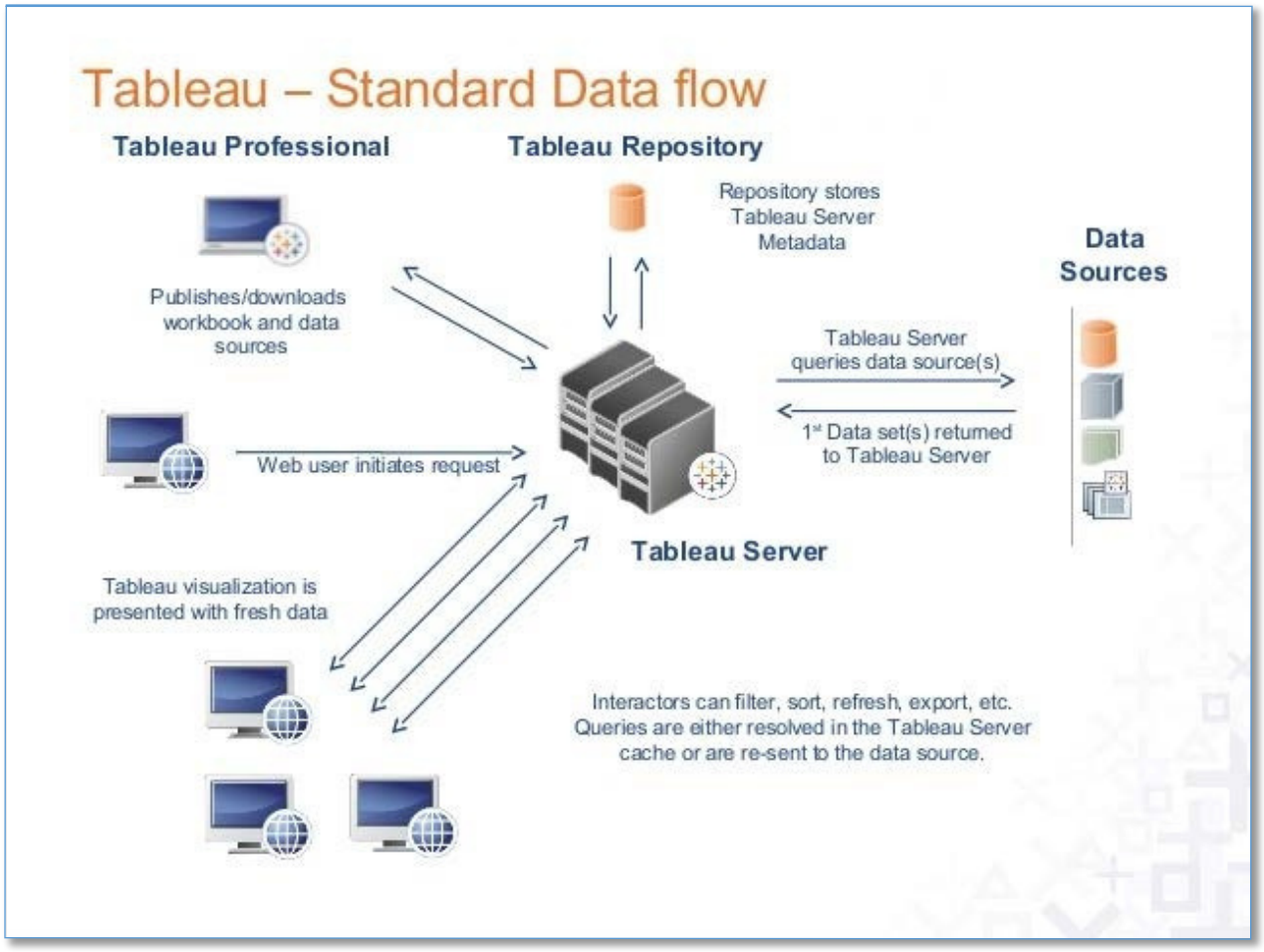
Tableau Server

Tableau Server is a browser based platform where you will publish your dashboards in order to share them with others around the university and beyond. Here at Princeton, the sites on Tableau server are managed in a manner very similar to the data warehouse. Each business unit will have a site and that site will be managed by a designated site administrator. The site administrator will be responsible for managing users by granting and setting access to data and dashboards on the server site.

As a desktop user, when you have created dashboards you need to share, you will publish to your server site. In order to do this, you will need to have a Publisher role on the server site and access to the Project. Please note that you must not have a later version of Tableau installed on your desktop than that of the server if you would like to publish to the server (e.g. if the server is at release 9.2, desktop users with releases 9.0, 9.1, and 9.2 may publish to the server but those with release 9.3 will not). Once published, report users will be able to interact with the workbook at their designated level of access as defined by the site administrator.

As mentioned earlier, when outlining data security, there may be times when you need to embed your dashboards into external websites. If this is the case, you will need to bypass authentication. This is when you would use the Tableau Public server.



Collecting and Assembling Data

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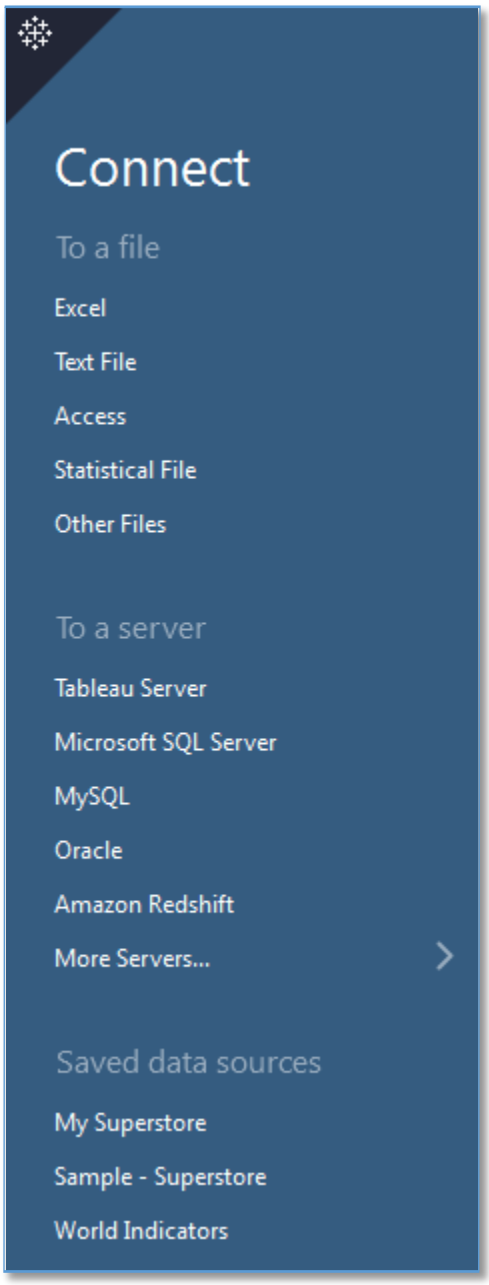
Understanding Tableau Data Sources

A data source is a reusable connection to data including connections to relational databases, cloud-hosted databases, spreadsheets, and more. When using Tableau Desktop, you may select data from a variety of locations including your local computer, server hosted or even from the cloud. In order to share a data source with others, you would first connect to it in Tableau Desktop and then publish it to the Tableau Server. The published data sources can include data or connections to live databases. The published data sources can also include layers of customizations including calculations, groups, and sets.



You should publish a data source when you want users to connect

to

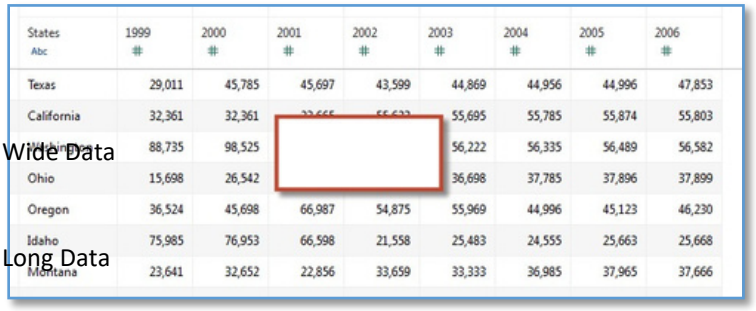
the same data source from multiple workbooks. When a published data source is refreshed, workbooks using the source will reflect the changes. This facilitates consistency and accuracy in reporting.

It is often useful to create a data extract in Tableau. This pulls the data from a data source into a stand-alone data set for use in Tableau Desktop. This is especially useful if performance is an issue or if you need to distribute to users without access to the data. It is important to note, however, that you cannot create an extract of a cube data source.

If you only want users to connect to a data source from a single workbook, you should embed the data source in a workbook but do not publish the source. Every published workbook has at least one embedded data source.

Tableau Data Format

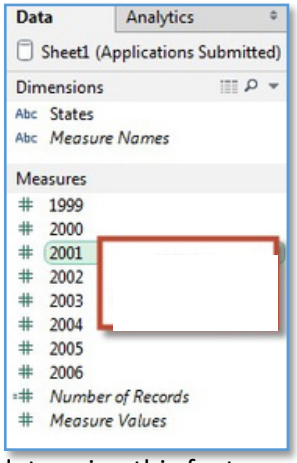
Tableau can work with data in varying formats. However to get the most out of Tableau, it is best if your data is at a detail level or "long" with a separate record for every element you are counting as opposed to compressed or "wide" with many details for each element.



States	1999	2000	2001	2002	2003	2004	2005	2006
Texas	29,011	45,785	45,697	43,599	44,869	44,956	44,996	47,853
California	32,361	32,361	[illegible]	[illegible]	55,695	55,785	55,874	55,803
[illegible]	88,735	98,525	[illegible]	[illegible]	56,222	56,335	56,489	56,582
Ohio	15,698	26,542	[illegible]	[illegible]	36,698	37,785	37,896	37,899
Oregon	36,524	45,698	66,987	54,875	55,969	44,996	45,123	46,230
Idaho	75,985	76,953	66,598	21,558	25,483	24,555	25,663	25,668
Montana	23,641	32,652	22,856	33,659	33,333	36,985	37,965	37,666

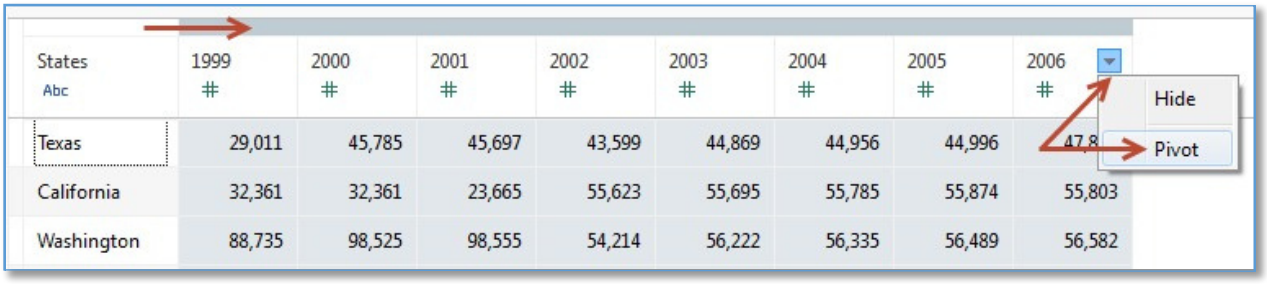
Wide Data

Long Data



While you can work with "wide" data in Tableau, you will have reduced reporting capabilities.

If you're starting with "wide" data, you do have the option to **Pivot** your data using this feature on the Data Connection page. To do this, select the columns you wish to transpose, hover over one of the selected columns, and select Pivot from the drop down arrow.



Once pivoted, your data will be in the detail or "long" format making it easier to work with.

If you have taken these steps, you will want to ensure your field names have been updated to reflect the new format appropriately, before moving to your initial worksheet.