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BU248 (60 points)

## Q1 (6 points)

Using the highway bridge inspection data, set an **alias** for "*Owner*" codes 11 and 12, based on the description of what those codes mean. Describe what you did and how.

Find Owner codes in the document “Recording and Coding Guide for the Structure Inventory and Appraisal of the Nation's Bridges”.

## Q2 (6 points)

Now that the alias for those State and Local parks have been set, how many bridges are owned by the state park system? How many bridges are owned by Local parks?

**Note:** Please filter on “Rectype” to only inlcude “1”. This is because “Rectype” representing the lanes on the bridge being counted, as two lanes will be listed twices for bridges.

## Q3 (6 pints)

What is the *lowest sufficiency rating* listed out of the State Parks?

## Q4 (6 points)

Add the *location* field to the view, list the name of the *state park* has the bridge with the lowest sufficiency rating. Describe your steps.

## Q5 (6 points)

Add the average daily traffic count to the tooltip. Which of the five state park bridges has the highest daily traffic number and how much is that traffic? Use the **color** shelf to visually illustrate the range. Describe your steps.

## Q6 (6 points)

## Use the **filter** to set the map to visualize just bridges built before 1960 and that are fracture-critical.

## Continuing to use the *sufficiency rating* on the color mark, which bridge (list the *location* information to identify) has the worst sufficiency rating. Fracture-critical bridges are listed as "Functionally Obsolete", which is listed in Stat2 as "2". Include this in your filtered view.

## What is the rating? Describe your steps.

Q7 (6 points)

What is the average daily traffic number for that bridge? Explain how you got your answer.

Q8 (6 points)

Using **filters** and the **color** shelf, find the bridges with more than 10,000 in average daily traffic that are fracture-critical and have a sufficiency rating below 50. Select **Map** and then **Map layers** from the top of the toolbar and click the check box for **county names**.

Which bridge is the worst and in what county?

## Q9 (6 points)

Write a news lede about the number of bridges in the Seattle area showing up on the above map and the condition they are in. Use the **color** shelf and the **size** shelf to illustrate the findings.

Write another news lede about the worst bridge(s) on the map, based on your findings so far. Provide a screen shot of your work or a packaged workbook.

## Q10 (6 points)

What other reporting steps would you need to take to tell both stories for which you wrote ledes?