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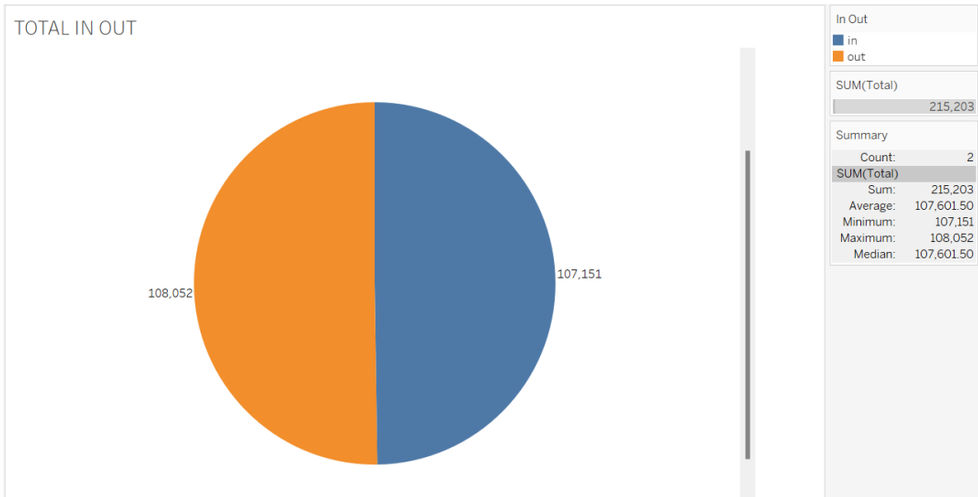
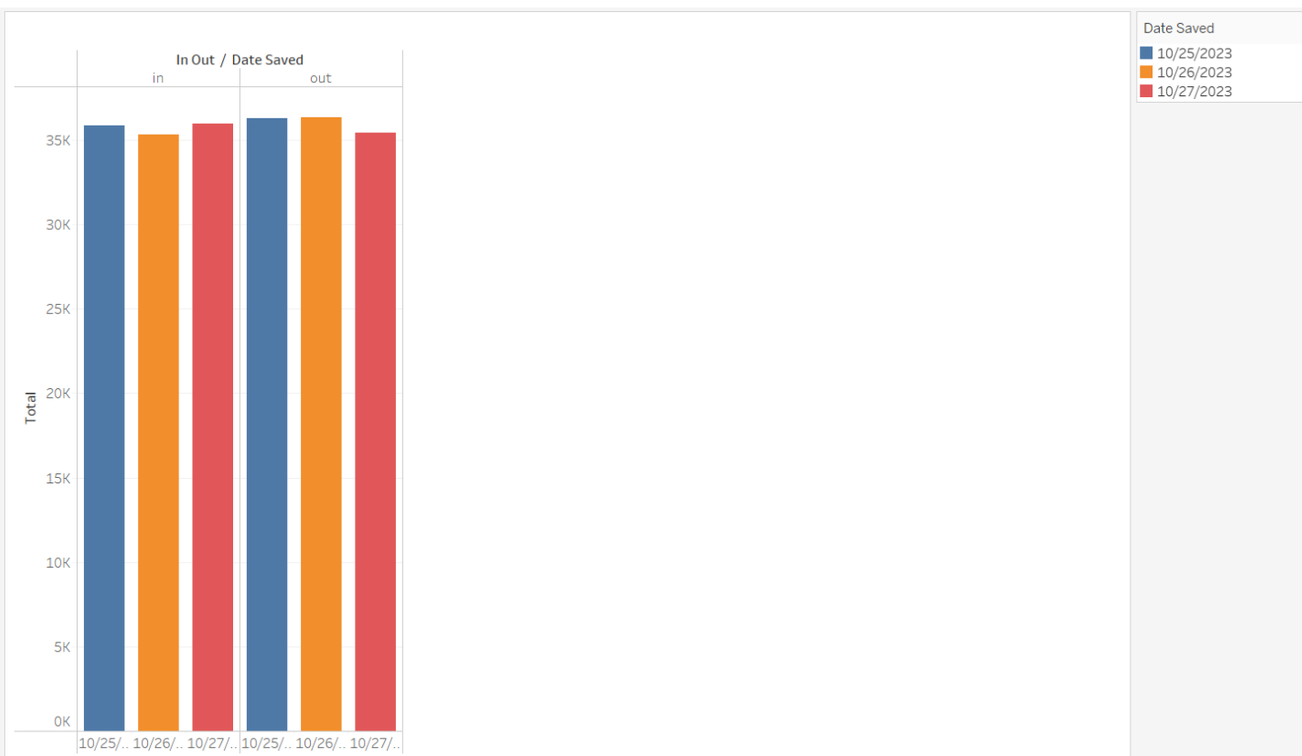
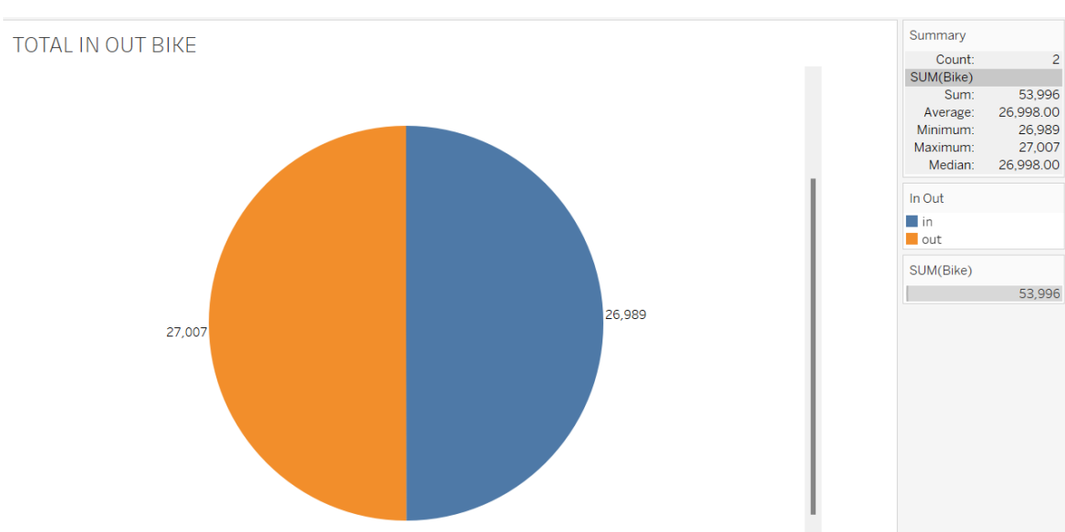
SA3 3-DAY REPORT AND VISUALIZATION

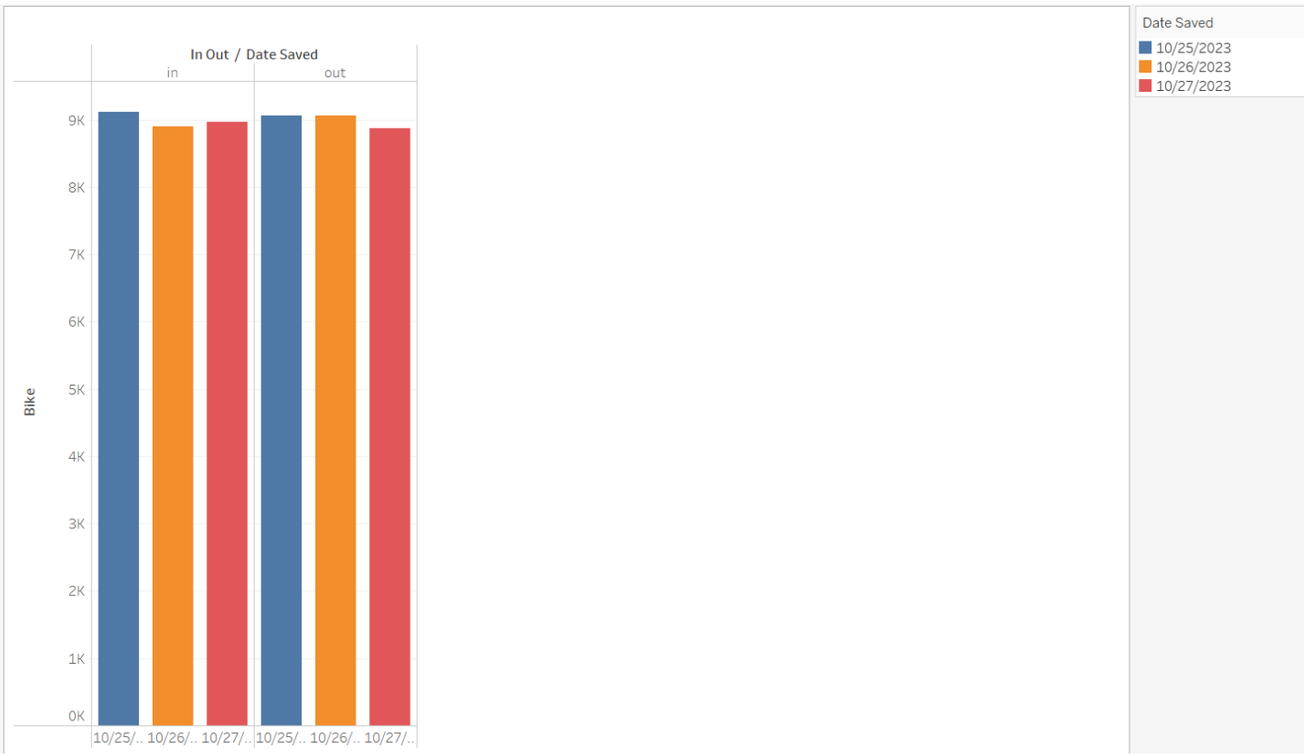
We will start with visualizations of data captured by all CCTVs as a whole. First, we will show the total counts in and out of all vehicles captured by all CCTV's in the 3 days of CCTV recordings. We will drag the inout header to columns and total header to rows. Here we see that there are 107,151 total in counts of all vehicles shown in the blue part and 108,052 total out counts of all vehicles shown in the orange part. We also see the total sum of all vehicles which is 215,203.



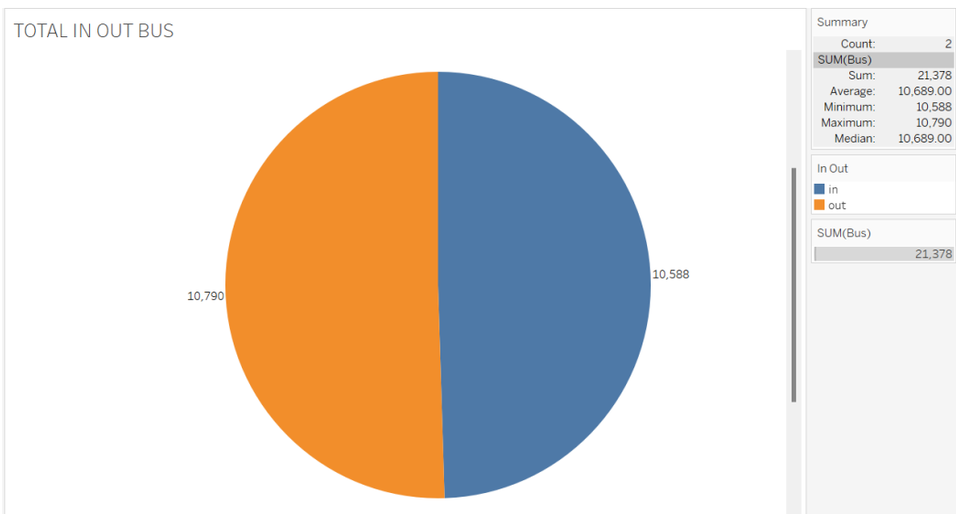


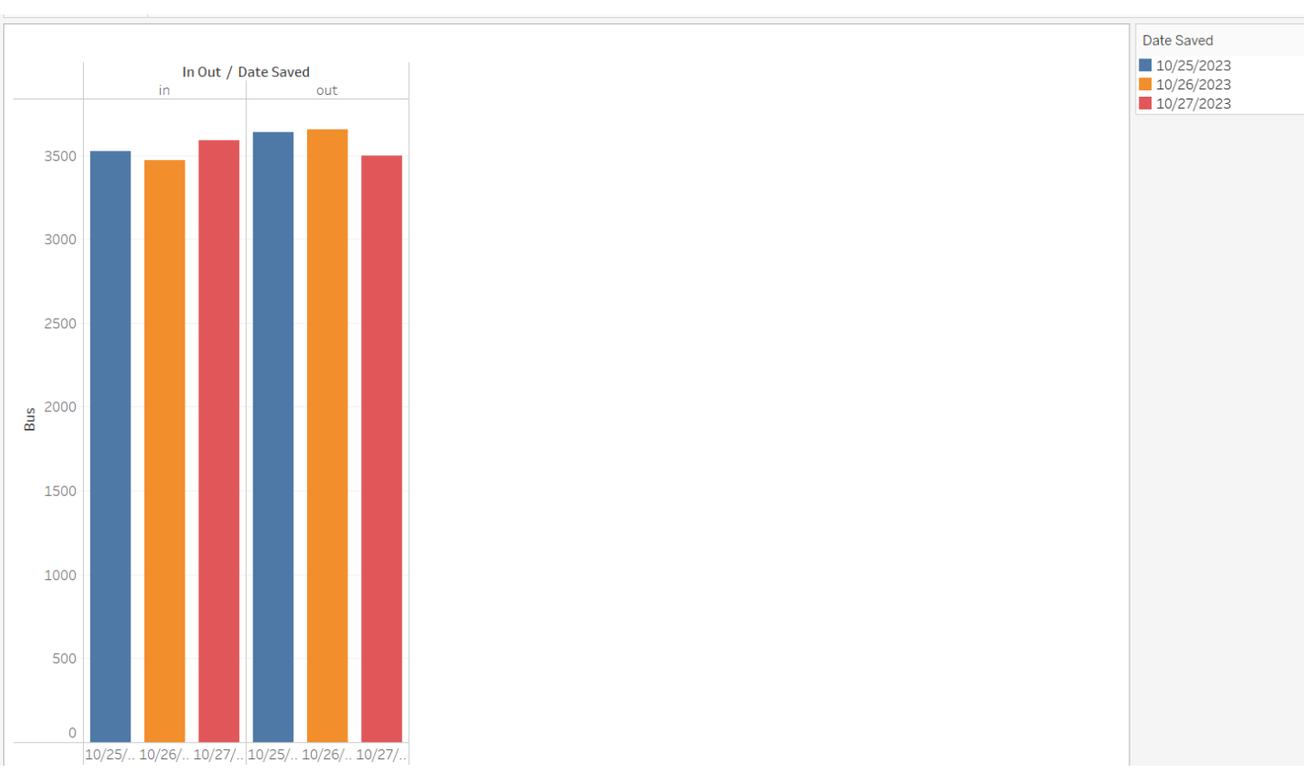
Now we will drill down to specific vehicle types. First, we will visualize total counts in and out of bikes. We will just drag inout to columns and bike to rows. We see 26,989 total in counts and 27,007 total out counts. We also show that the total is 53,996 counts.



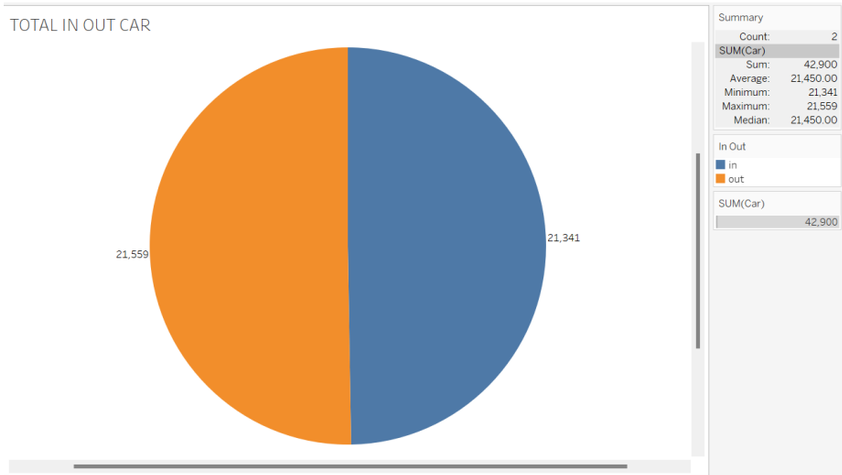


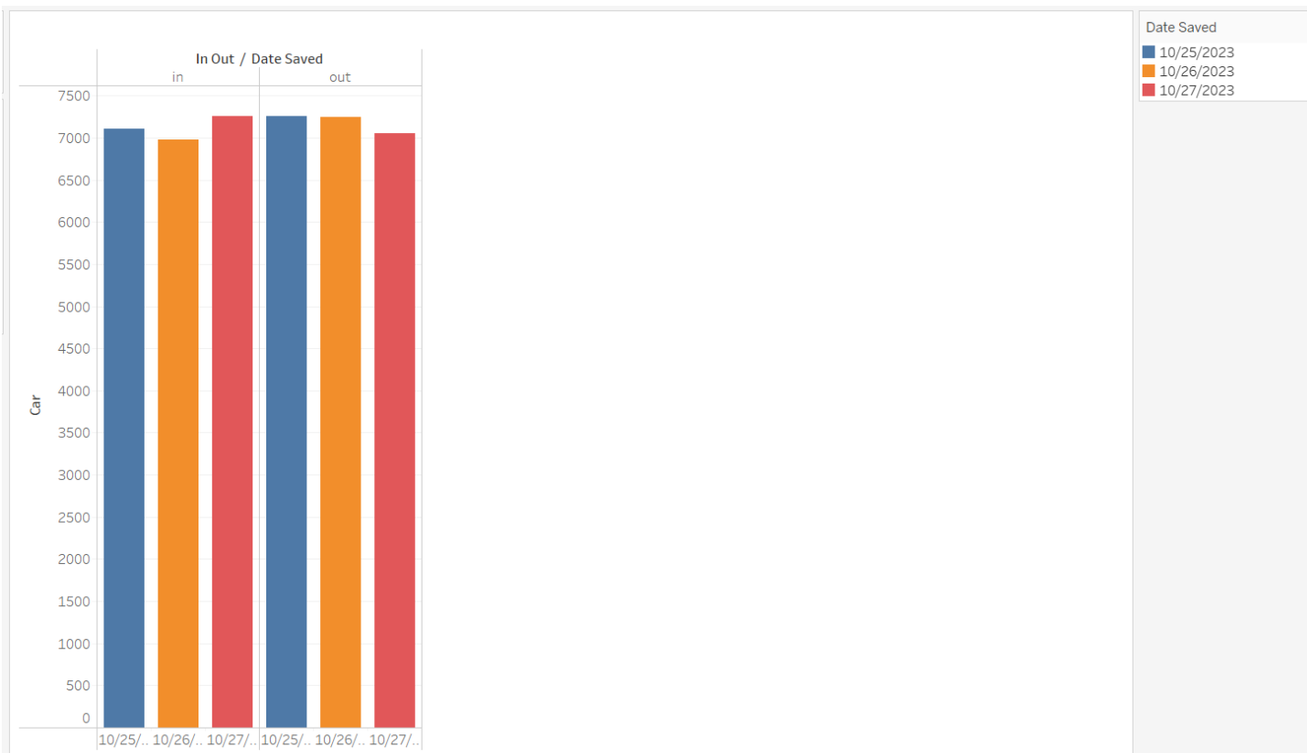
Next is total in and out counts of buses. We will now just drag inout to columns and bus to rows. We have 10,588 total in counts and 10,790 total out counts. We also have 21,375 total counts overall.



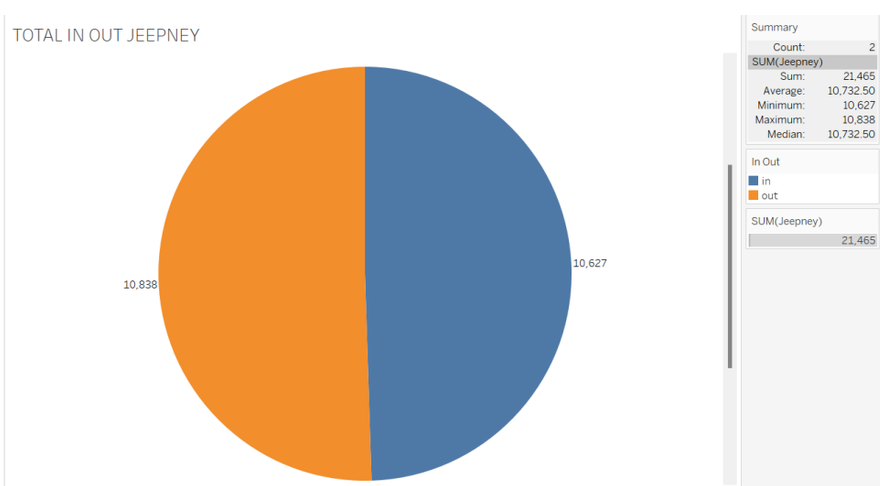


Now this time we will show cars. We drag inout to columns and car to rows. In the pie chart we see 21,241 total in counts and 21,559 total out counts. We also have 42,900 counts overall.

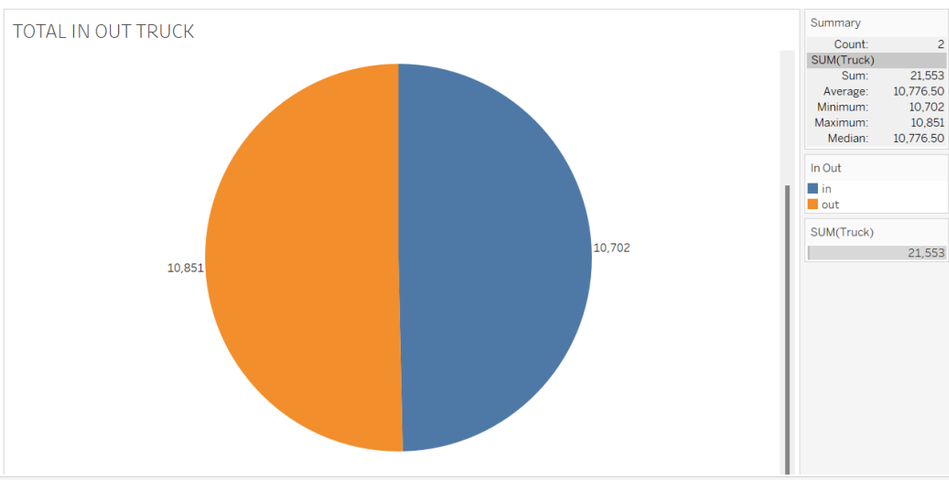


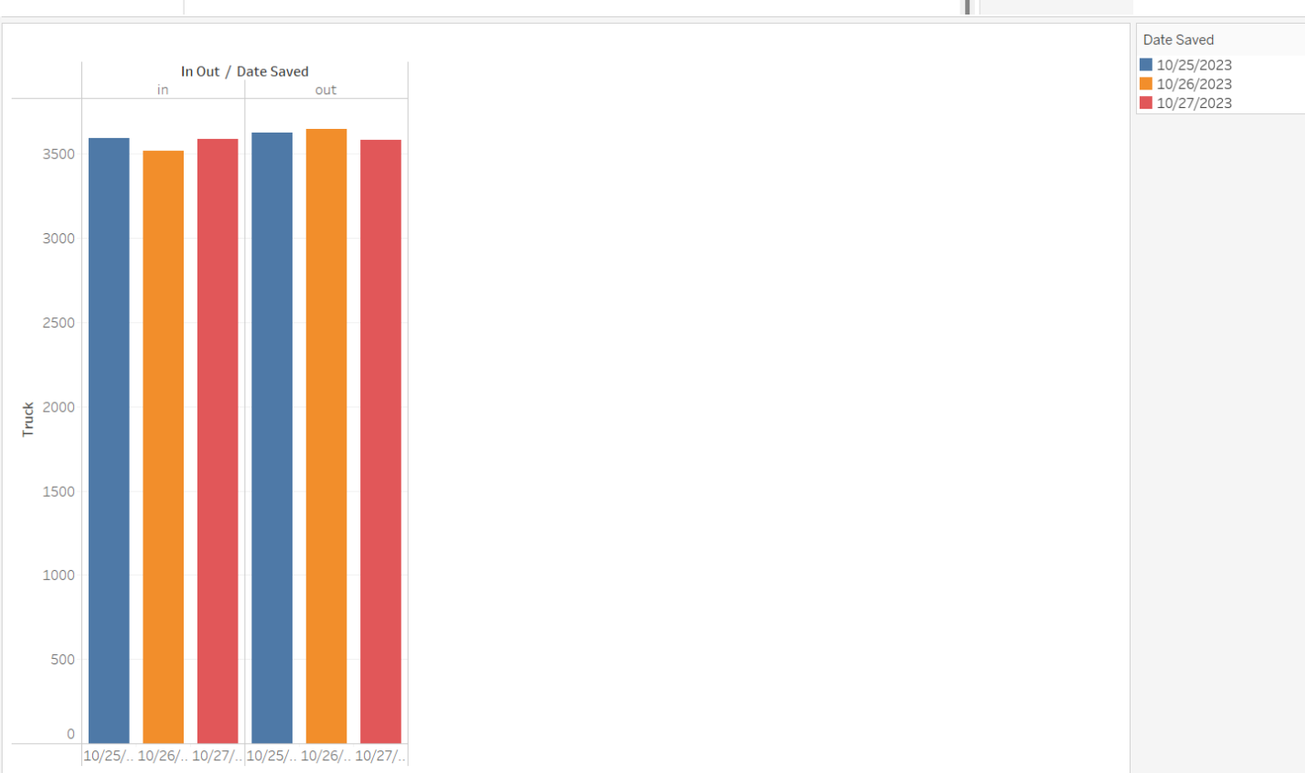


We have jeepneys. We again drag inout to columns and now jeepneys to rows. Now we can see that there are 10,627 total counts for in and 10,838 total counts for out. The overall total counts is 21,465.

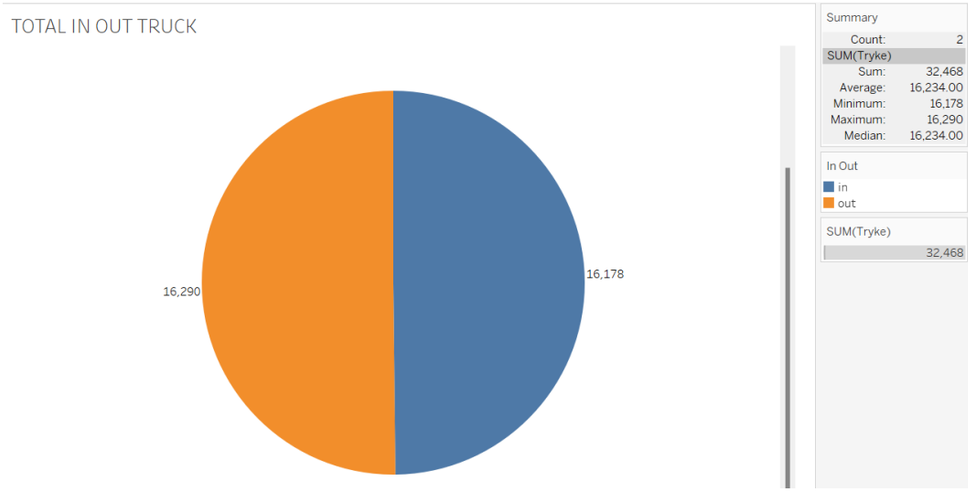


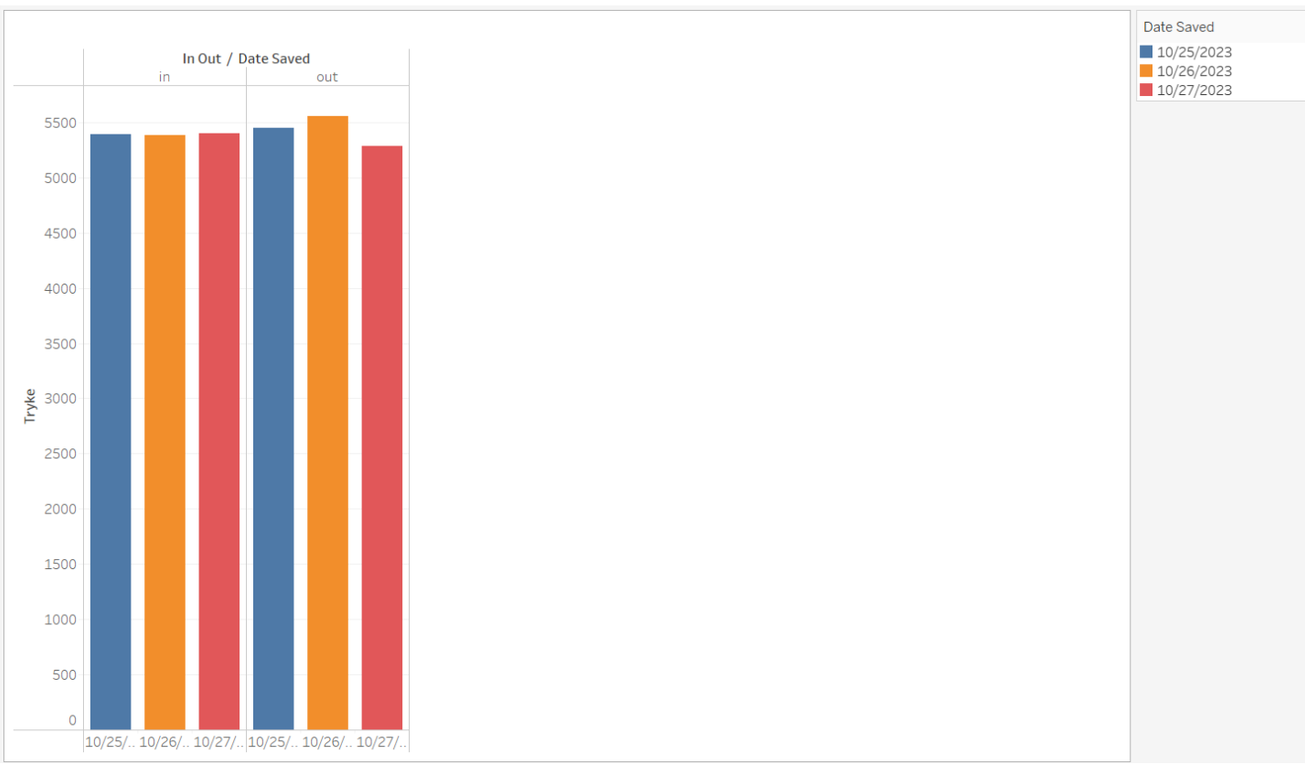
Then we have trucks. For trucks we drag truck to rows and retain inout to columns. We can see that there is a total of 10,702 for in counts and 10,851 for out counts. The overall is 21,553.





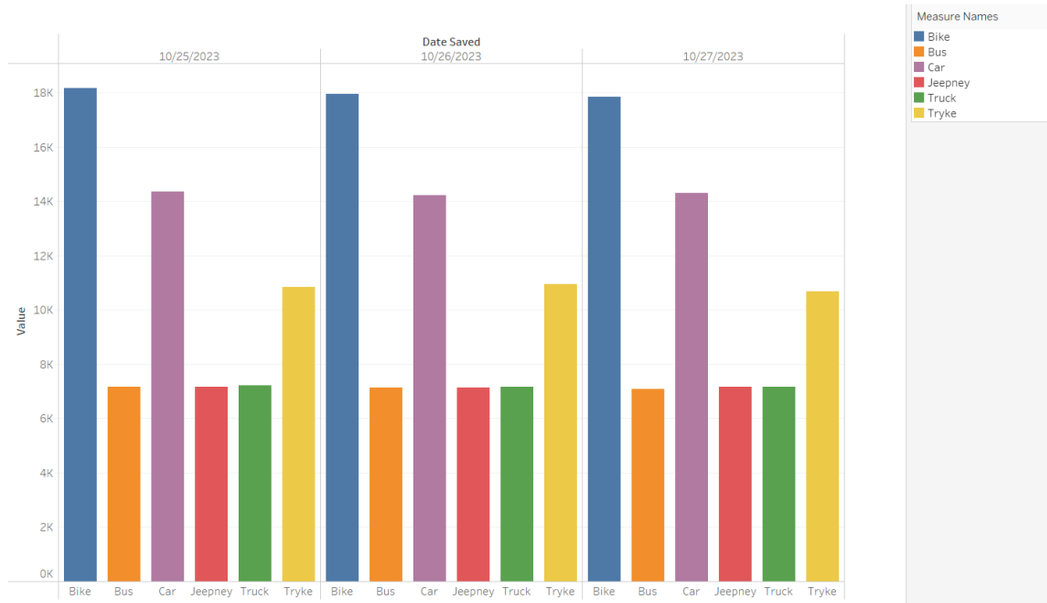
Lastly we have trykes. We just drag tryke to rows and inout to columns. We have 16,178 total counts for in and 16,290 total counts for out. The total is 32,468 overall.



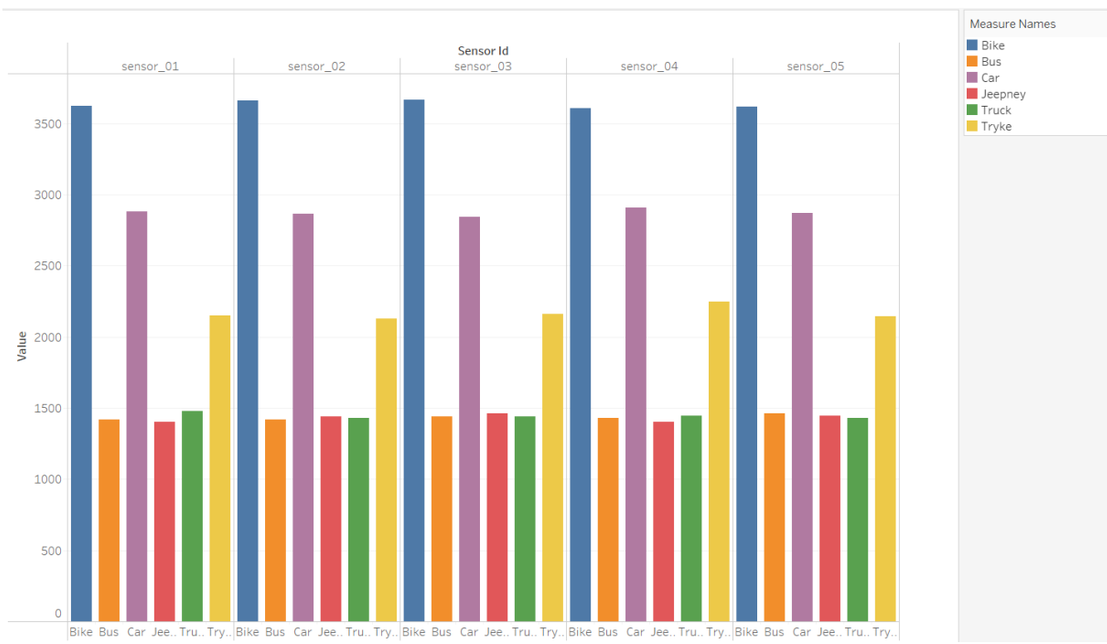


3-DAY REPORT

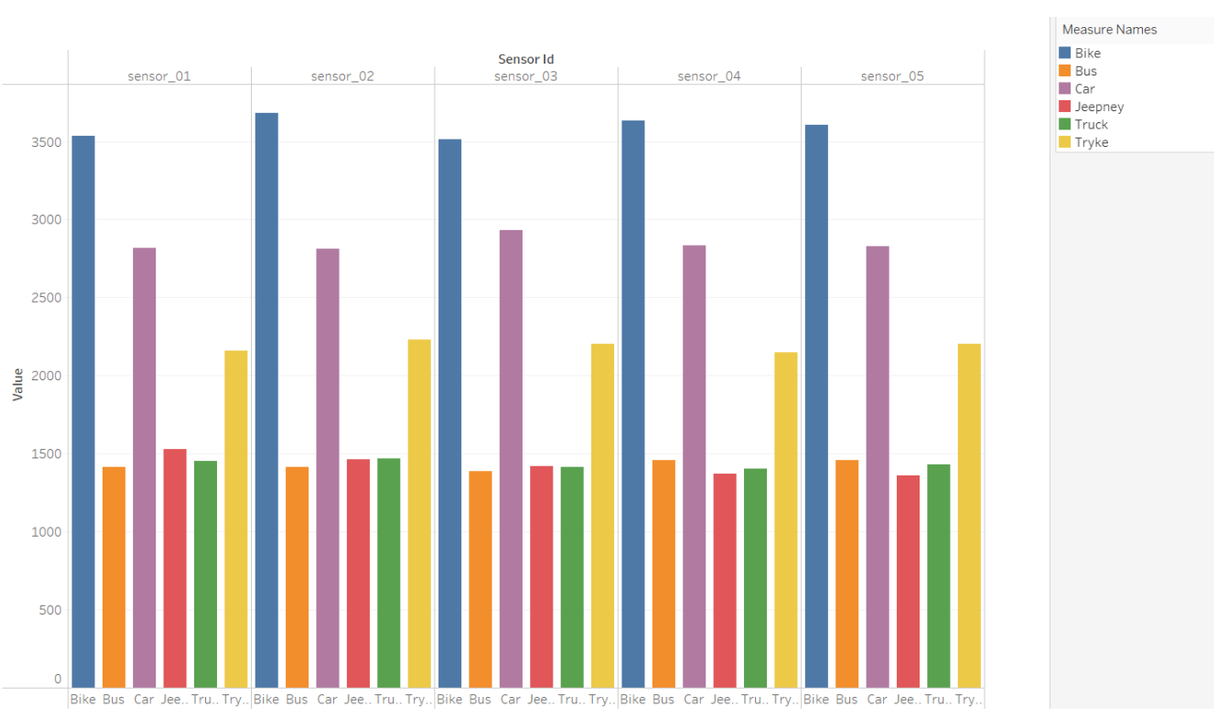
We can show the sum of each vehicle per day using a bar graph. We can specify the total for each vehicle from all CCTVs per day. We can see the results below.



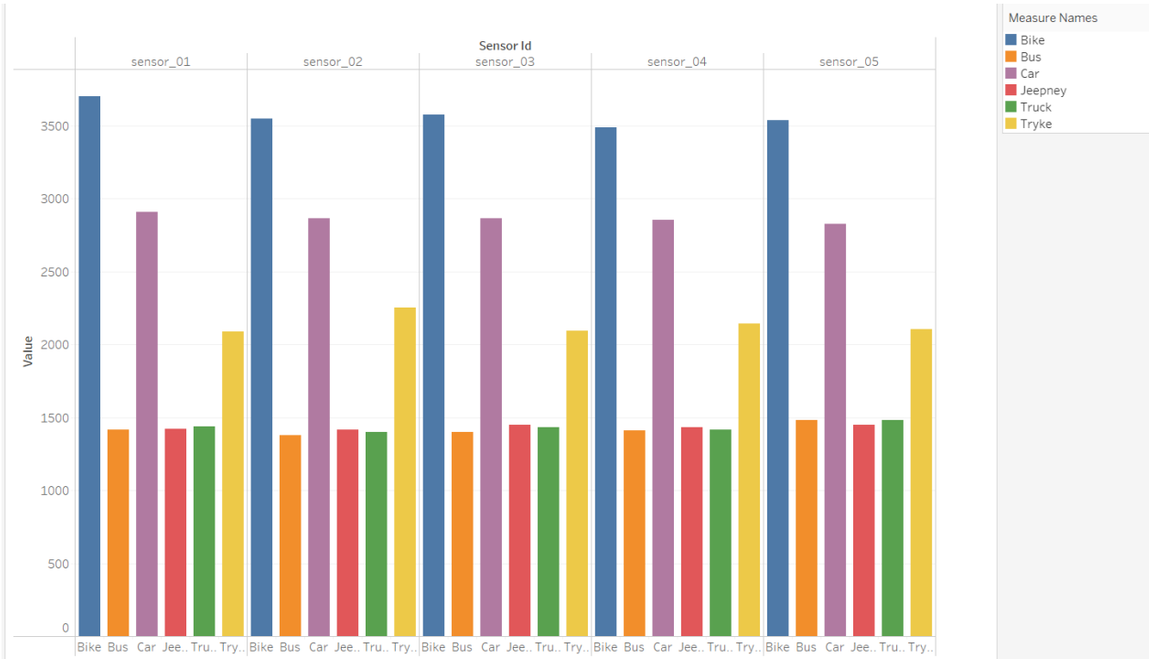
We can further drill down based on each CCTV per day. We have a visualization for day 1.



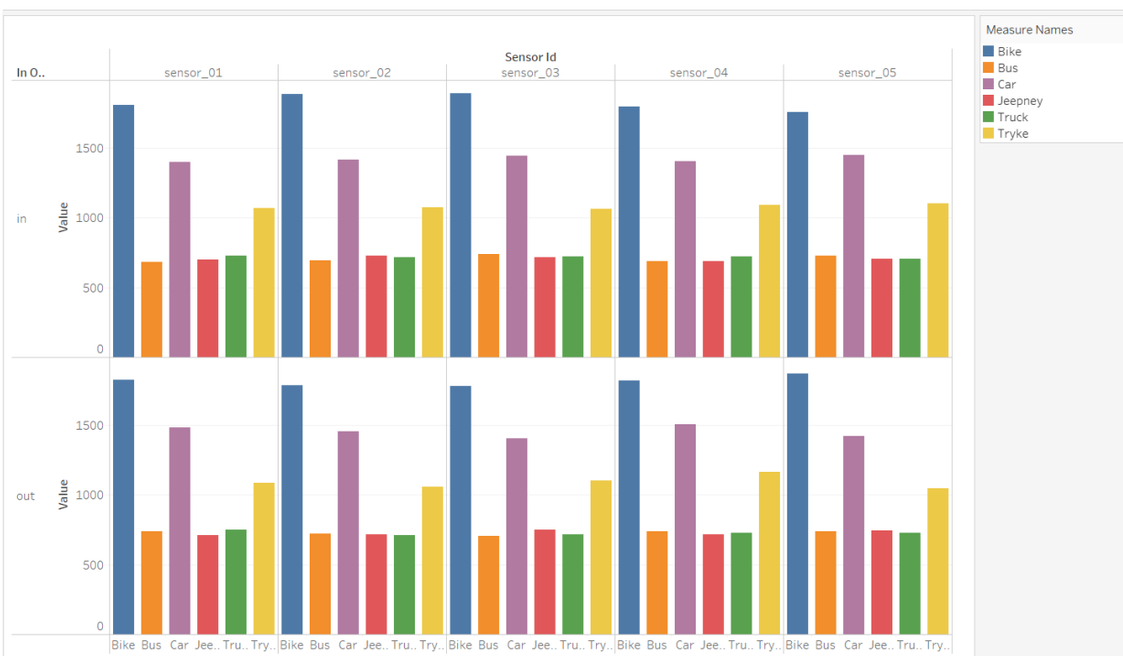
Then we also have the visualization for day 2. We can visualize the total for each vehicle per sensor



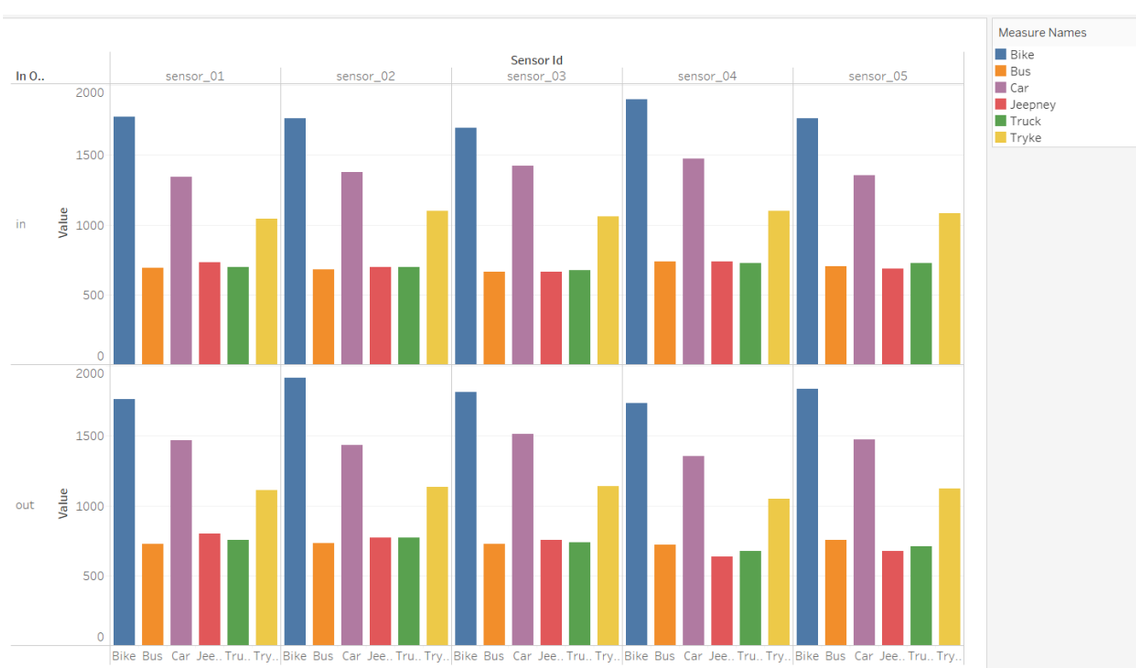
We also have a visualization for day 3. We can see that the most number is always bike.



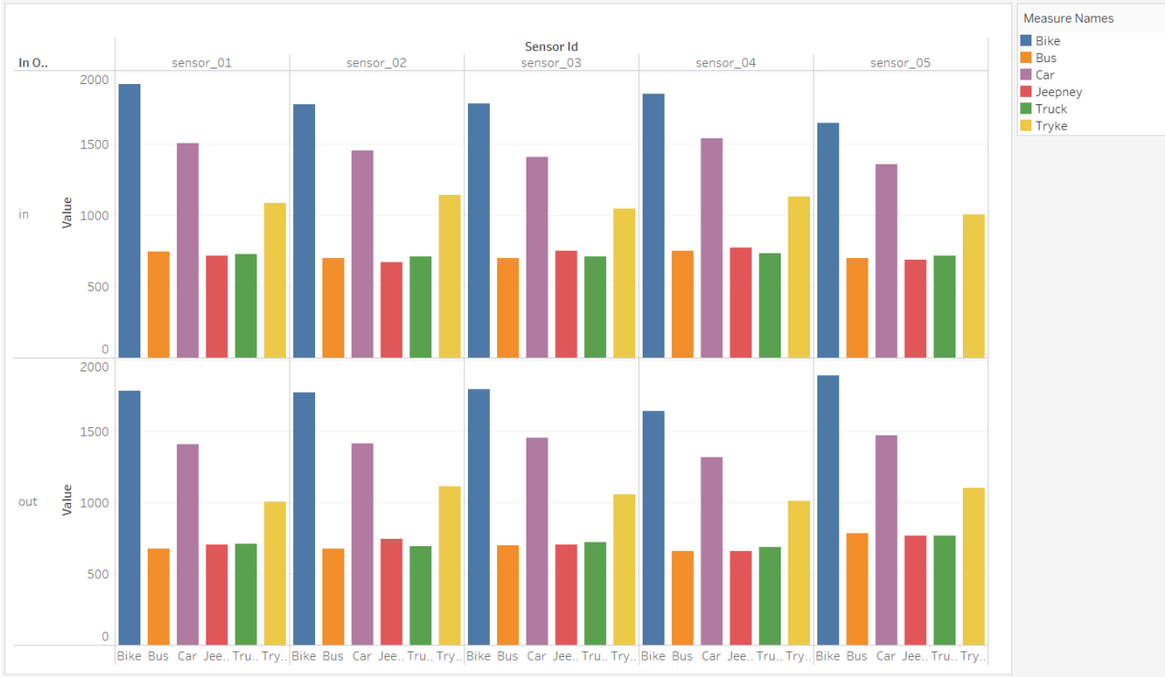
We can also continue to drill down by showing the total in and out counts. We can see it for day 1.



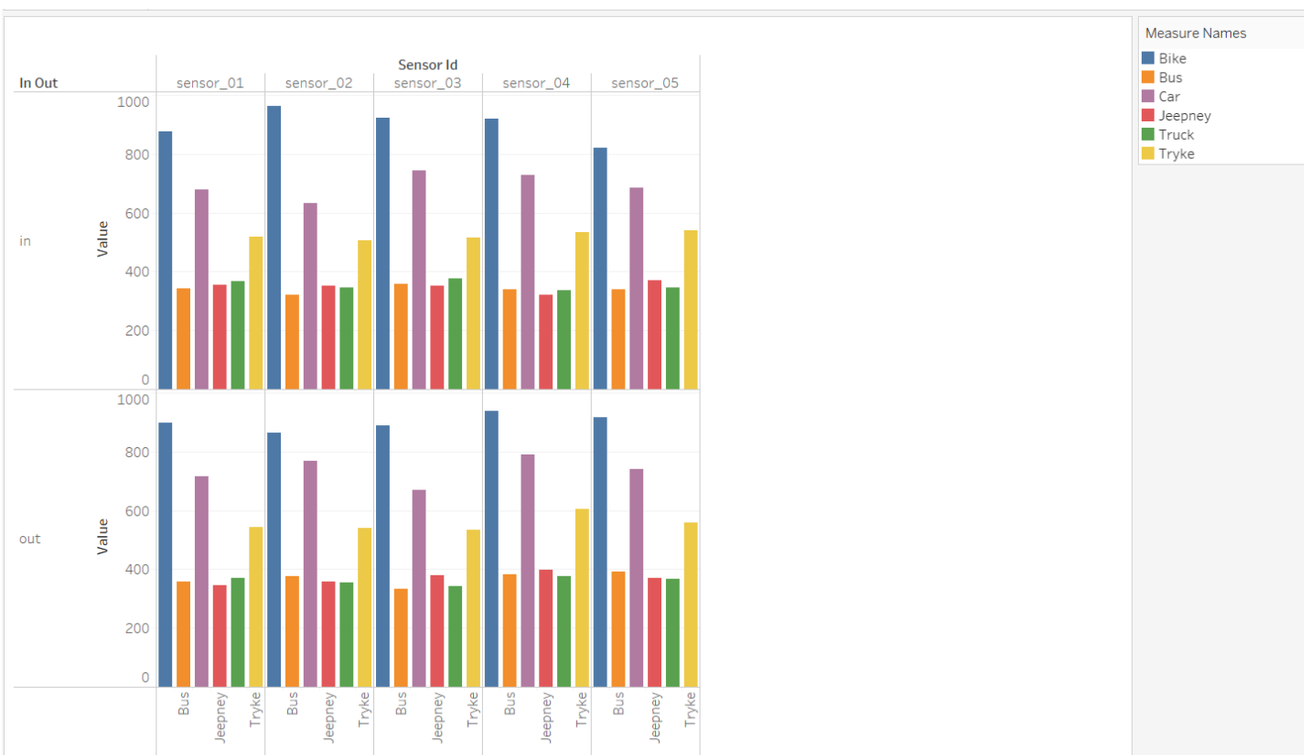
We also have a bar visualization for day 2. The in counts is above and the out counts is below as we can see.

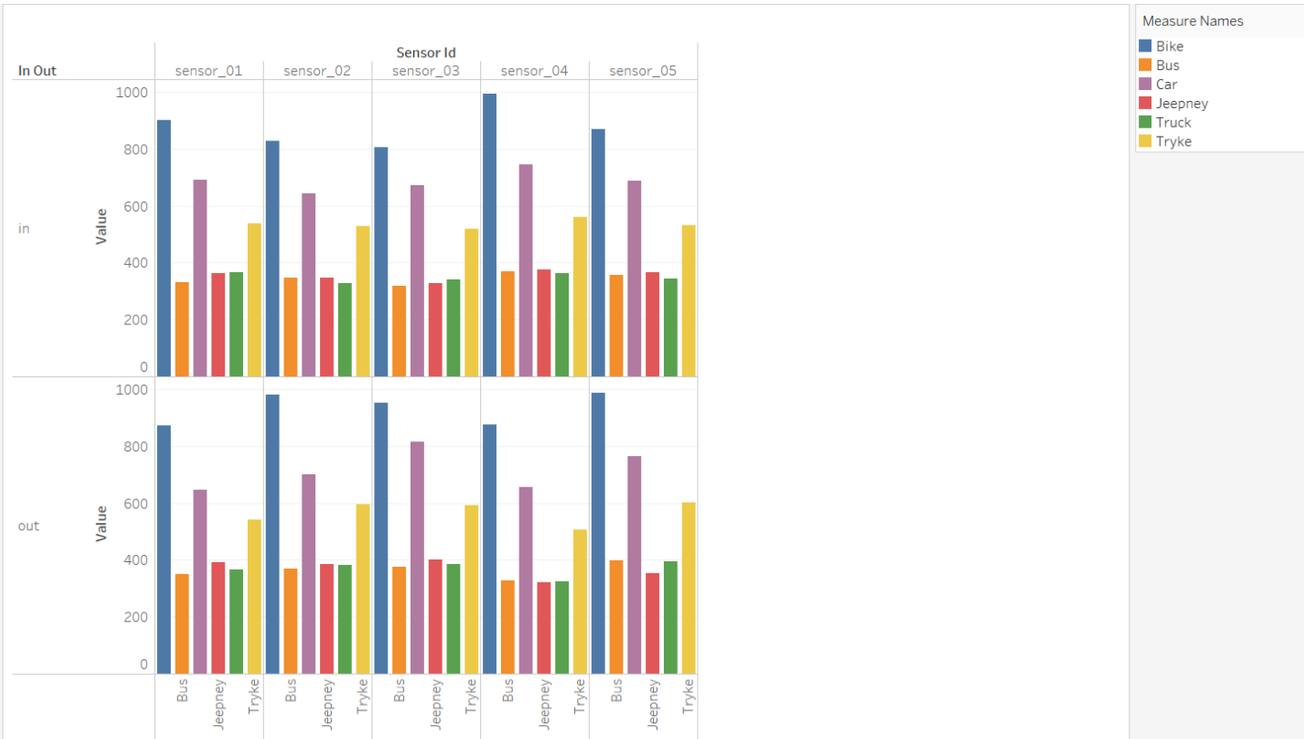


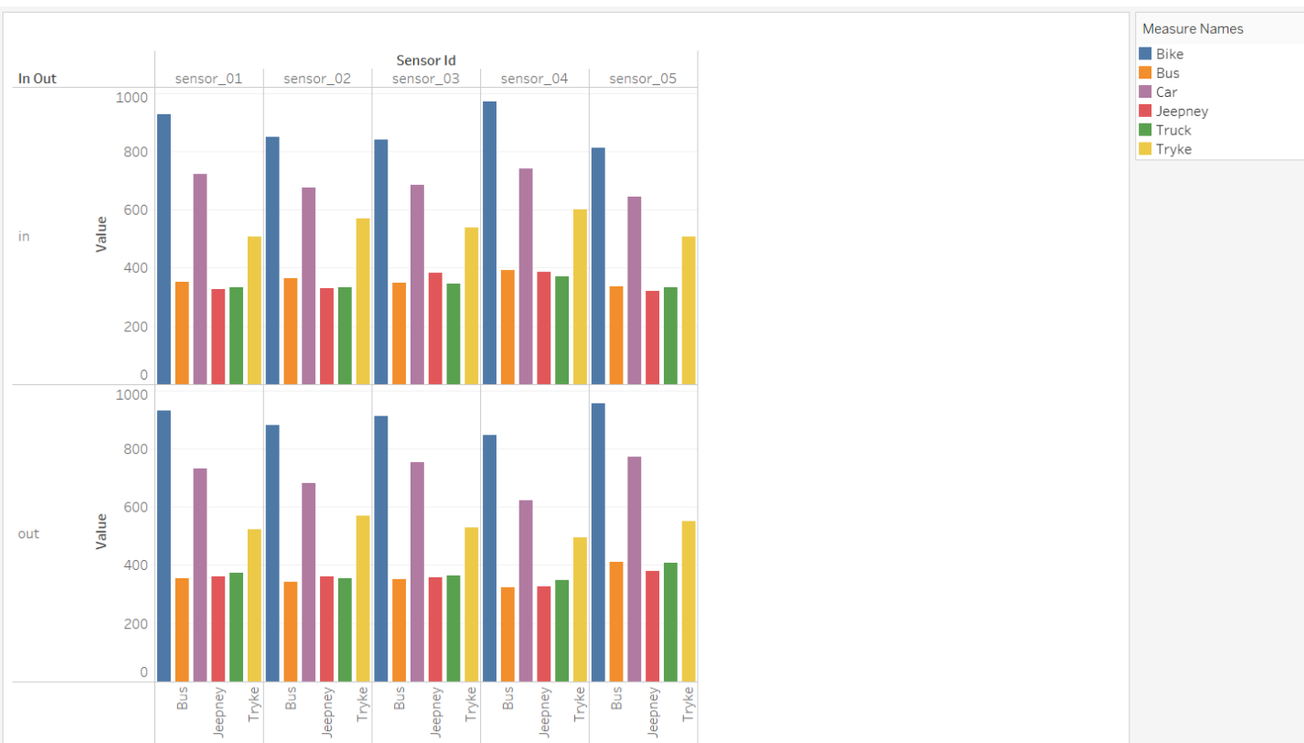
We also have a visualization for day 3. Bike is still the highest followed by car in all instances.



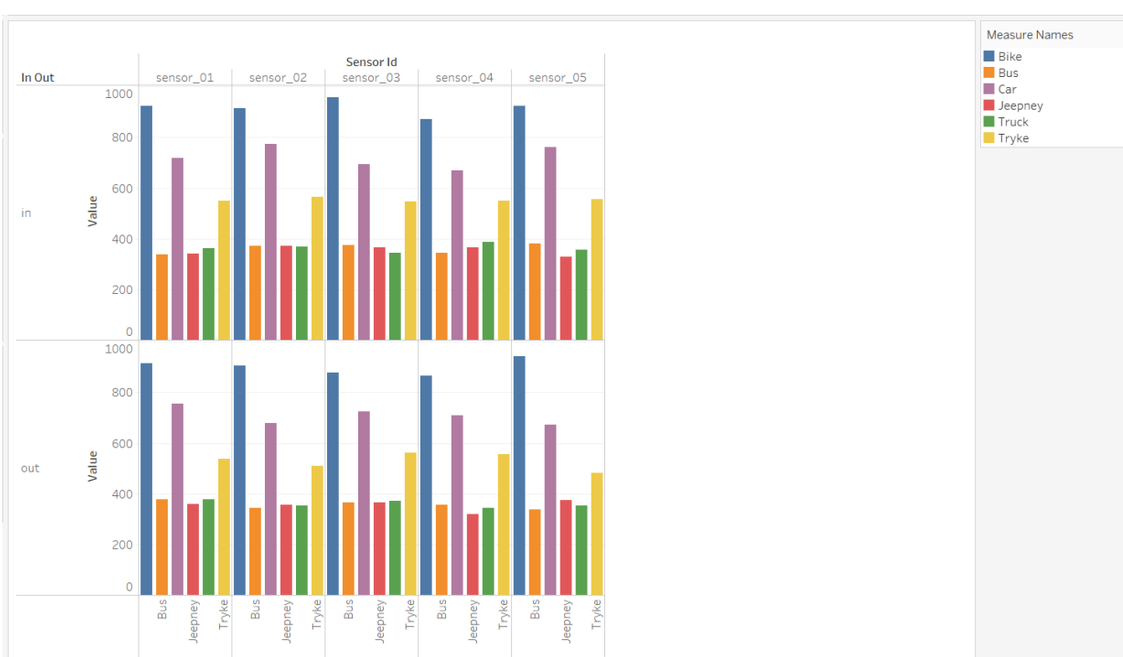
We can further drill down by specifying the time. We have a visualization showing the total in and out counts for each vehicle from 6:00 AM to 6:59 AM for day 1, 2, and 3 respectively.

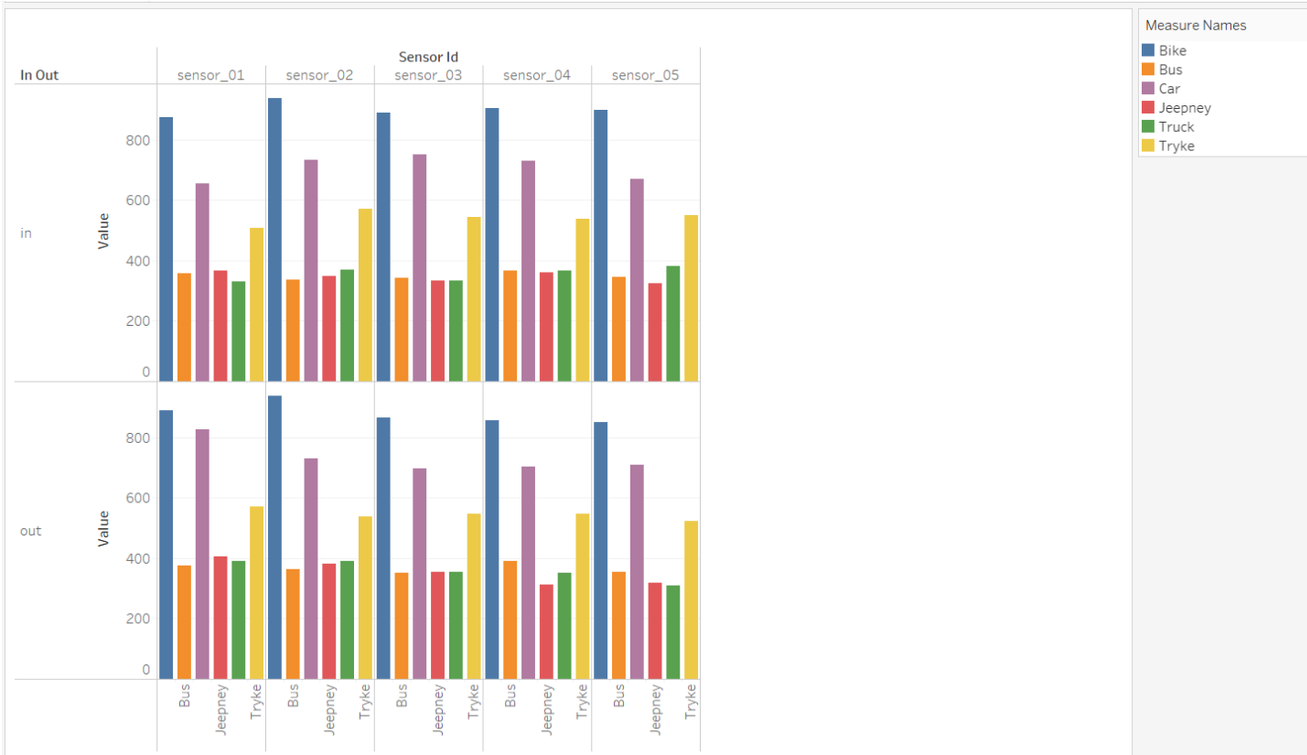


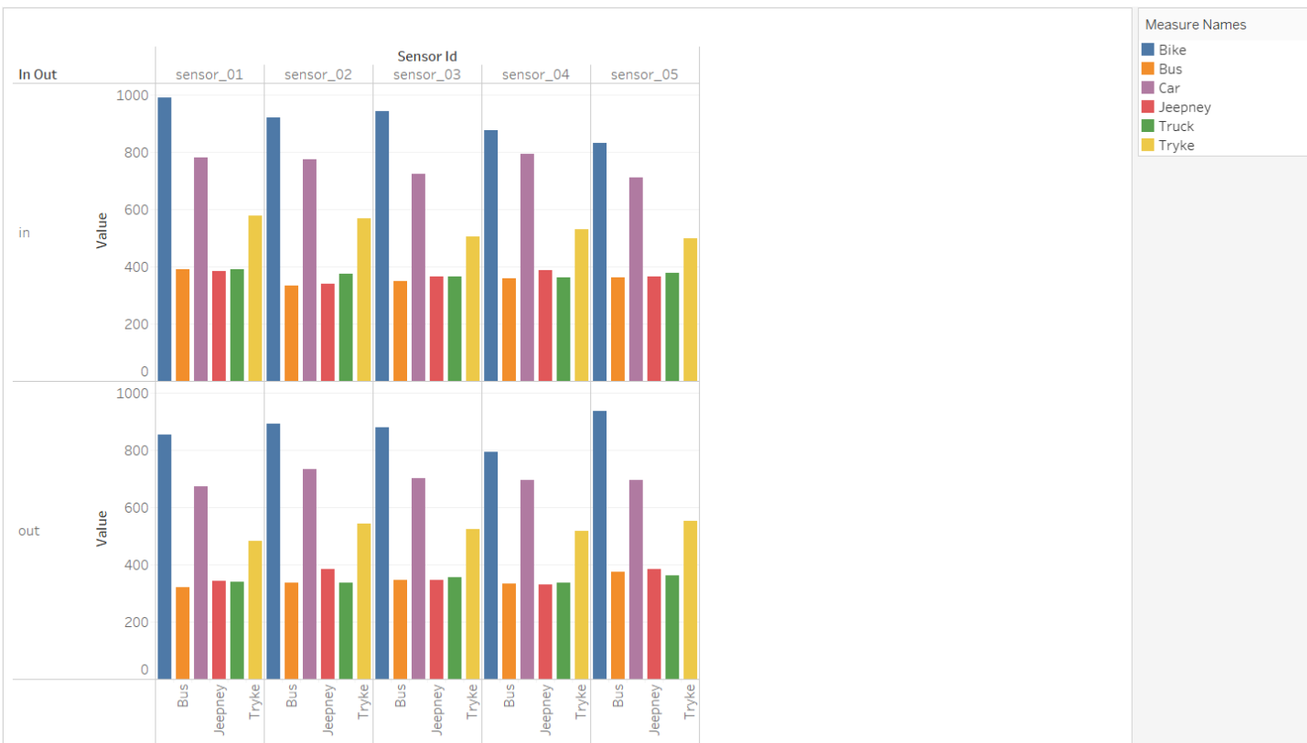




We also have the visualization for the time from 6:00 PM to 6:59 PM. The total in and out counts for each vehicle type per CCTV for day 1, 2, and 3 respectively are shown.

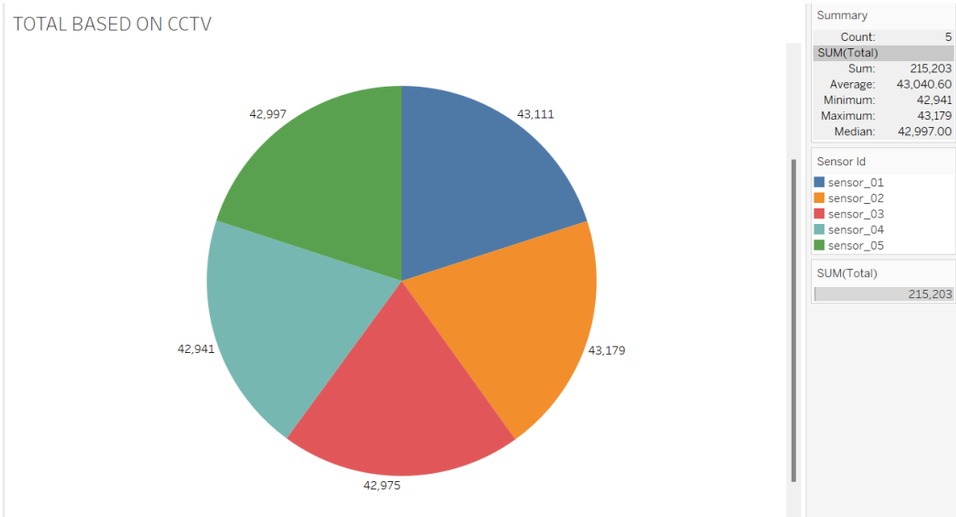



Sensor Id
In Out
sensor_01
sensor_02
sensor_03
sensor_04
sensor_05
in
out
Value
0
200
400
600
800
Bus
Jeepney
Tryke
Measure Names
Bike
Bus
Car
Jeepney
Truck
Tryke

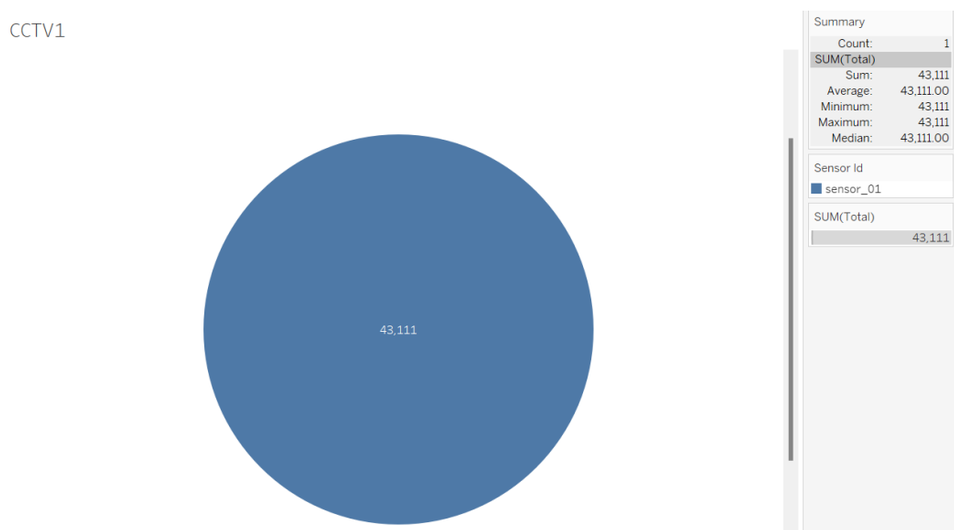

Sensor Id
In Out
sensor_01
sensor_02
sensor_03
sensor_04
sensor_05
in
out
Value
0
200
400
600
800
1000
Bus
Jeepney
Tryke
Measure Names
Bike
Bus
Car
Jeepney
Truck
Tryke

CCTV 1

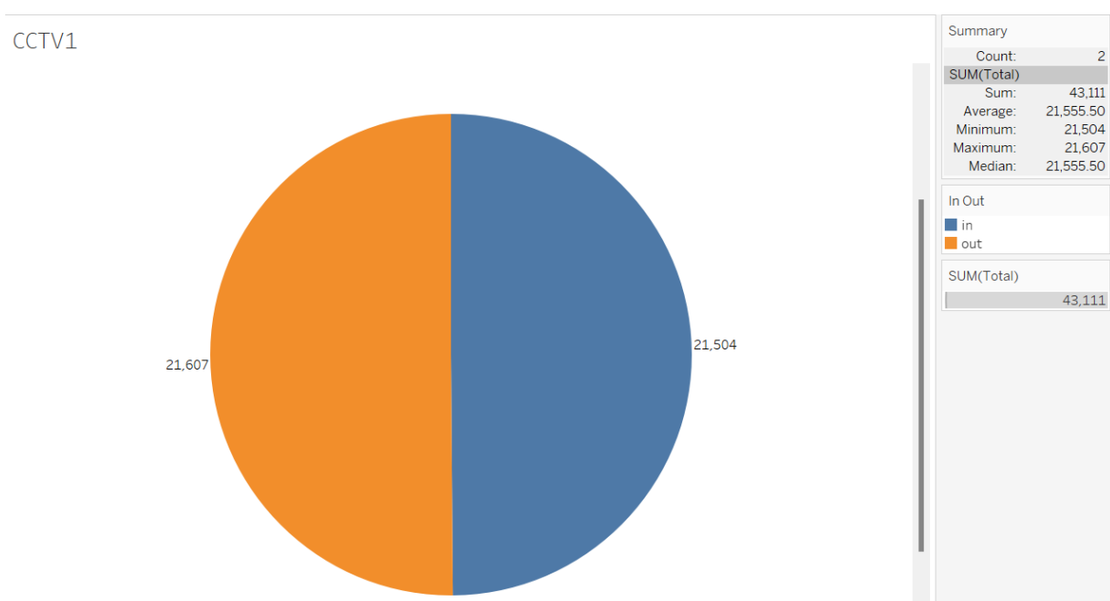
Now we will perform data analytics for each CCTV. First we show the total counts for each CCTV. Here we can see the total vehicle counts for every CCTV by using the sensor id. For CCTV 1 we have 43,111, for CCTV 2 we have 43,179. For CCTV 3 we have 42,975. For CCTV 4 we have 42,941. For CCTV 5 we have 42,997. We have a total of 215,203. This shows the total recordings for the 3 days.



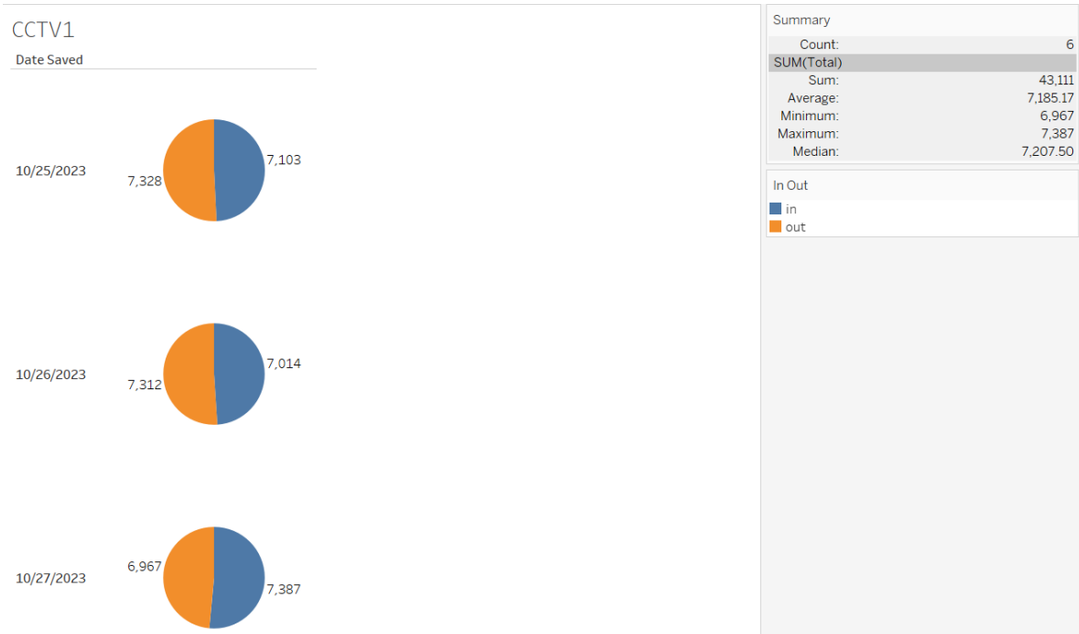
Now we will first drill down to CCTV 1 or sensor 01. CCTV 1 has a total of 43,111 for the 3 days as shown.



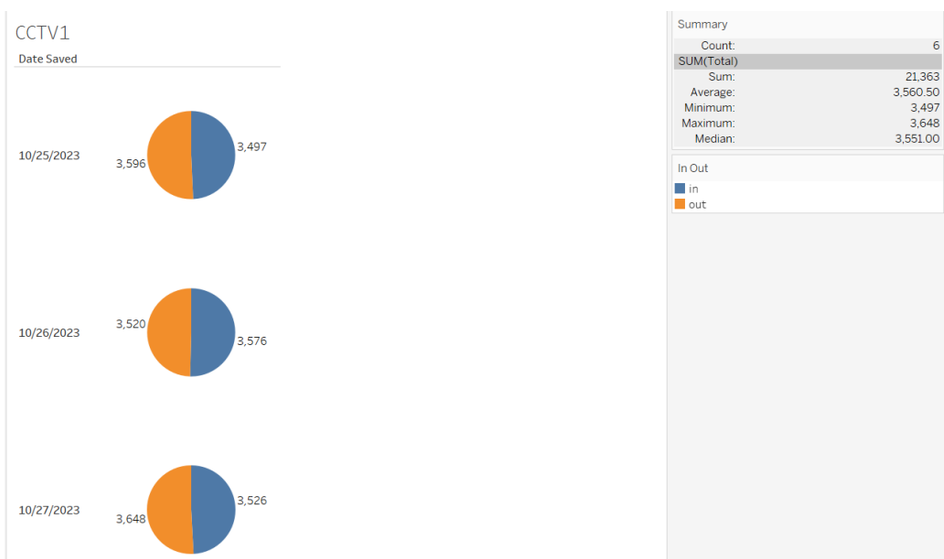
We now drill down to total in and out counts in CCTV 1. We can see 21,504 for total in counts. We also see 21,607 for total out counts.



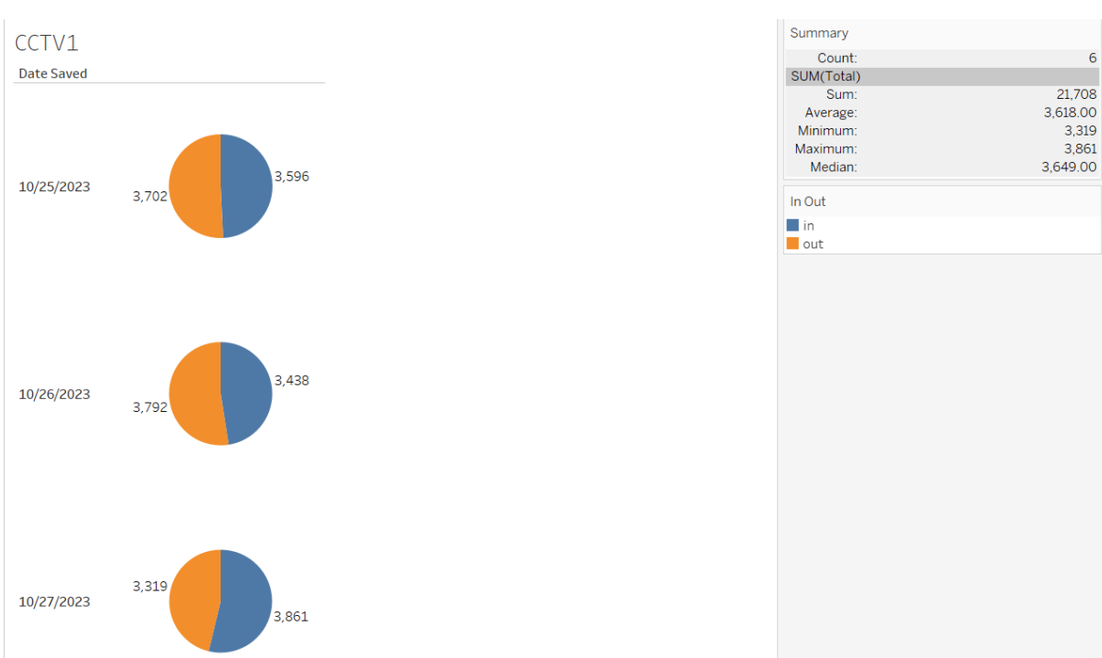
Now we drill down based on the day. For the first day, we have 7,103 for in and 7,328 for out. For the second day there are 7,014 total in counts and 7,312 total out counts. For the third day we have 7,387 total in counts and 6,987 total out counts.



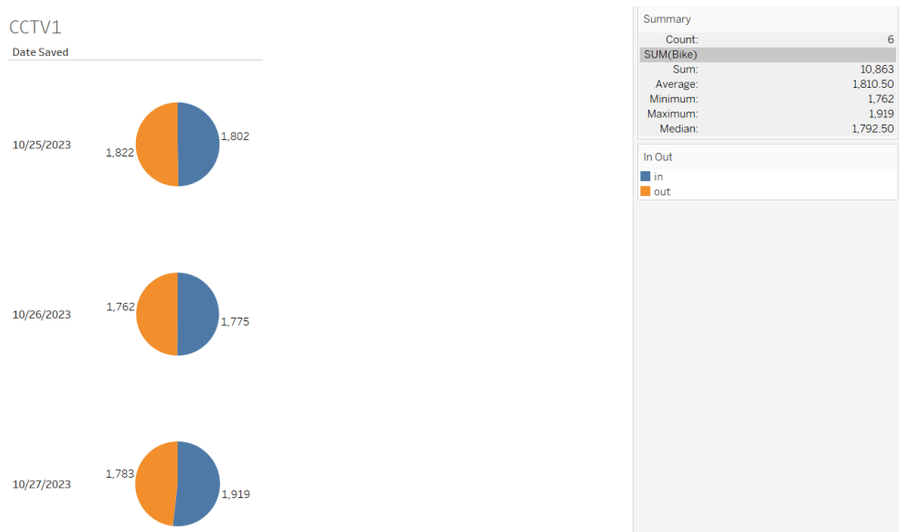
We can continue to drill down based on the time. We have the total in and out counts from 6:00 AM to 6:59 AM. In the first day we see 3,497 total in counts and 3,596 total out counts. For the second day we have 3,576 for in counts and 3,520 for out counts. For the third day we see 3,526 for in counts and 3,648 for out counts.



Now we have total in and out counts from 6:00 PM to 6:59 PM. For the first day we have 3,596 for total in counts and 3,702 for total out counts. For the second day there are 3,438 total in counts and 3,792 total out counts. For the third day there are 3,861 total in counts and 3,319 total out counts.



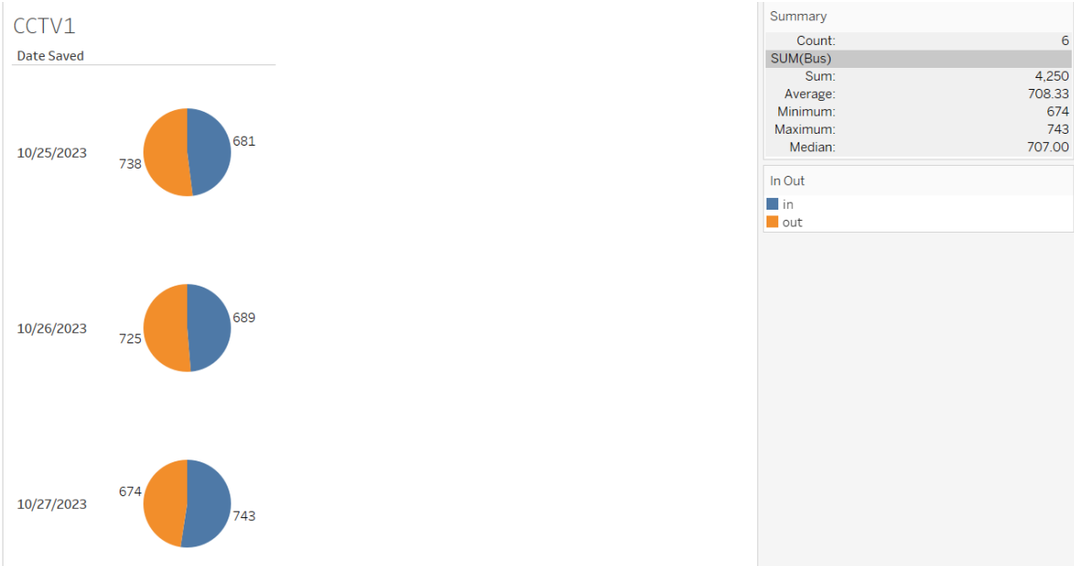
We will further drill down to total in and out counts per vehicle type based on date. First we have bikes. In day 1 we have 1,802 total in counts and 1,822 total out counts. In day 2 we see 1,775 for total in counts and 1,762 for total out counts. For day 3 there are 1,919 for total in counts and 1,783 for total out counts



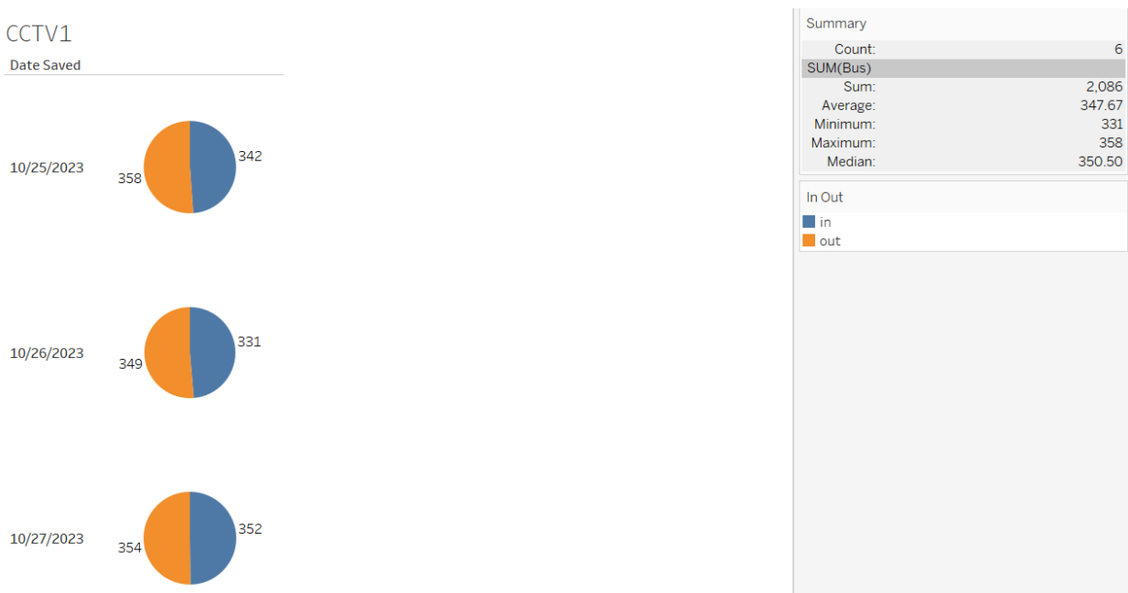
We can again drill down based on time. We have from 6:00 AM to 6:59 AM. On day 1 we have 876 total in counts and 899 total out counts. On day 2 we have 902 total in counts and 872 total out counts. On day 3 we have 926 total in counts and 929 total out counts.

Now from 6:00 PM to 6:59 PM, for the first day we have 923 total in and 916 total out counts. Then in the second day we have 873 total in and 890 total out counts. For the third day we have 993 total in counts and 854 total out counts.

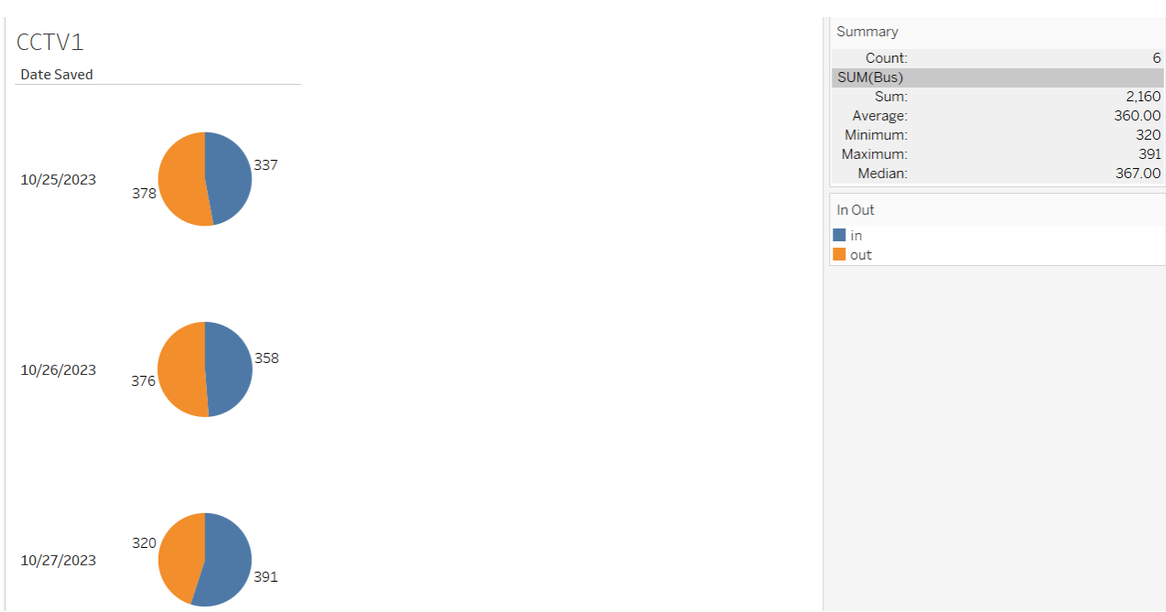
Now we show for buses. For the first day we have 681 total in counts and 738 total out counts. In the second day there are 689 total in counts and 725 total outcounts. For the third day there are 743 total in counts and 674 total out counts.



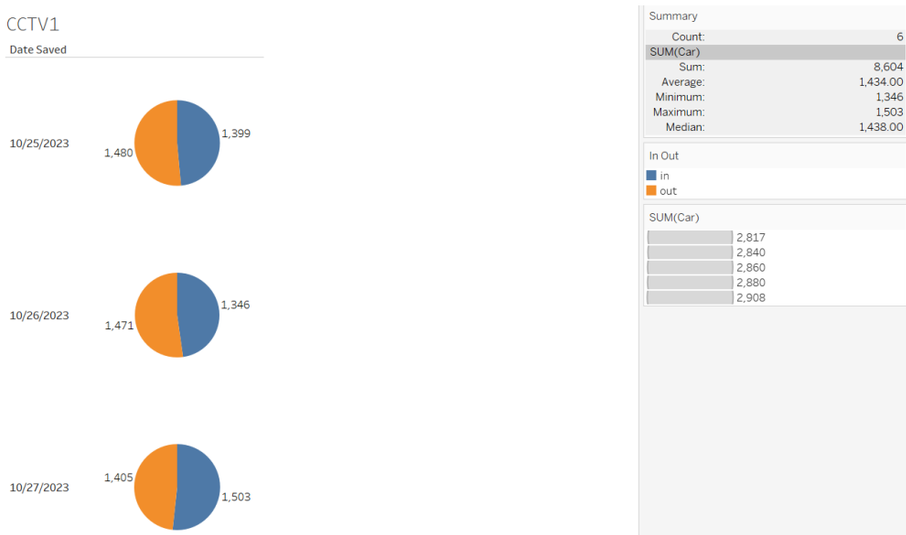
Now we drill down for buses based on time. From 6:00 AM to 6:59 AM. For the first day we have 342 total in counts and 358 total out counts. For the second day we have 331 total in counts and 349 total out counts. For the third day we have 352 total in counts and 354 total out counts.



Now from 6:00 PM to 6:59 PM, for day 1 we have 337 total in and 378 total out counts. For day 2 we have 358 total in and 376 total out counts. For day 3 we have 391 total in and 320 total out counts.

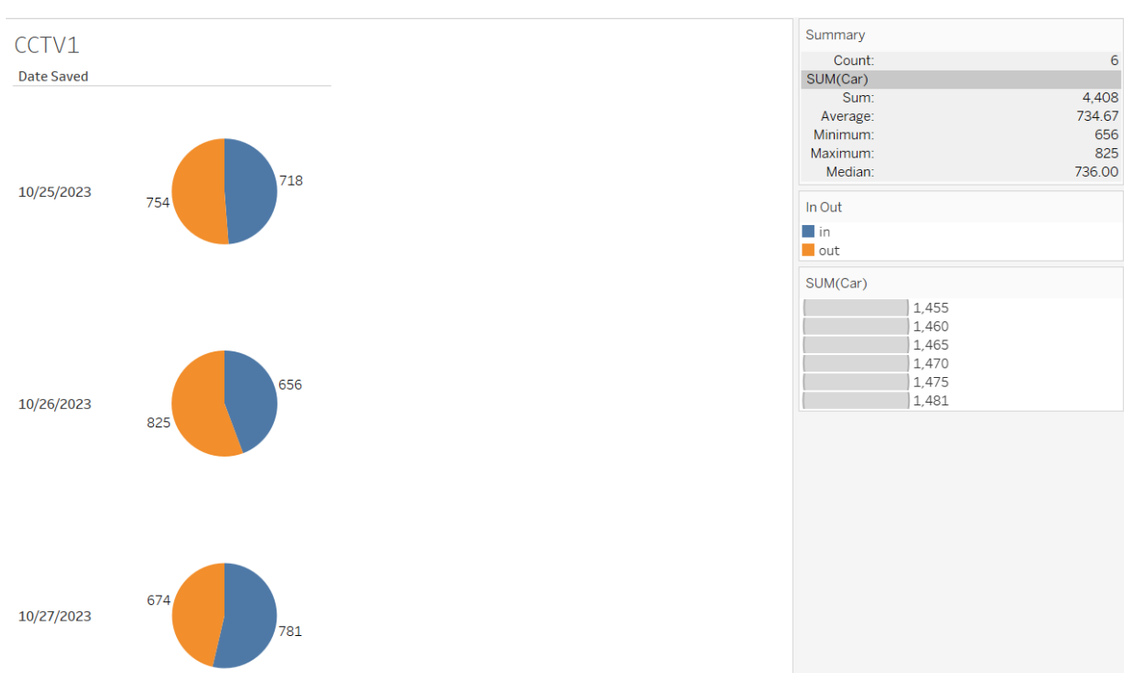


We have cars. For day 1 we have 1,399 for in and 1,480 for out, In day 2 we see 1,346 total in and 1,471 total out. For day 3 we have 1,503 for in counts and 1,405 out counts.



Drilling down based on time, from 6:00 AM to 6:59 PM, day 1 has 678 for in and 717 for out. For day 2 we have 690 for in and 646 for out. For day 3 we can see 722 for in counts and 731 for out counts.

From 6:00 PM to 6:59 PM, for day 1 we have 718 for in and 754 for out counts. In day 2 we have 656 in and 825 out counts. Now for day 3 we see 781 for in and 674 for out counts.

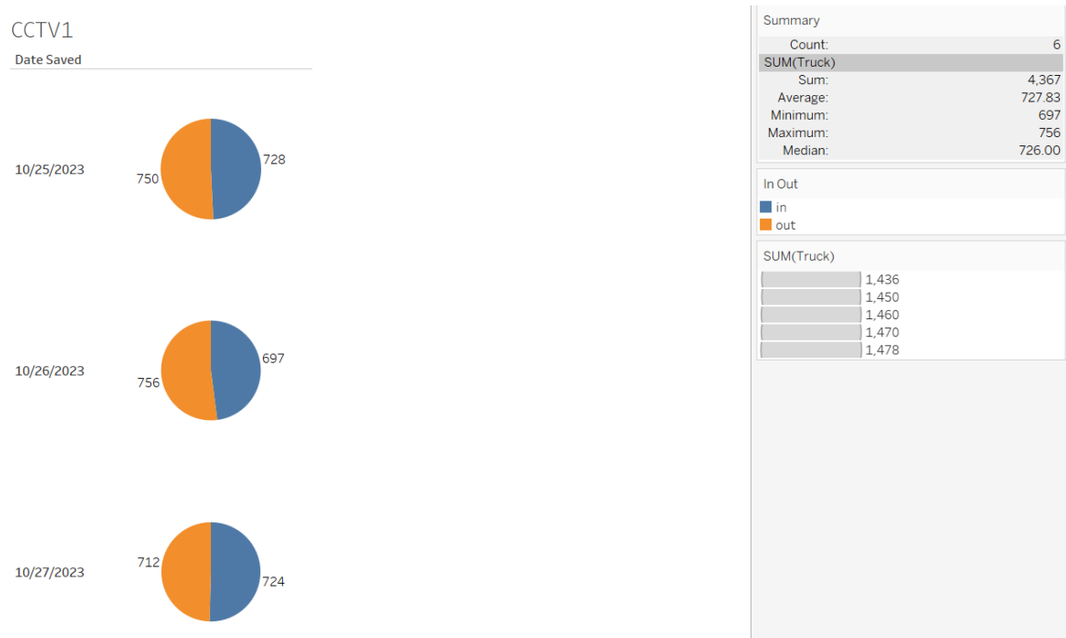


We will focus on Jeepneys. In day 1 we have 696 total in and 709 total out counts. In day 2 we have 731 total in and 797 total out counts. Then we see in day 3 we have 714 total in and 706 total out counts.

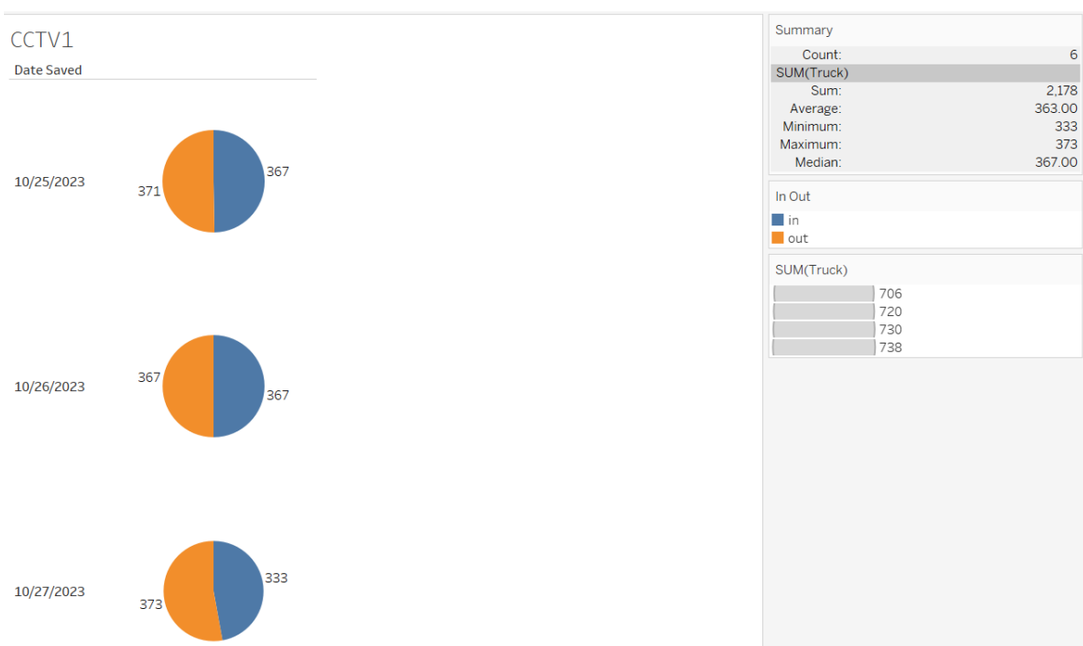
Now based on time. From 6:00 AM to 6:59 AM, we have 355 total in counts and 346 total out counts for day 1. For day 2 we see 364 for in and 391 for out. In day 3 we have 328 in counts and 362 out counts.

From 6:00 PM to 6:59 PM, for day 1 we have 340 for in and 360 for out. For day 2 we see 367 for in and 406 for out. For day 3 we have 386 for in and 344 for out.

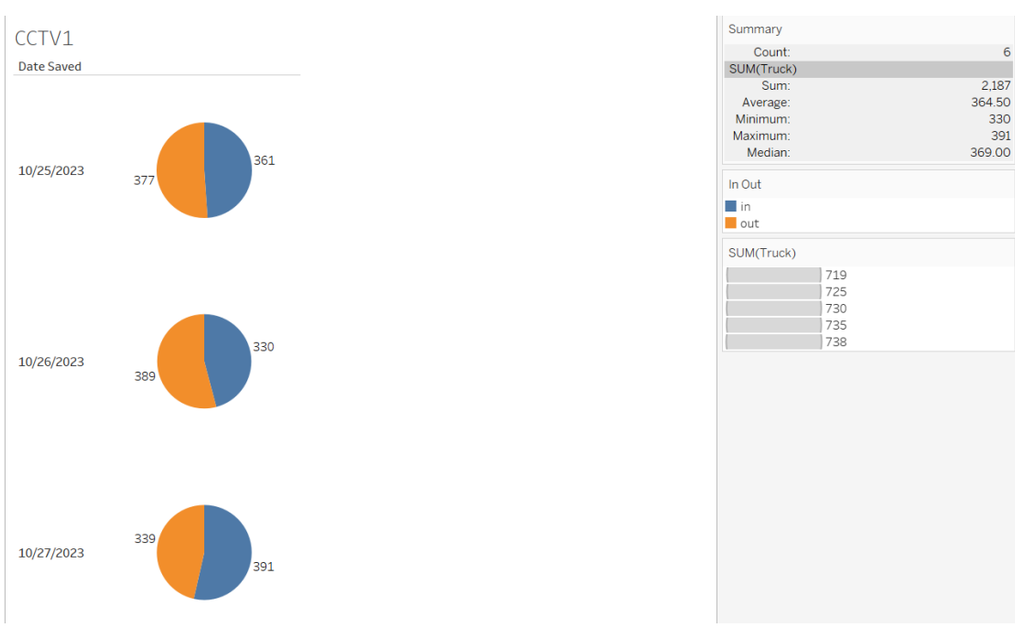
Now we have trucks. For day 1 we have 728 in and 750 out counts. For day 2 we have 697 in and 756 out counts. Then in day 3 we see 724 in and 712 out counts.



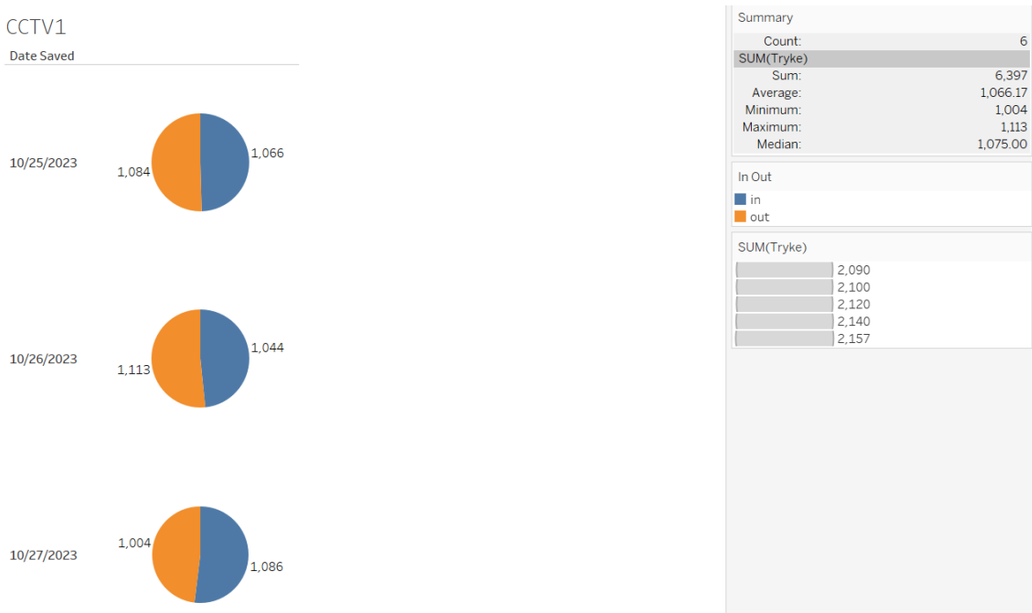
We now move on to time and based from 6:00 AM to 6:59 AM, for day 1 we have 367 in counts and 371 out counts. For day 2 we have 367 in counts and 367 out counts. For day 3 we have 333 in counts and 373 out counts.



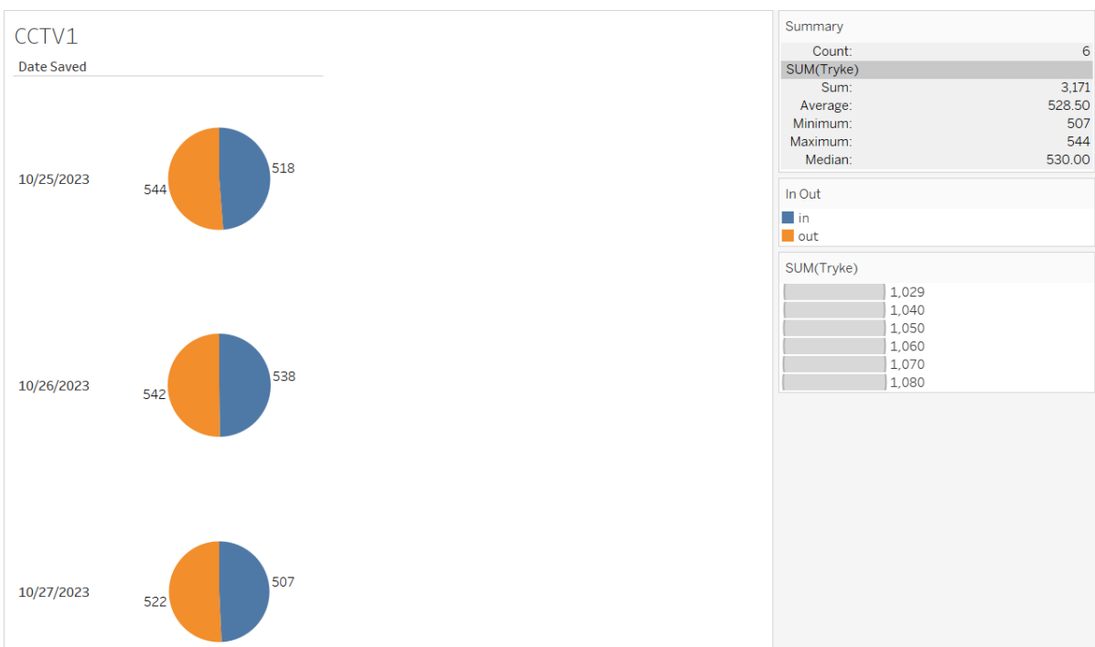
Now from 6:00 PM to 6:59 PM, in day 1 we see 361 for in and 377 for out. In day 2 we have 330 for in counts and 389 for out counts. For day 3 we see 381 total in counts and 339 total out counts.



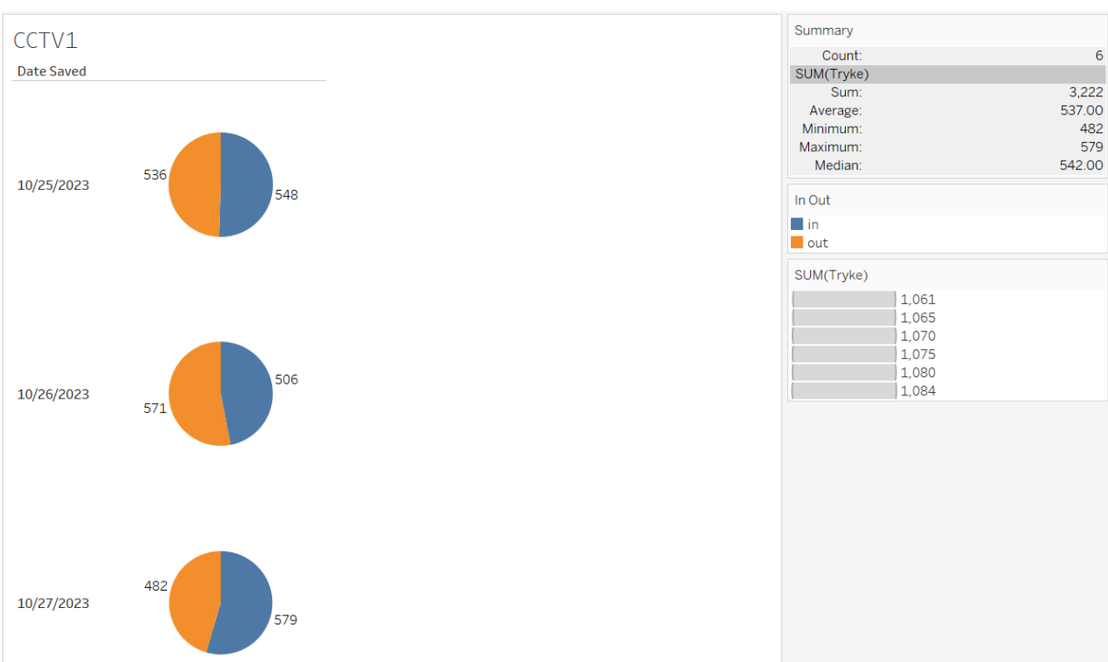
We have trykes. In day 1, we have 1,066 for total in counts and 1,084 for total out counts. For day 2 we have 1,044 for in and 1,113 for out. For day 3 we see 1,086 for in counts and 1,004 for out counts.



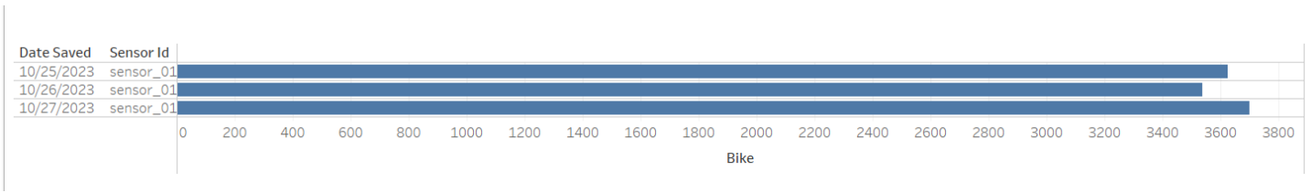
Drilling down based on time, we focus on 6:00 AM to 6:59 AM. In day 1 we have 518 for in and 544 for out. In day 2 we see 538 for in and 542 for out. In day 3 we see 507 for in and 522 for out counts.



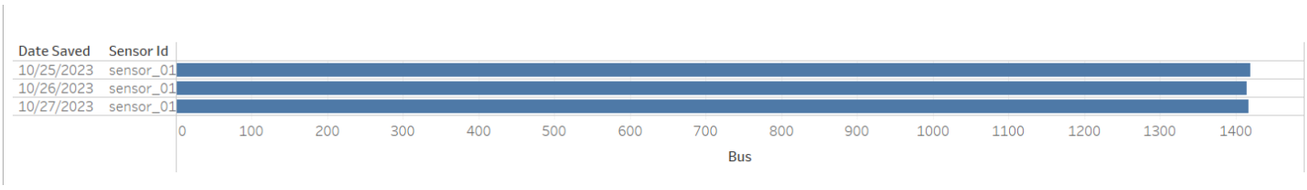
Next we focus in 6:00 PM to 6:59 PM. We can see that in day 1 there are 548 in counts and 536 out counts. For day 2 we have 506 in counts and 571 out counts. For day 3 we have 579 in counts and 482 out counts.



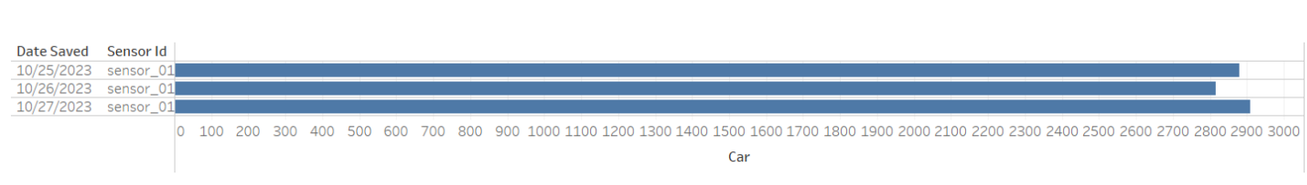
We can also show the total counts for each vehicle for CCTV 1 per day. We also have the total counts for bike. Day 3 has the most



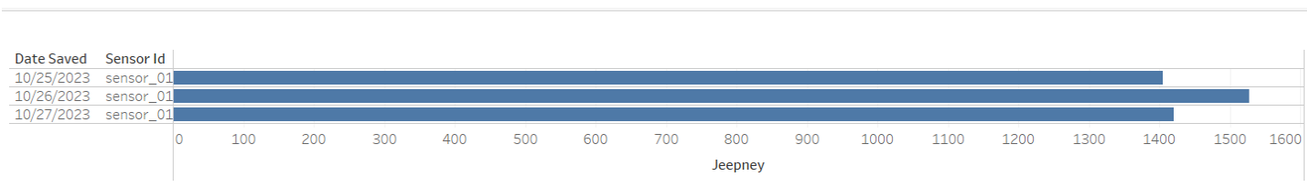
We also have total counts for bus. Day 1 has the most



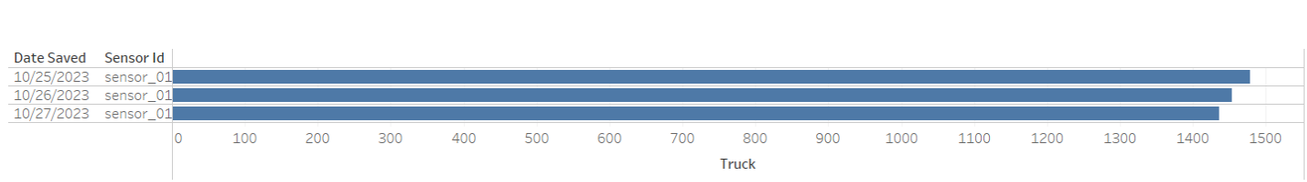
Now we see the total counts for car. Day 3 has the most.



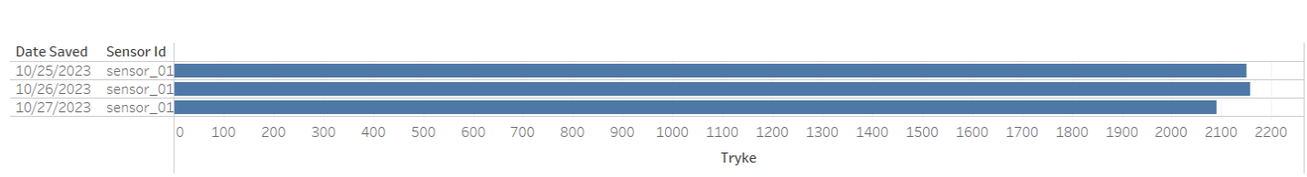
We also have the total counts for jeepney. Day 2 has the most.



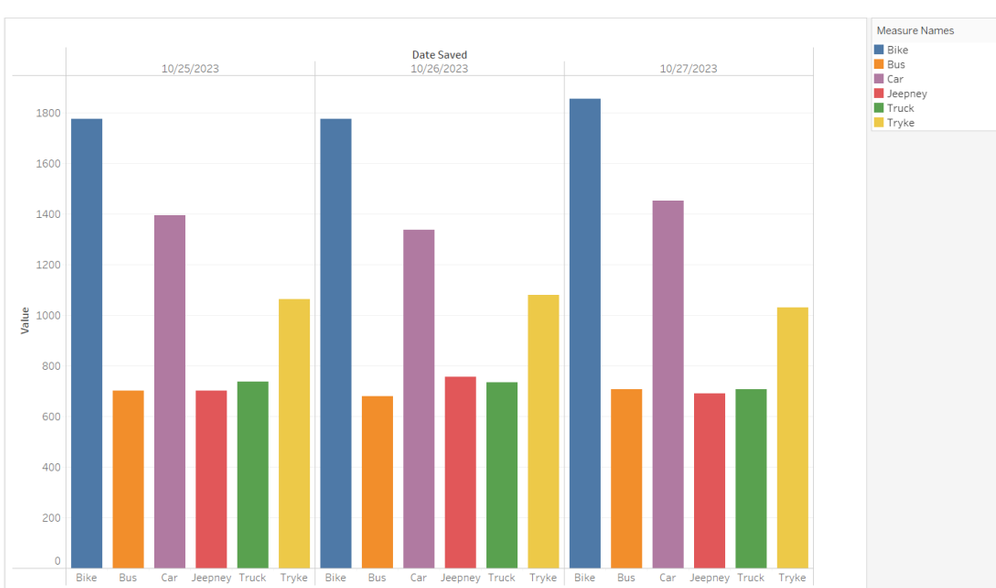
Now we see the total counts for the truck. Day 1 has the most.



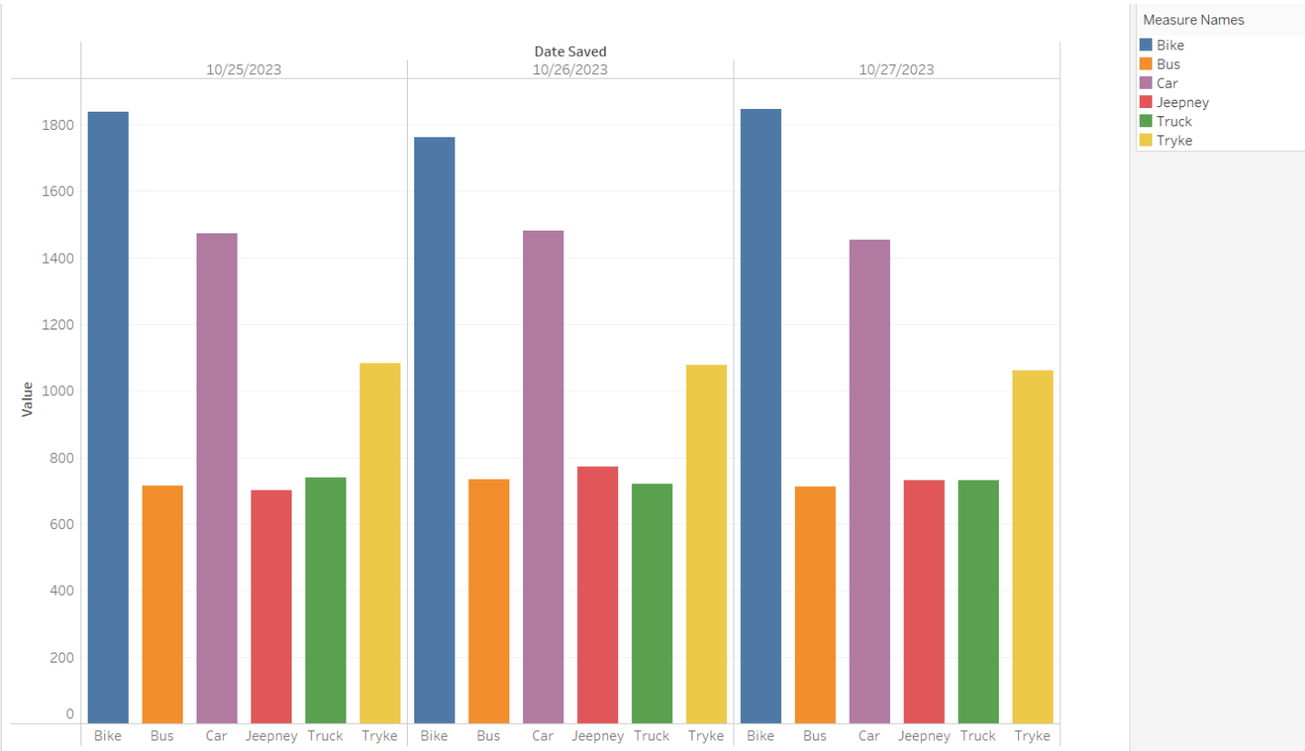
Then we have the total counts for tryke. Day 2 has the most.



We can also show the total counts of vehicles per day based on the time. We have the total counts of each vehicle per day from 6:00 AM to 6:59 AM.

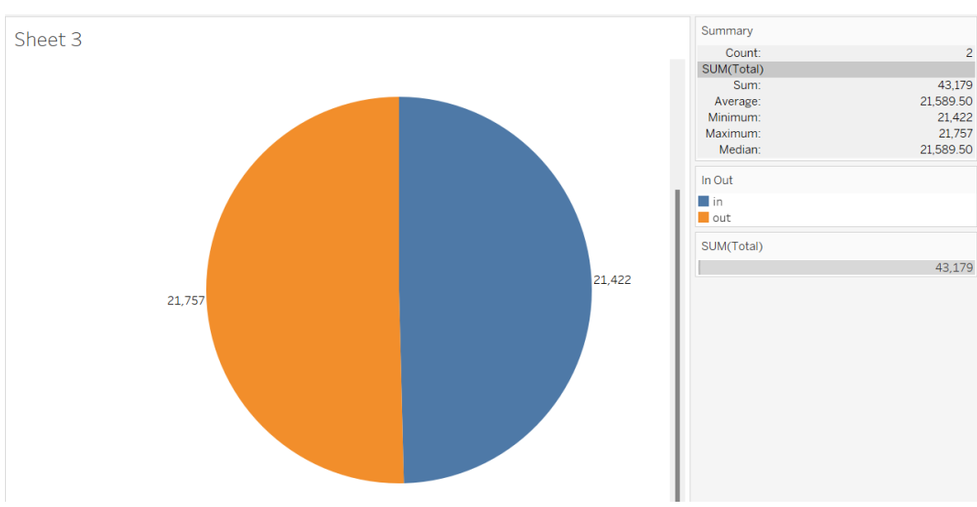


We also have the total counts per vehicle and per day from 6:00 PM – 6:59 PM.

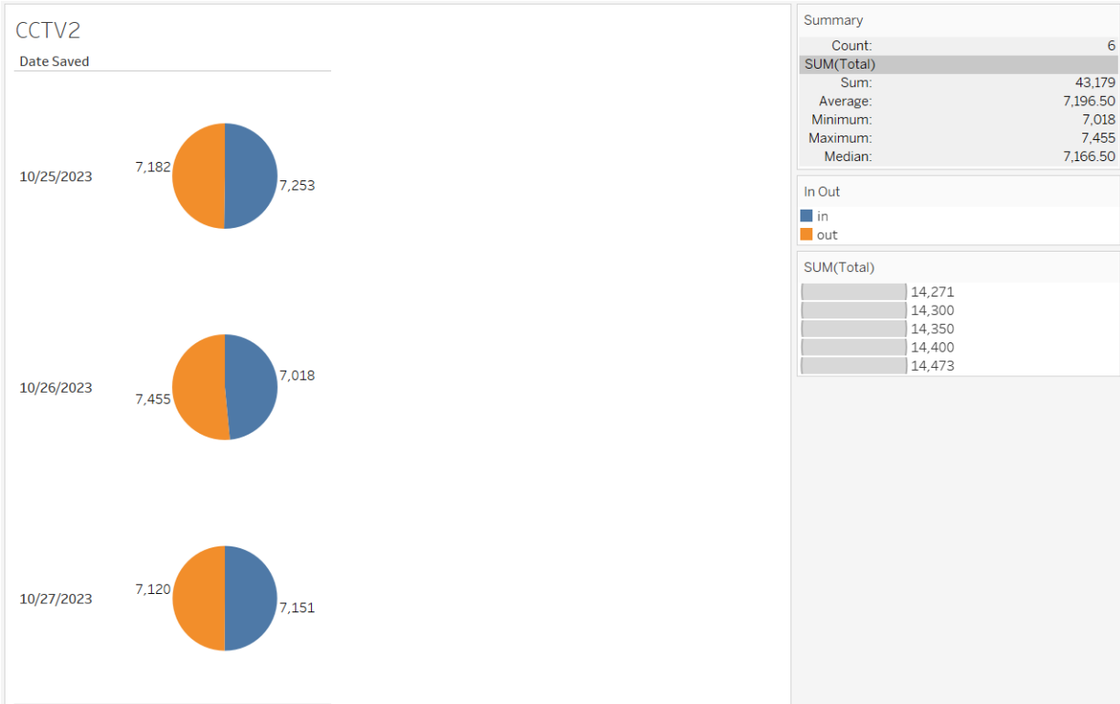


CCTV 2

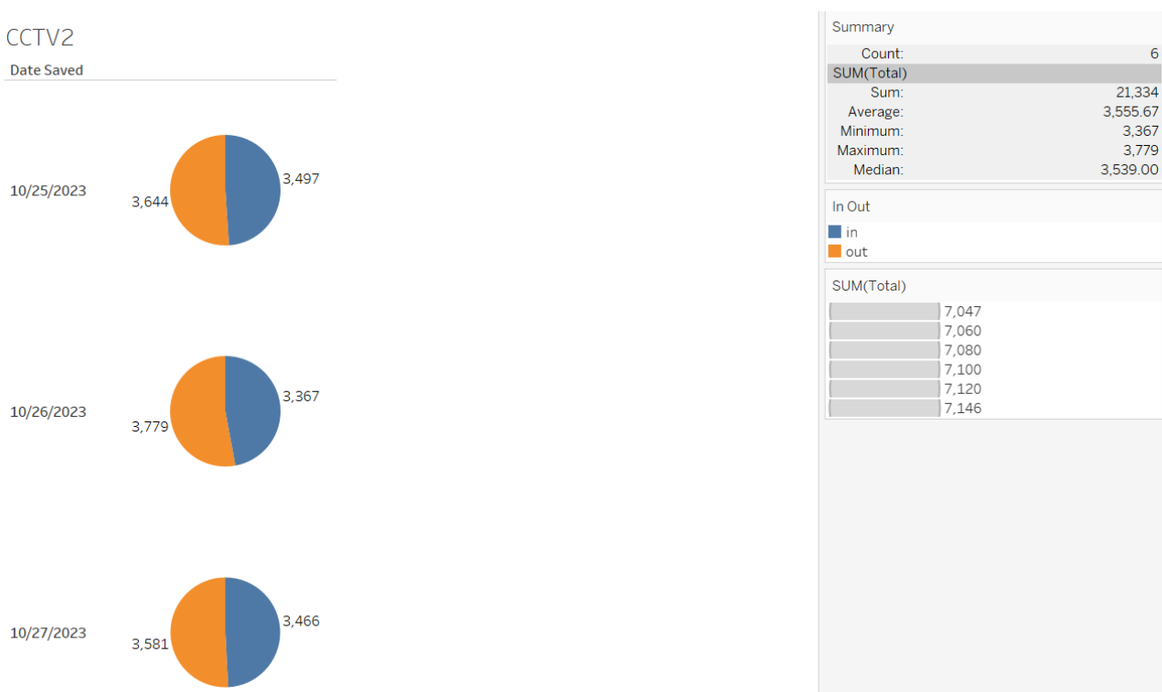
Next we focus on CCTV 2 with id sensor 02. We see in the chart the total in counts and out counts of all vehicles in all 3 days for CCTV 2.



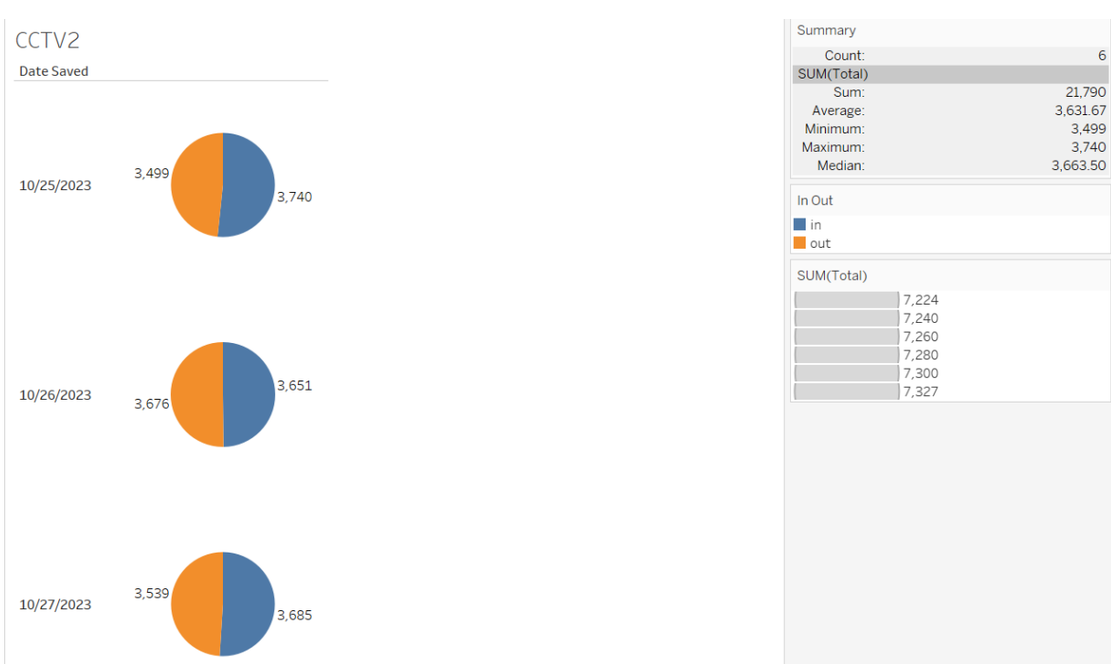
Now we continue drilling down based on date. We see the total in and out counts per day in the pie charts shown below.



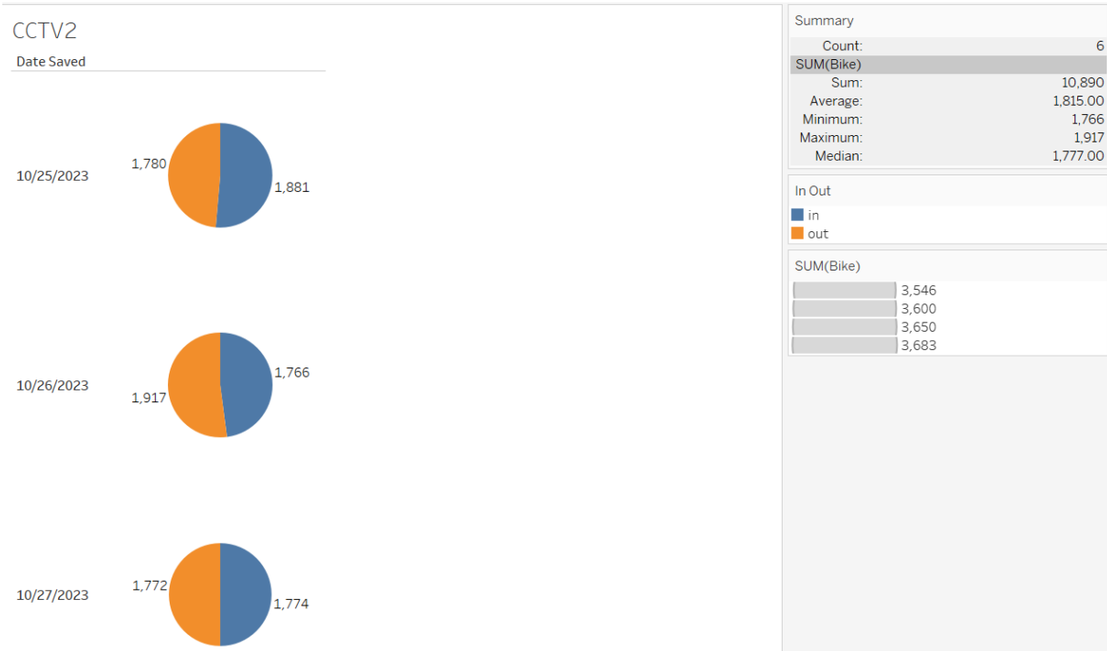
We further drill down based on time. We have total in and out counts from 6:00 AM to 6:59 AM.



Next we evaluate data from 6:00 PM to 6:59 PM. We can see the counts based on that time in the pie chart.



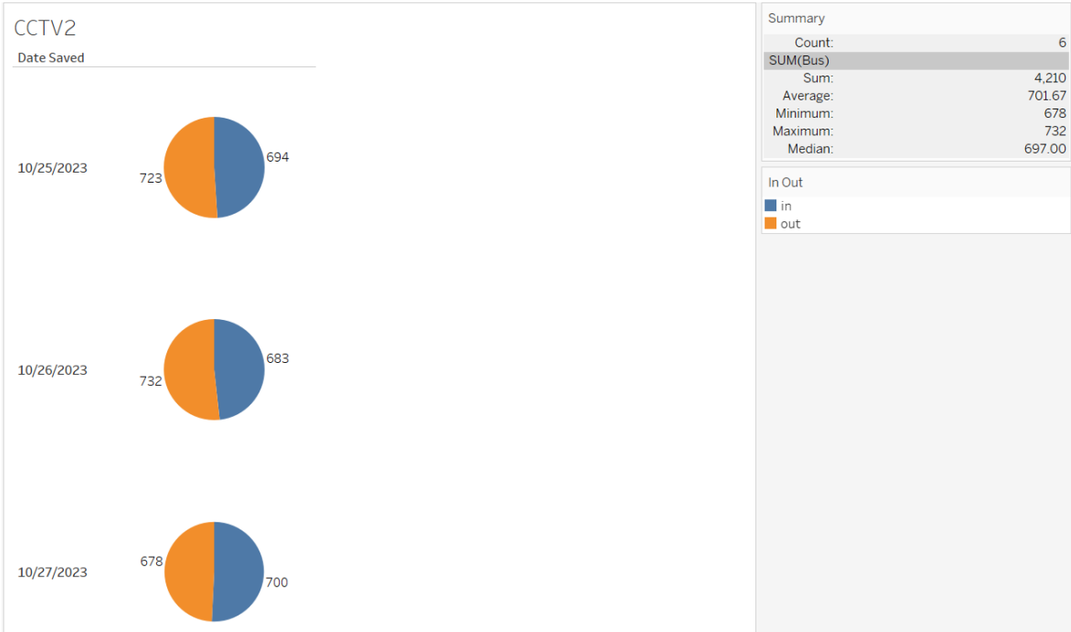
Now drilling down to the vehicle types. For bikes, we have the following visualization that shows total in and out counts.



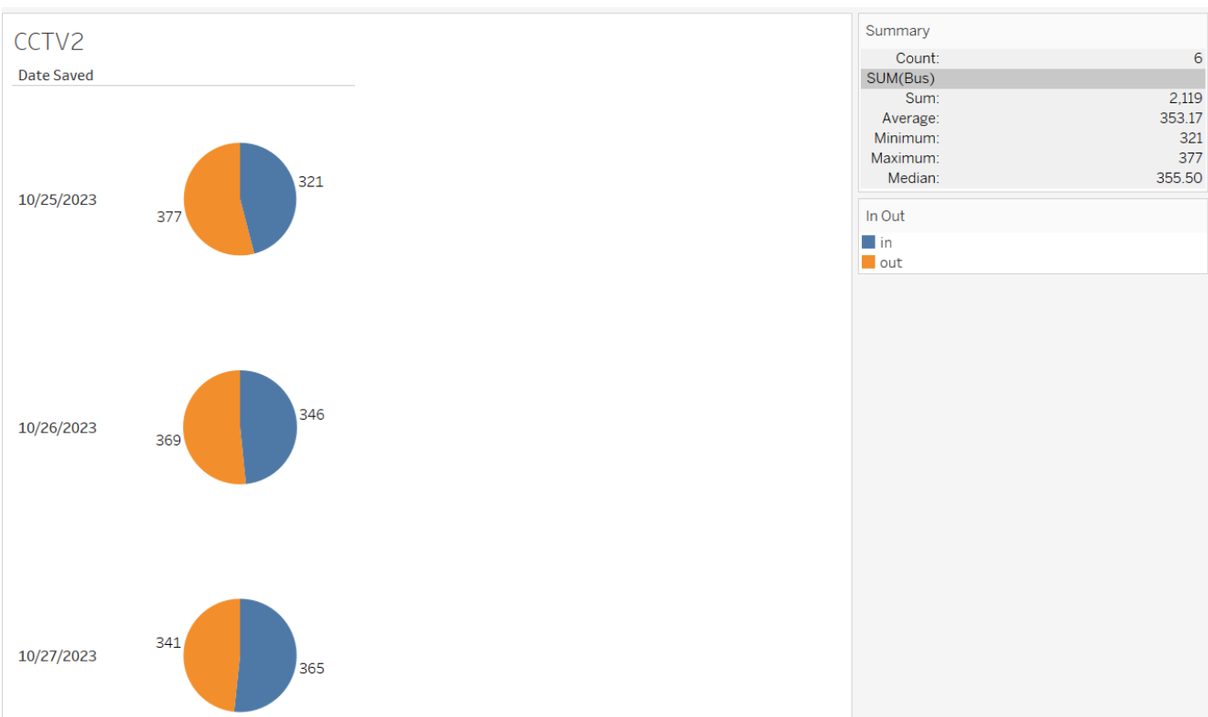
We drill down again. From 6:00 AM to 6:59 AM here are the total in and out counts shown.

Next we have from 6:00 PM to 6:59 PM. The total in and out counts are shown in out pie chart.

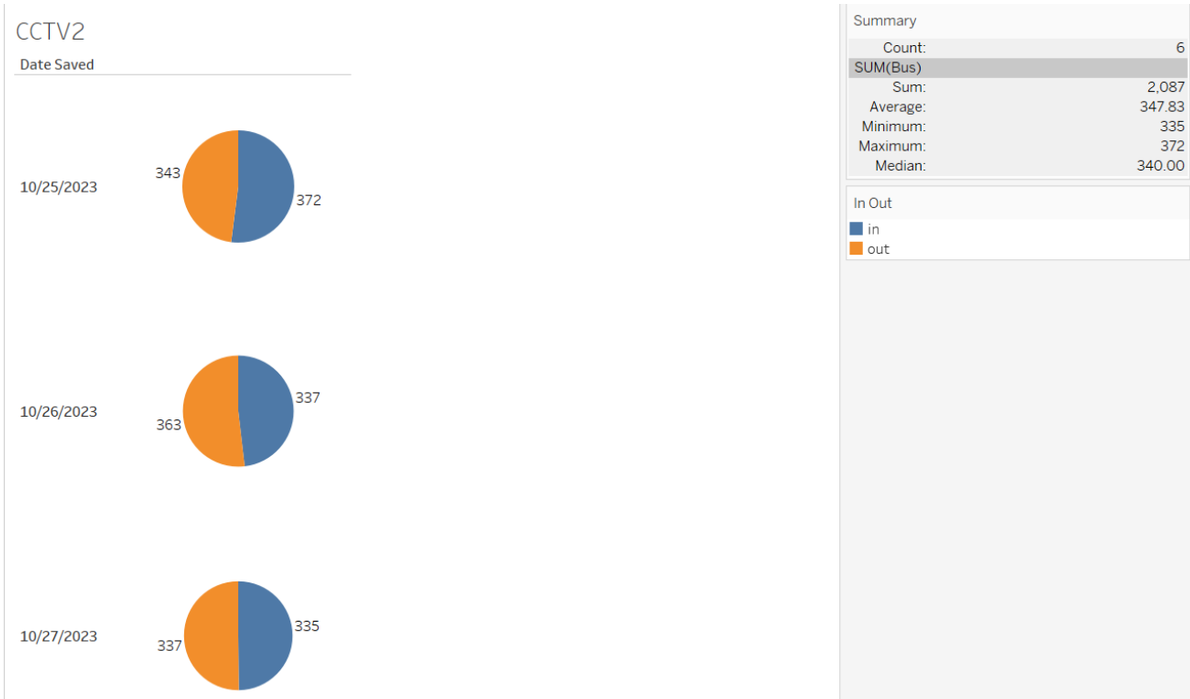
Now we focus on bus. Based on date, we have the following total in and out counts shown below in our pie chart.



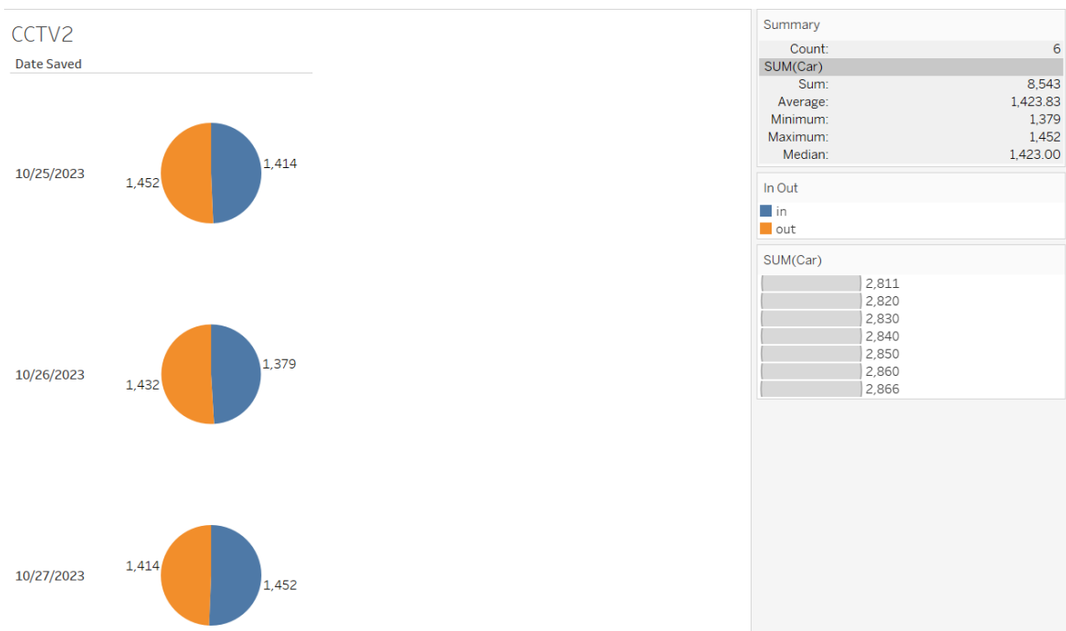
We drill down again. Now we have time from 6:00 AM to 6:59 AM. Total in and out counts can be seen here below.



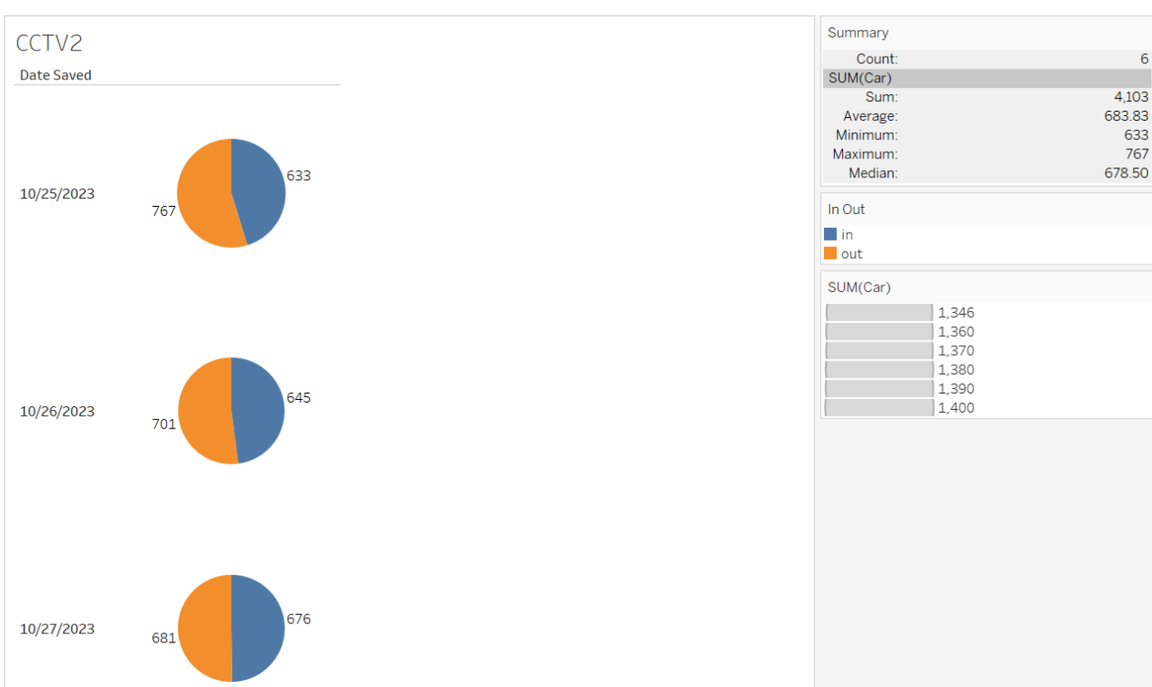
Now we further drill down. We have time from 6:00 PM to 6:59 PM. We show the total in and out counts below.



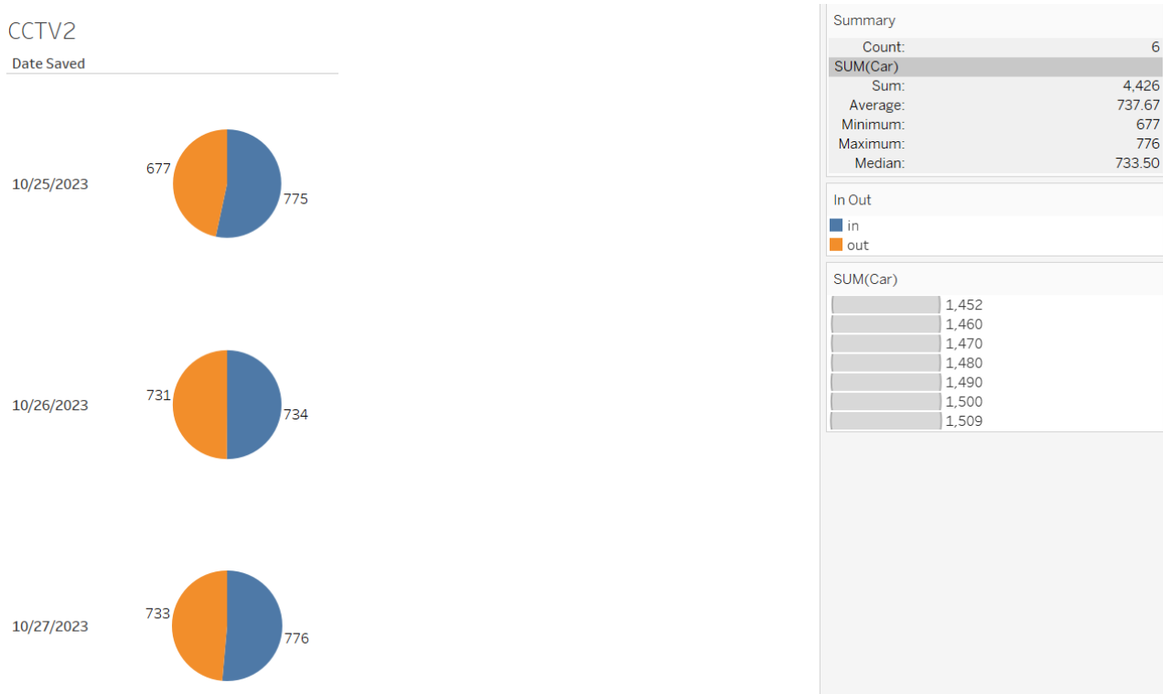
Moving on to car. We have total in and out counts based on the day shown in our pie chart.



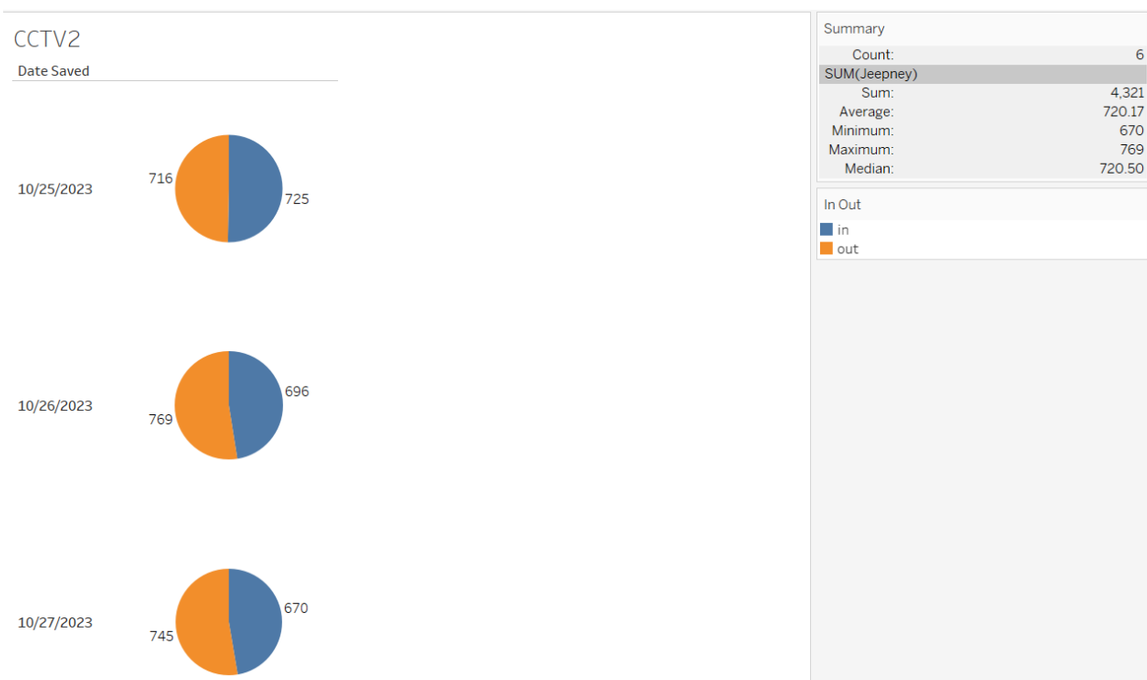
Again we drill down. We have in and out counts from 6:00 AM to 6:59 AM shown in a pie chart.



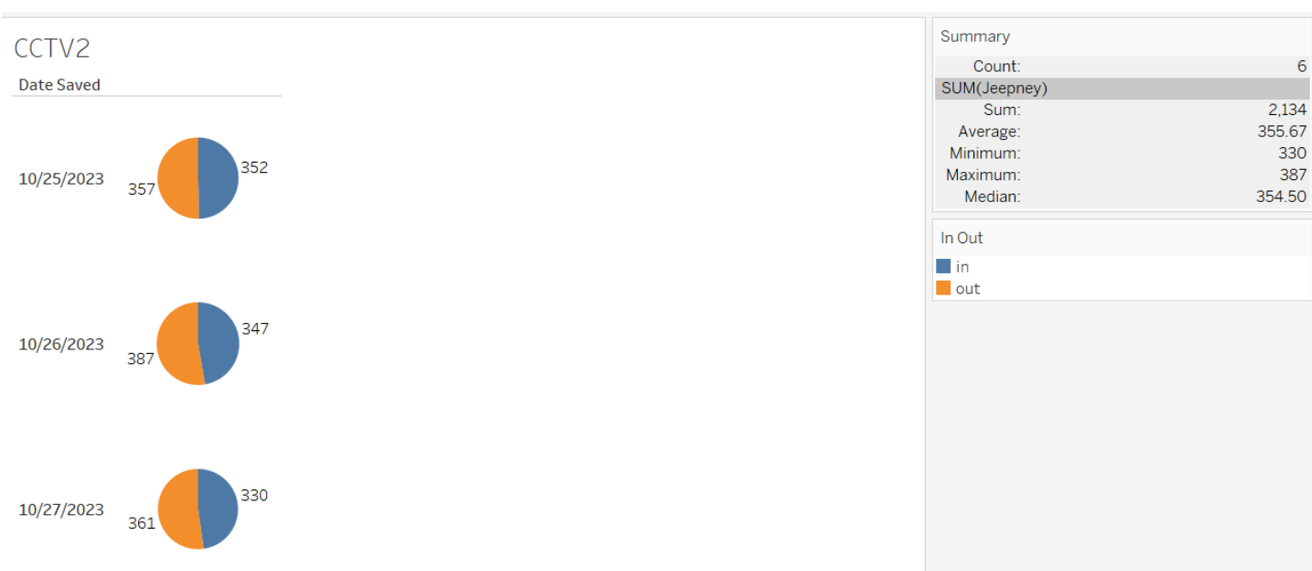
Next we focus on another hour. We have total counts from 6:00 PM to 6:59 PM in the pie chart.



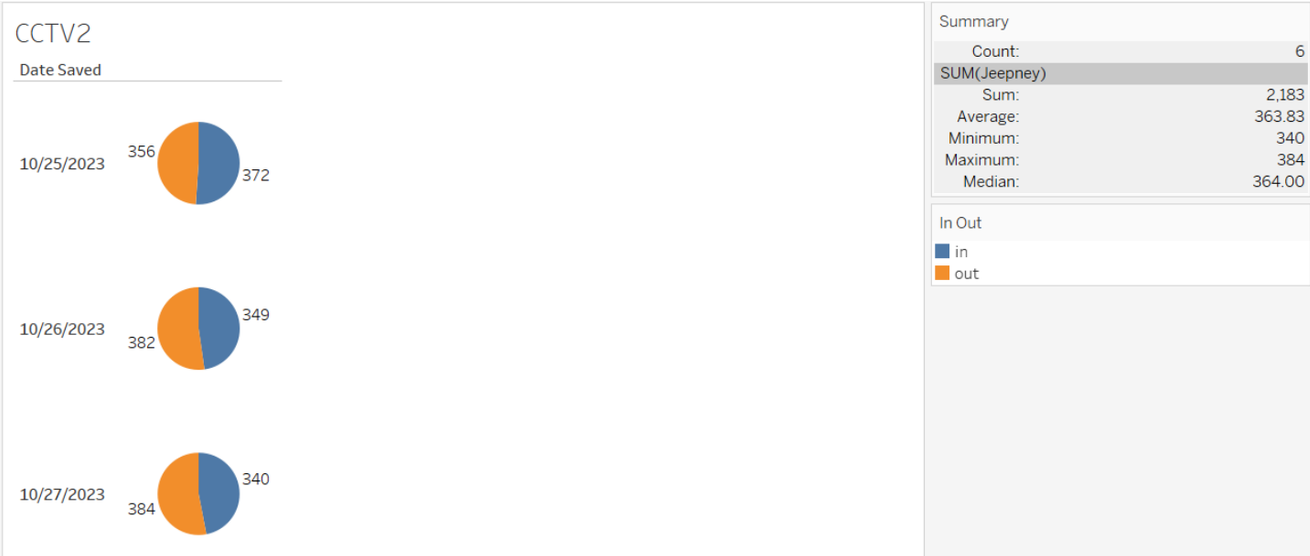
Now we continue on to Jeepneys. We focus on the total in and out counts per day and we show it in the pie chart.



We further drill down based on time. We have the total in and out counts from 6:00 AM to 6:59 AM in our pie chart.

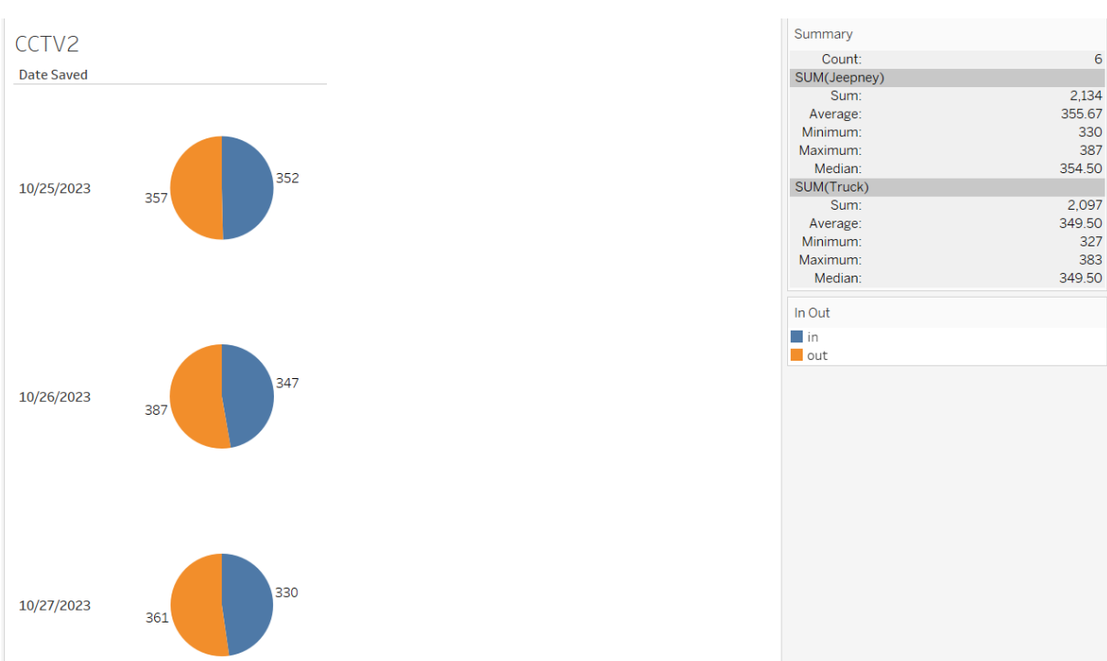


Next we choose another time. Here we focus on the time from 6:00 PM to 6:59 PM and show the total in and out counts during that time.



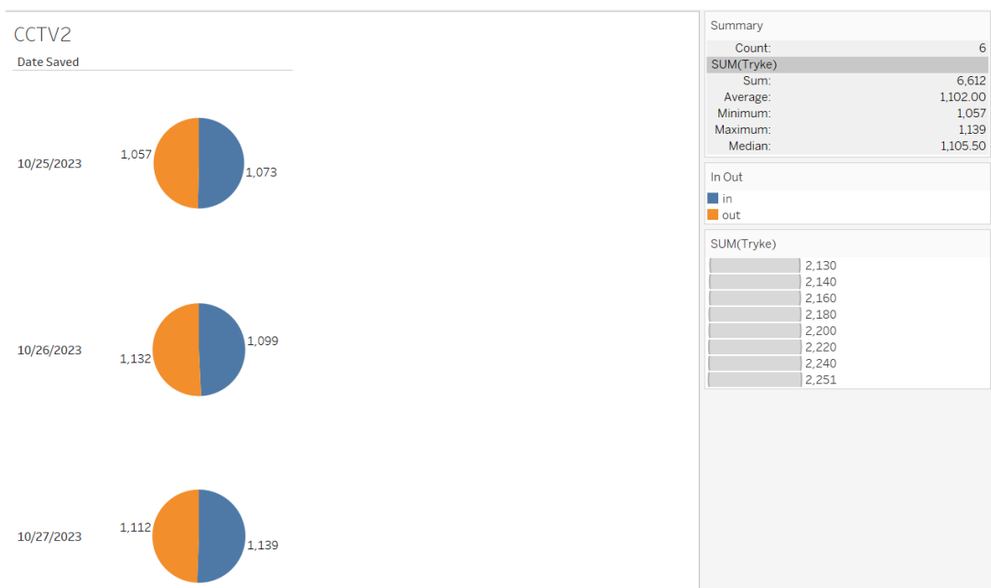
Now we focus on Truck. Here we have the drilled down total in and out counts based on day.

We further drill down based on time. Here we focus on the time from 6:00 AM to 6:59 AM and show the total in and out counts.

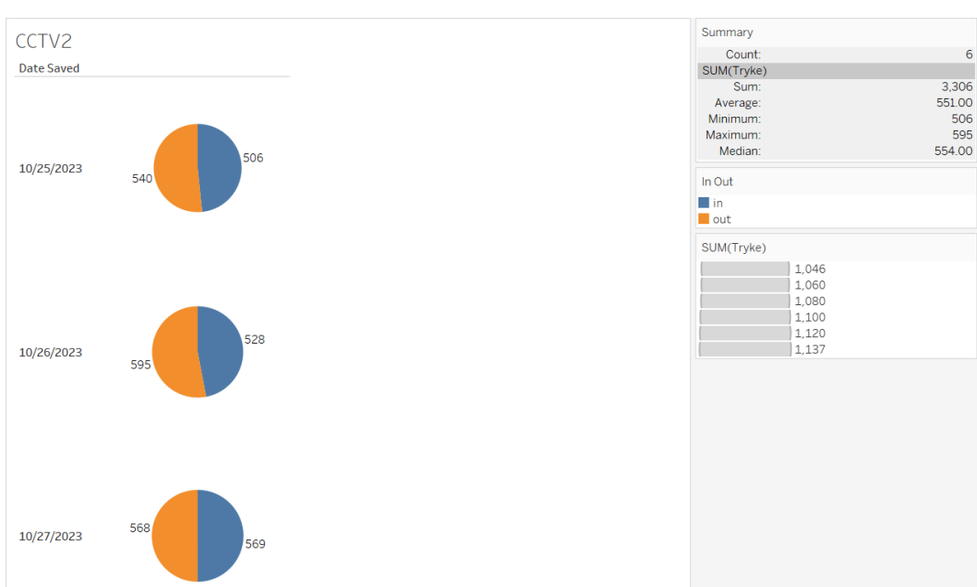


Next we focus on the time from 6:00 PM to 6:59 PM. Here the total in and out counts are shown in the pie chart.

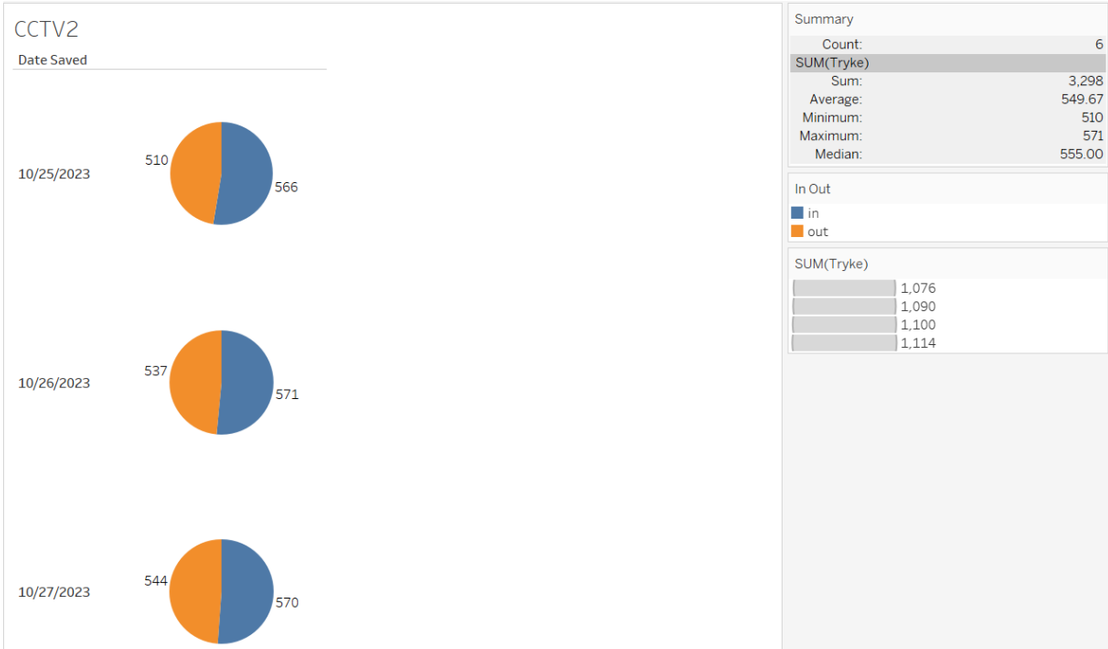
Now we continue on tryke. Here we focus on the total in and out counts per day and show it in our pie chart.



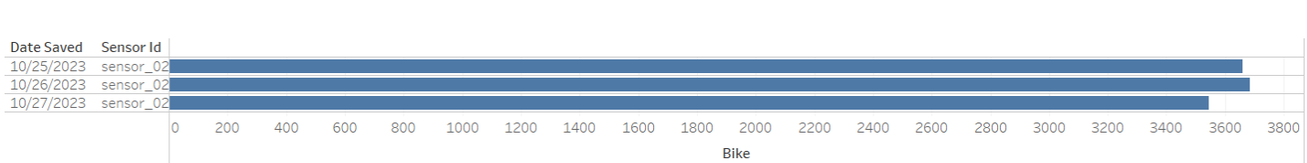
We further drill down. Here we focus on the time from 6:00 AM to 6:59 AM and show the total in and out counts.

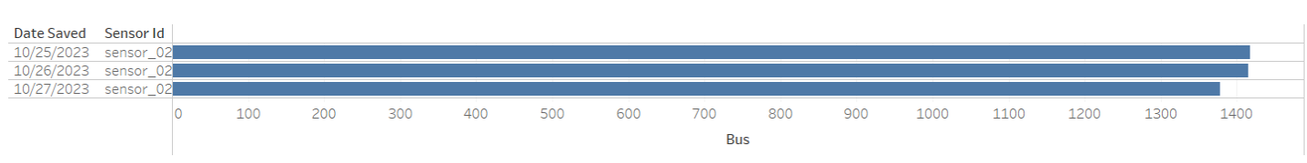


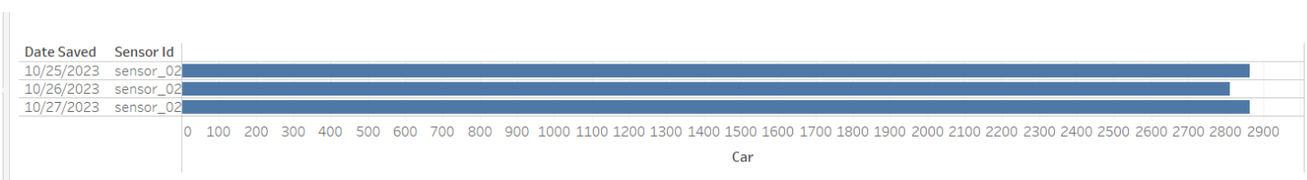
Now moving to the time from 6:00 PM to 6:59 PM. Here we see the total in and out counts during that time and the total sum of all counts.

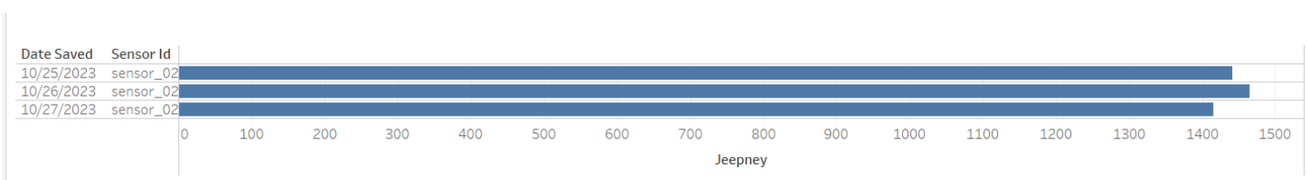


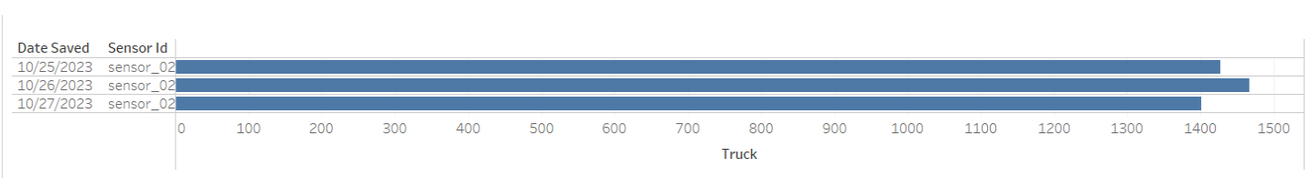
The total counts per vehicle for CCTV 2 can also be visualized. Here we have visualizations for bike, bus, car, jeepney, truck, and tryke per day for CCTV 2.

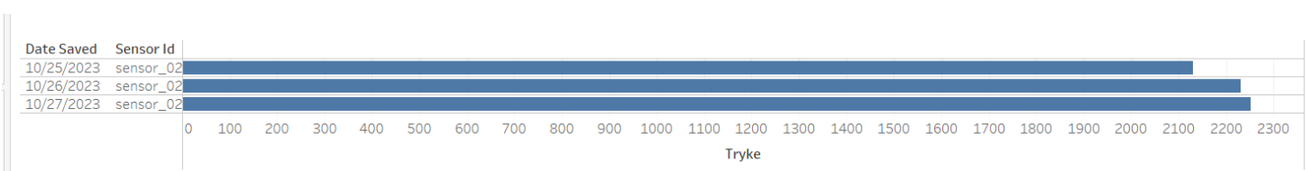




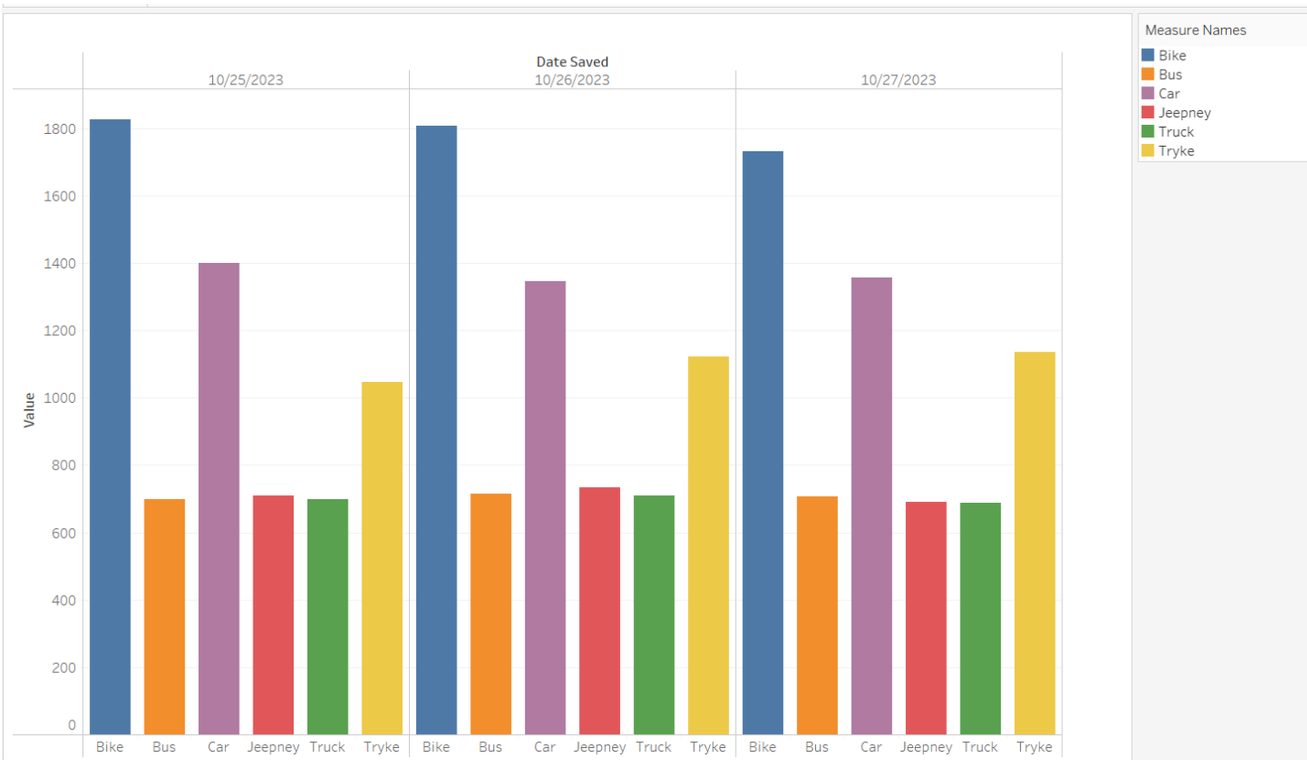




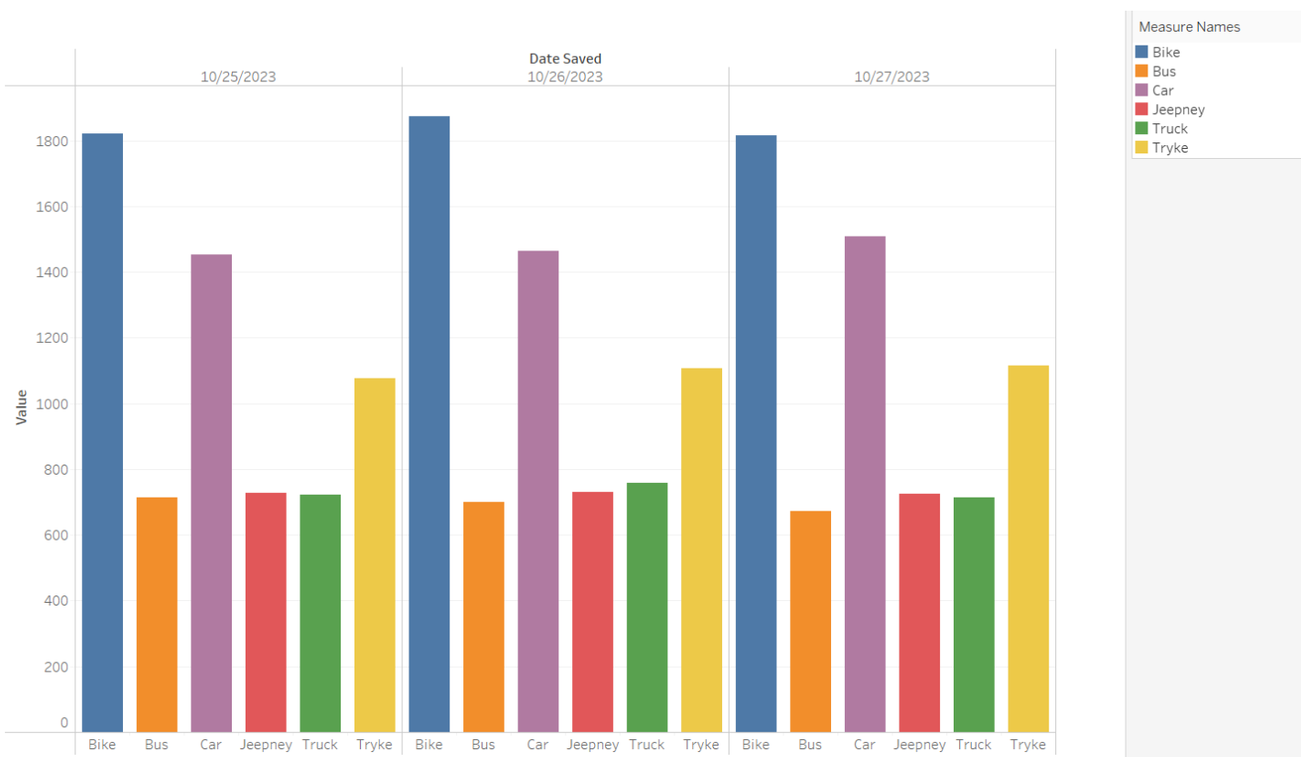




We can also include visualizations based on the total counts of each vehicle per day based on time. Here we have the total counts from 6:00 AM to 6:59 AM.

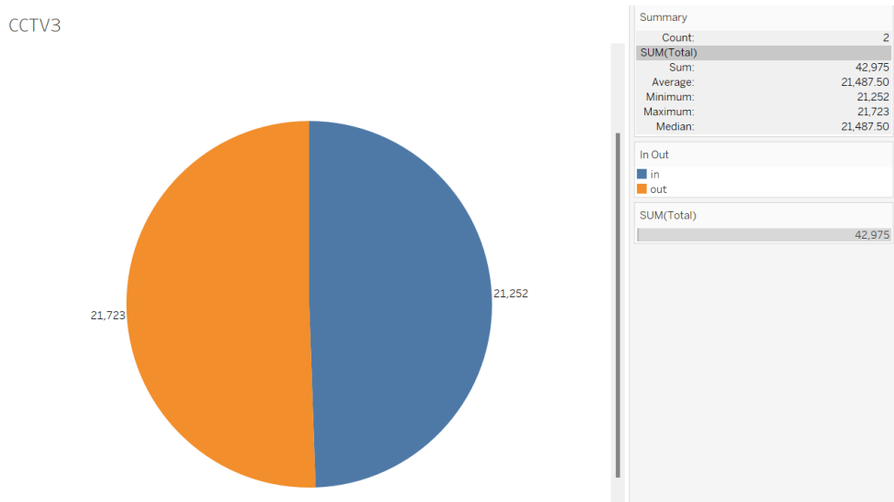


We also have the total counts for each vehicle per day from 6:00 PM to 6:59 PM.

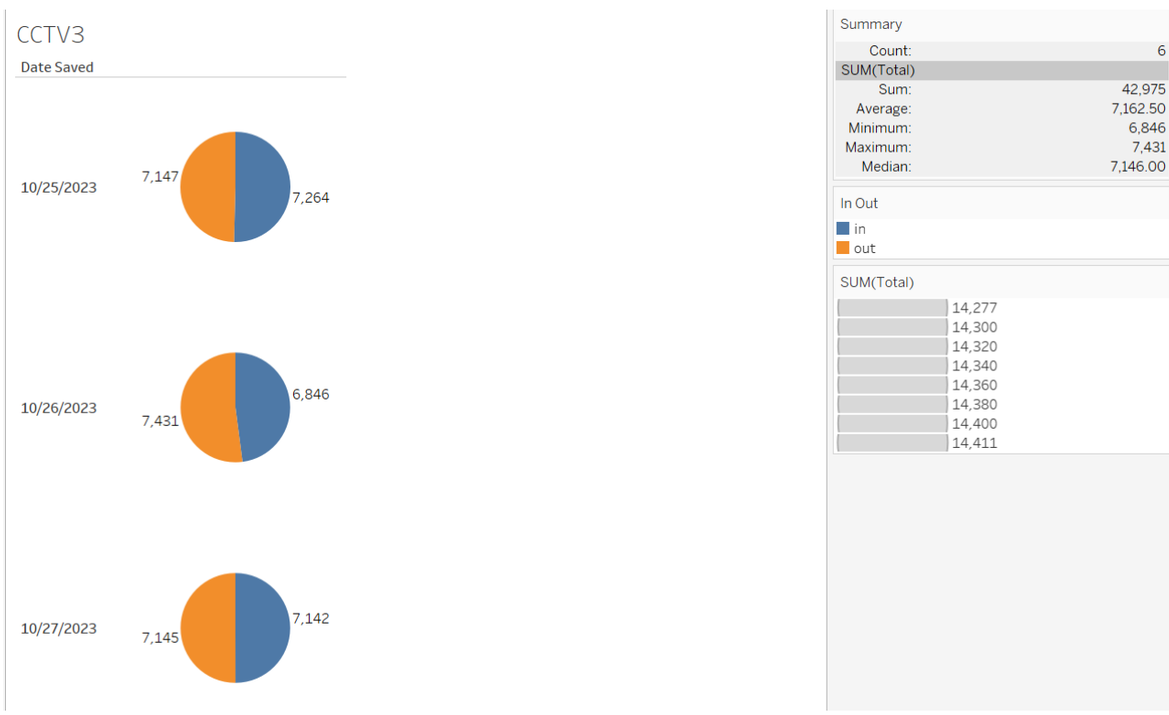


CCTV 3

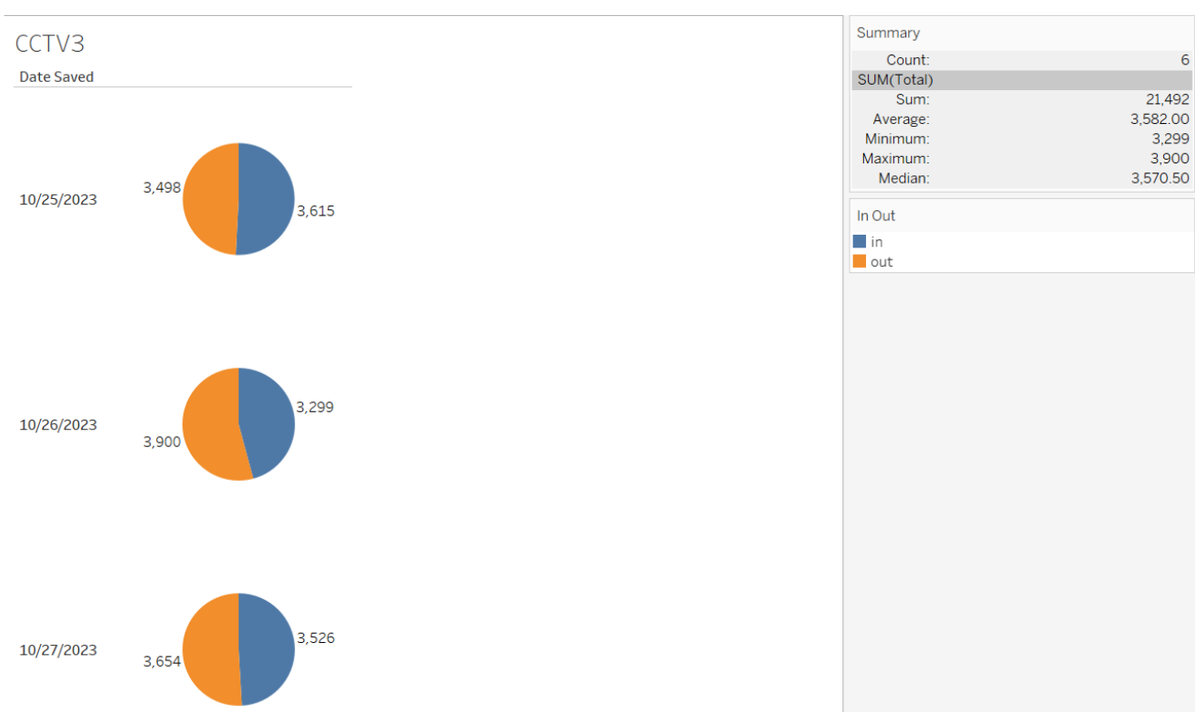
Now we will focus on the data collected by CCTV 3 with id of sensor_03. Here we have the pie chart that shows total in and out counts of all vehicle types within 3 days.



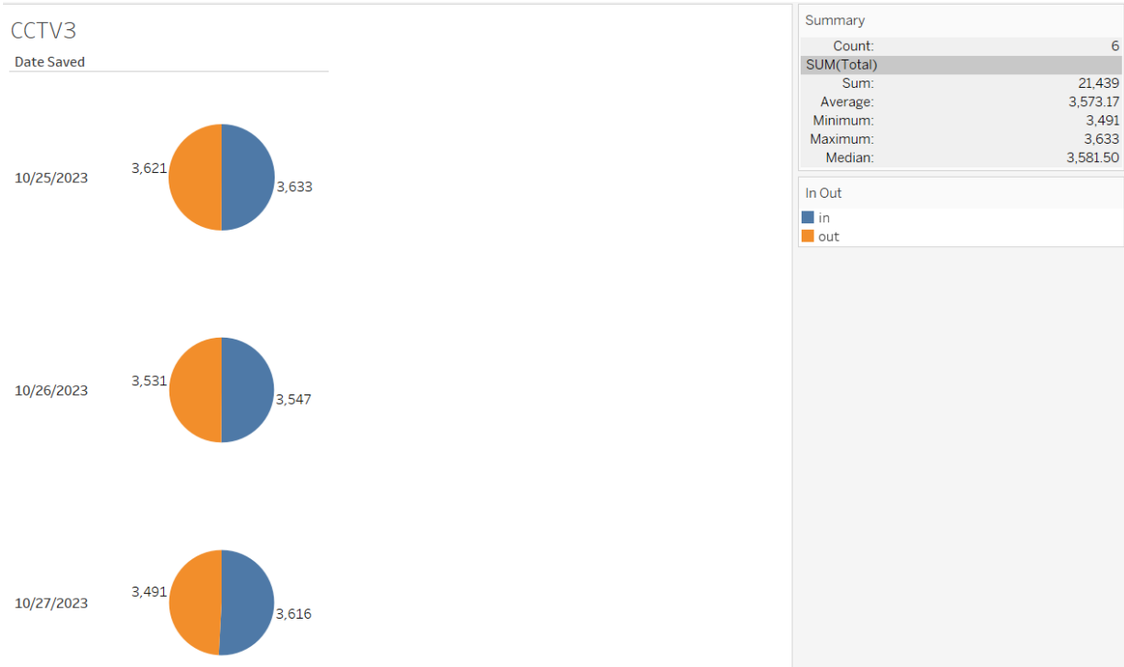
Now we drill down based on date. Here we see the total in and out counts for each day in CCTV 3.



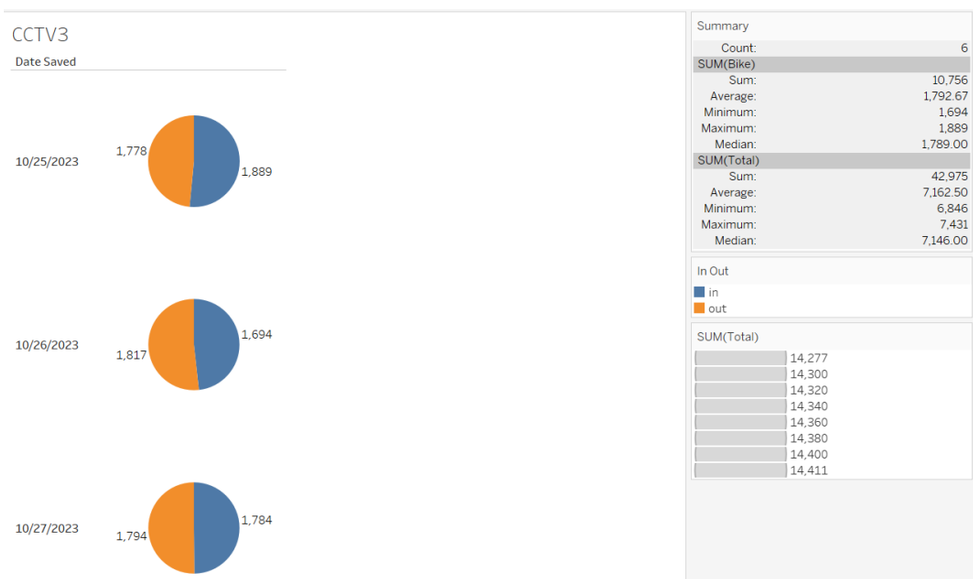
Next we further drill down based on time. Here we focus on the time from 6:00 AM to 6:59 AM and show the total in and out counts.



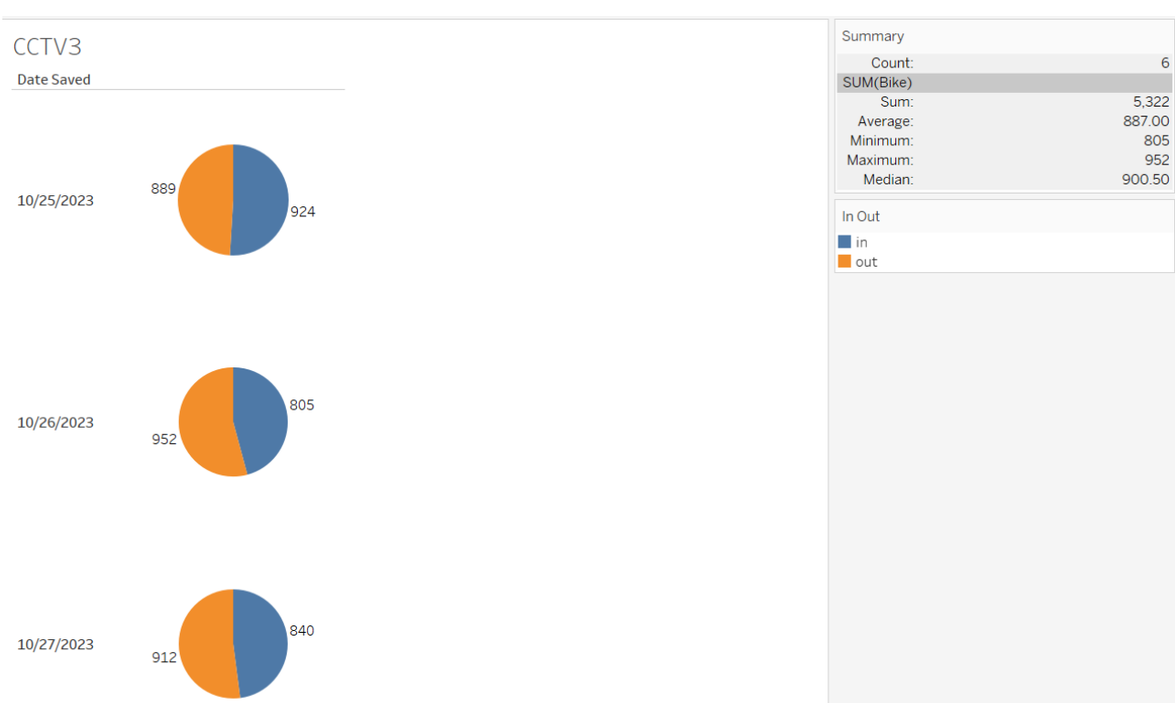
We also evaluate the time from 6:00 PM to 6:59 PM. We show the total in and out counts based on that period in the pie chart.



Now we drill down based on the vehicle type. First we evaluate bike. Here we show the total in and out counts of bike based on the day.



Next we focus on time. Here we show the total in and out counts based on the time from 6:00 AM to 6:59 AM.

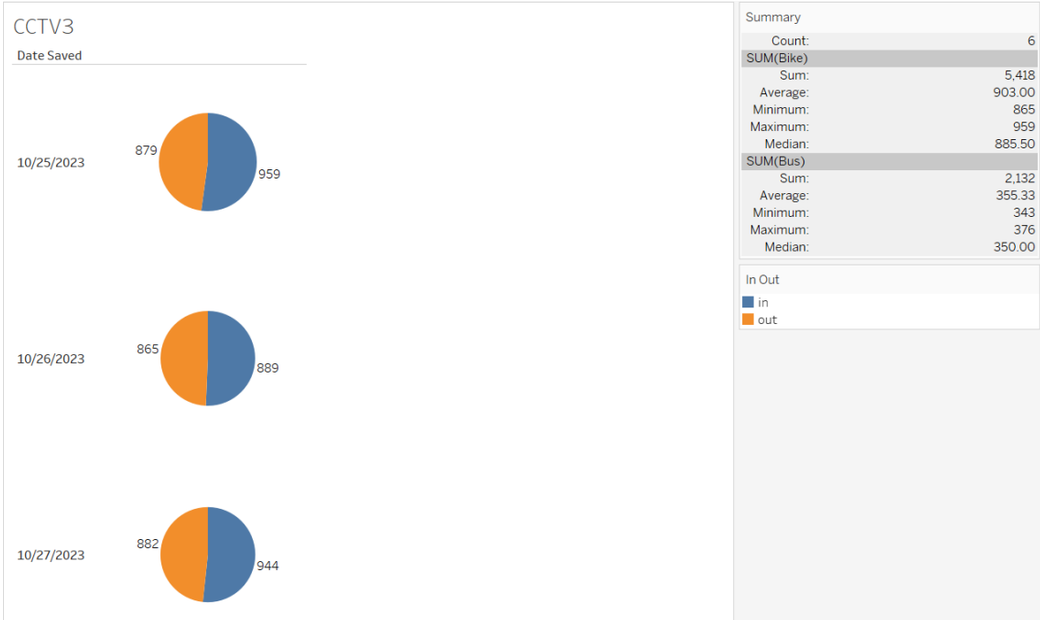


Then we focus on the time from 6:00 PM to 6:59 PM. The total in and out counts during that time is shown in our pie chart.

Now we move on to bus. First we focus on the total in and out counts based on day. Here we show it in the pie chart.

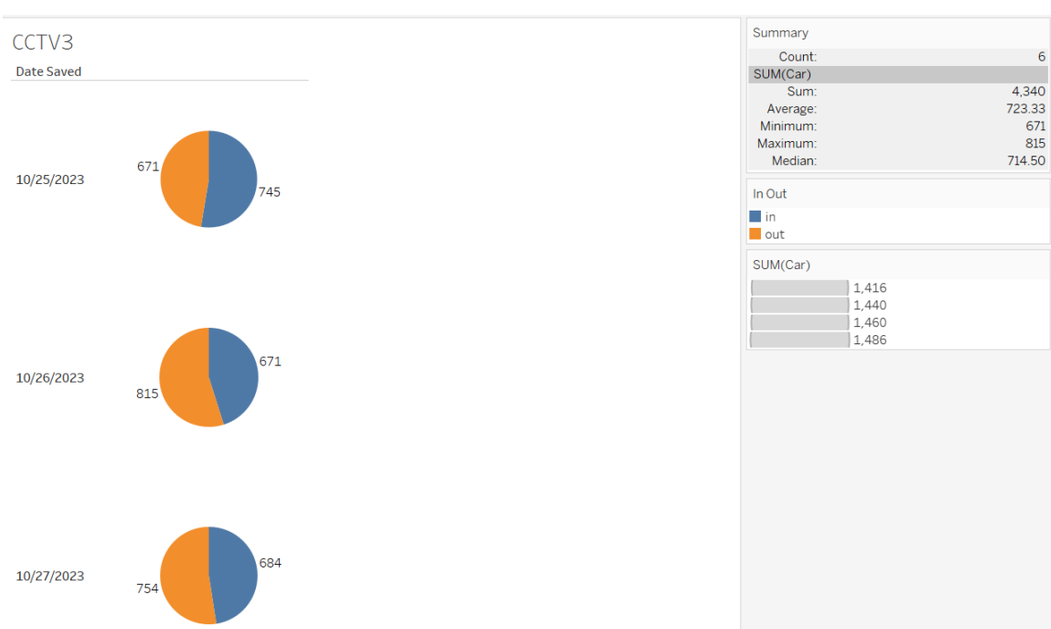
Next we focus on the time period from 6:00 AM to 6:59 AM to further drill down. Here we see the total in and out counts within the that period.

We further evaluate based on the time from 6:00 PM to 6:59 PM. Here we show the total in and out counts so that we can further drill down.



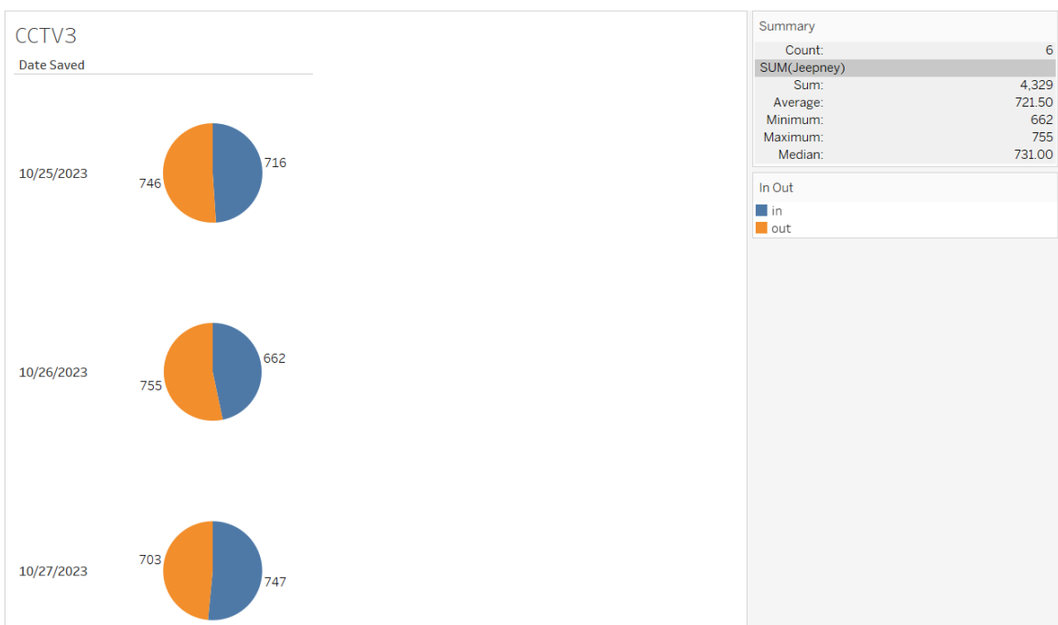
Next we focus on car. Here we drill down based on the total in and out counts of cars per day. We show it in the pie graph.

We drill down further. Here we show the total in and out counts from 6:00 AM to 6:59 AM.

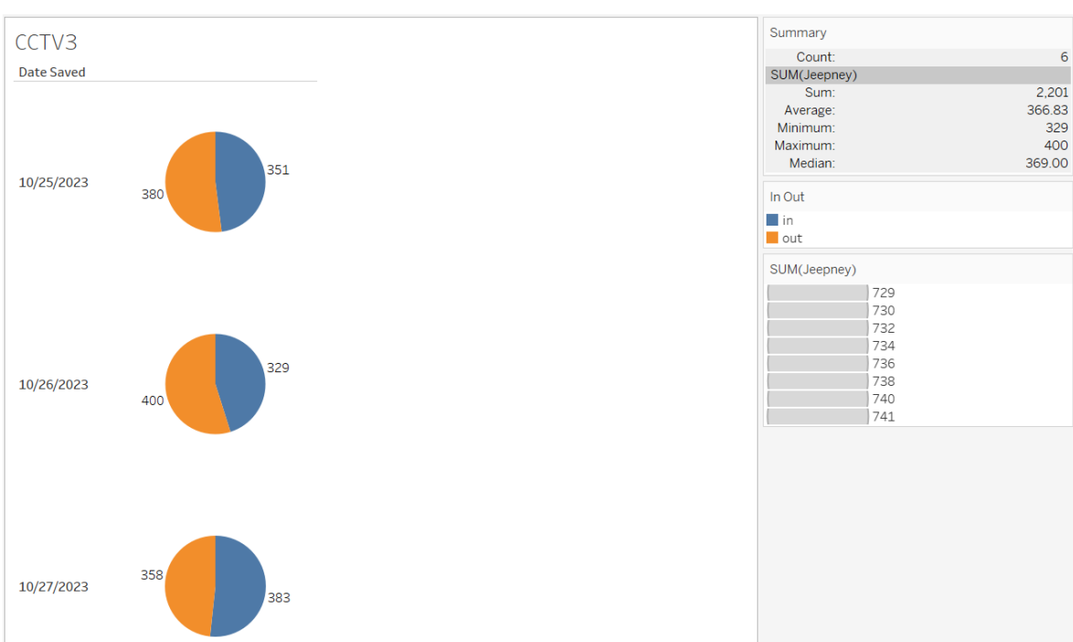


Next we again drill down now focusing on the time from 6:00 PM to 6:59 PM. Here we show the total in and out counts in the pie chart.

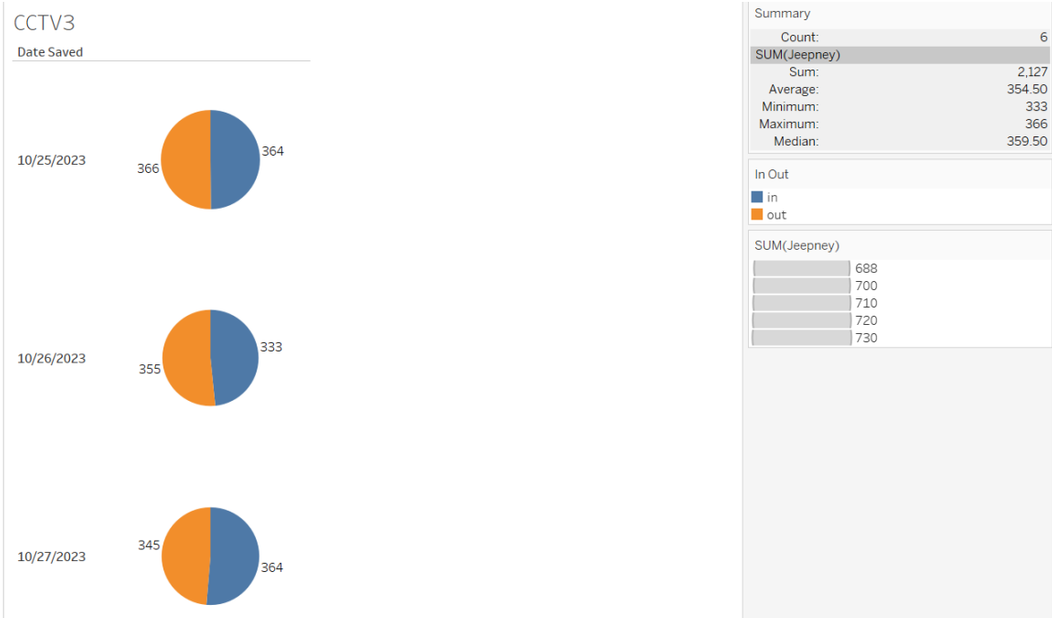
Now we evaluate Jeepney vehicles. First we drill down to the total in and out counts based on the day.



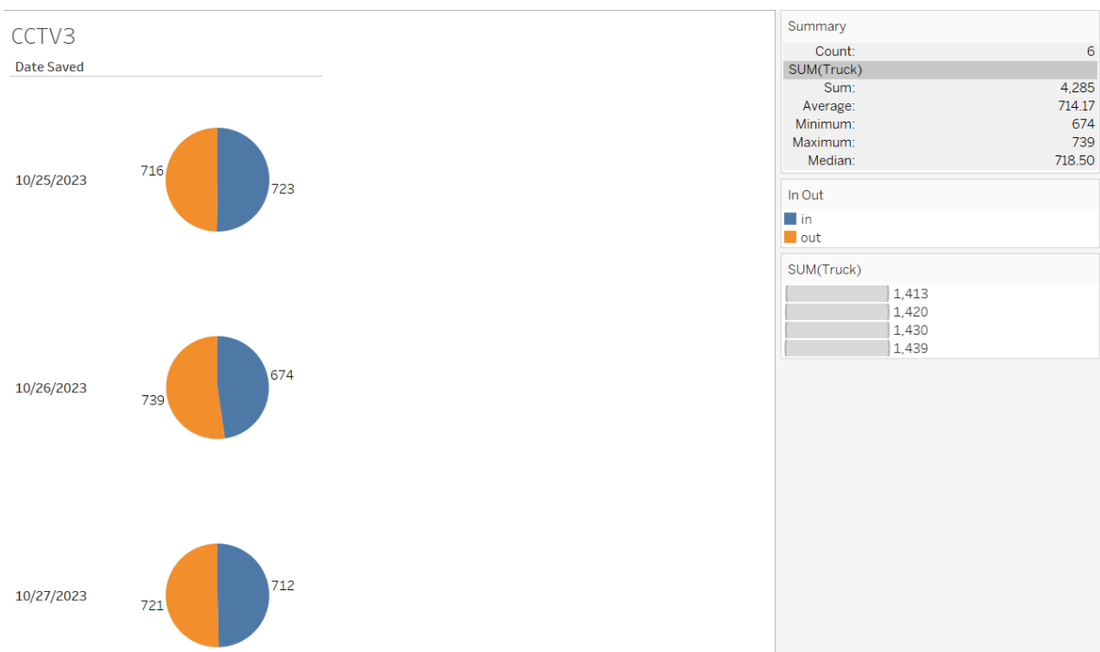
Now we further drill down based on time. Here we show the total in and out counts from 6:00 AM to 6:59 AM.



We can further drill down to evaluate the total in and out counts. Here we now focus on the time from 6:00 PM to 6:59 PM.

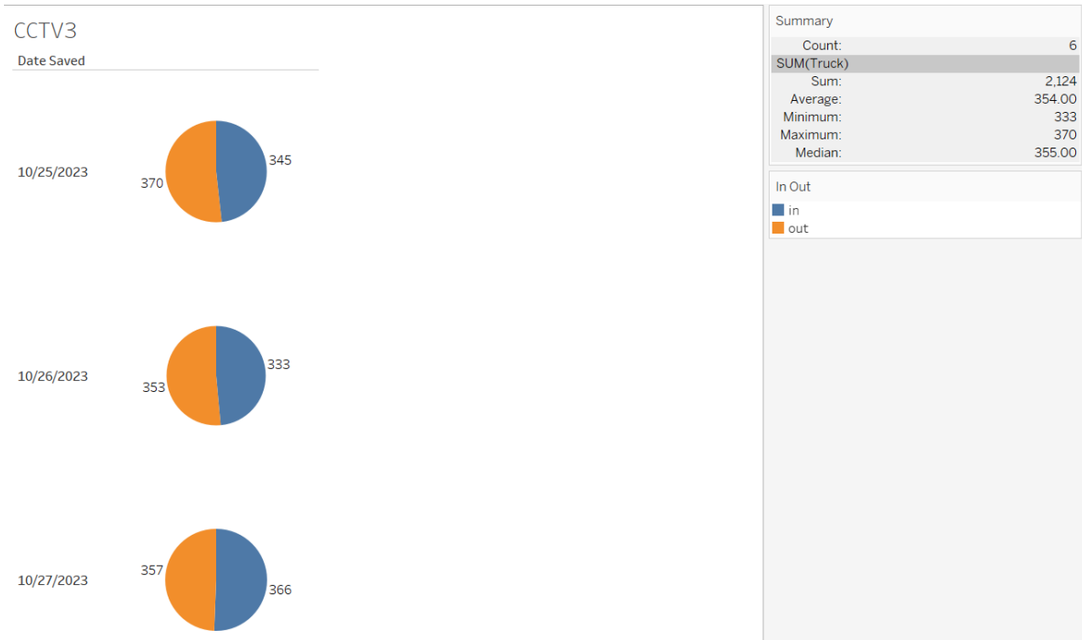


Now we focus on truck. Here we show the total in and out counts each day of the three days recording of CCTV 3.

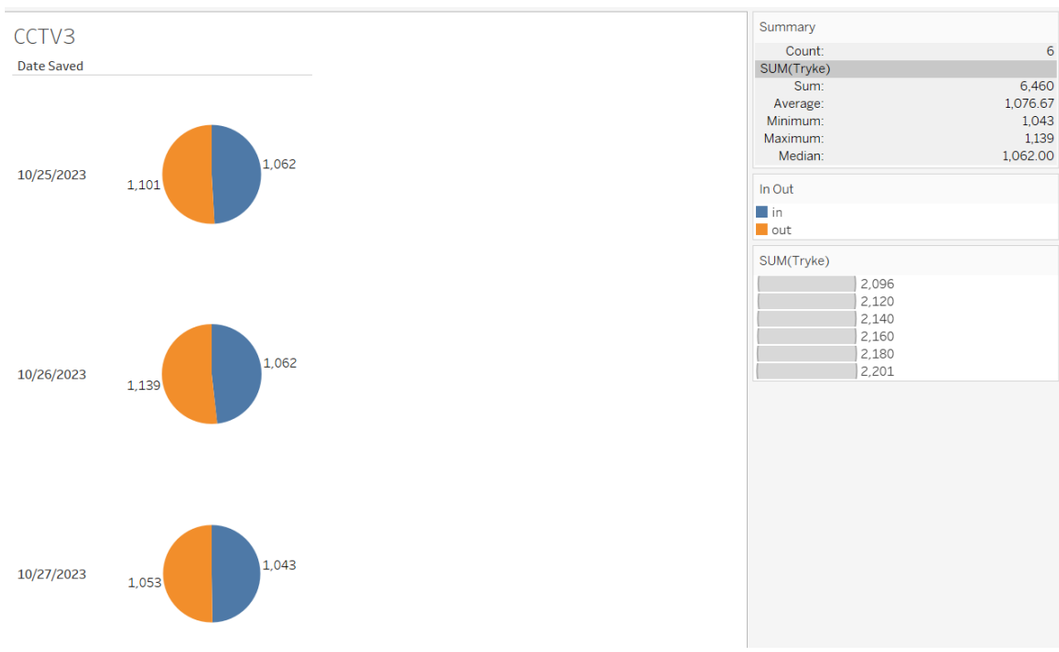


Next we further drill down based on time. Here we first evaluate the total in and out counts from 6:00 AM to 6:59 AM.

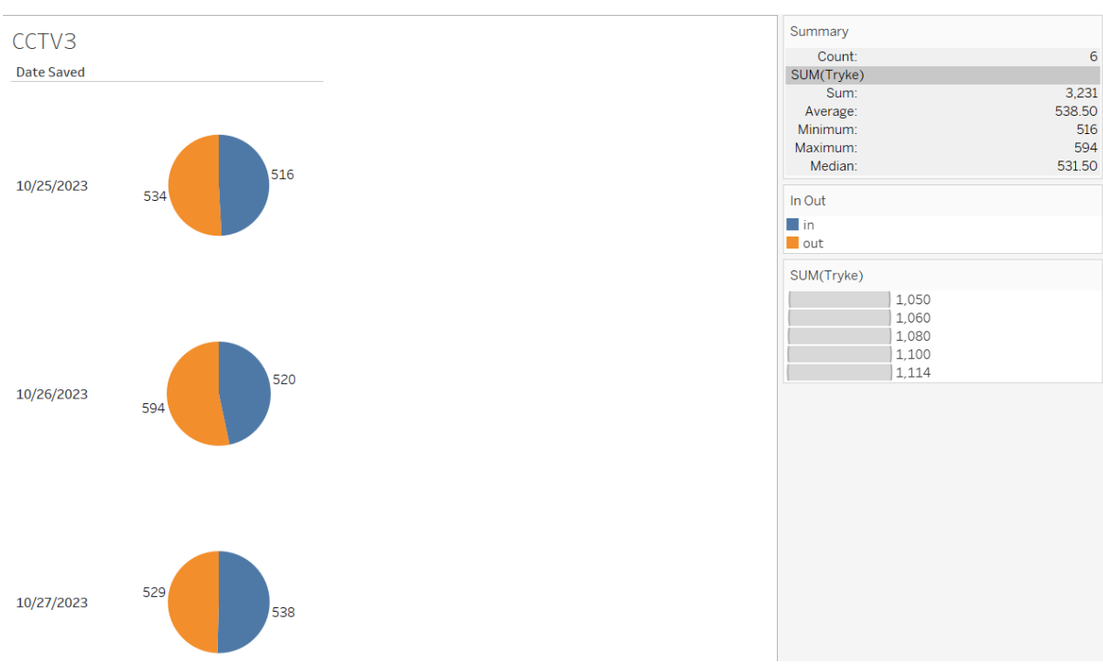
Now we evaluate the time from 6:00 PM to 6:59 PM. We can see the total in and out counts of jeepneys during that time.



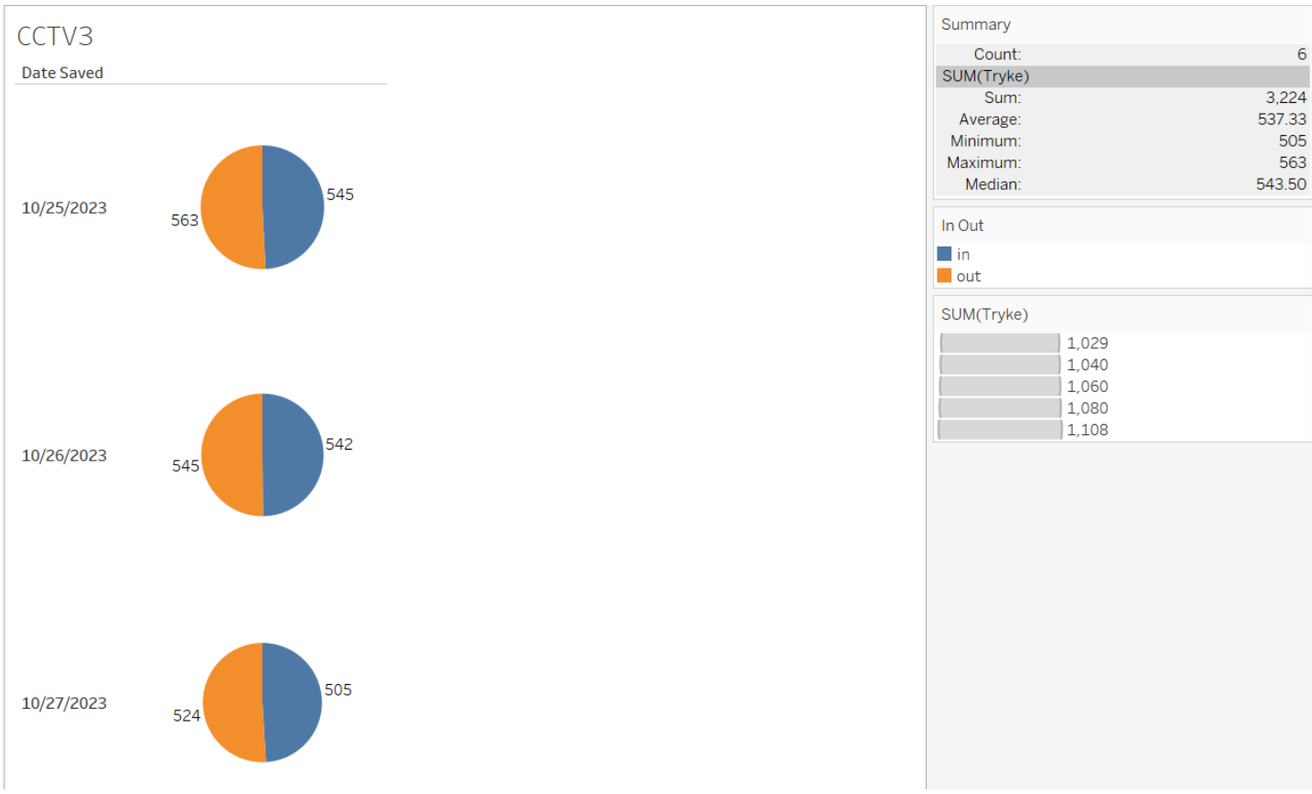
Now we move on to tryke. Here we focus on the total in and out counts per day. We show it in the pie chart.



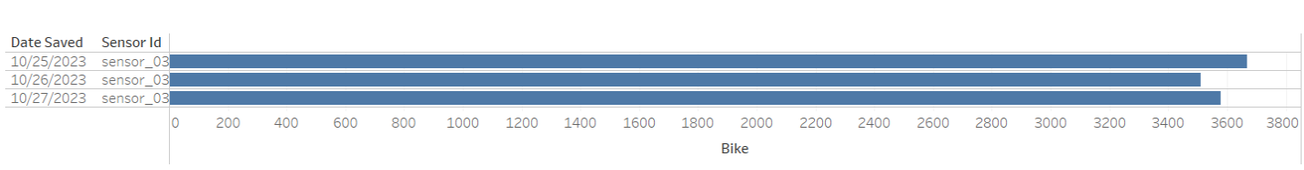
Now we further drill down and use time. Here we show the total in and out counts from 6:00 AM to 6:59 AM and show it in a pie chart.

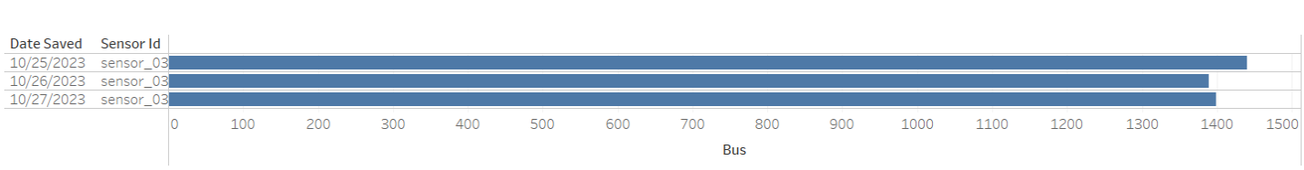


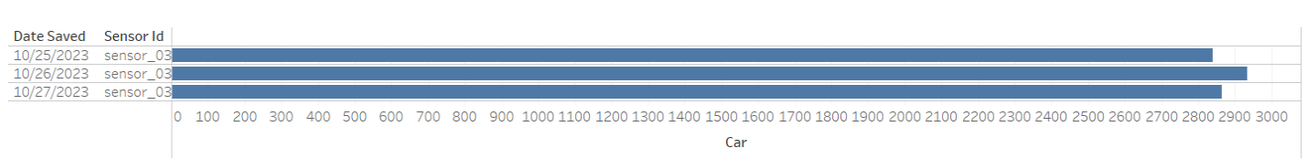
Next we drill down by focusing on the time from 6:00 PM to 6:59 PM. We show the total in and out counts during that time in the pie chart.

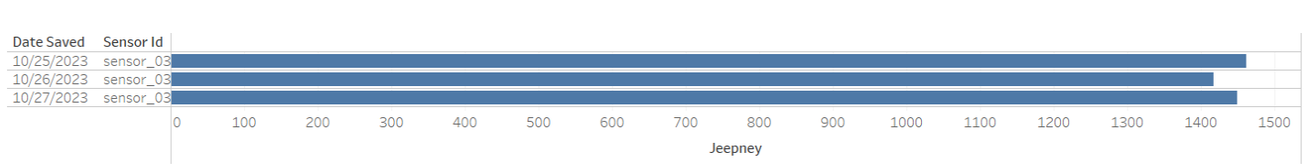


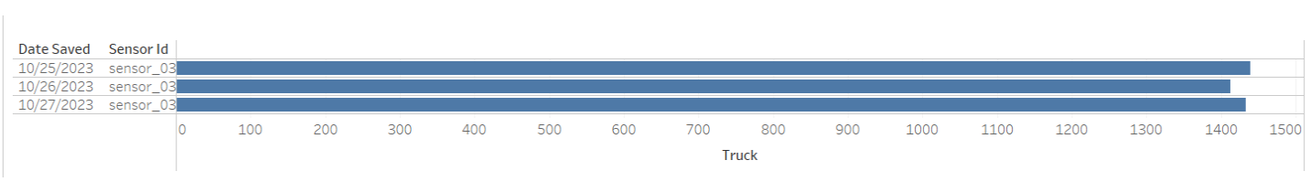
For CCTV 3 we can also show visualizations for the total counts of each vehicle per day. Here we have bar graphs to show them.

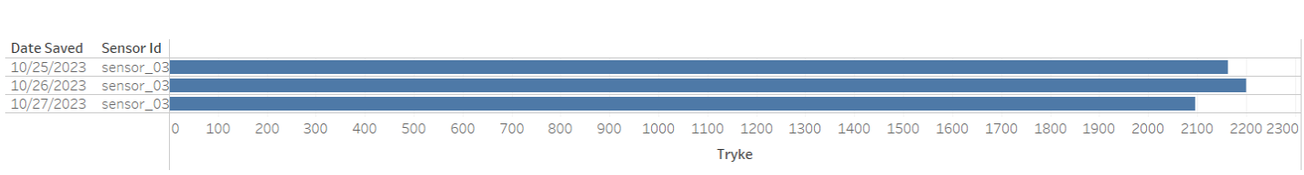




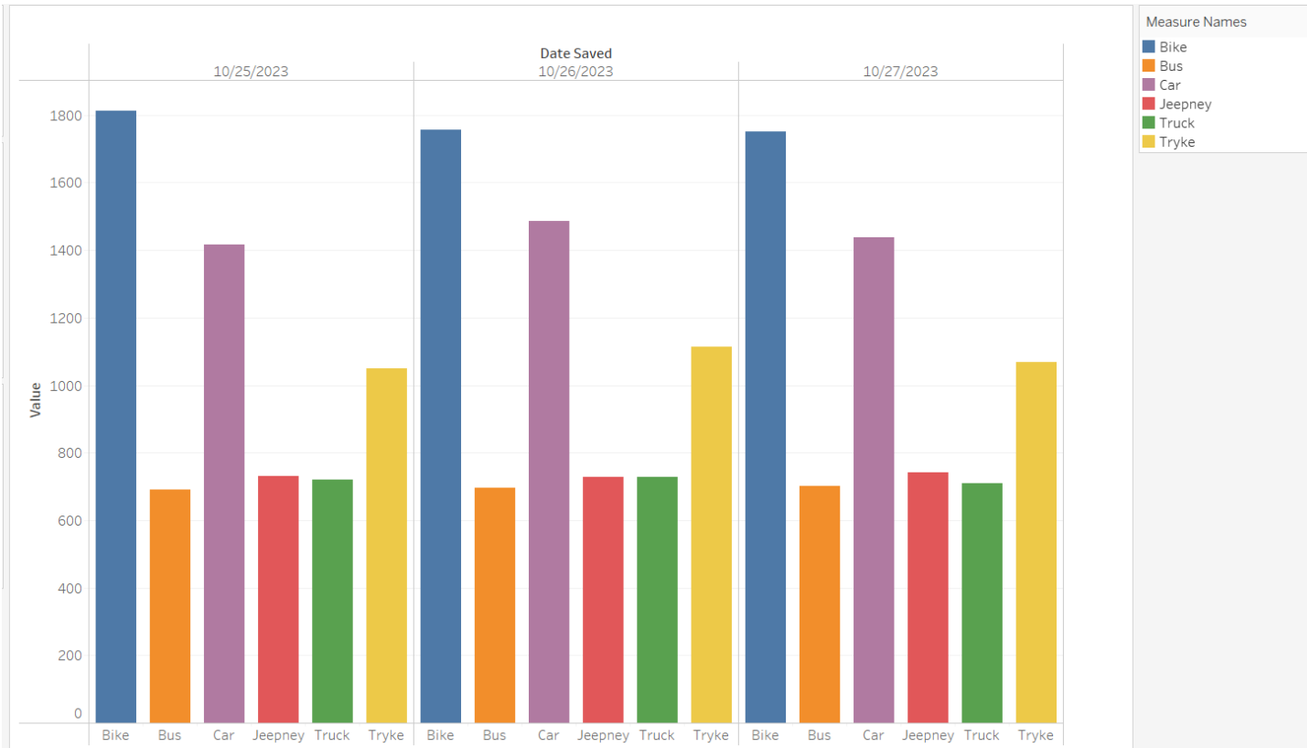




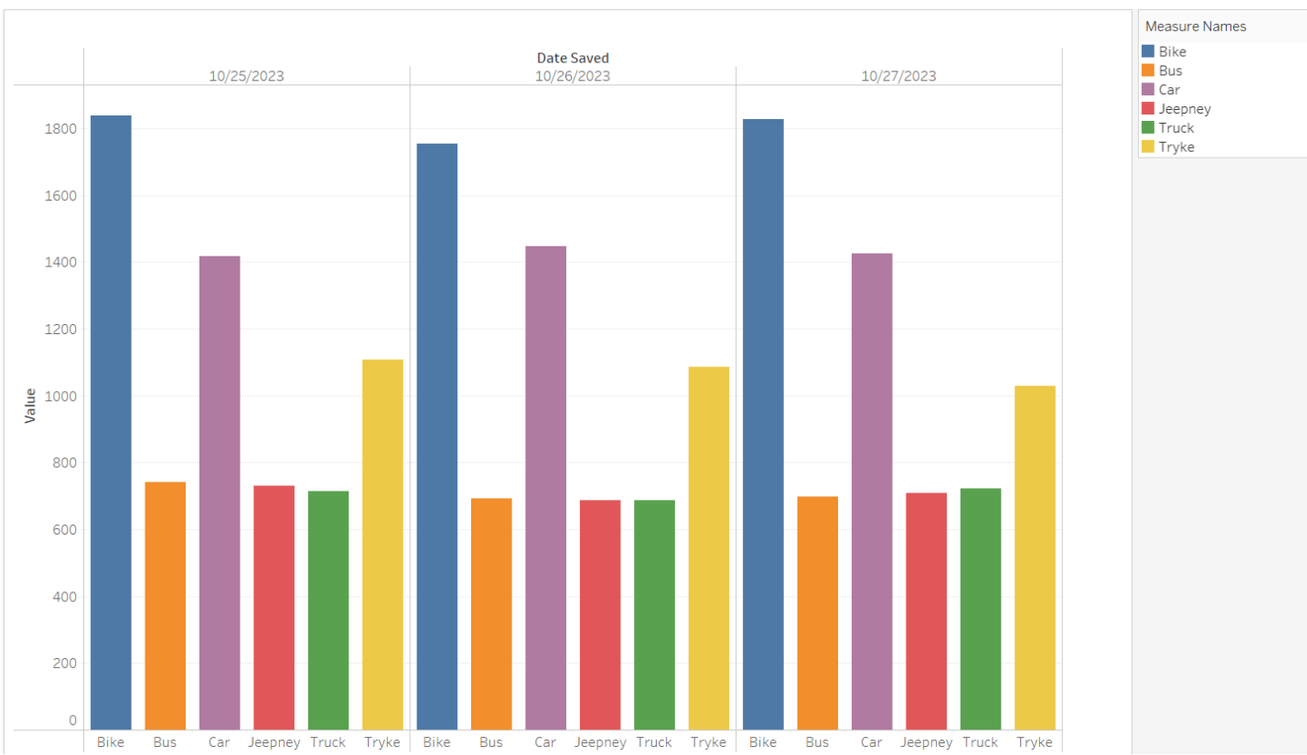




We can also show visualizations based on the total counts per vehicle and per day and based on time. Here we have the total counts from 6:00 AM to 6:59 AM.

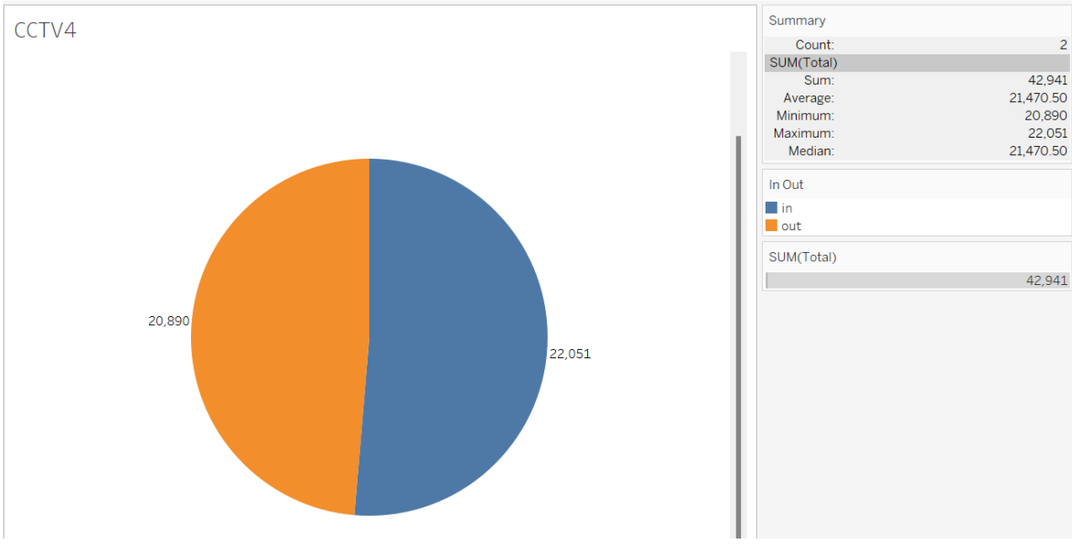


We also have this visualization for the total counts from 6:00 PM to 6:59 PM.

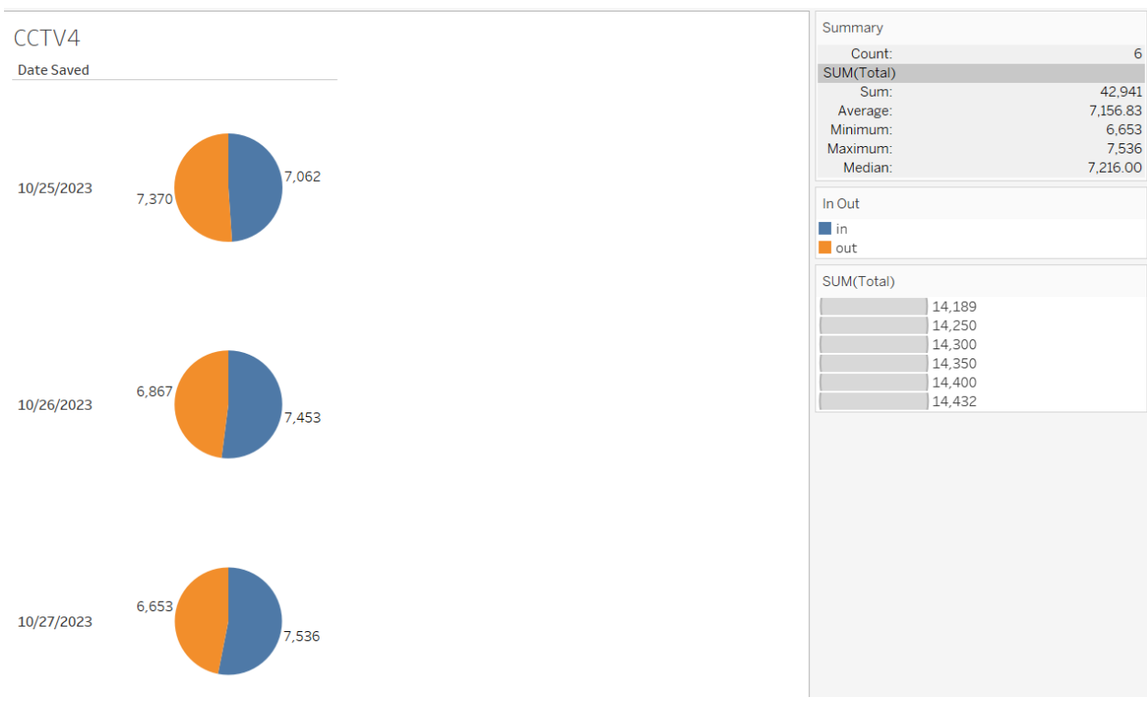


CCTV 4

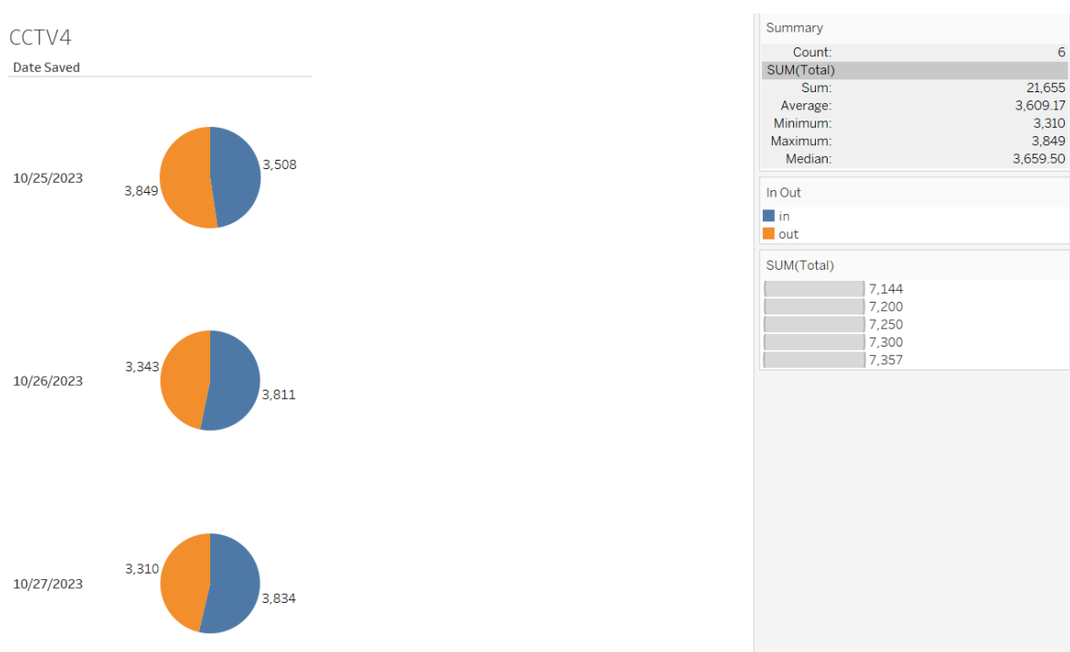
Now we will perform analysis on the data collected by CCTV for with id sensor_4. First we show the total in and out counts collected by CCTV 4 for 3 days and including all vehicle types.



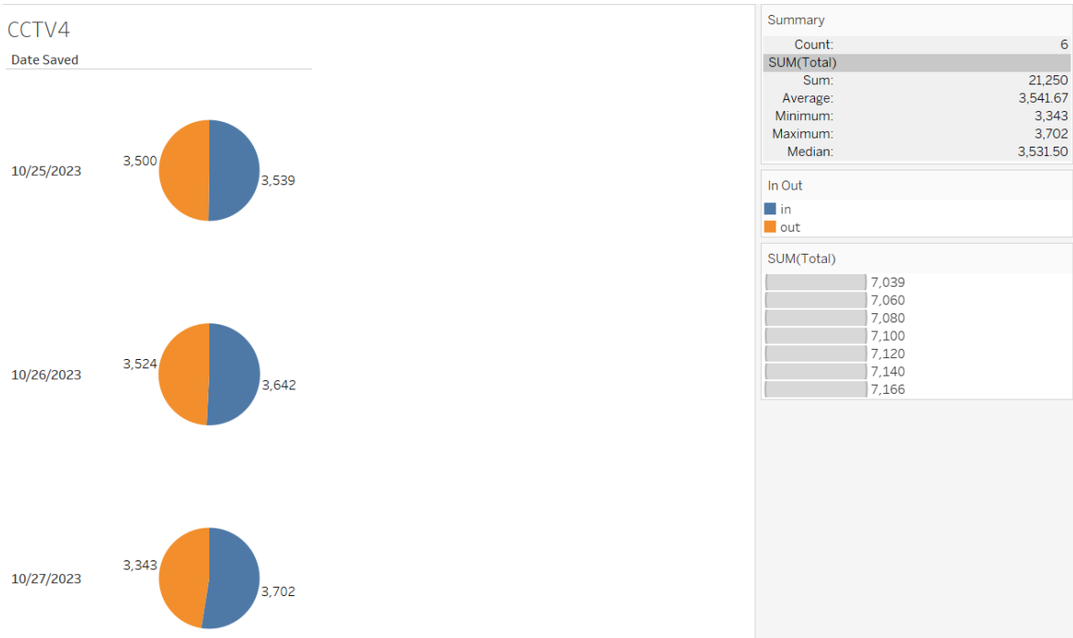
Then we drill down based on the day. Here we have the total in and out counts per day for the total of 3 days.



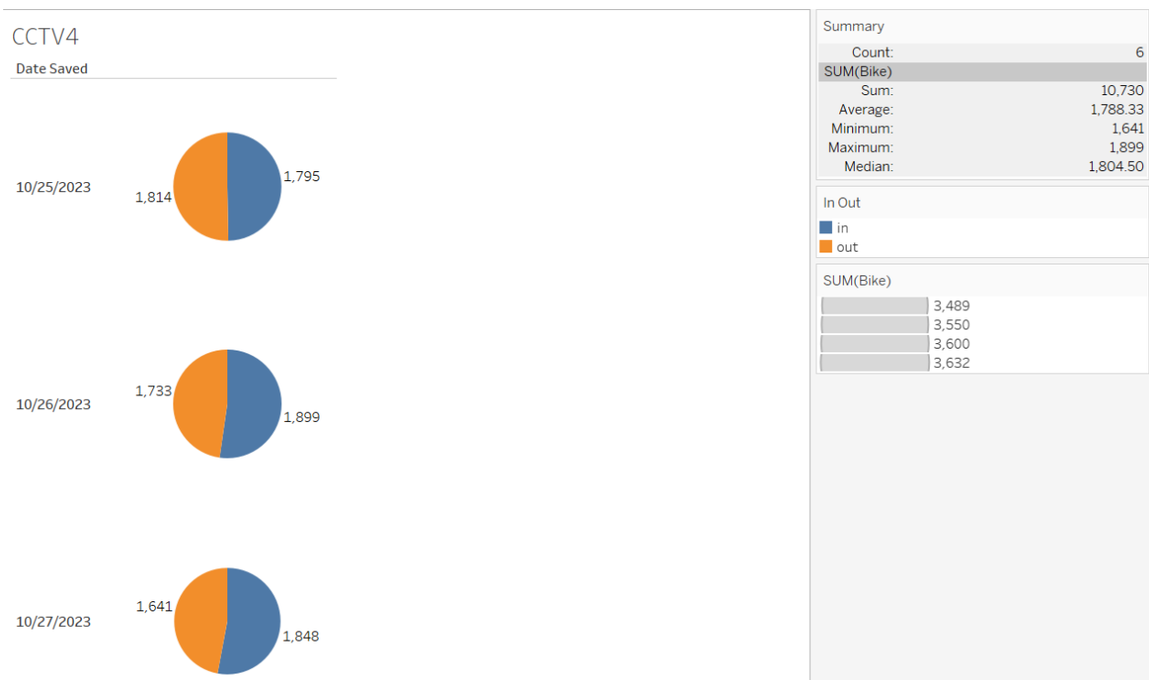
We continue drilling down based on time. Here we show the total in and out counts from the time 6:00 AM to 6:59 AM.



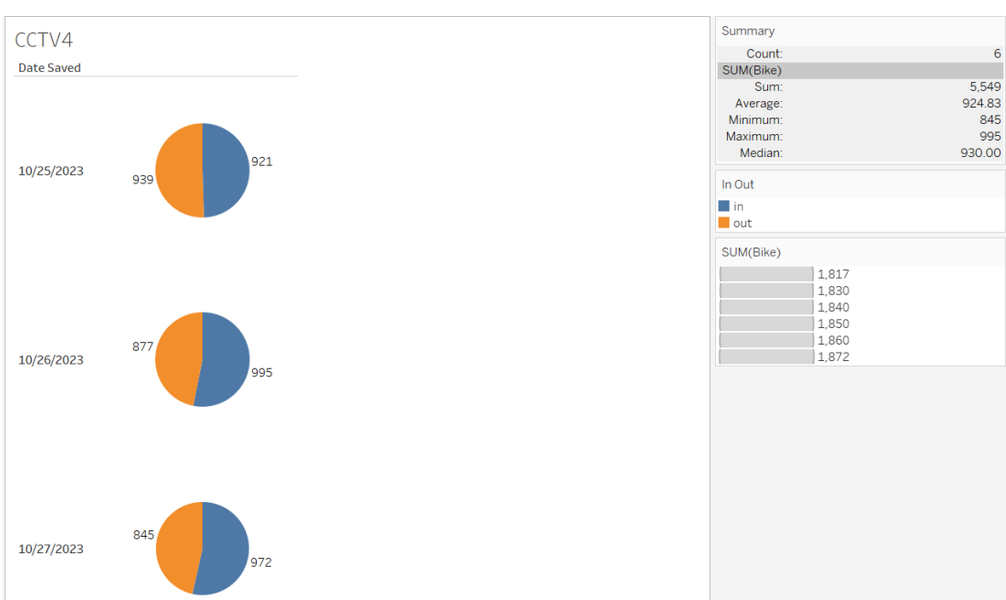
Then we drill down again. Now we focus on the time from 6:00 PM to 6:59 PM. We show the total in and out counts below.



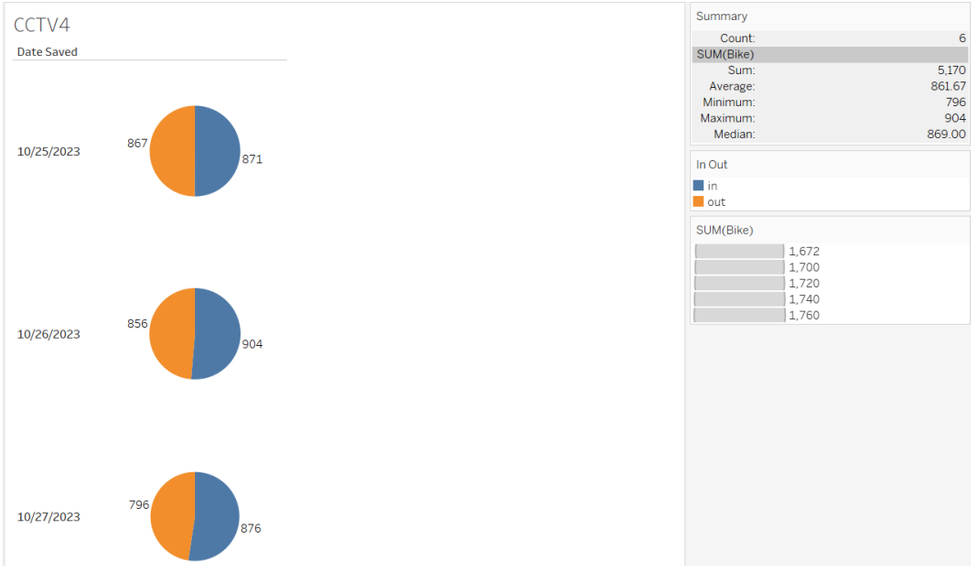
Now we can further drill down based on the vehicle type. First we focus on bike. Here we show the total in and out counts of bike collected by CCTV 4 per day.



Then we drill down based on time. Here we show the total in and out counts of bike from 6:00 AM to 6:59 AM.



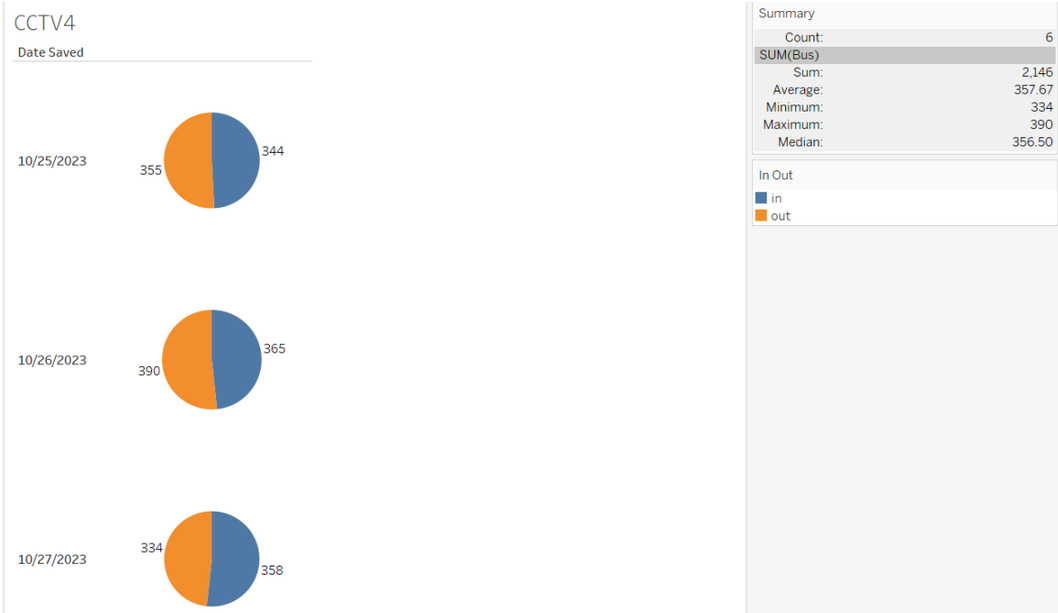
We further evaluate the time from 6:00 PM to 6:59 PM. Here we see the total in and out counts of bike during that time.



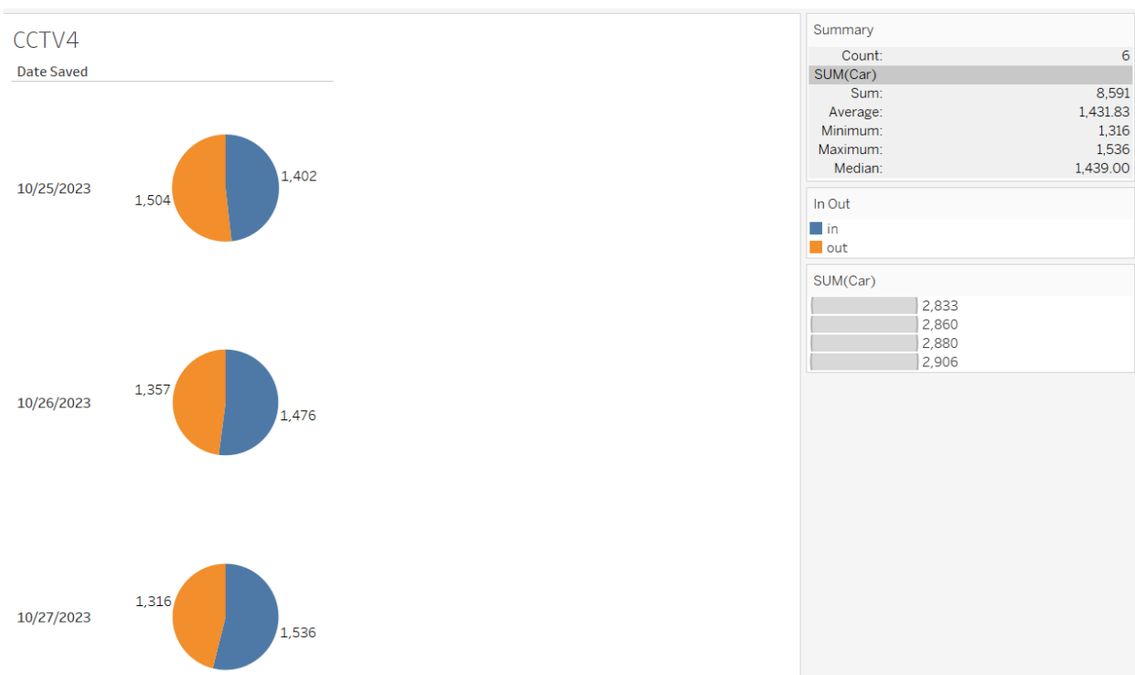
Next we move on to bus. Here we focus on the total in and out counts per day collected by CCTV 4.

Further drilling down, we evaluate during the time from 6:00 AM to 6:59 AM. Here we show the total counts of both in and out gathered during that time.

Then we evaluate based on the time from 6:00 PM to 6:59 PM. Here we show the total in and out counts of bus during that time detected by CCTV 4.



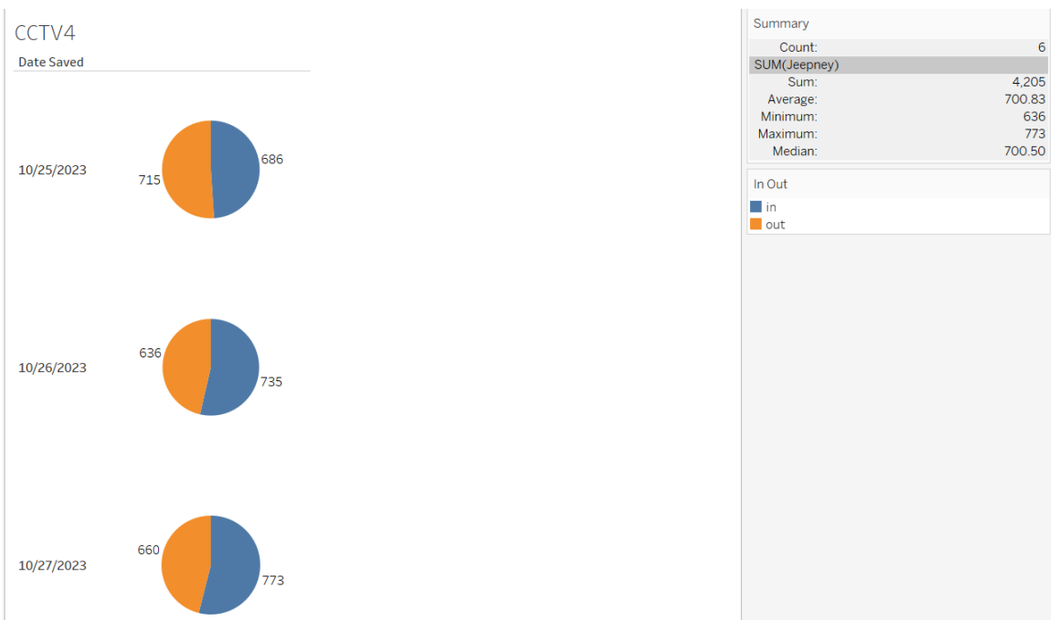
Next we evaluate car. Here we evaluate the total in and out counts of car per day.



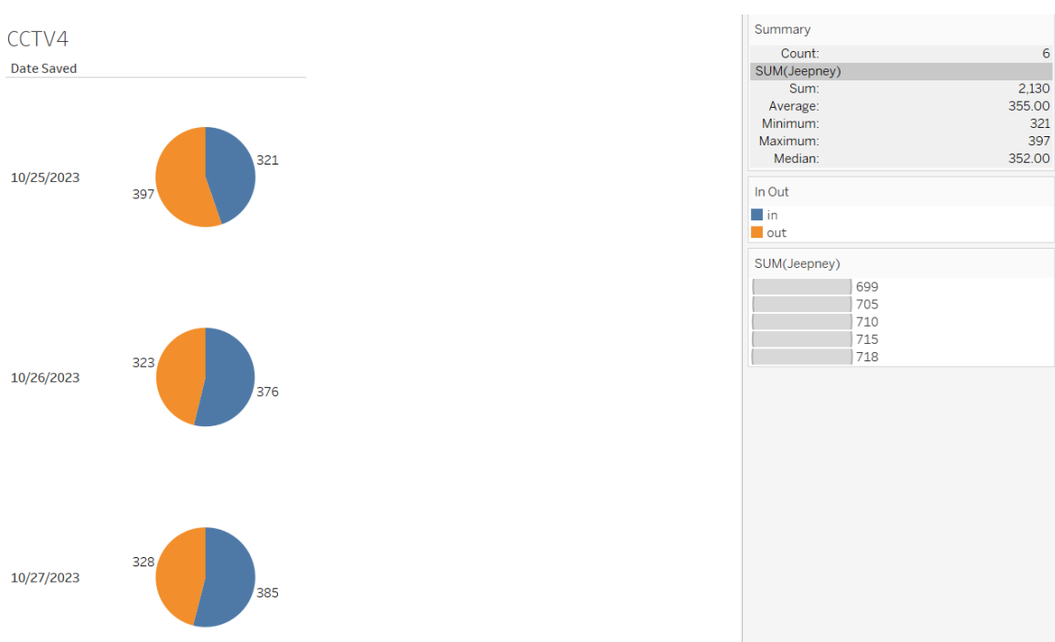
Further drilling down, we evaluate car based on the time from 6:00 AM to 6:59 AM. We show the total in and out counts of car in the pie chart.

Then we further evaluate the total in and out counts of car. We now focus on the time from 6:00 PM to 6:59 PM and show the results in the pie chart.

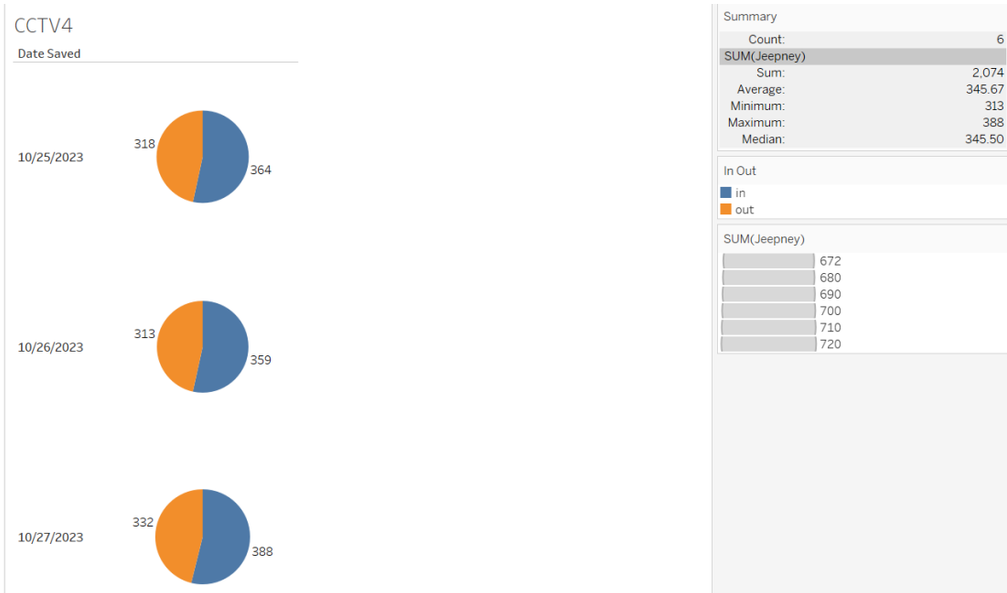
Now we focus on Jeepney. Here we show the total in and out counts of jeepney per day based on CCTV 4.



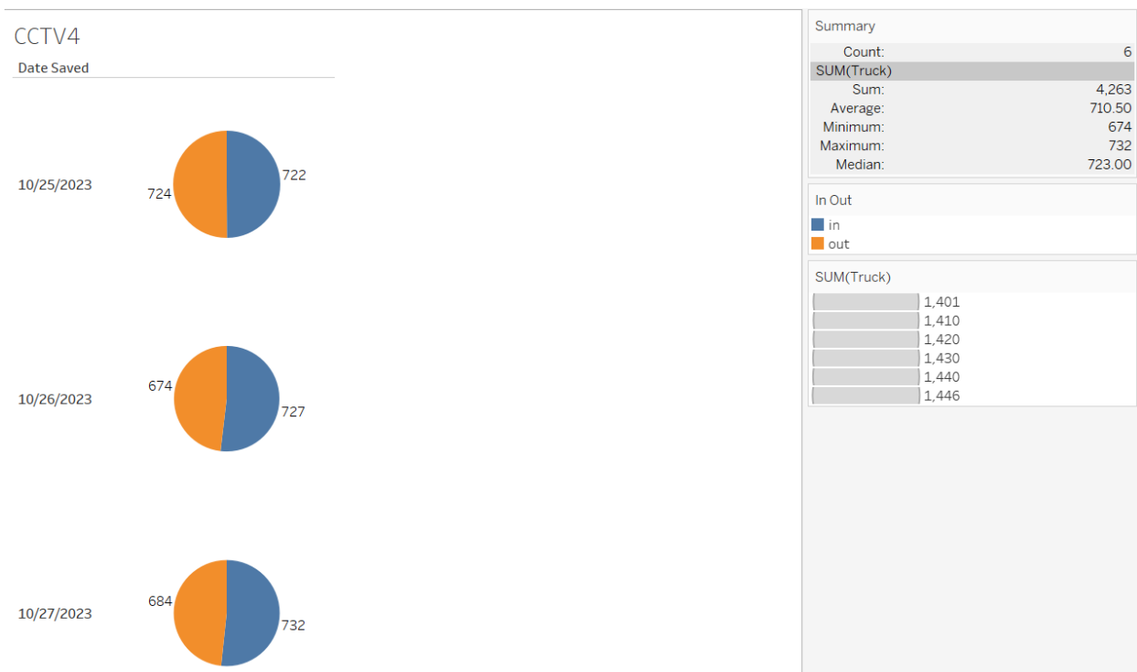
We can further drill down by showing the total in and out counts based on time. Here we focus on the time from 6:00 AM to 6:59 AM. We show the results in the pie graph.



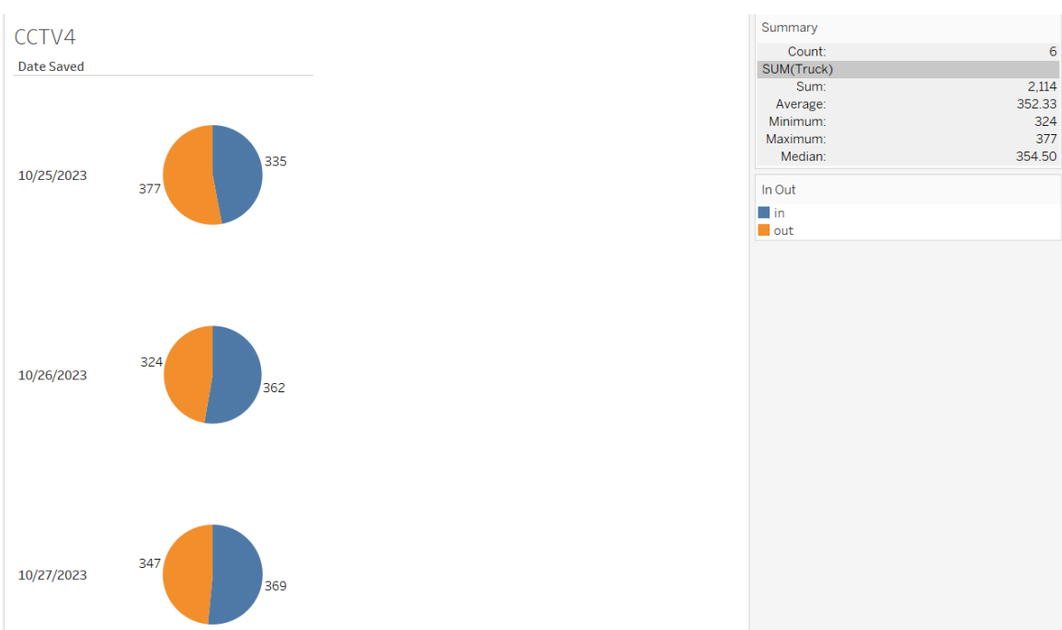
Next we evaluate based on the time from 6:00 PM to 6:59 PM. We show the total in and out counts of jeepney during that time.



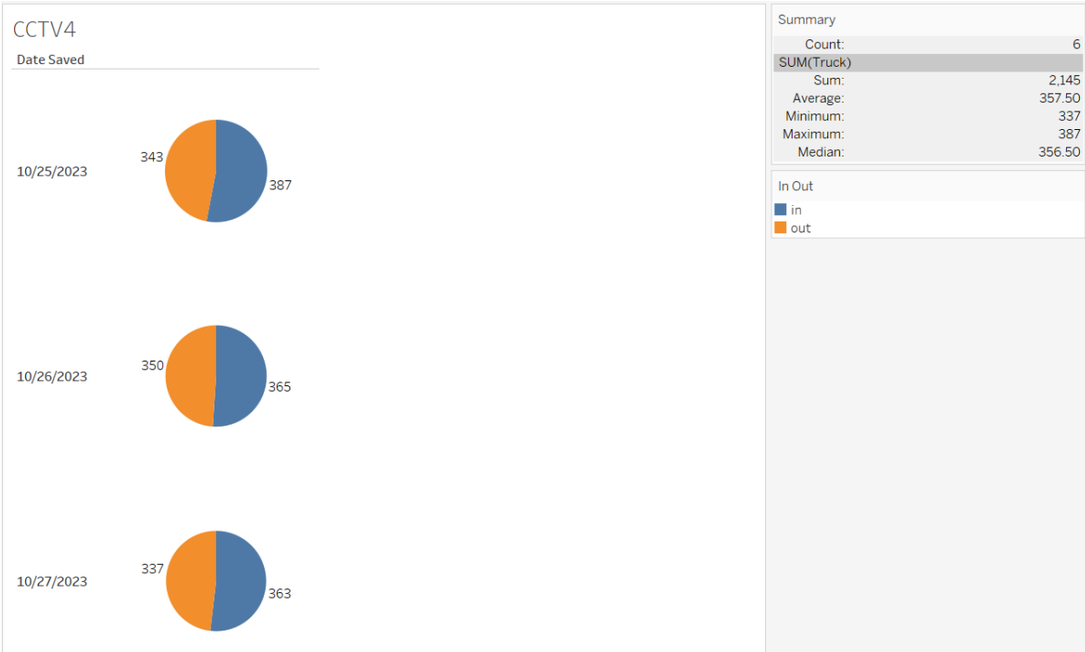
Next we move on to truck. The total in and out counts of truck in CCTV 4 is shown in the pie chart. It is based on day.



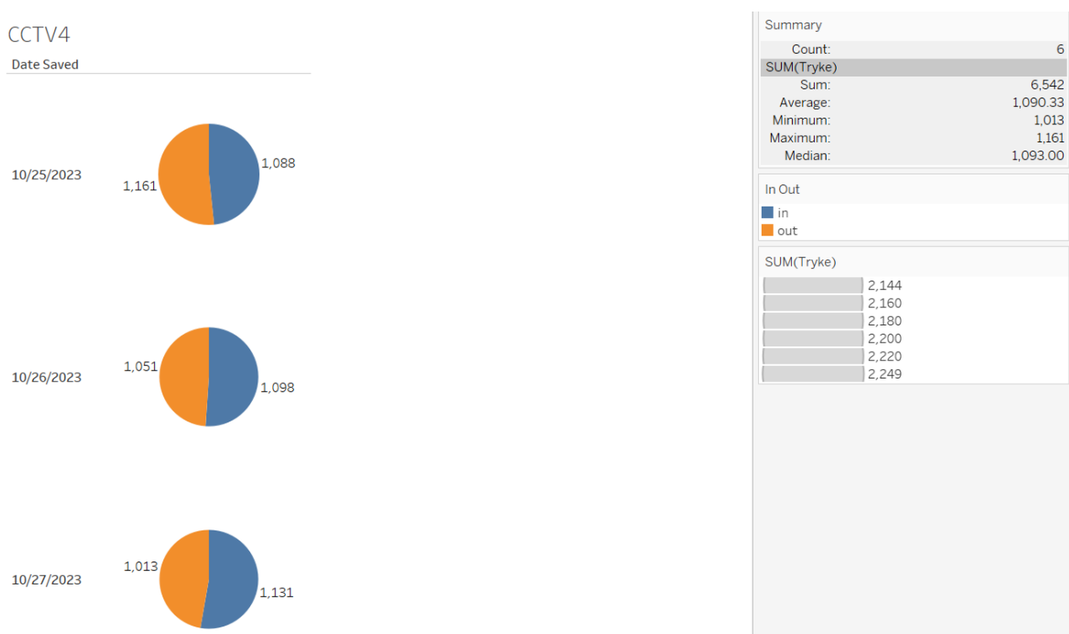
We can further drill down be evaluating based on time. Here we evaluate the total in and out counts of truck from 6:00 AM to 6:59 AM.



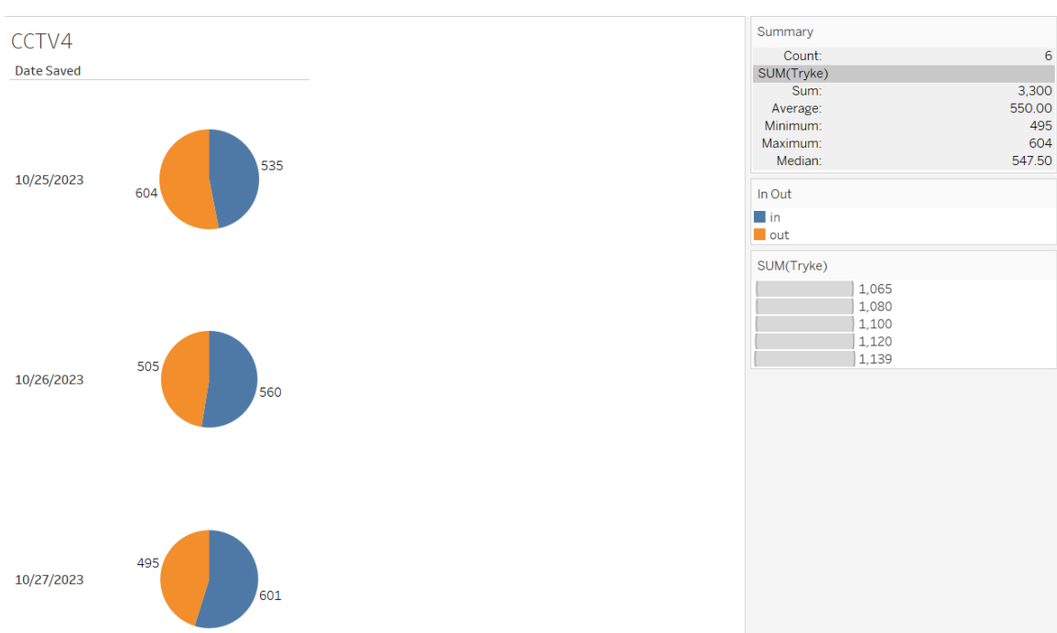
We can further evaluate by using the time from 6:00 PM to 6:59 PM. Here we show the total in and out counts during that time for truck.



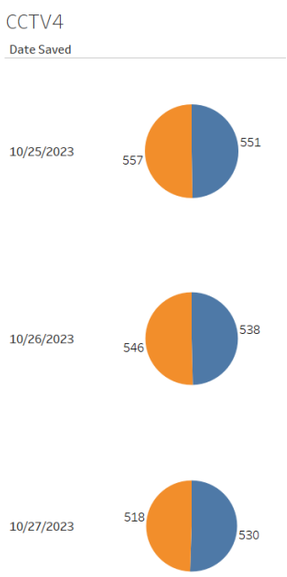
Now we evaluate tryke. Here we show the total in and out counts of tryke based on day as collected by CCTV 4.

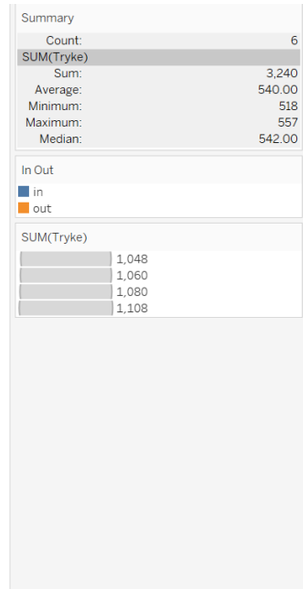


Next we can drill down based on time. Here we identify the total in and out counts from 6:00 AM to 6:59 AM and show it in the pie chart.

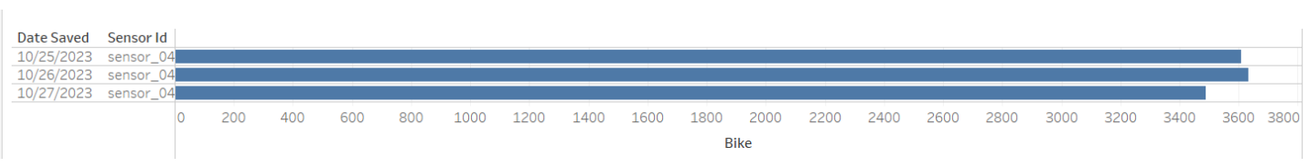


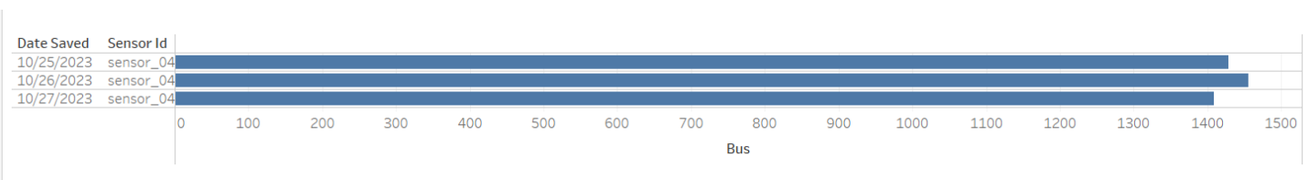
We also evaluate from 6:00 PM to 6:59 PM. Here we show the total in and out counts of tryke during that time as collected by CCTV 4.

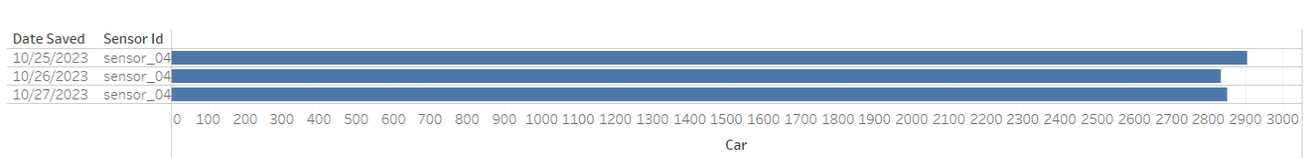


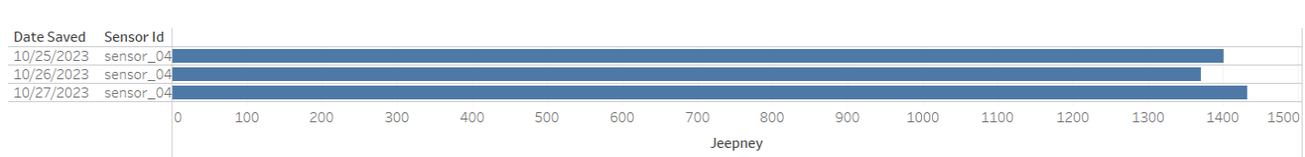


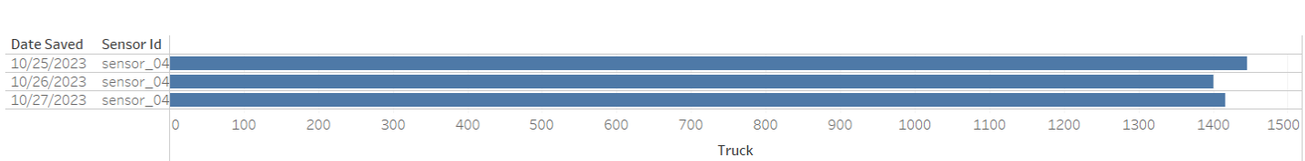
Now we can also show the total counts per vehicle recorded by CCTV 4. Here we have bar graphs that show the total counts for bike, bus, car, jeepney, truck and tryke vehicles for data analysis.

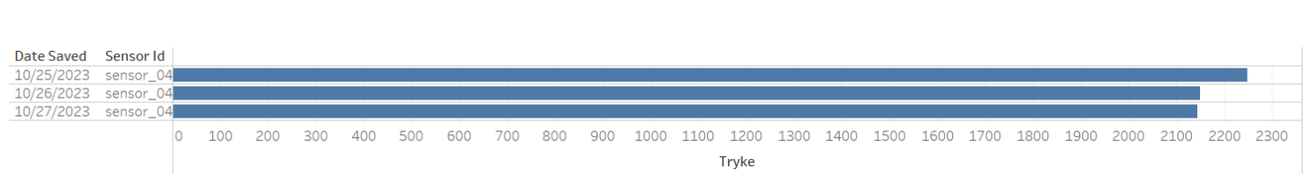




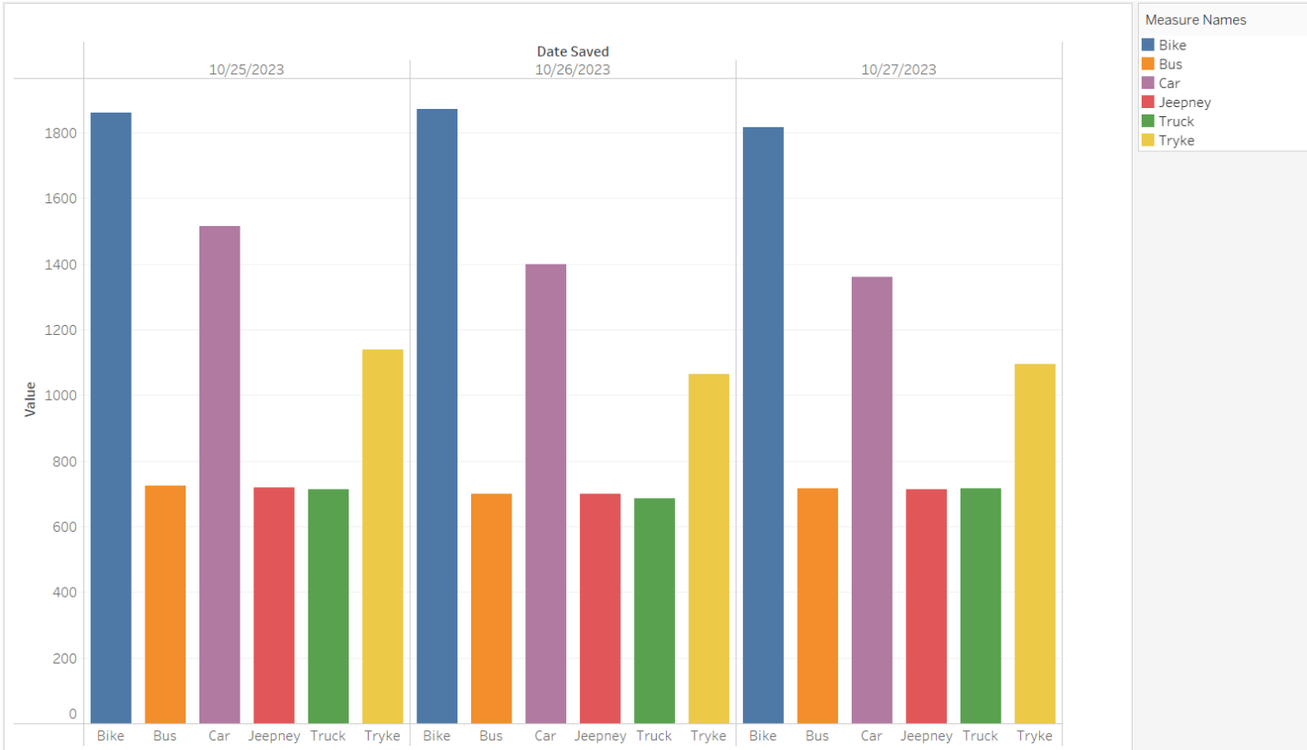




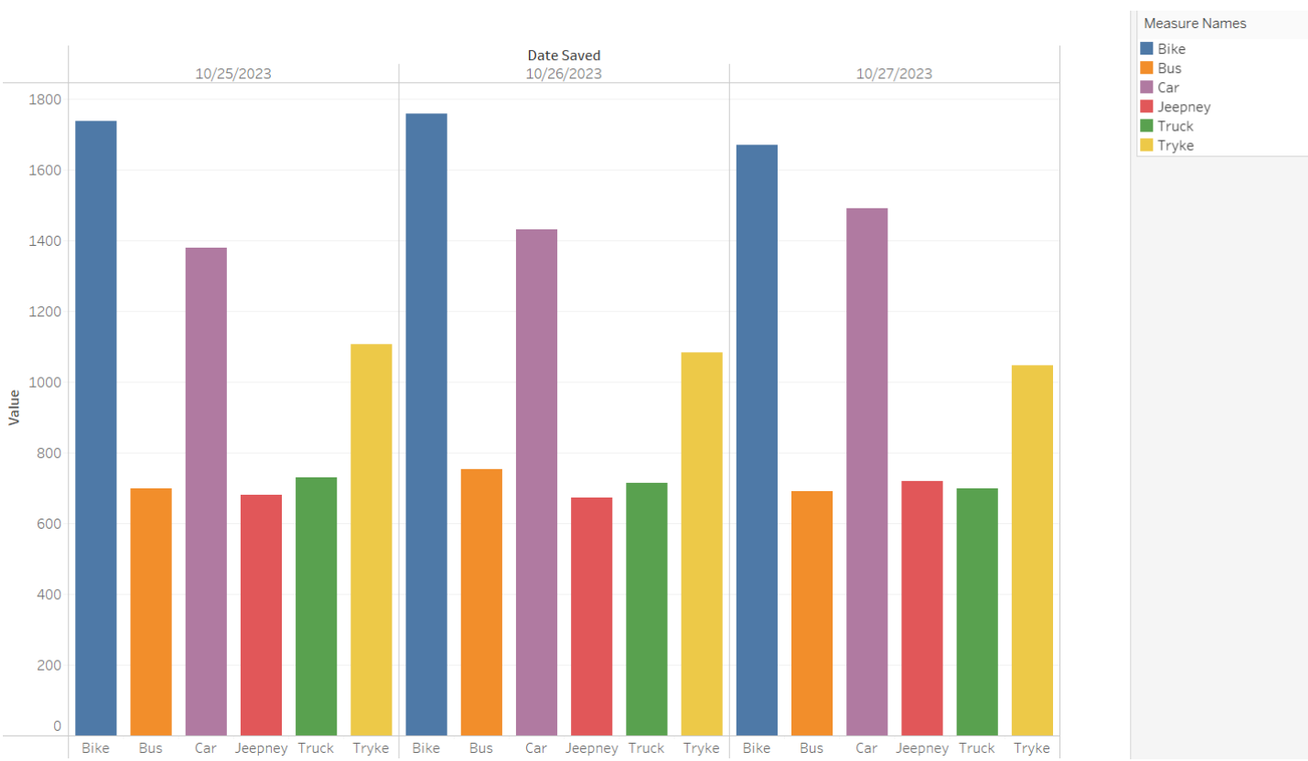




Now we can also show the total counts per vehicle and per day from 6:00 AM to 6:59 AM. Here we have that visualization using a bar graph.

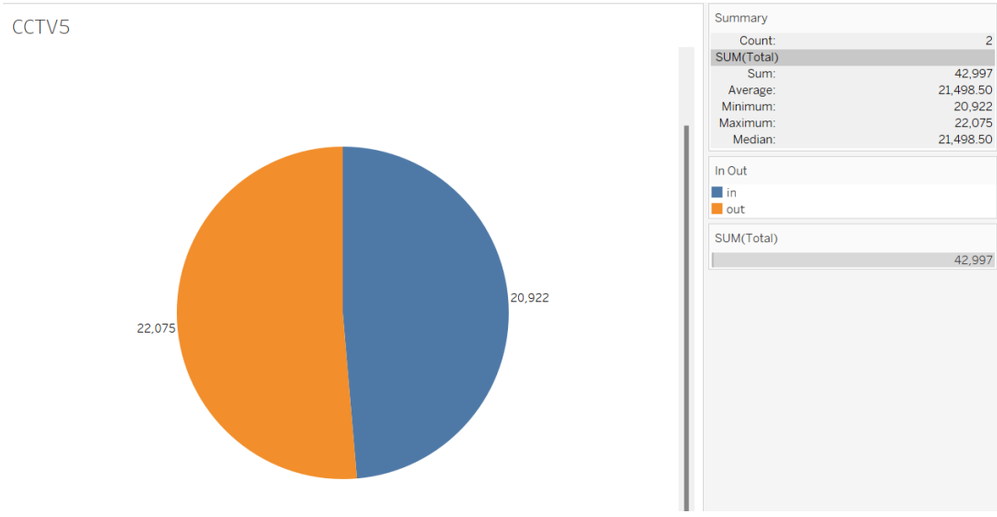


We also have the bar graph to visualize the total counts from 6:00 PM to 6:59 PM.

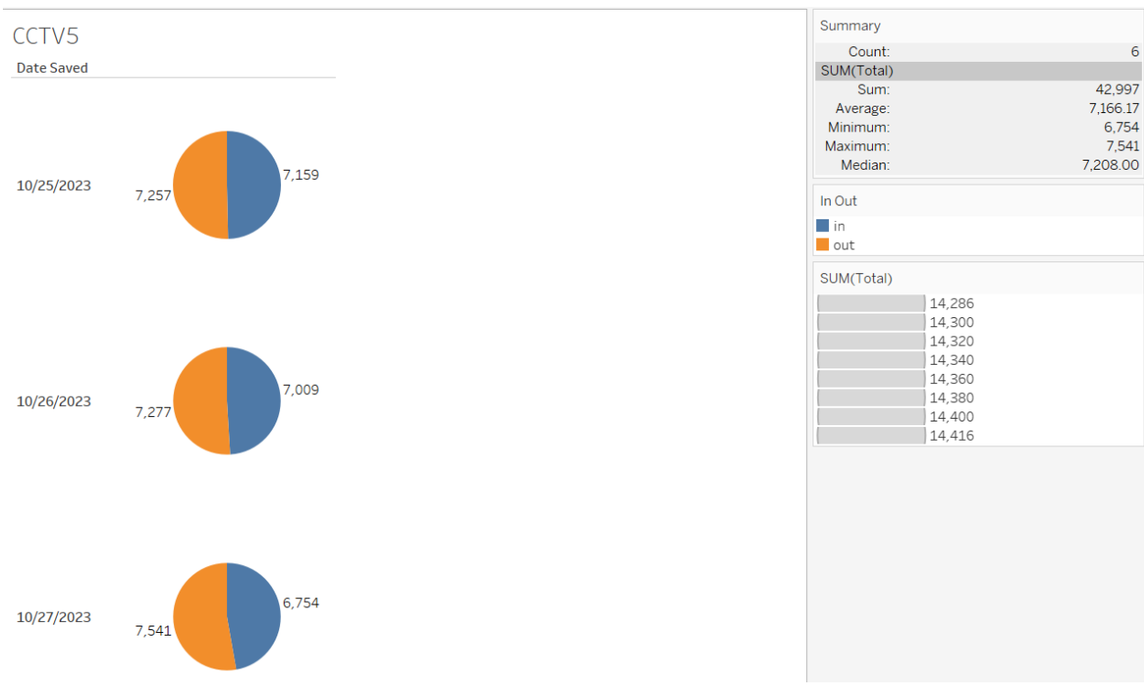


CCTV 5

Now we focus on CCTV 5 with id sensor_05. We first show in the chart the total in and out counts of the different vehicle types for all days based on the data recorded by CCTV 5.



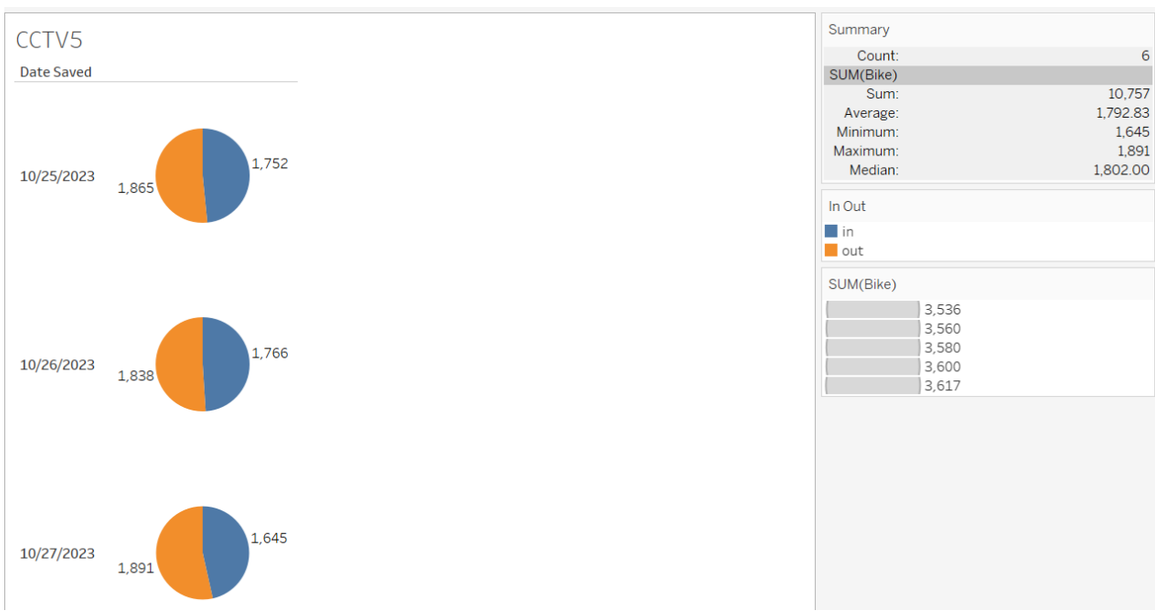
Next we further drill down based on the day. Here we show the total in and out counts per day.



We can further drill down based on the time. Here we show the total in and out counts from 6:00 AM to 6:59 AM.

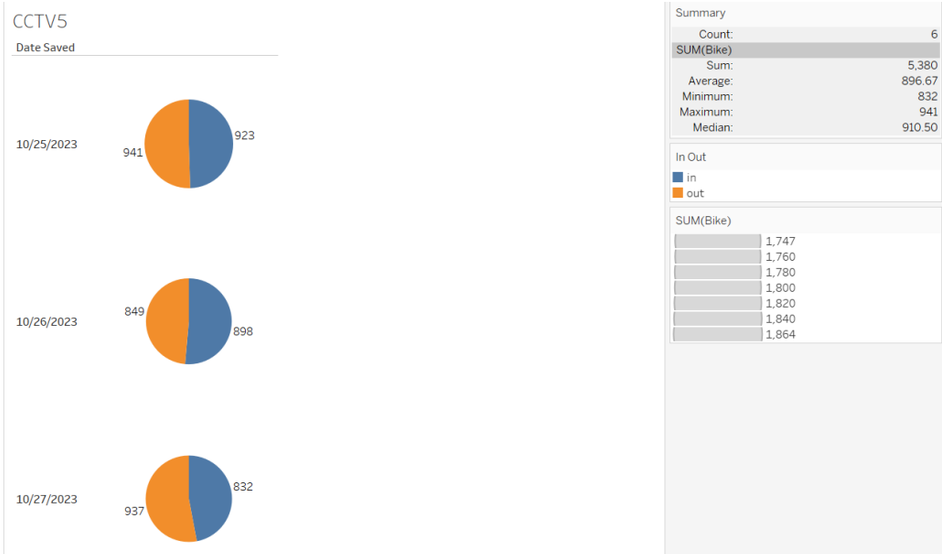
We also show the total in and out counts from time 6:00 PM to 6:59 PM. The results from the CCTV 5 are shown in the pie chart.

We can further drill down based on the vehicle type. First we focus on bike. Here we show the total in and out counts of bike per day.



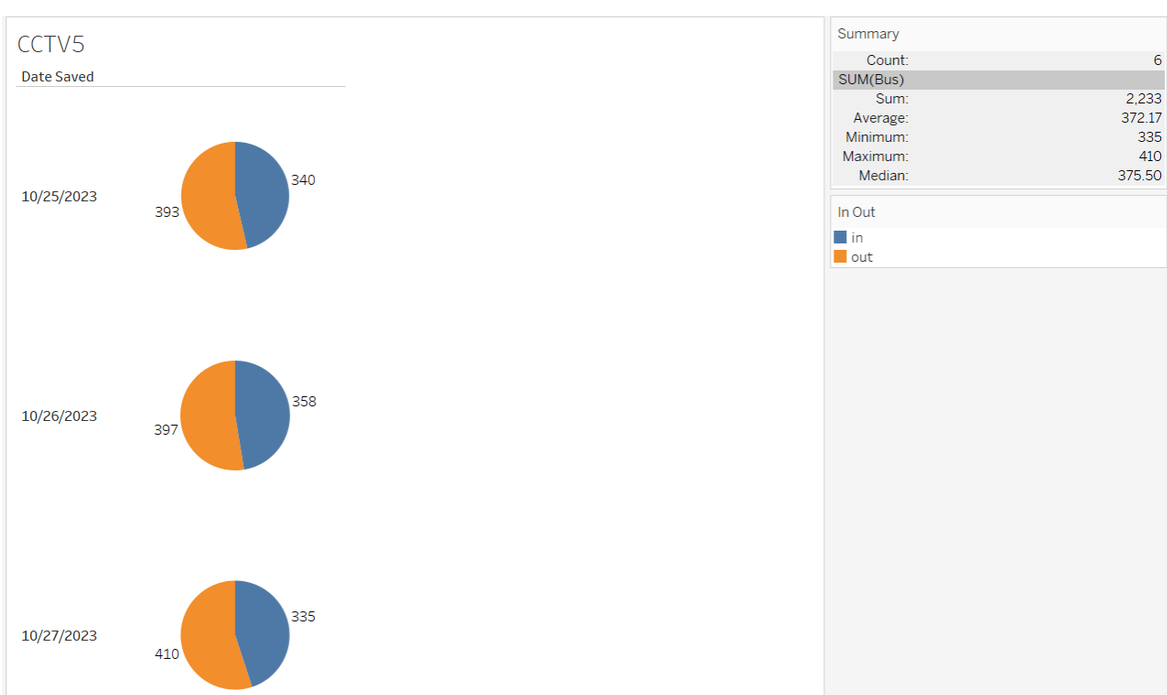
We can further drill down based on time. Here we show the total in and out counts from 6:00 AM to 6:59 AM.

Next we can focus on the time from 6:00 PM to 6:59 PM. Here we show the total in and out counts during that time.

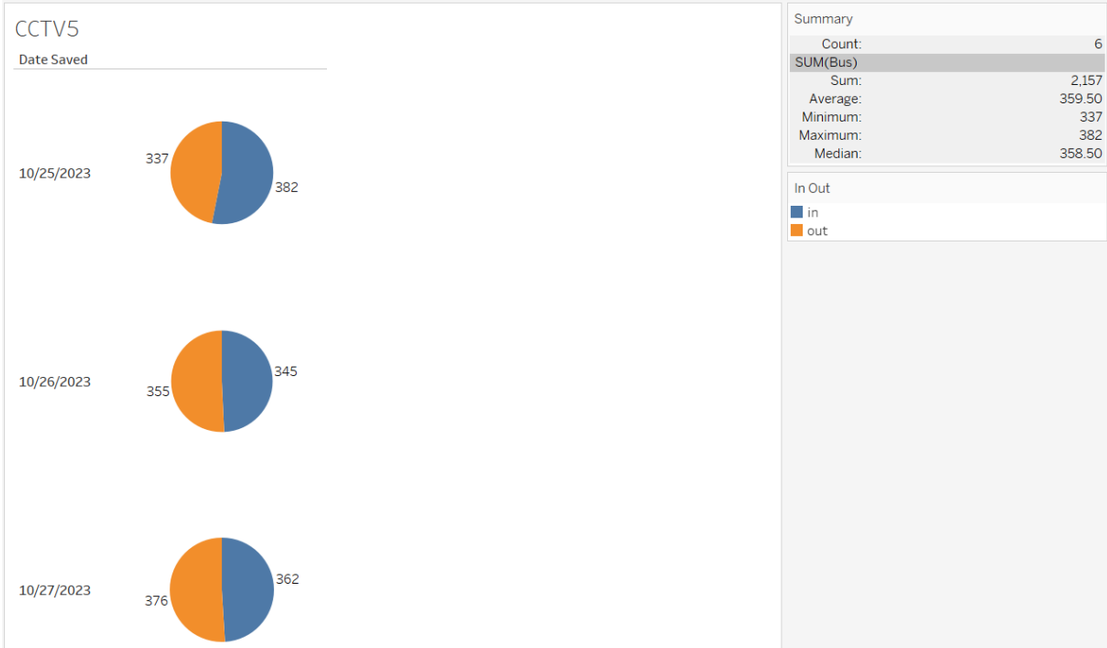


Next we evaluate bus. First we show the total in and out counts based on date in the pie chart.

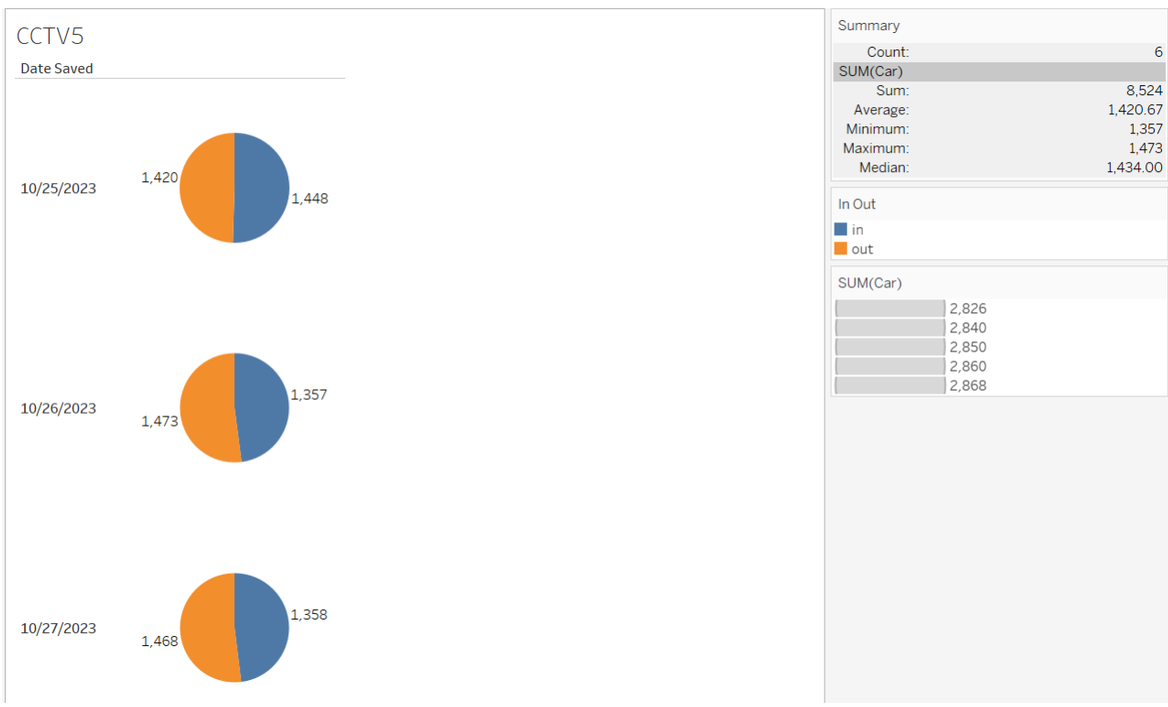
Then we further drill down based on time. Here we focus on the time from 6:00 AM to 6:59 AM and show the total in and out counts.



Then we evaluate based on the time from 6:00 PM to 6:59 PM. Here we show the total in and out counts during that time for bus.

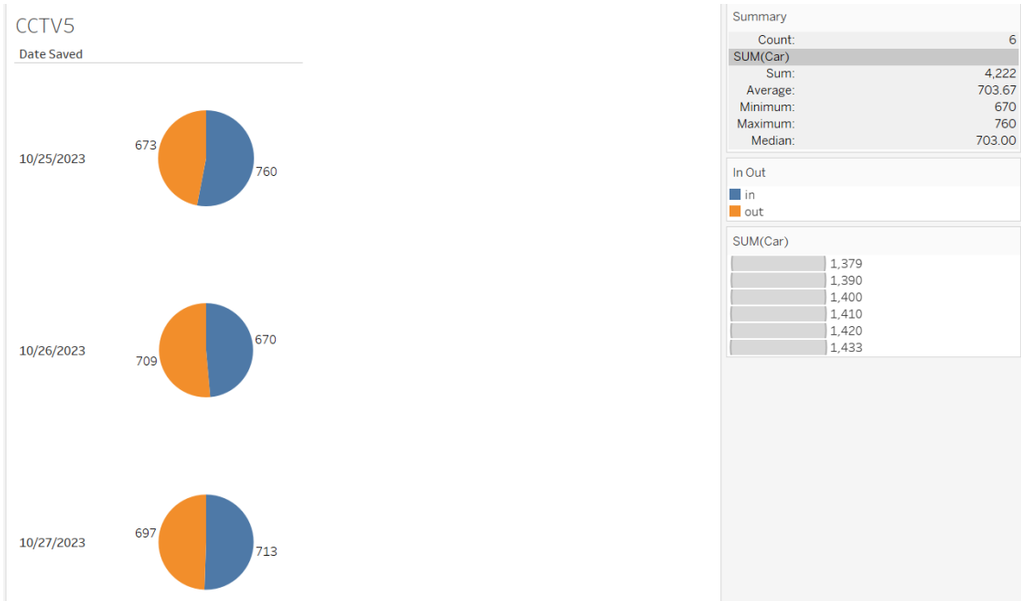


Next we focus on car. Here we show the total in and out counts of car based on the date.



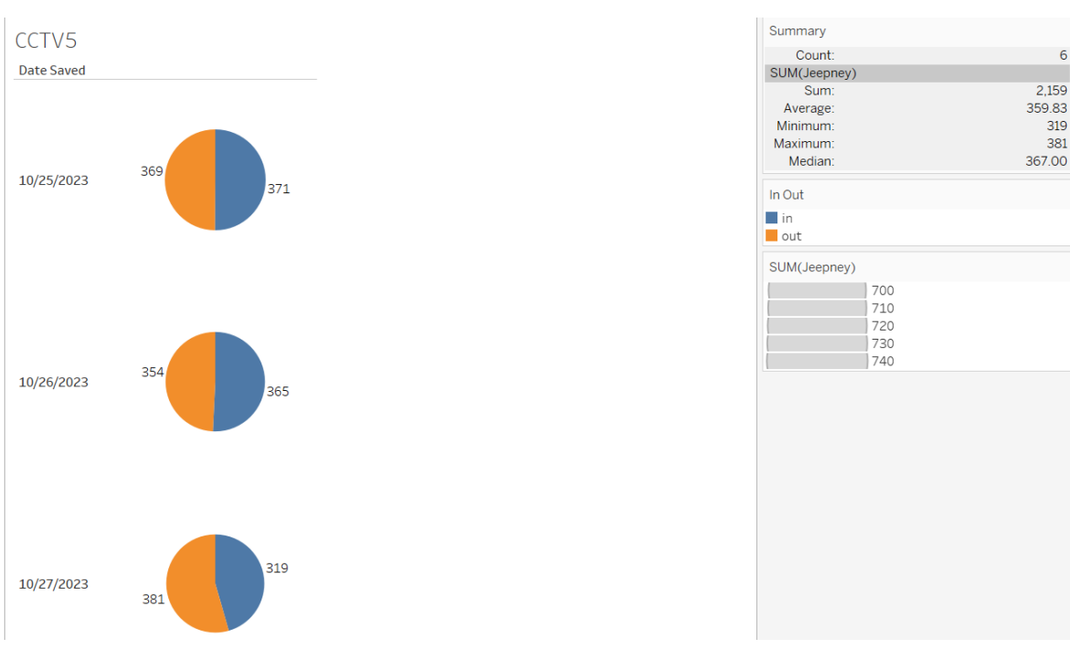
Next we can drill down based on time. Here we focus on the time from 6:00 AM to 6:59 AM and show the total in and out counts during that time.

Then we can evaluate based on the time from 6:00 PM to 6:59 PM. Here we show the total in and out counts of car during that time.

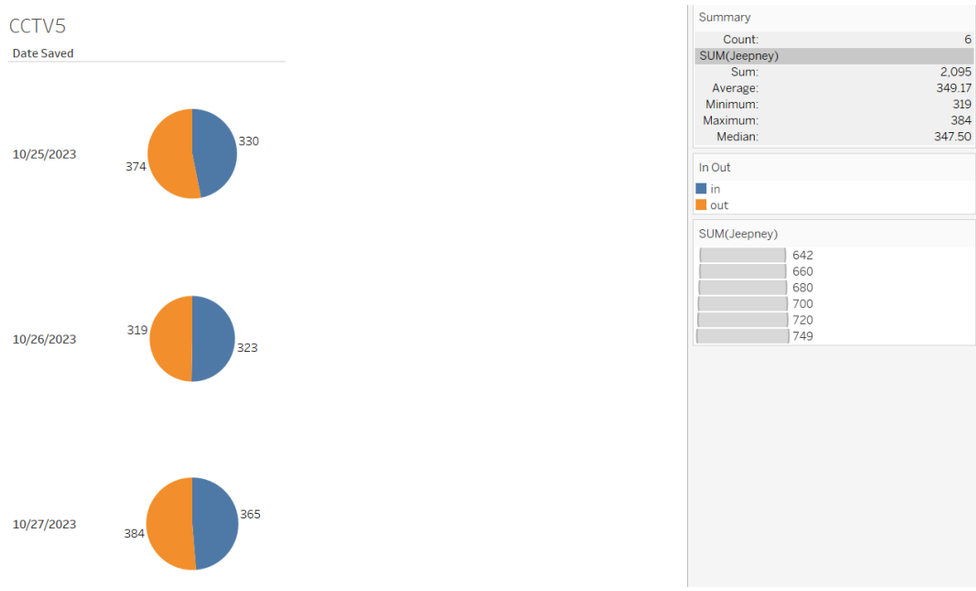


Now we focus on Jeepney. Now we show the total in and out counts of jeepney per day from CCTV 5.

Next we focus on the time to further drill down. Here we show the total in and out counts from 6:00 AM to 6:59 AM for jeepney.

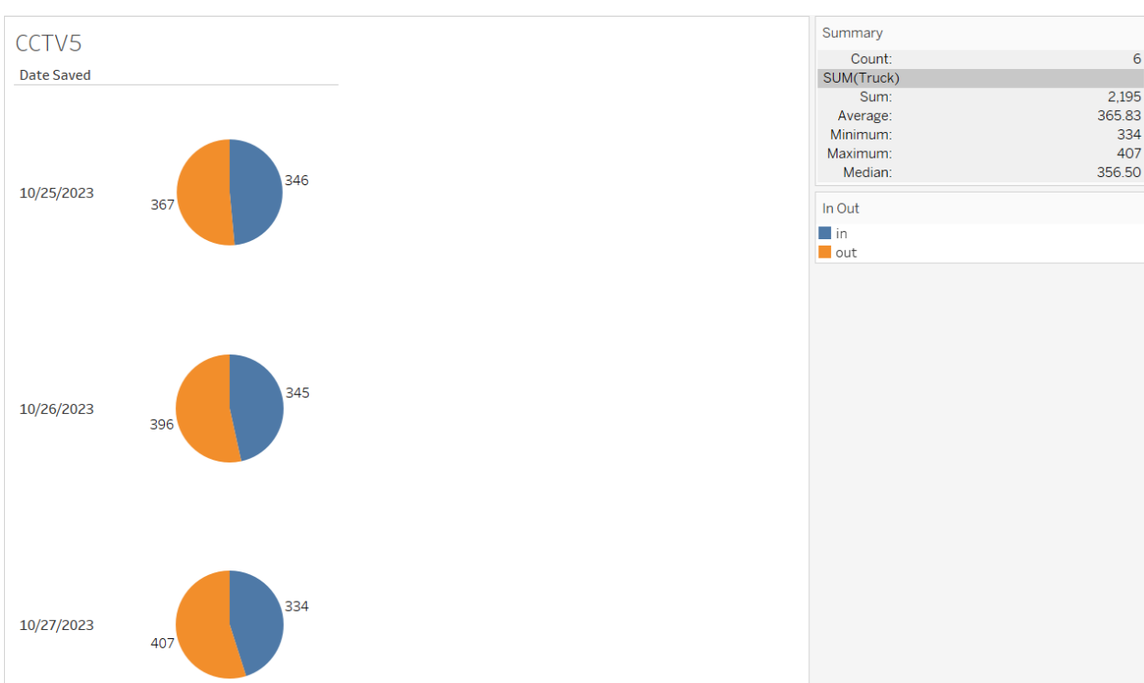


Next we focus on the time from 6:00 PM to 6:59 PM. We show the total in and out counts for jeepney during that time in the pie chart.

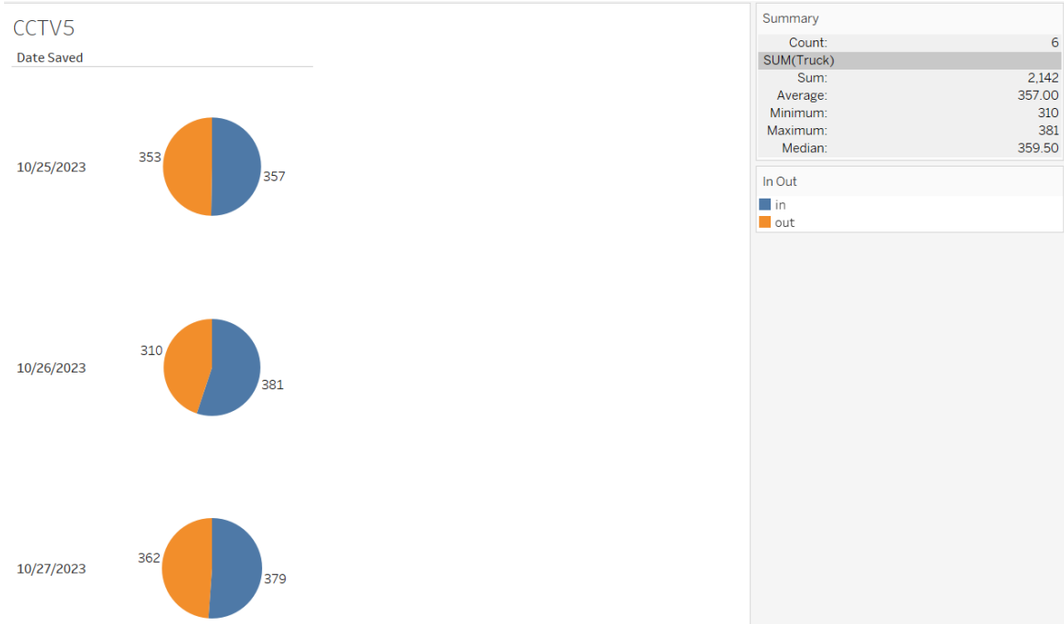


Now we go to truck. Here we show the total in and out counts of truck per day.

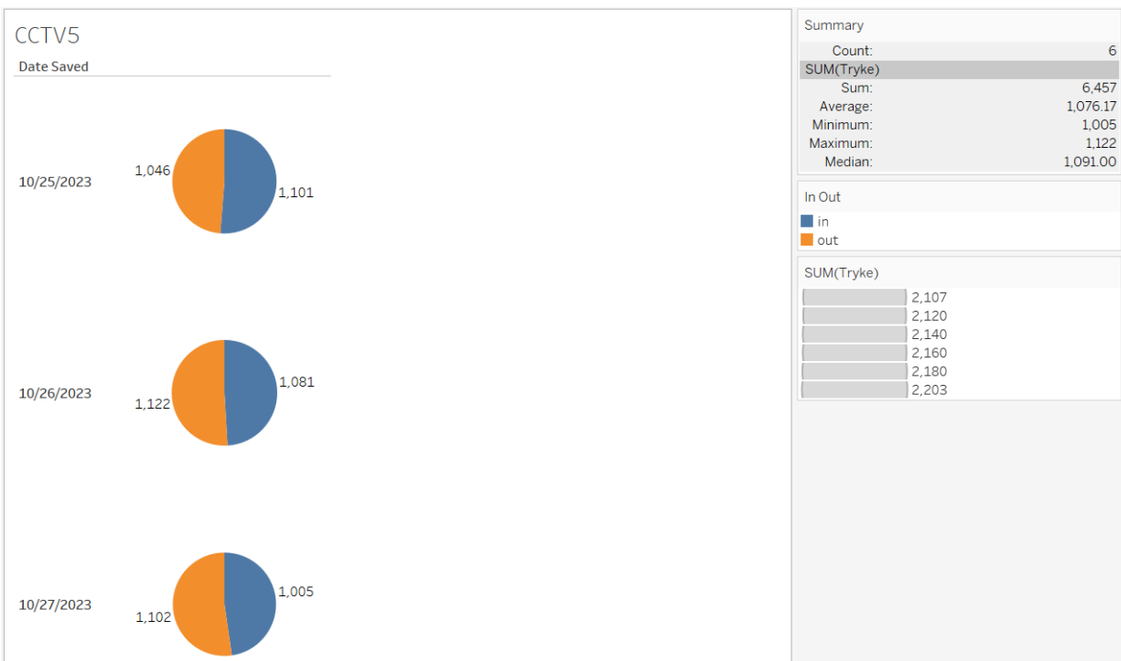
Then we further drill down using time. Here we used the time from 6:00 AM to 6:59 AM. The total in and out counts during that time are shown in our pie chart.



Then we focus on the total in and out counts from 6:00 PM to 6:59 PM. The counts are shown in the pie chart.



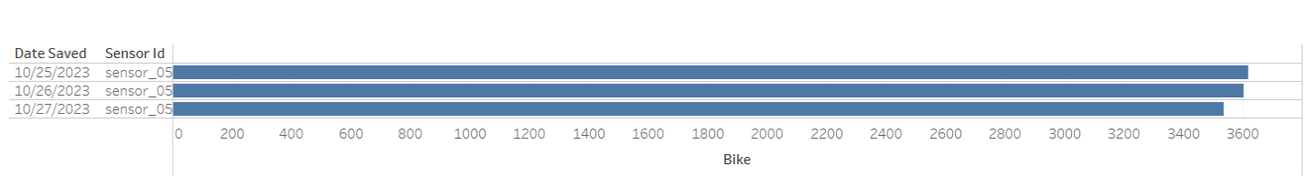
Then we go to tryke. Here we show the total in and out counts of tryke based on the date.

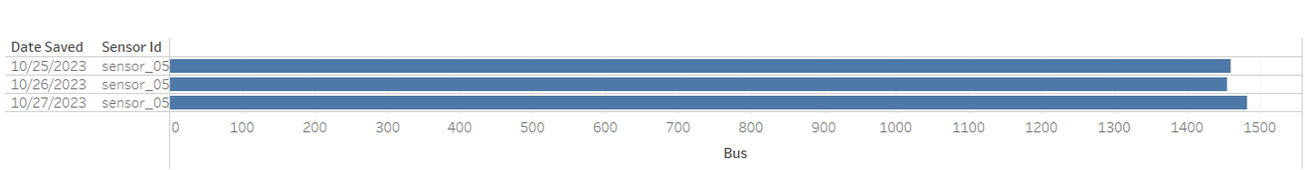


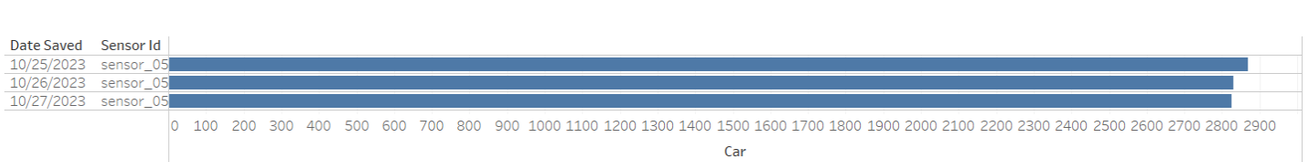
Then we drill down based on time. Here we show the in and out counts of tryke from 6:00 AM to 6:59 AM.

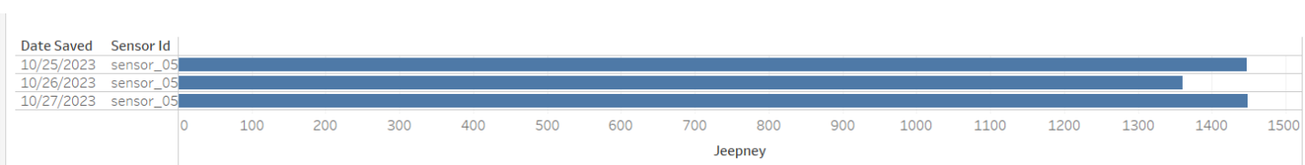
Then we further evaluate the total in and out counts from 6:00 PM to 6:59 PM. Here we show the total counts of tryke in the pie chart.

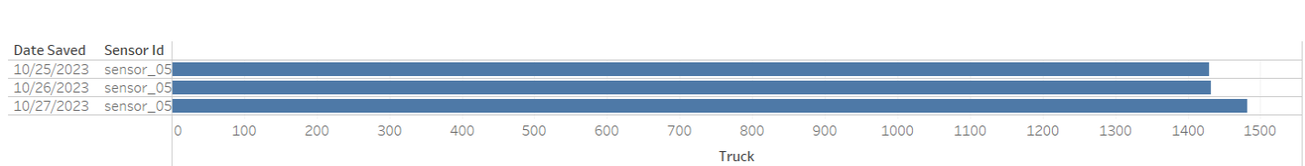
For CCTV 5, we can also show the total counts for each vehicle based on the data it recorded. Here we have bar charts to show the total counts.

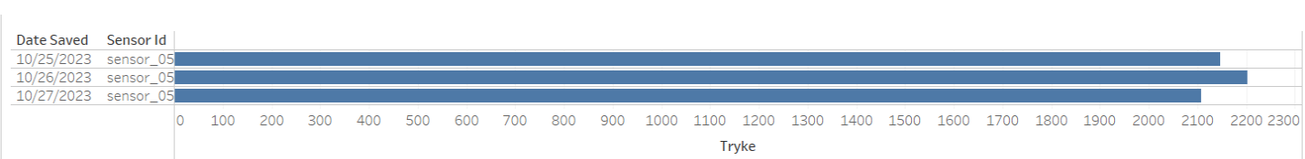




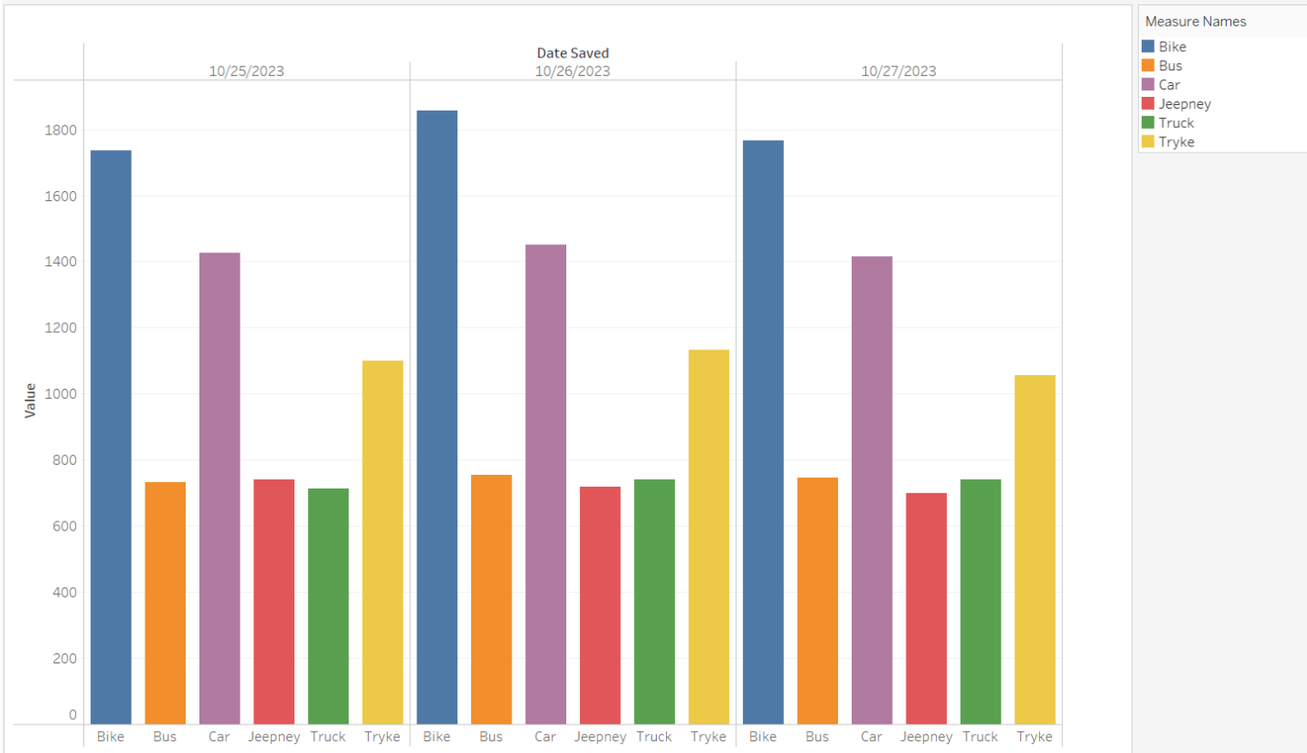




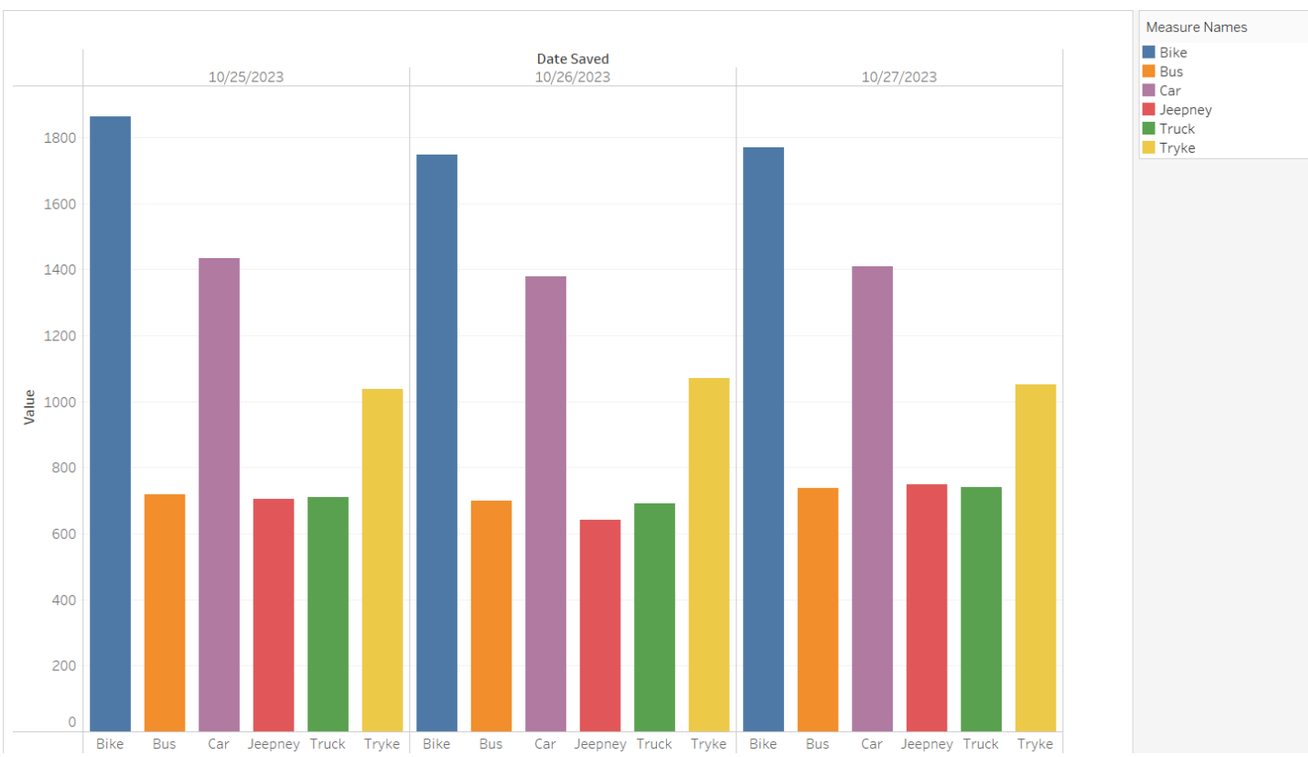




Here we can also show the total counts per vehicle based on time and per day. Here we have a bar graph that show the total counts per vehicle from 6:00 AM to 6:59 AM.



We also have a bar graph to show the total counts per vehicle per day from 6:00 PM to 6:59 PM.



Now we have completely performed real-time data analytics using Tableau Public. We first began with total in and out counts for all CCTVs. Then we drilled down based on the day. Then we further drilled down based on time. Next we focused on each CCTV data and drilled down from total in and out counts, to per day, to per hour, and to per vehicle type. This completes the data analytics project.

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