



Creating Tableau Charts, Dashboards, and Stories

Data Boot Camp

Lesson 14.2



The Big Picture



This Week: Tableau

By the end of this week, you'll know how to:



Import data into Tableau



Create and style worksheets, dashboards, and stories in Tableau



Use Tableau worksheets to display data in a professional manner



Portray data accurately using Tableau dashboards and stories

Module 14

Today's Agenda



This Week's Challenge

Using the skills learned throughout the week, the students will create visualizations to show the differences in bike checkout times throughout the day.

Today's Agenda

By completing today's activities, you'll learn the following skills:

01

Creating area and bubble charts

02

Creating Tableau dashboards

03

Creating Tableau stories

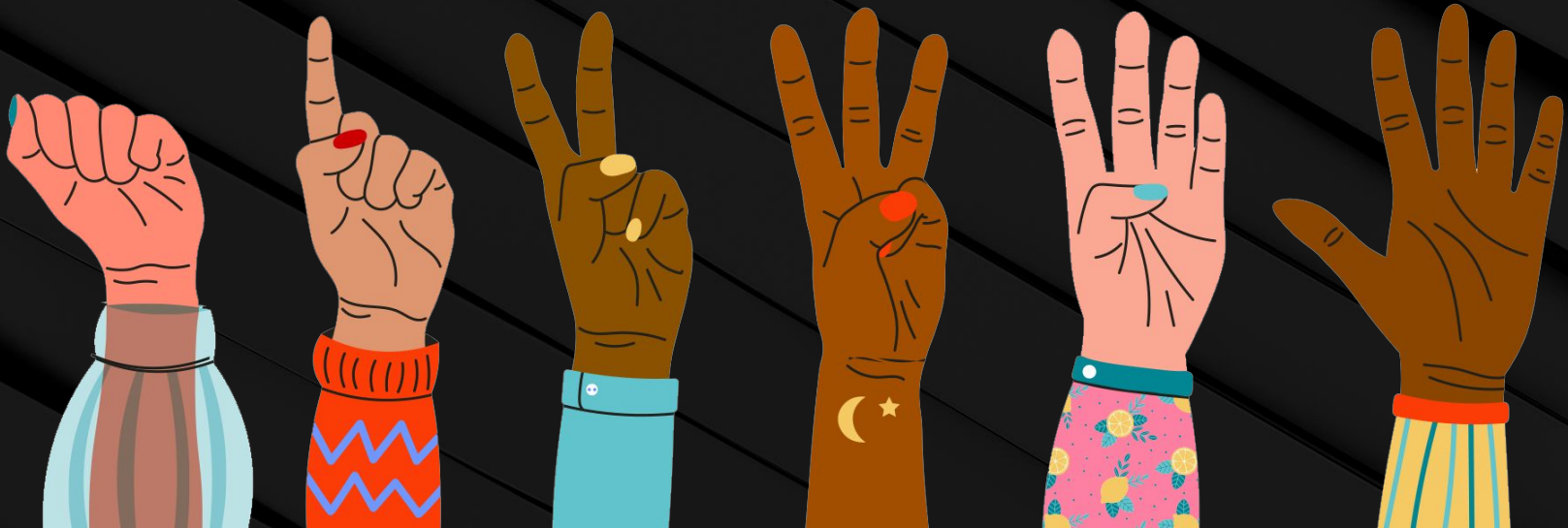


**Make sure you've downloaded
any relevant class files!**

Tableau

FIST TO FIVE:

How comfortable do you feel with this topic?





Time to Code



Warm-up

Suggested Time:

20 minutes

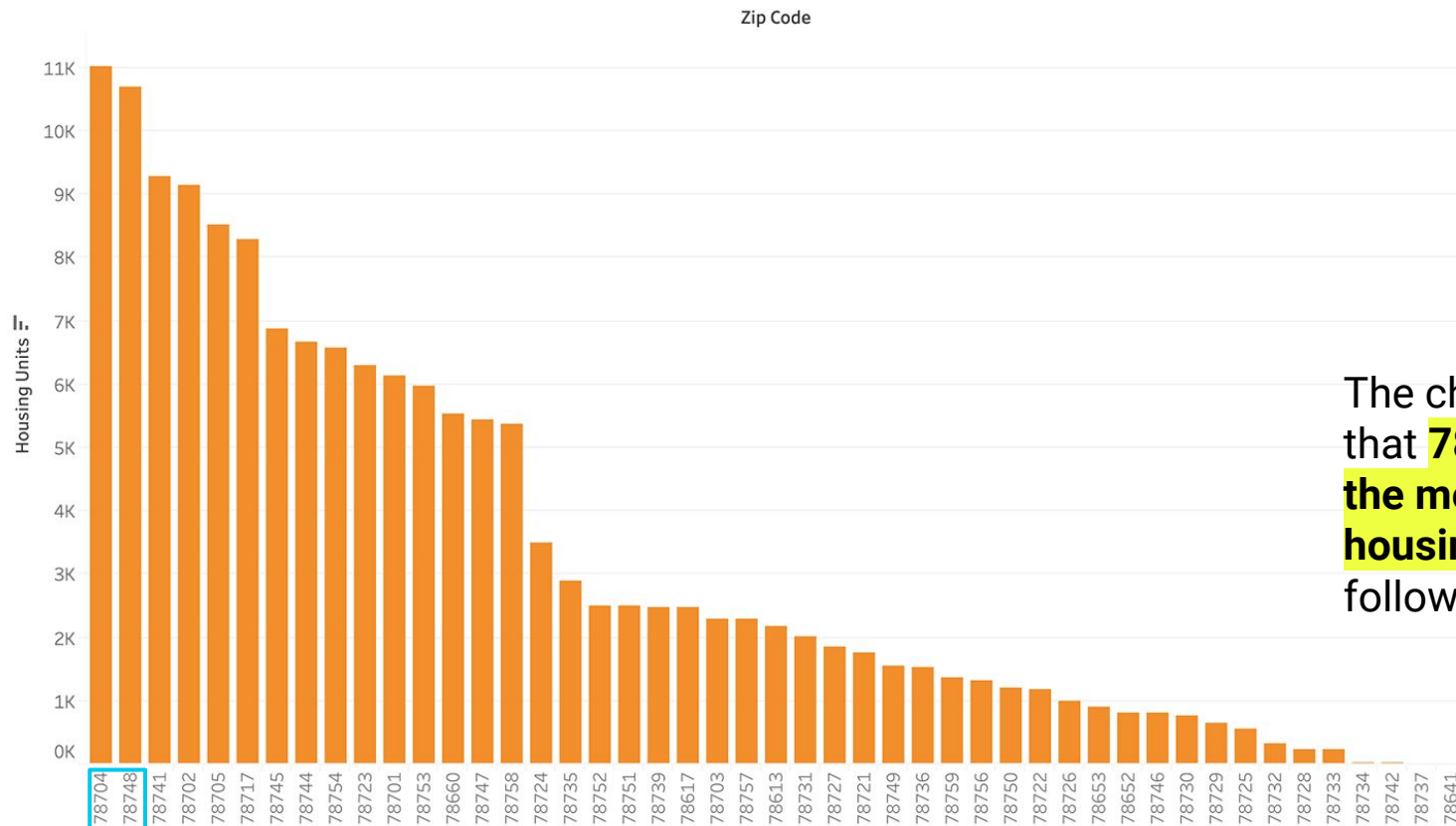
Columns Zip Code

Rows SUM(Housing Units)

Drag the **Zip Code** pill to **Columns**

Drag the **Housing Units** pill to **Rows**

Total Housing Units by Zip



The chart shows that **78704** zip has the most new housing units, followed by 78748

Visualizing Data on a Geospatial Map

We can also visualize this data on a geospatial map.

- When you have data that has a geographic role, such as zip codes, Tableau automatically adds two fields to the "Measures" area of the "Data" pane:
Latitude (generated) Longitude (generated)



- To create a map, double-click on the Latitude (generated) pill and Tableau will automatically place the **latitudes into Rows**, since latitudes run horizontally.
- When you double-click on the Longitude (generated), Tableau will automatically place **longitudes into Columns**, since longitudes run vertically.

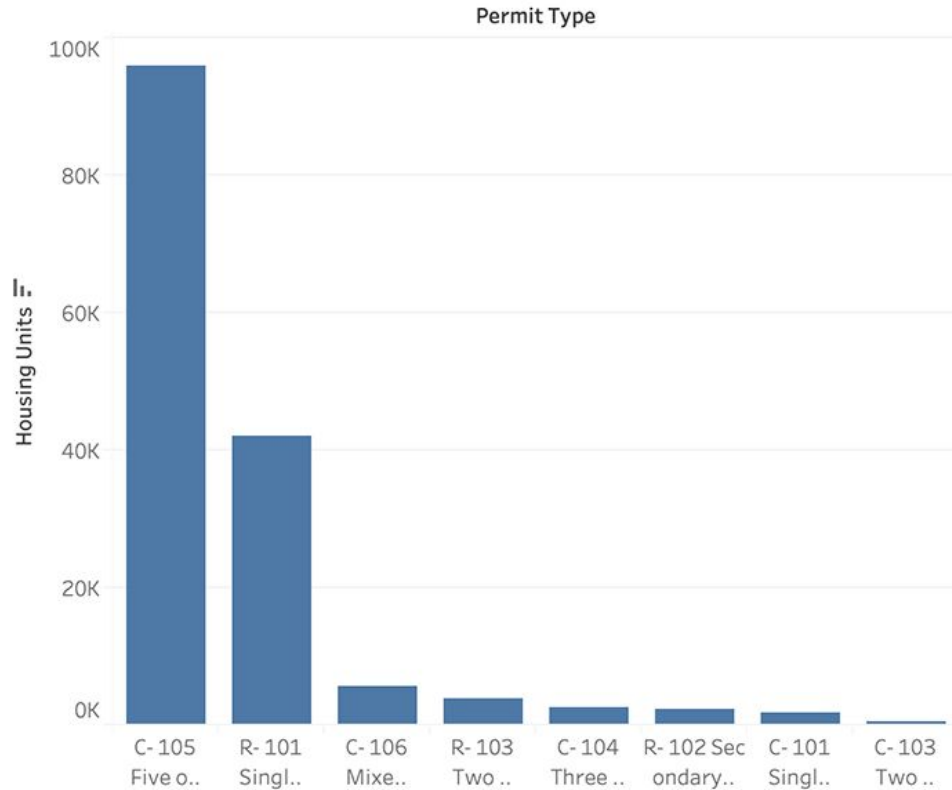
Columns Permit Type

Rows SUM(Housing Units)

Drag the **Permit Type** pill to **Columns**

Drag the **Housing Units** pill to **Rows**

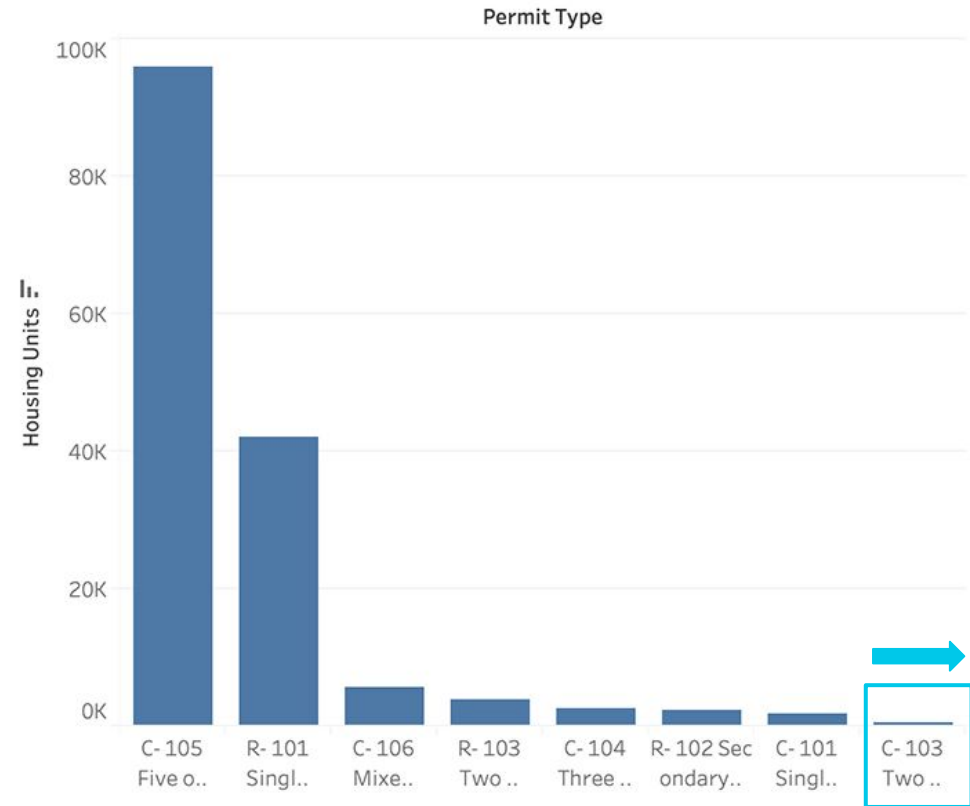
Total Housing Units by Permit Type



Arrange in
descending order

Columns	Permit Type
Rows	SUM(Housing Units)

Total Housing Units by Permit Type



We can make the **x-axis labels** completely **visible** by clicking on the **right end of the x-axis** and **dragging to the right**.

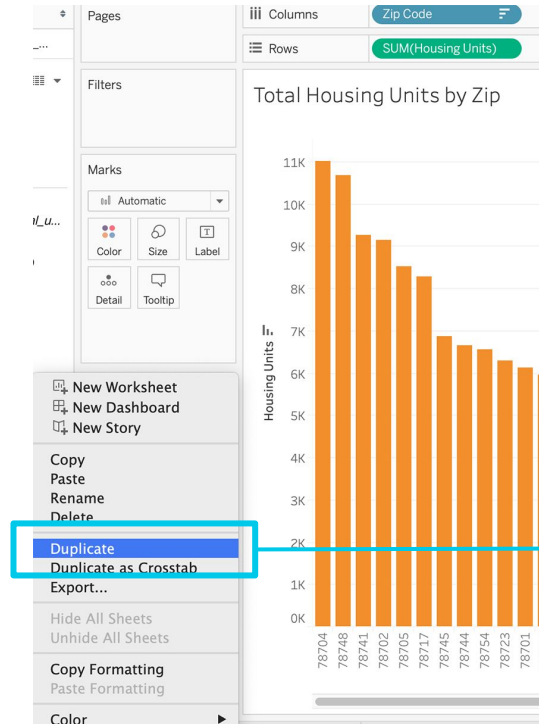
Columns	Permit Type
Rows	SUM(Housing Units)

Total Housing Units by Permit Type



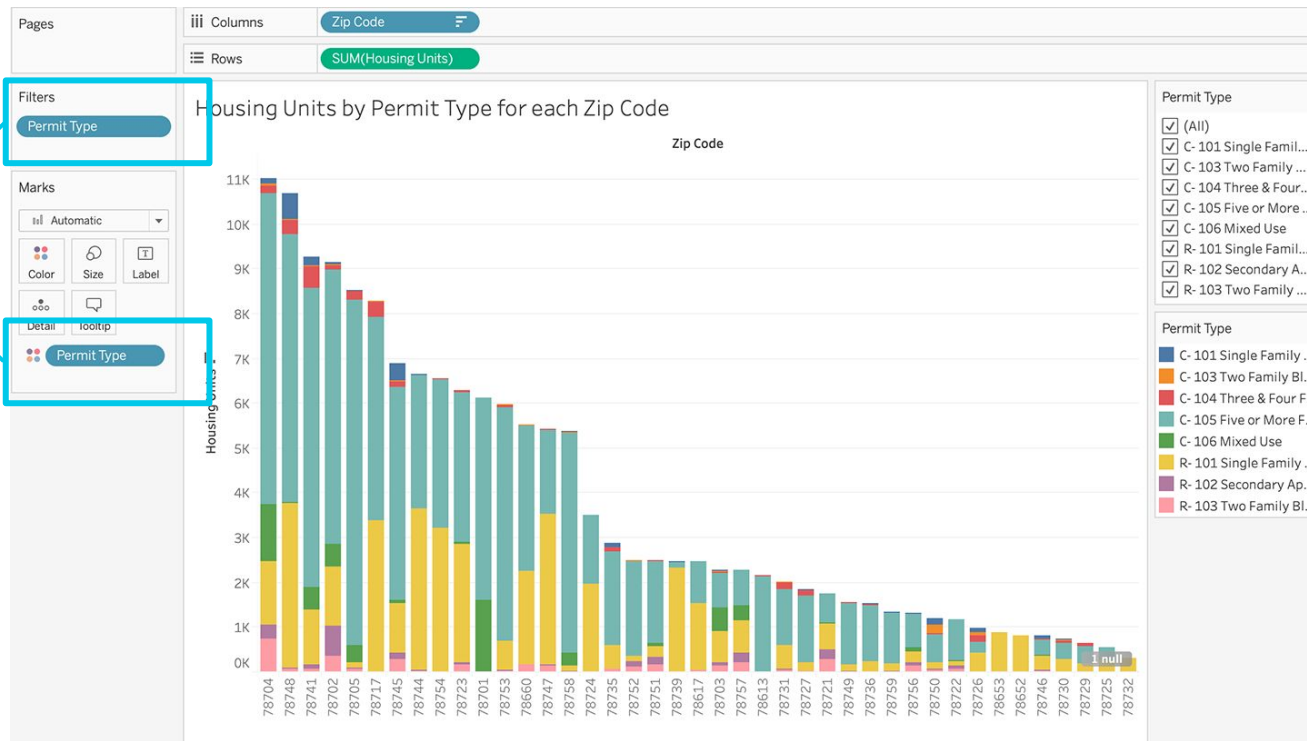
Or, **right-click on the x-axis** and select "**Rotate Label**."

We can visualize the number of housing units by permit type for each zip code in two different ways.



First, we can make a **duplicate of the first visualization**, the total housing units for each zip code, by **right-clicking on the chart title**.

Drag the **Permit Type** pill to "Color" and to "Filters"



Columns

Zip Code

Rows

Permit Type

SUM(Housing Units)

Drag the **Zip Code** pill to **Columns**

Drag the **Permit Type** and **Housing Units** pill to **Rows**

Filters

Zip Code

Permit Type

Marks

Automatic

Color

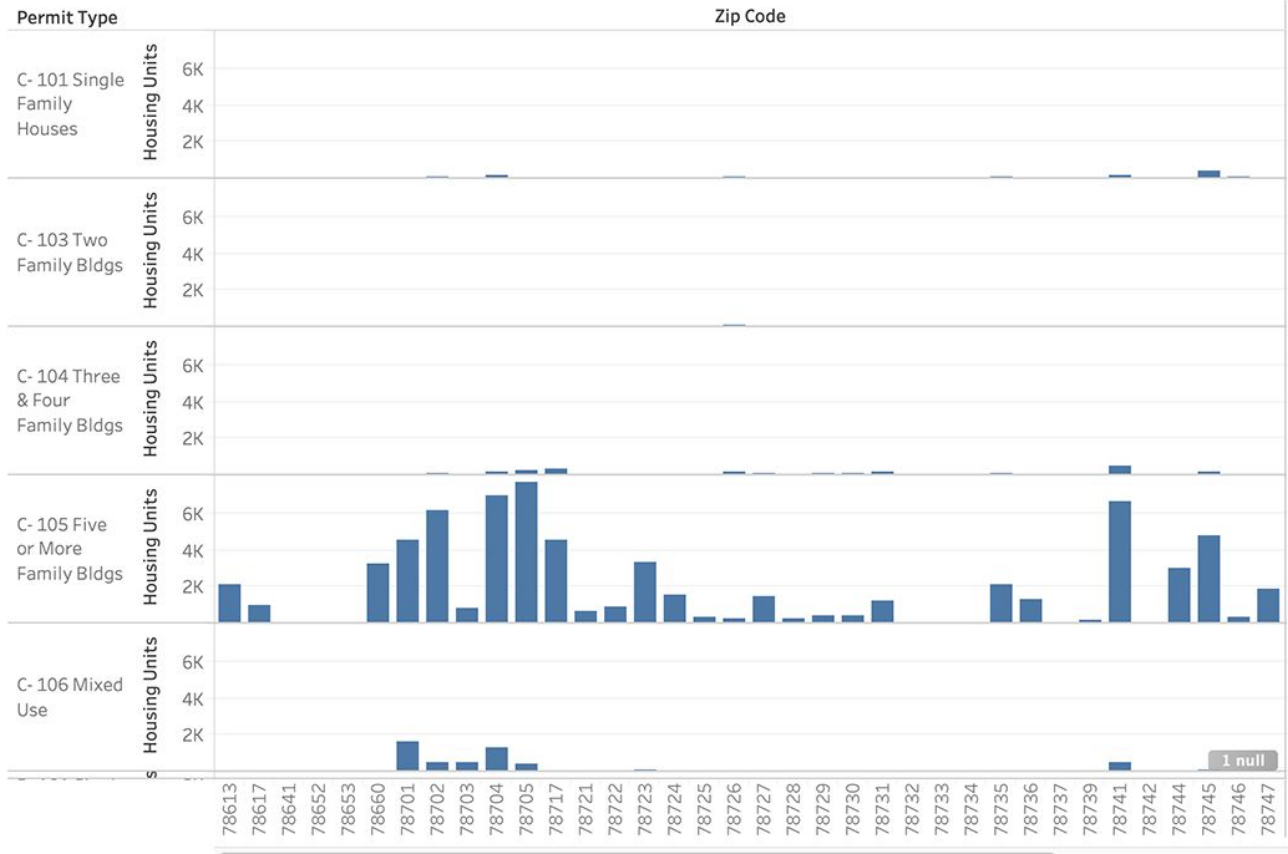
Size

Label

Detail

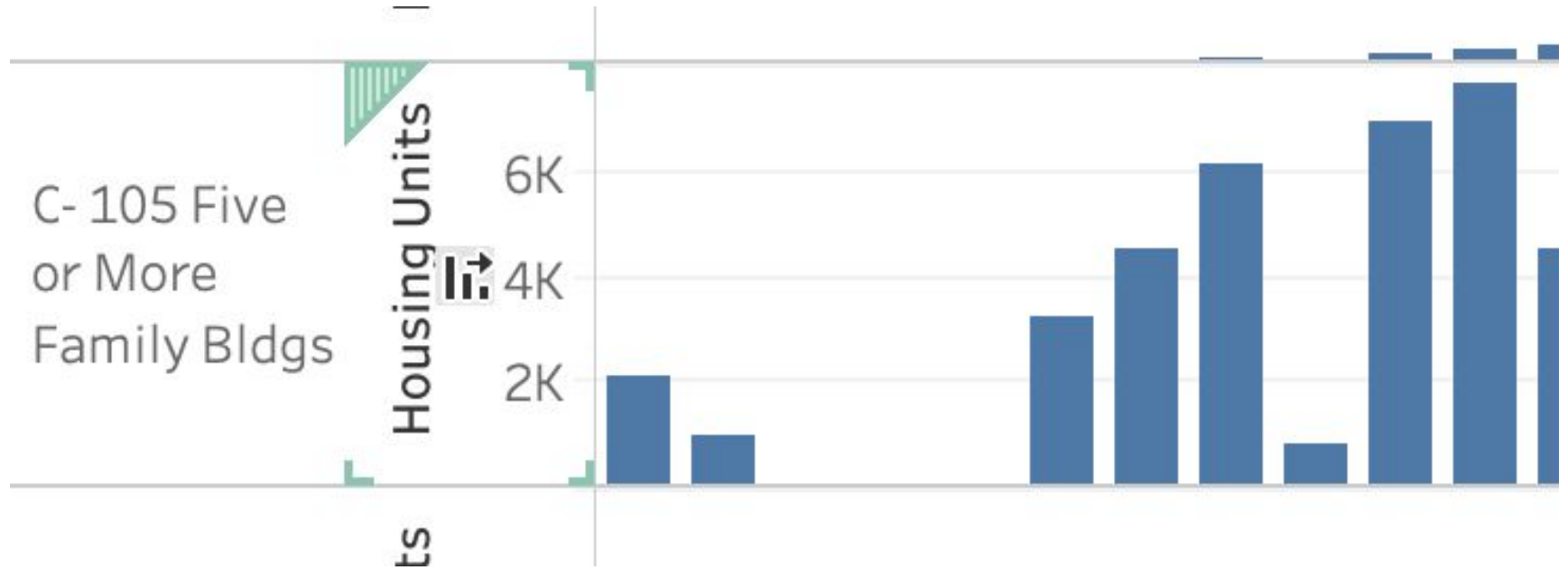
Tooltip

Permit Types issued by Zip



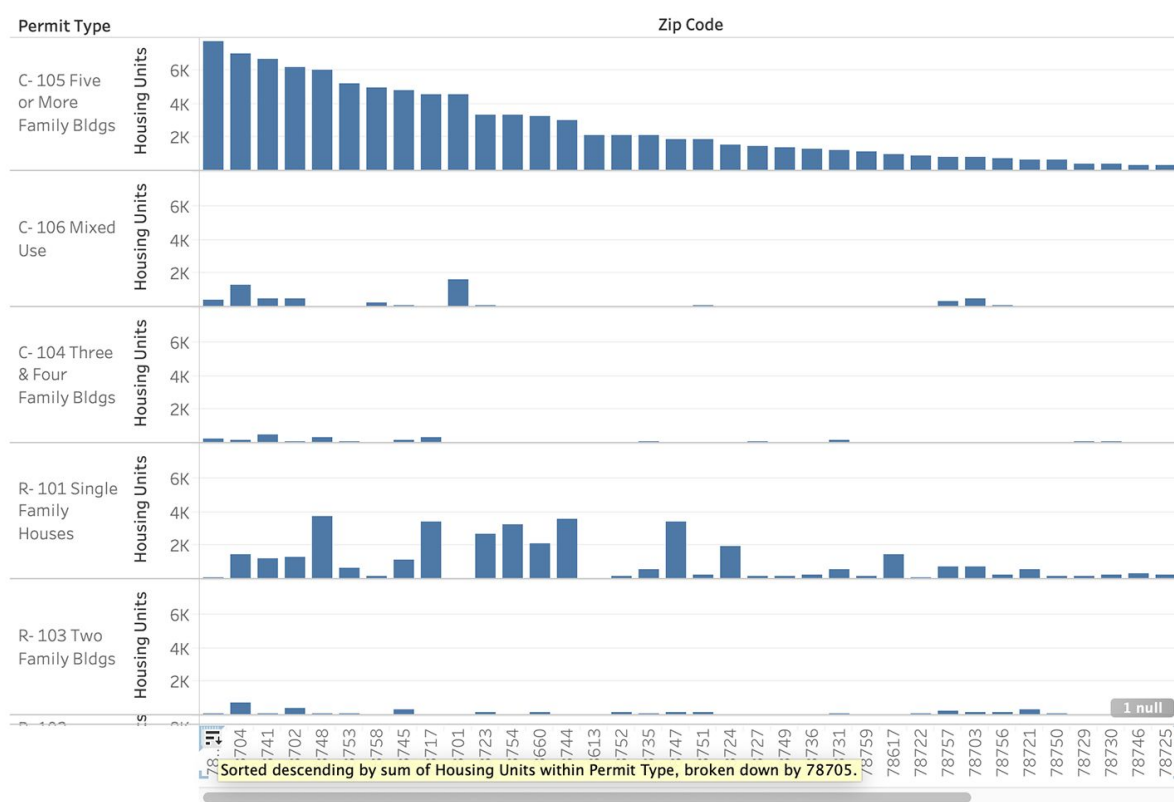
- Permit Type
- ☒ (All)
 - ☒ C- 101 Single Famil...
 - ☒ C- 103 Two Family ...
 - ☒ C- 104 Three & Four...
 - ☒ C- 105 Five or More ...
 - ☒ C- 106 Mixed Use
 - ☒ R- 101 Single Famil...
 - ☒ R- 102 Secondary A...
 - ☒ R- 103 Two Family ...

Next, sort in **descending order** on "sum of housing units within Zip Code broken down by C-105 Five or More Family Bldgs"



Columns	Zip Code
Rows	Permit Type
	SUM(Housing Units)

Permit Types issued by Zip



- Finally, **sort in descending order** on "sum of housing units within Permit Type broken down by 78705"
- Using the **filtering options** on the right, we can show the **breakdown by zip code** based on the type of permit.

Questions?



Maps



**This next demonstration will take
a deeper dive into creating and
enhancing maps.**



Instructor Demonstration

Maps



Where have we used this before?



**How does this activity equip
us for the Challenge?**



**What can we do if we don't
completely understand this?**



Time to Code

Maps

Suggested Time:

25 minutes

Questions?





Instructor Demonstration

Dashboard

Questions?





Time to Code



Airline Safety Dashboard

Suggested Time:

20 minutes



Instructor Demonstration

Storytelling



Time to Code

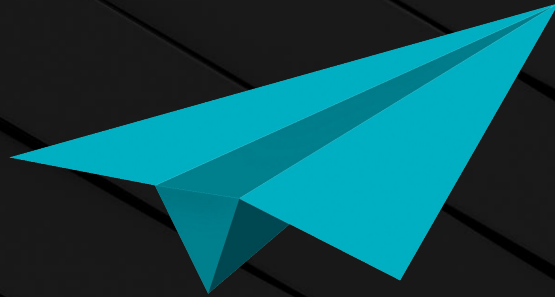
Creating Stories and Presentations

Suggested Time:

20 minutes

Questions?





Office Hours

30 Minutes