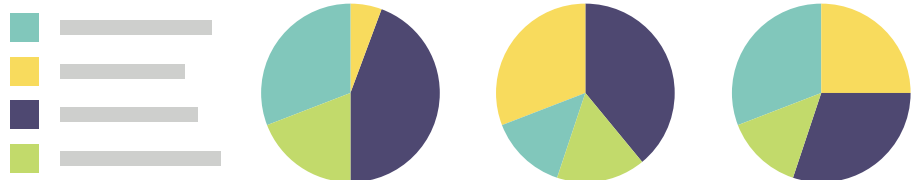
Color Implementation

The following are examples of how to implement color when representing data.

If you don't need to highlight one piece of data above others: don't. If one piece of data is more important than the others, use the dark green. Use blue and orange to call out categories that are oposite one another.

Use the bright green, yellow, and red to indicate if a value is good, at risk, or bad.

Use shades of the same color (charcoal or dark green) to separate values that are represented next to each other. This could be an area chart, stacked bar graph, or donut chart.

Table Styles

Model table styles after this table.

Use bold white text on UVU green for headers; left-align text with indent and center vertically in the cell; use stratum font		
For row titles: use Charcoal 1, Arial, bolded, left-aligned, indented text and center vertically	For table body, match title style but with unbolded, centered text	
Alternate row shades: Charcoal 4 and Charcoal	Separate columns with 1 pt white stroke; do not add stroke to horizontal or outside borders	

Chart Types and Uses

Line Chart

Line charts are best used to show data that changes over time. Line charts can show multiple lines (no more than 4) to highlight a comparison between 2 or more sets of data. Use no more than 2 hues and use the brightest hue to show the most important value.
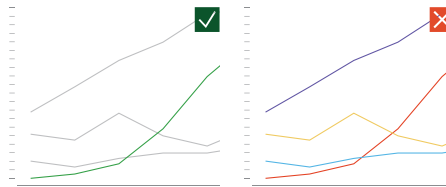
Area Chart

An area chart has a similar time-series purpose as a line chart but can also show volume. Stick to 4 categories or less. Categories should be distinguished by different shades of the same color (light/dark) except for when an additional hue better highlights the most important value.
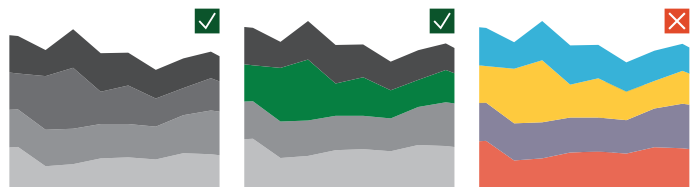
Scatter Plot

Use scatter plots to show the correlation between 2 sets of data. Scatter plots should be monochromatic (no more than one color).
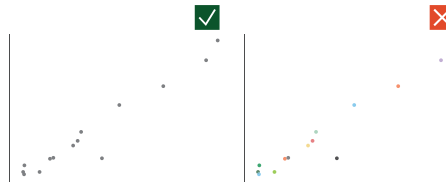
Bar/Column Charts

Use bar and column charts to compare different categories or parts of a whole (stacked charts). Column charts should be used when the data have long category labels. Values should be displayed outside of the bar. Bar/column charts should be monochromatic except when highlighting an important value.

UVU

Chart Types and Uses (Cont.)

Area Map

Use an area map to show categorical or continuous data based on region. Use different shades of the same hue to represent different values (darker shade = higher value).

Bubble Chart

Bubble charts are good for comparing sizes of different groups. As with maps, use different shades of the same hue to represent different values (darker shade = higher value). An additional hue may be added to highlight a significant group.
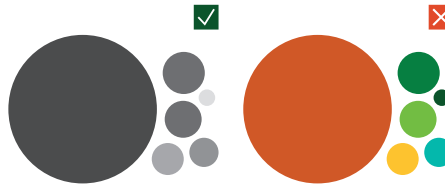
Pie/Donut Charts

Pie charts and donut charts should generally be avoided and donut charts are preferable of the two. In some cases, however, these charts can be useful for showing percentages.

Do not use more than 4 categories on these charts, and only if all categories can be read easily. Use varying shades to distinguish categories, except for when an additional hue better highlights the most important value. Use a legend to label categories, rather than putting labels next to their corresponding section.
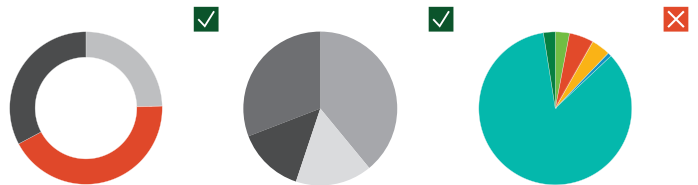
Guiding Principles

Simplicity Rules the Day

The intended audience should be able to understand the meaning of a chart or dashboard within seconds. The number of elements should be minimal — just enough to illustrate the answer to the question users came to find.

The Question is the Star

Data illustrations have a one-to-one relationship with the question they answer. Good business intelligence and data illustrations will beg more questions. That is a good thing.

Color Signals Value

Color should be used sparingly, and differences in color should compare and contrast the outcomes of a measure, not the categories.

Less is More

Text should be used only where necessary and in small doses. Take care to eliminate redundant information. If lengthy explanations are necessary, rethink the number of questions you're trying to answer with one chart or graph.

Avoid Analysis Paralysis

Filters on data categories should be minimal as well. Just enough to allow the user to shape their question. Too many filters can cause decision paralysis.

Give Credit where Credit is Due

Data source, date and time, department, and other key information is critical to understanding the context of the data you're presenting. Users will be able to make better decisions knowing this context, and they'll come to trust the data as well.