# Creating Tableau Charts, Dashboards, and Stories

Data Boot Camp

Lesson 14.2

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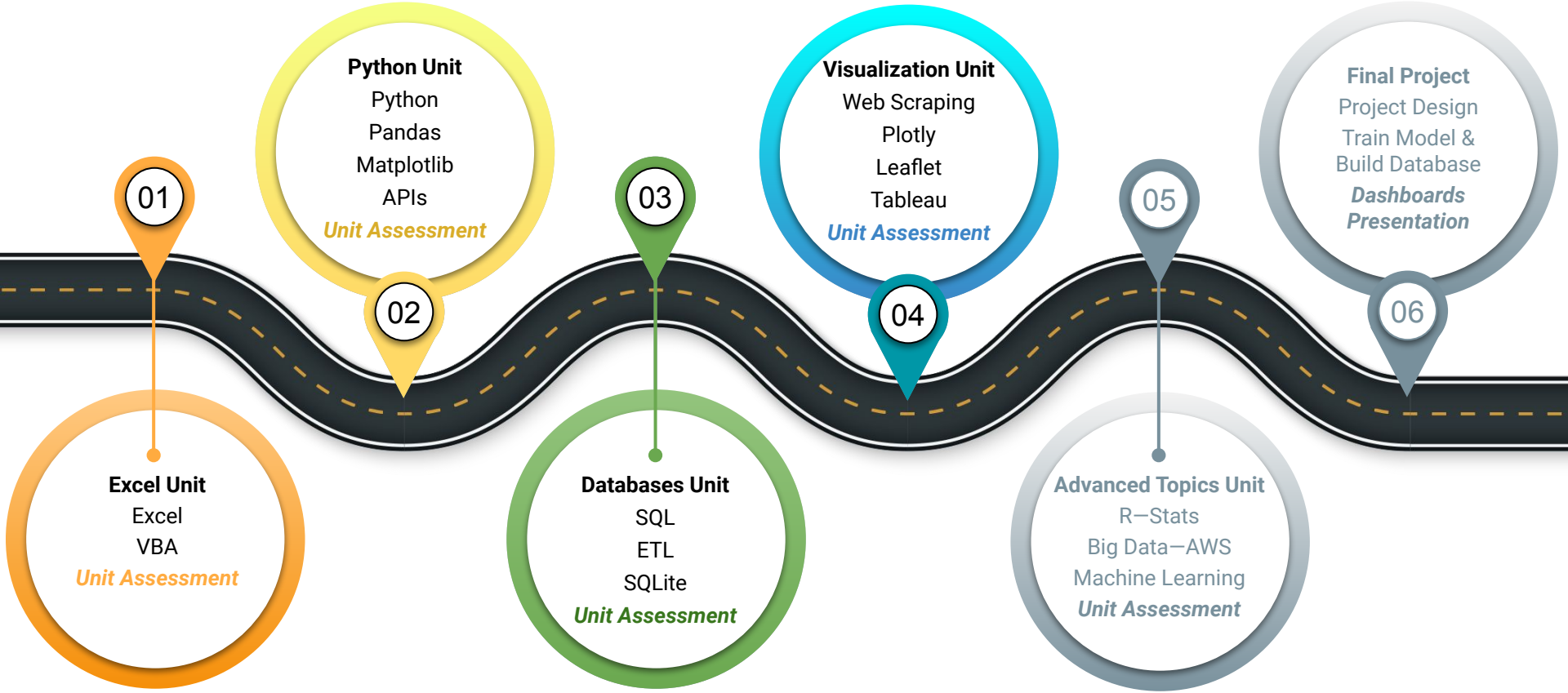
# The Big Picture



# This Week: Tableau

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

01 Import data into Tableau

02 Create and style worksheets, dashboards, and stories in Tableau

03 Use Tableau worksheets to display data in a professional manner

04 Portray data accurately using Tableau dashboards and stories

## 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.

Module 14

# Today’s Agenda

# Today's Agenda

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

01 Creating area and bubble charts

02 Creating Tableau dashboards

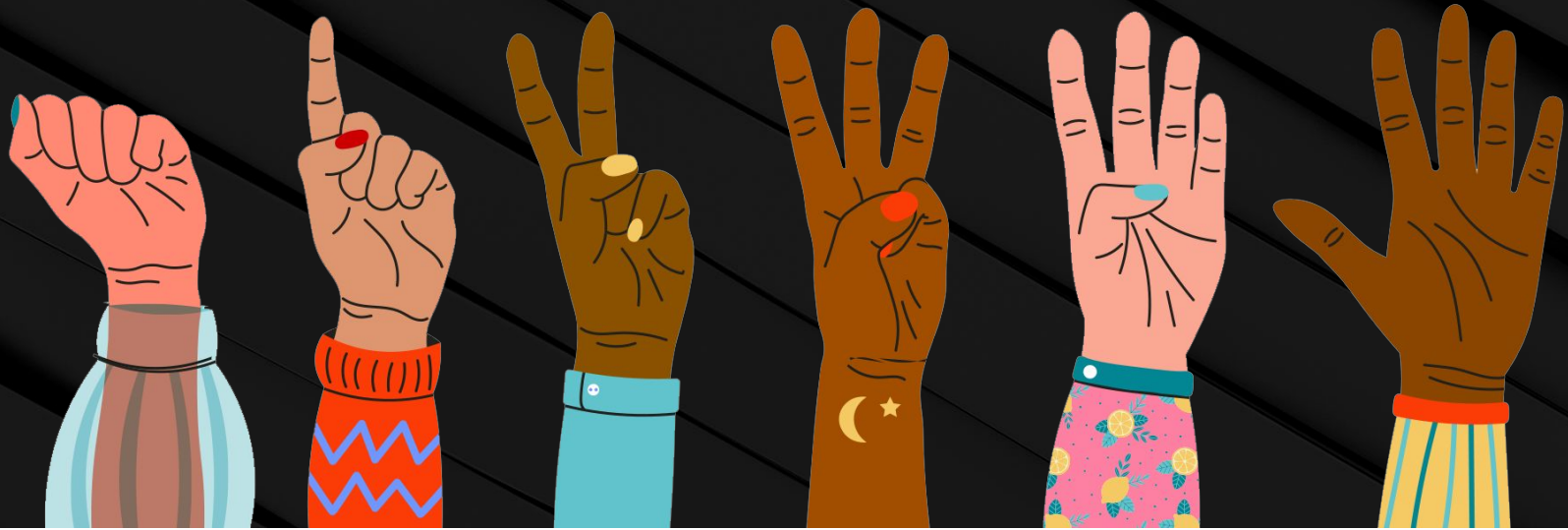
03 Creating Tableau stories

**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:

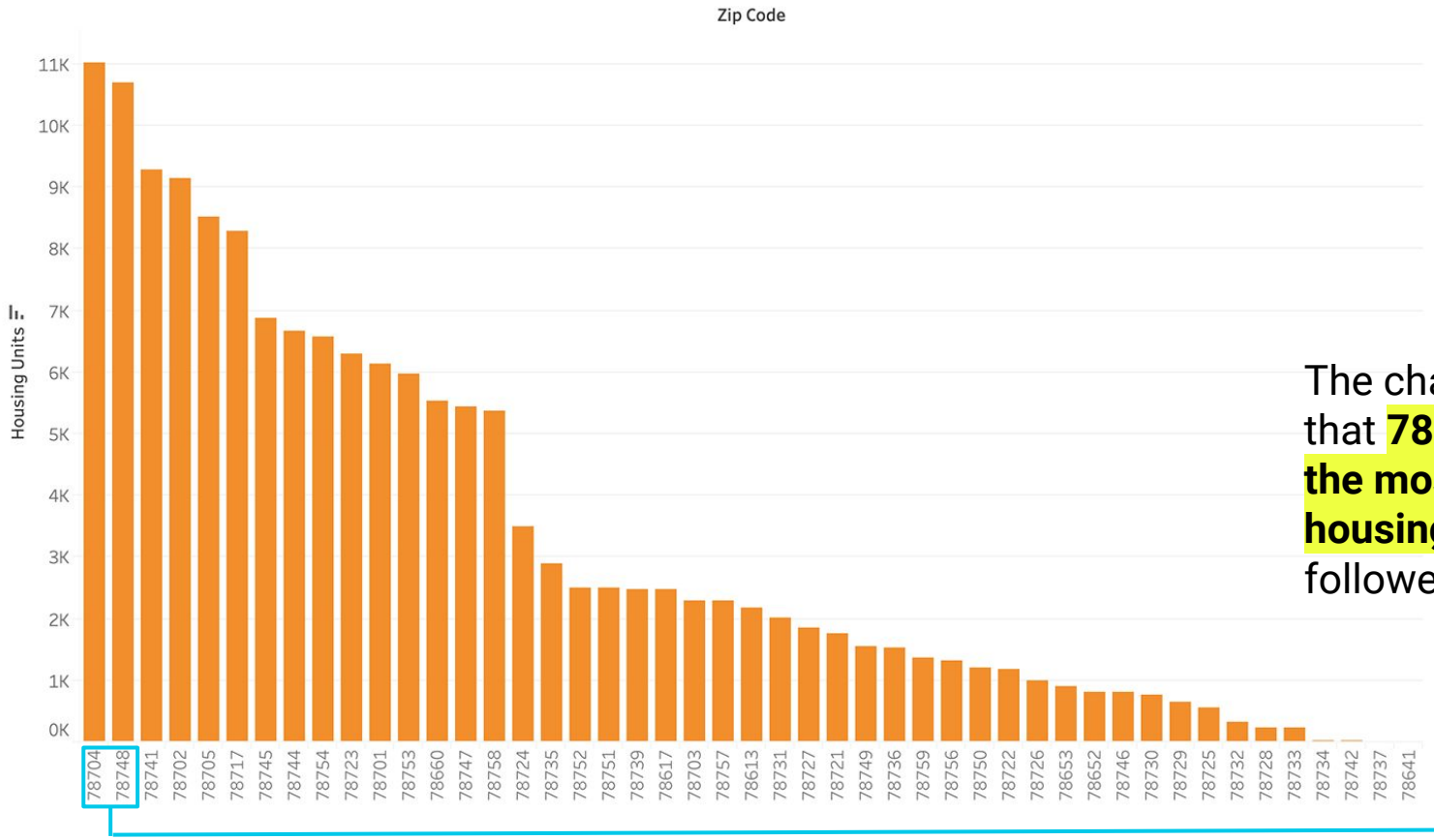
20 minutes

Columns: Zip Code

Rows: SUM(Housing Units)

Drag the **Zip Code** pill to Columns

Drag the **Housing Units** pill to Rows




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

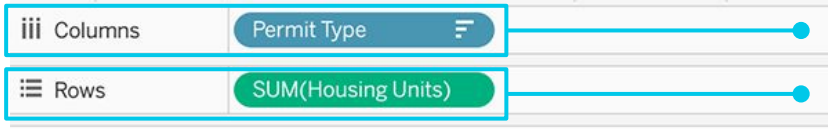
# Visualizing Data on a Geospatial Map

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:

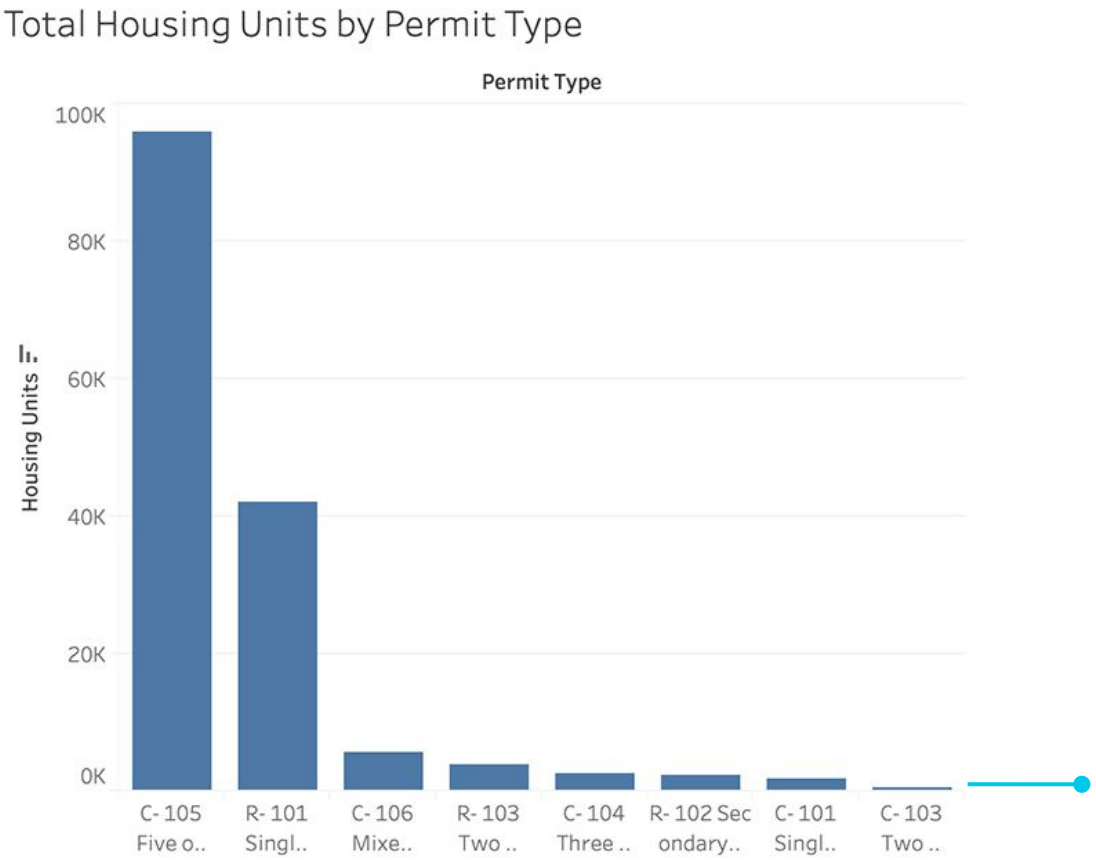
  Latitude (generated)  Longitude (generated)

- 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.

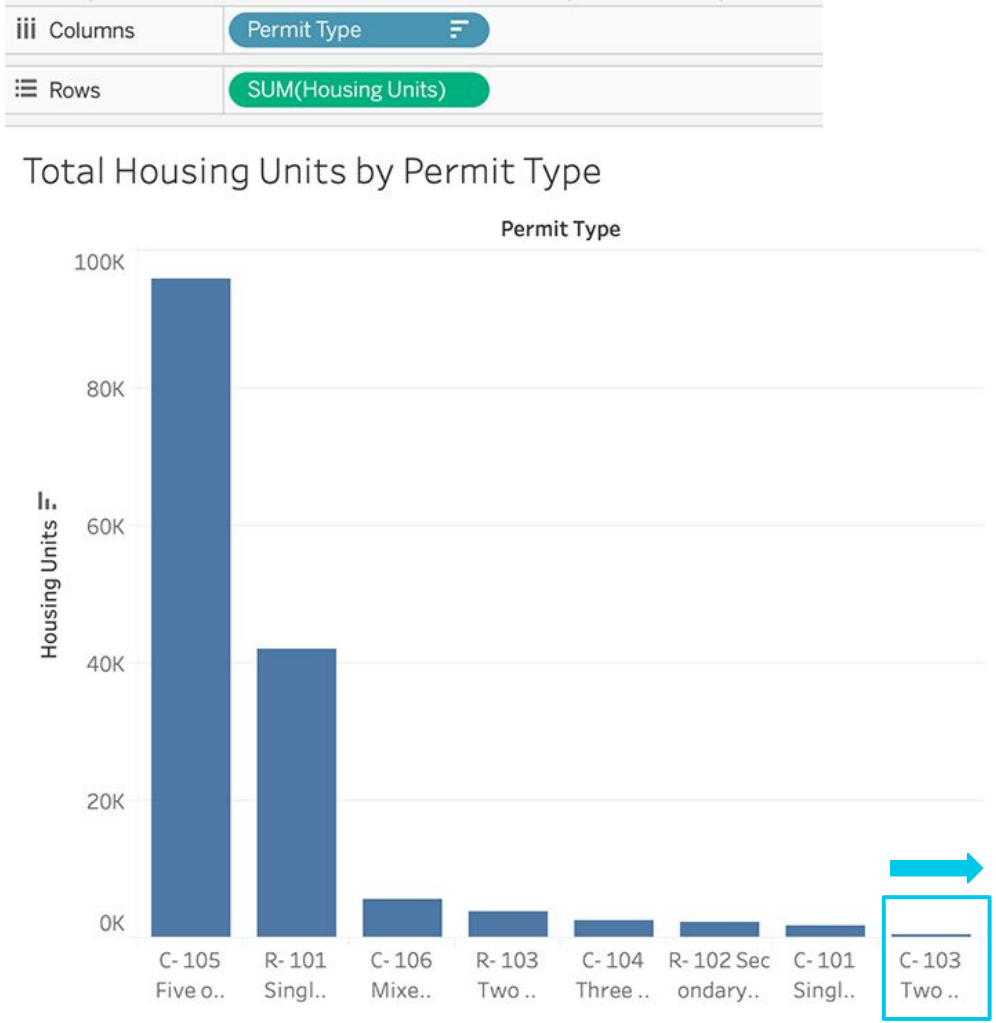



Drag the **Permit Type** pill to Columns

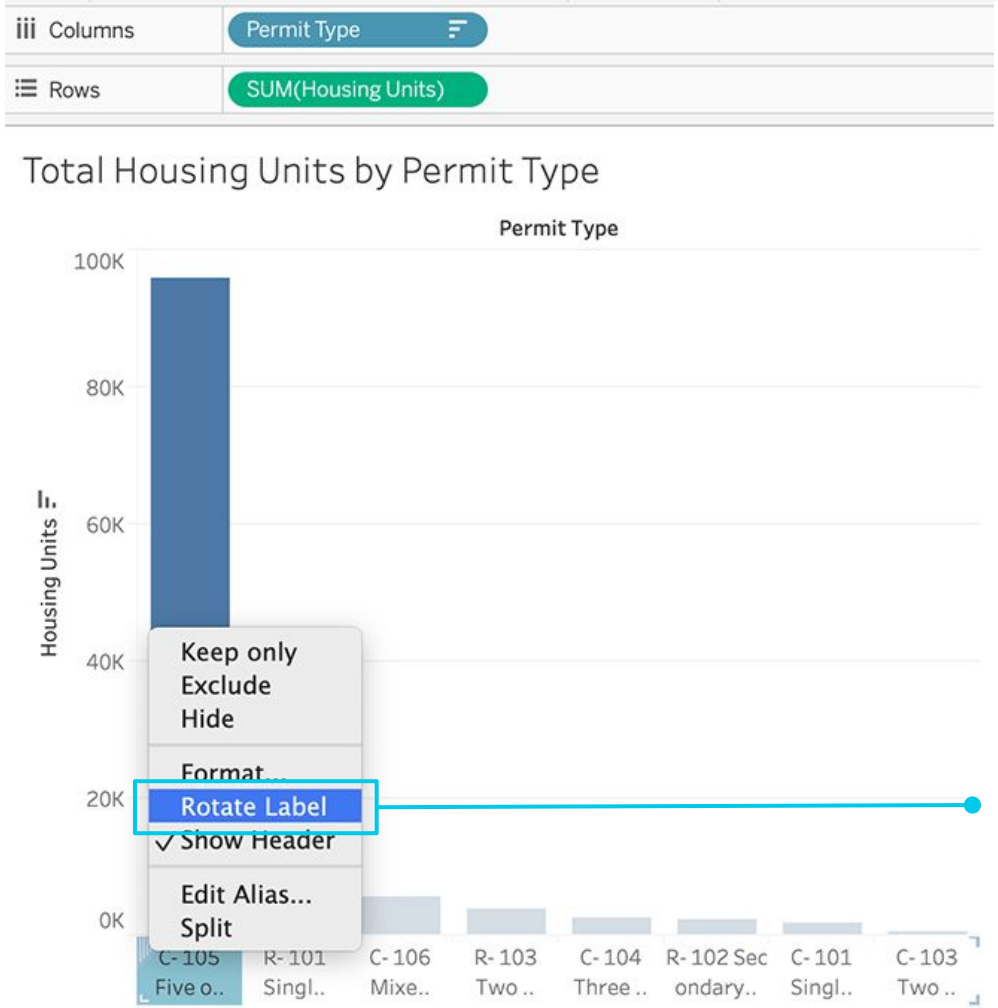
Drag the **Housing Units** pill to Rows




Arrange in **descending order**

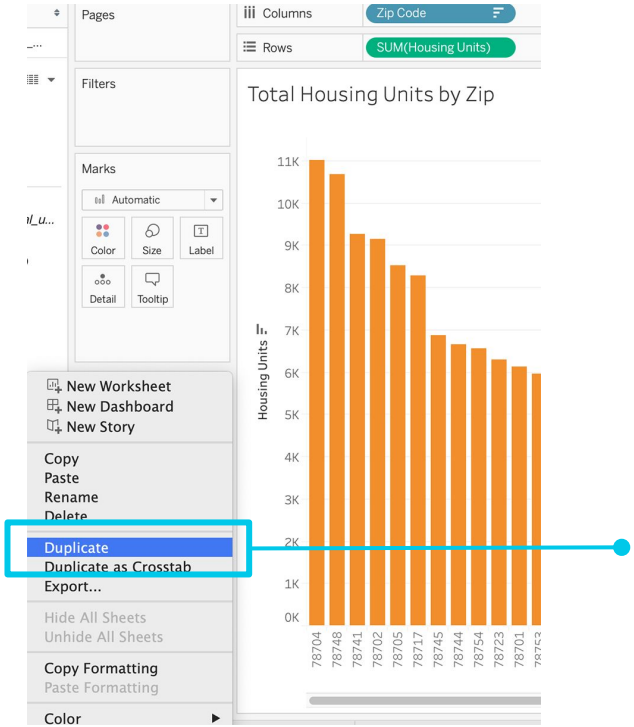



We can make the **x-axis labels** completely **visible** by clicking on the **right end of the x-axis and dragging to the right**.



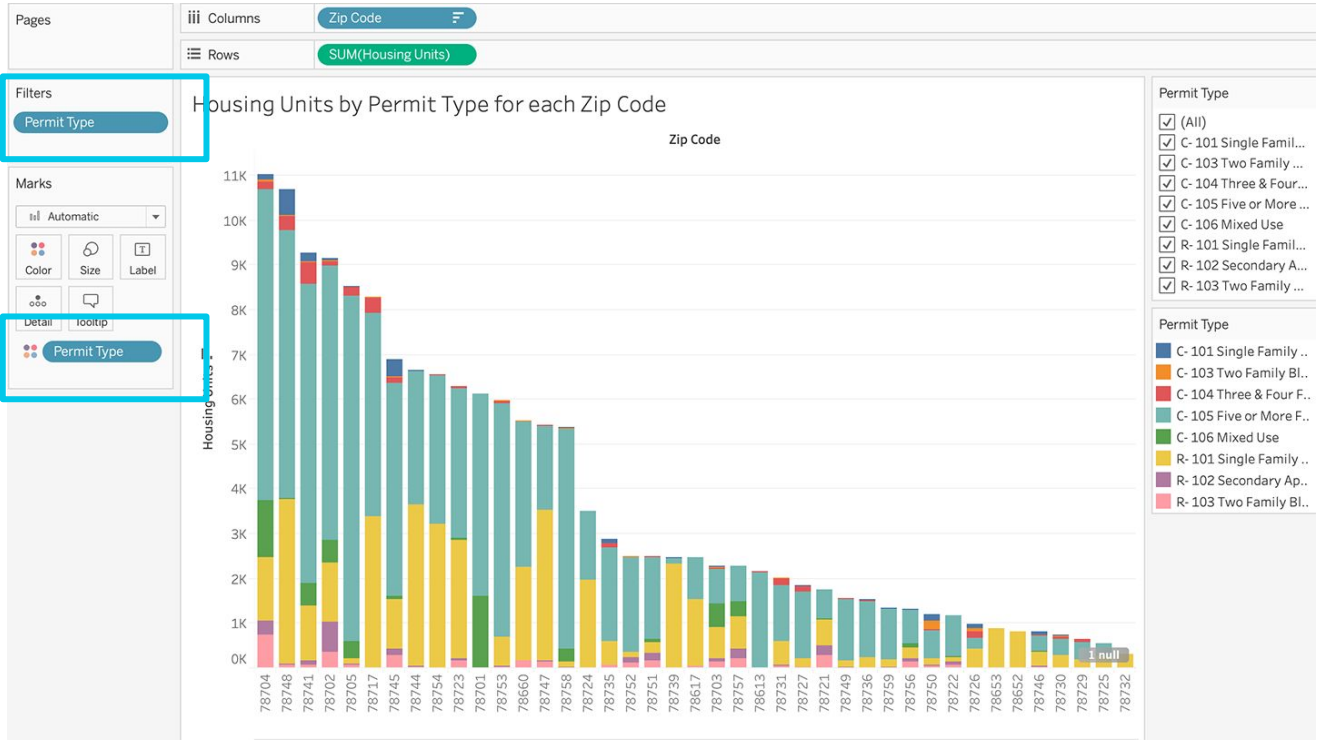

Or, **right-click on the x-axis** and select "**Rotate Label**."

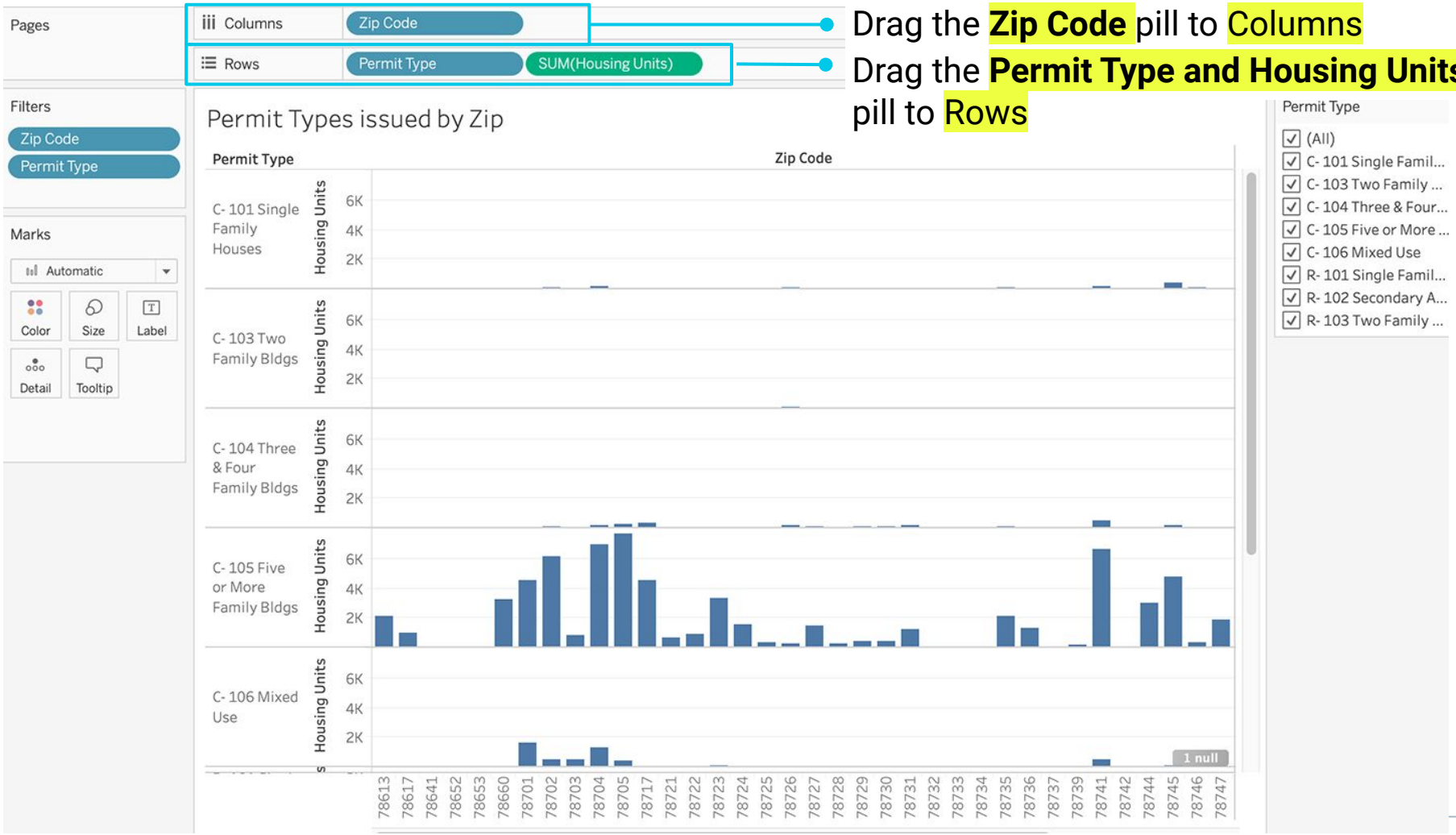
We can visualize the number of housing units by permit type for each zip code in two different ways.



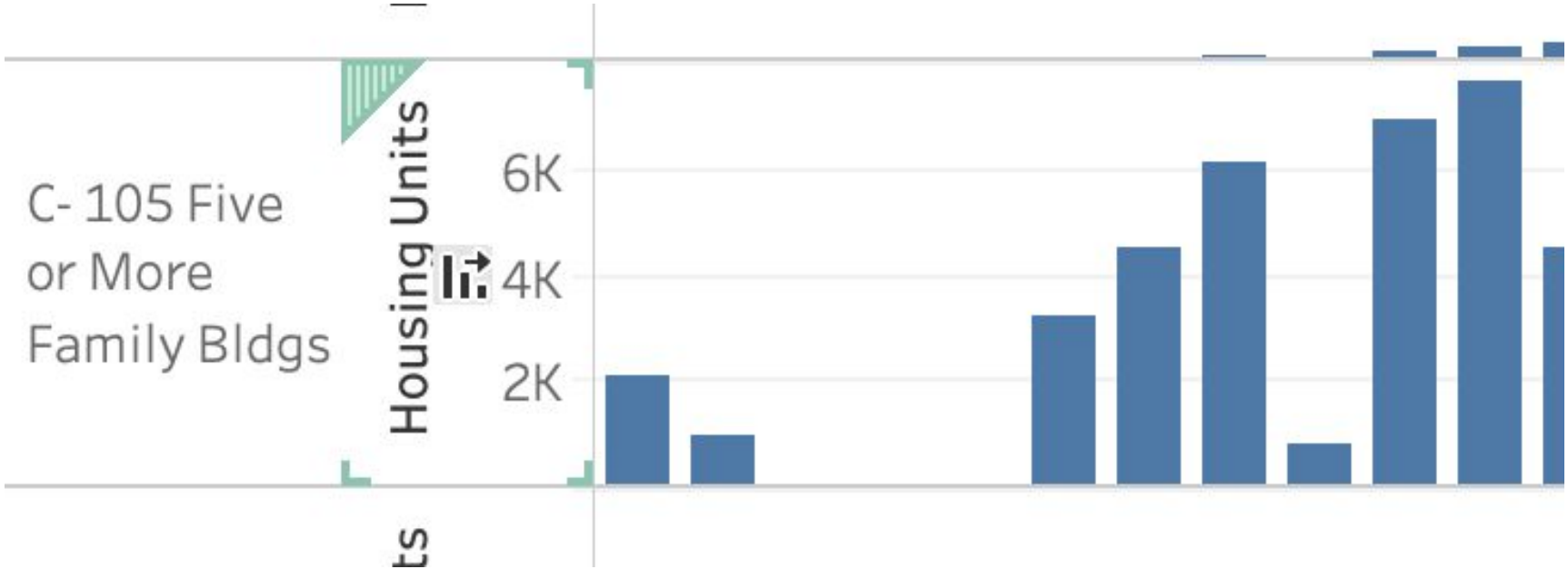

First, we can make a **duplicate of the first visualization**, the total housing units for each zip code, by **right-clicking on the chart title**.

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




Pages
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
Zip Code
C- 101 Single Family Houses
C- 103 Two Family Bldgs
C- 104 Three & Four Family Bldgs
C- 105 Five or More Family Bldgs
C- 106 Mixed Use
Housing Units
6K
4K
2K
1 null
78613 78617 78641 78652 78653 78660 78701 78702 78703 78704 78705 78717 78721 78722 78723 78724 78725 78726 78727 78728 78729 78730 78731 78732 78733 78734 78735 78736 78737 78739 78741 78742 78744 78745 78746 78747
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



- 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?

# Airline Safety Dashboard

Suggested Time:

20 Minutes

# Instructor Demonstration

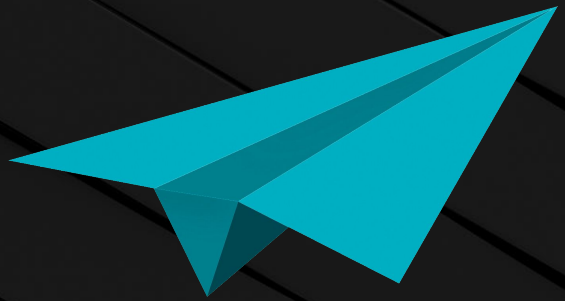
## Storytelling

# Creating Stories and Presentations

Suggested Time:

20 Minutes

# Questions?



# Office Hours

30 Minutes