These instructions assume that the version CAR_2023 is being used. They should also work with CAR_2024, using the more recent data, although the precise data results shown in the data table beneath the graphs will be different for some of those mentioned in the instructions.

1. Clink on the link to the left that appears as CAR_2023;
2. After noting the title of the bar chart, click on item 2 to the left, “Display interactive graphs”.
3. There are 5,152 points in the LH graph, one for each non-charter elementary and middle school for which CAR assigned grades for 2022-2023. The schools were divided into quintiles, based upon the percentages of FRPL kids in the schools. In each of the five quintile groupings, schools are plotted in the segments indicating grades A to F, with the As at the top, and Fs at the bottom. Within each grade box in each quintile, the schools were plotted randomly. That is to say, within each letter-grade/quintile box, the precise vertical or horizontal position is random.
4. With that our of the way, each school is also plotted, in the RH graph, at one of the 25 positions based on its low-income quintile and the letter grade assigned by CAR. CAR’s grade pluses (+) and minuses (-) were disregarded.
5. Interactivity with the graphs occurs when you draw a rectangle around one or more points. The rectangles are drawn by positioning the mouse cursor near a point, clicking the LMB, moving the mouse, thereby creating a moveable rectangle, then clicking the LMB again when the rectangle encloses the desired point or points.
6. It is important to note that the rectangles you draw can be used with two different types of operations, depending on whether the button with the label [Multi] has the color red or white. It should initially be set to white. To try out this interactivity do the following;
    a. Click on the [Multi] button, changing it to red. This puts you in what I call the “multi mode”, where multiple points are operated on and results displayed in the data window.
    b. Move the cursor, by moving the mouse, until it is just to the left and above the point in the RH graph which I will reference by Q1-A . i.e., the upper left-hand point in the graph on the RH side of your screen;
    c. Click the LMB, move the cursor and the resuting rectangle until it encloses that single dot (Q1-A), and click the LMB again;
    d. The point inside the rectangle should have turned red, as well as all 285 of the points which represent schools in Q1 which received grades of A in the left-hand graph.

e. In similar fashion, in the graph on the right, use the mouse and the click-move-click technique to draw a rectangle, and enclose the upper-most point in Q5. The result should be to illuminate 13 points at the top of the Q5 region in the left-hand graph.
f. Click on the button [Pct]. A small gray box should appear at the lower LH corner of the graph on the left. You can use the mouse to move this box to where it does not overlap any graph.
g. Use the mouse to enclose all of the points in column Q2. Note that after you click the LMB and move the mouse to enlarge the rectangle, the numbers in the small gray box increase. At any point in time, they indicate the percentage of all students in those schools/points enclosed within the rectangle. If you enclose all of the points in one of the quartiles, the percentage should end up very close to 20%.
h. If you click on the [Multi] button again, changing it to white, you are then in what I call the "Mouse Id" or single-point mode. Any points enclosed in a rectangle as described above will be identified one-by-one, in turn. For example, after changing the [Muli] button to white, use the mouse to enclose the point at the lower-left, the Q1-F point. After the rectangle is completed, a point should be blinking in both graphs. Click on the [R=1] button a couple of times, changing the radius of the blinking dot, making it more obvious. One thing you will see is that the name of the first school encountered is "Albany JR-SR H S". I said that these graphs included only elementary and middle schools. Turns out this school is in CAR's list of middle schools, even though it is a combined JR-SR school. There are other such discrepancies.
i. If you now click the LMB again, with the cursor inside one of the graph areas, the next school represented by the Q1-F point is identified, blinks in a different color in both graphs, and several data elements displayed for it in the second line in the data area.
j. To return to the original presentation click on the [Reset] button, click on the [Multi] button changing it back to red, and the identification mode to the "Multi" function.
k. Here is an interesting exercise. Having completed the steps in (j), use the mouse-rectangle scheme to draw the following rectangles:
    i. In the RH graph, enclose the points corresponding to grades A and B in Q1;
    ii. Enclose the points corresponding to grades D and F in Q1;
    iii. Repeat steps i and ii for grades A & B in Q5, and for grades D & F in Q5.
    iv. Ponder the visual results;

v. Note the values of FRPL% in each row. The schools receiving grades A and B in Q1 had 19% FRPL kids; those schools in Q1 receiving grades D and F had 29% FRPL kids.
vi. Conclusion: even within a quintile FRPL densities in schools are impactful.

l. Final demonstration point. To look at the distribution of grades and FRPL quintiles for a specific district:
    i. Click [Reset] button;
    ii. Click on the [Hlt/Sel] button, turning it red and setting the **select** function;
    iii. Click on the small window that says "Districts", put the cursor inside the list, use the mouse wheel to scroll down and click on the name Austin ISD;
    iv. Click on the [Clear] button, turn off the select function by clicking once again on the [Hlt/Sel] button, turning it white again;
    v. The points now plotted on the screen represent schools only in Austin ISD. The percentages shown in the small gray box will now only refer to enrollments in Austin ISD.
    vi. With the [Multi] button red and the [Hlt/Sel] white, draw rectangles around the entire columns of points in Q1 and Q5 separately, then around only point Q1-F and then around point Q5-F, all in the RH graph. You should see (a) that of the 22,993 students in Q1, 344 of them were in an F-rated school; (b) of the 13,046 students in Q5 schools, 6,844 of them were in one of 15 schools rated F. Thus, just 1.5% of students in Q1 are in F-rated schools; and 52.4% of students in Q5 are in F-rated schools.
    vii. Having selected a district (Austin ISD) the list box to the right (or maybe below) should have the name ALLISON EL showing. Clicking the mouse on this will pop up a list of names of schools in Ausin ISD which are included. Clicking on one of the names will blink its corresponding point in both graphs, and will also put data for the blinking school in the data window. And also, if you move the cursor near to one of the blinking points, in either graph and press the <Cntrl> key, the school's name will be displayed at the cursor position.