

The image features a dark blue background with a large, light blue, multi-lobed decorative shape in the center. Inside this shape, the letters "UCI" are written in a bold, dark blue, sans-serif font.

UCI

**Bright Past.
Brilliant Future.**

Confidentiality and Privacy Considerations in Prepping Data for Public Display
CAIR Conference 2020
Aliana Flores & Angela Teshima
November 18, 2020

About the University of California, Irvine

- Established in 1965
- Association of American Universities member
- UCI has top 50 national rankings for more than 40 academic programs
- Over 35,000 students and more than 15,000 non-student employees
- Over 11,000 degrees awarded in 2019-20
- Over 120,000 undergraduate applications for Fall 2020



Website Reports

Our website is the go-to site for people to look for official reporting figures.

Reports include:

- Enrollment
- Admissions
- Student Outcomes
- And more

Unduplicated Enrollment

Enrollment by:	New Enrollment		Total Enrollment		
	Fall	Fall	Winter	Spring	3-Term-Avg
Admissions status	PDF				
Student level		PDF	PDF	PDF	PDF
Registration Status		PDF	PDF	PDF	PDF
Gender	PDF	PDF	PDF	PDF	PDF
Ethnicity	PDF	PDF	PDF	PDF	PDF
California residency	PDF	PDF	PDF	PDF	PDF
Tuition Status	PDF	PDF	PDF	PDF	PDF
Full-time / part-time	PDF	PDF			
First language	PDF				
First-generation status	PDF				

Enrollment by School, by:	New Enrollment		Total Enrollment		
	Fall	Fall	Winter	Spring	3-Term-Avg
Admissions status	PDF				
Student level		PDF	PDF	PDF	PDF
Major	PDF	PDF	PDF	PDF	PDF
Gender		PDF	PDF	PDF	PDF
Ethnicity		PDF	PDF	PDF	PDF
California residency		PDF	PDF	PDF	PDF
Tuition status		PDF	PDF	PDF	PDF

Fall Enrollment sorted by:	New Enrollment		Total Enrollment	
	Undergraduate	Graduate	Undergraduate	Graduate
State or country	PDF	PDF	PDF	PDF
California county (CA residents)	PDF	PDF	PDF	PDF
Major	PDF	PDF	PDF	PDF

OLD WEBSITE

Redesign of Reporting Methods

As an office we decided that we needed to redesign the way we displayed our reports, this led to the creation of our DataHub.

All
Student Enrollment
Student Admissions
Student Outcomes
Student Experience
Instructional Data
Faculty and Staff

Tuition and Fees
Rankings
Additional Resources

<p>Student Enrollment (Characteristics)</p>	<p>Student Enrollment (Locations, Feeder Schools, Top Majors)</p>	<p>Student Enrollment (Historical Enrollment)</p>	<p>Undergraduate Admissions</p>
<p>Graduate Admissions</p>	<p>Student Success</p>	<p>Degrees Awarded</p>	<p>Time to Degree</p>
<p>Instructional Data</p>	<p>Tuition and Fees</p>	<p>Summer Session Enrollment</p>	<p>Common Data Set</p>

Using Tableau

Goal: to create dashboards that would be interactive and more useful for the campus using Tableau.

Problem: No Tableau Server

Solution: Tableau Public

How do we use Tableau Public but still maintain data security?

The logo for Tableau Public, featuring the word "tableau" in a lowercase, sans-serif font, followed by three small white plus signs arranged in a triangular pattern, and then the word "public" in a lowercase, sans-serif font. The entire logo is set against a dark blue rectangular background.

+tableau+++public

Ensuring Data Security

Title
Make sure your viz has a good title so people don't pass it by when they're browsing Tableau

Permalink
Plan on embedding your viz? This is an excellent way to drive traffic to your site.

Inspiration
Did you leverage the community for your creation? Don't forget to give a shout out to those

Description
A great description and relevant **#hashtags** can help people discover your viz.

Toolbar Settings Show view controls *Undo, Redo, Revert*
 Show author profile link
 Allow others to download or explore and copy this workbook and its data

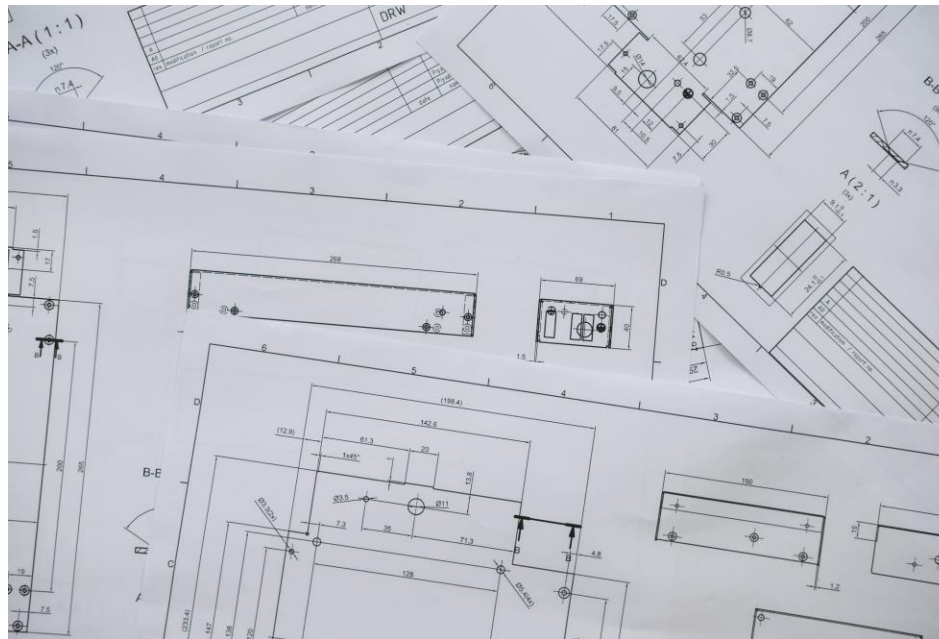
Other Settings Show workbook sheets as tabs

- Tableau Public offers options to limit downloading of underlying data
- Use aggregated data sets to ensure data security.

Designing the Dashboard

Most critical part of the process

- Will determine how the data will be aggregated
- Will guide the decision on fields and calculations needed for data preparation



Designing the Dashboard

Things to consider:

- What level of breakdown?
- What fields will be filters?

Enrollment

<input type="radio"/> New Students <input type="radio"/> Total Students <input type="radio"/> Student Enrollment by Majors		
School <input type="text" value="(All)"/>	Report Type <input type="text" value="Admissions Status"/> <ul style="list-style-type: none"> Admissions Status California Residency Ethnicity First Language First-Generation Status Full-time / Part-time Gender Tuition Status 	New Studen
<input type="text" value="General campus"/> <input type="text" value="State-funded"/> <input type="text" value="Undergraduate"/> <input type="text" value="Freshman"/> <input type="text" value="Freshman"/>	<input type="text" value="Advanced standing"/> <input type="text" value="Transfer"/> <input type="text" value="Second baccalaureate"/>	

Preparation of Data

ReportType	Calyr	DataForReport	AcadTerm	SubcampusUC	ProgramFundid	CollegeForReporting	AdmissionsStatusrollup1	StudentlevelUCIRollup2	NewStudentFlag	Count
Full-time / part-time	2017	Part-time	Fall	General campus	State-funded	Arts	Advanced standing	Undergraduate	Y	1
Full-time / part-time	2018	Full-time	Fall	General campus	State-funded	Arts	Advanced standing	Undergraduate	Y	84
Full-time / part-time	2018	Part-time	Fall	General campus	State-funded	Arts	Advanced standing	Undergraduate	Y	2
Full-time / part-time	2019	Full-time	Fall	General campus	State-funded	Arts	Advanced standing	Undergraduate	Y	139
Full-time / part-time	2019	Part-time	Fall	General campus	State-funded	Arts	Advanced standing	Undergraduate	Y	3
Full-time / part-time	2020	Full-time	Fall	General campus	State-funded	Arts	Advanced standing	Undergraduate	Y	121
Full-time / part-time	2020	Part-time	Fall	General campus	State-funded	Arts	Advanced standing	Undergraduate	Y	5
Gender	2011	Female	Fall	General campus	State-funded	Arts	Advanced standing	Undergraduate	Y	40
Gender	2011	Male	Fall	General campus	State-funded	Arts	Advanced standing	Undergraduate	Y	33
Gender	2011	Not stated	Fall	General campus	State-funded	Arts	Advanced standing	Undergraduate	Y	1
Gender	2012	Female	Fall	General campus	State-funded	Arts	Advanced standing	Undergraduate	Y	48

tal Students | Student Enrollment by Maj

Report Type

▼ Admissions Status ▼

Admissions Status
 California Residency
 Ethnicity
 First Language
 First-Generation Status
 Full-time / Part-time
 Gender
 Tuition Status

Undergraduate Freshman Freshman

Total

What we did:

- Use SAS to first pull the original data, then group them based on breakdown level and create the aggregated data

Create Dashboards

Here's our example!

Enrollment

New Students
 Total Students
 Student Enrollment by Majors

School:
 Report Type:

New Student Enrollment by Admissions Status
Fall

Schools: All

					Fall									
					2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
General campus	State-funded	Undergraduate	Freshman	Freshman	4,788	4,709	5,072	5,040	5,418	6,170	6,218	5,476	5,623	5,417
				Total	4,788	4,709	5,072	5,040	5,418	6,170	6,218	5,476	5,623	5,417
			Advanced standing	Transfer	1,672	1,619	1,893	1,918	1,843	2,338	2,810	2,559	2,964	2,613
				Second baccalaureate	4	5	17	10	4	24	18	9	12	11
			Total	1,676	1,624	1,910	1,928	1,847	2,362	2,828	2,568	2,976	2,624	
	Total	6,444	6,333	6,982	6,968	7,265	8,532	9,046	8,044	8,599	8,041			
	Graduate	Credential	Credential	82	93	70	65	96						
			Total	82	93	70	65	96						
		Graduate	Masters	619	554	668	770	663	658	679	633	556	491	
			Doctoral	449	438	464	548	471	476	546	552	602	550	
Professional Doctoral			95	125	128	91	129	148	166	232	161	147		
Total	1,163	1,117	1,260	1,409	1,263	1,282	1,391	1,417	1,319	1,188				
Total	1,245	1,210	1,330	1,474	1,359	1,282	1,391	1,417	1,319	1,188				
Total	7,689	7,543	8,312	8,442	8,624	9,814	10,437	9,461	9,918	9,229				
Self-supporting	Graduate	Graduate	Masters	219	229	270	285	284	342	627	682	840	897	
			Total	219	229	270	285	284	342	627	682	840	897	
	Total	219	229	270	285	284	342	627	682	840	897			
Total	219	229	270	285	284	342	627	682	840	897				
Total	7,908	7,772	8,582	8,727	8,908	10,156	11,064	10,143	10,758	10,126				
Health science	State-funded	Undergraduate	Freshman	Freshman	347	368	388	395	338	382	327	318	445	348
				Total	347	368	388	395	338	382	327	318	445	348
			Advanced standing	Transfer	55	85	105	106	112	127	160	95	125	110
				Second baccalaureate	1	4	3			2				

How-to: Upload on Tableau Public

The screenshot shows the Tableau Desktop interface. The 'Server' menu is open, and 'Tableau Public' is selected. A secondary menu is open over 'Tableau Public', with 'Save to Tableau Public...' highlighted. The background shows a Tableau dashboard with a table of student enrollment data.

New Student Enrollment By: <insert roll year> Fall			
Schools: <insert college list>			
General campus	Self-supporting	Graduate	2011
			188
			9
		Other U.S. citizens or permanent residents	22
		Total	219
	Total		219
Total			219
State-funded	Graduate	Credential	California Resident
			78
			International Students
			Other U.S. citizens or permanent residents
			4

Secure and Efficient Reporting

- De-identifying data
- Data aggregation
- Quickly update Tableau Public dashboards
- Users can now create their own filtered reports

Q&A Time, and Before you go:

Please use the WHOVA Mobile App to rate this session. CAIR uses the session evaluations to determine the winners of the Best New Presenter, and Best Presenter awards each year.

