

Date	Tables Affected	Records Affected	Change Type	Description of Change	Reason for Change	Additional Details
2/25/2022	All Spreadsheets	4771	Removal	Remove null entries for "end_ing" and "end_lat"	Accuracy - data in this column is necessary for this analysis and cannot be blank.	
2/25/2022	All Spreadsheets	311705	Update	Replace all instances of "docked_bike" with "classic_bike"	Consistency - "docked" and "classic" refer to the same style of bike.	
2/25/2022	All Spreadsheets	5590292	Addition	Create column "ride_length"	Perform calculations that will be used to gain further insight into data.	
2/25/2022	All Spreadsheets	5590292	Addition	Create column "day_of_week"	Perform calculations that will be used to gain further insight into data.	Calculated using the WEEKDAY function in Excel.
2/25/2022	All Spreadsheets	5590292	Addition	Create column "distance_traveled"	Perform calculations that will be used to gain further insight into data.	Formula for converting latitude and longitude coordinates to distance in miles=CONVERT((ACOS(COS(RADIANS(90-I2)) *COS(RADIANS(90-K2)) +SIN(RADIANS(90-I2)) *SIN(RADIANS(90-K2))) *COS(RADIANS(J2-L2)))) *6371), "km", "mi")
3/2/2022	All Spreadsheets	13030	Update	Update #NUM! errors in "distance_traveled" column to 0.00	Accuracy - this error message occurs when there is no difference between start and end coordinates.	
3/2/2022	All Spreadsheets	5590292	Update	Round "start_lat", "start_ing", "end_lat", and "end_ing" columns to 6 decimal places.	Consistency - 6 digits is precise enough for the purpose of this analysis.	
3/2/2022	All Spreadsheets	146	Removal	Remove records where "ended_at" was earlier than "started_at"	Accuracy - a glitch occurred when some start and end times were encoded, causing errors.	
3/29/2022	All Spreadsheets	5590146	Update	Convert "day_of_week" column from single digit to text label for each day	Clarity - the names will be more meaningful to users than the digits when performing queries.	Formula for converting Day of Week values to Names in Excel: =IFS(O2=1, "Sunday", O2=2, "Monday", O2=3, "Tuesday", O2=4, "Wednesday", O2=5, "Thursday", O2=6, "Friday", O2=7, "Saturday")
4/3/2022	SQL - bikes_2021 table	5590146	Addition	Create column "season"; update records based on time of year (Spring, Summer, Autumn, Winter) when trip took place.	Categorize data to aid with analysis.	Spring took place between 3/20/2021 and 06/19/2021. Summer took place from 06/20/2021-09/21/2021. Autumn took place from 09/22/2021-12/20/2021. Winter took place both from 01/01/2021-03/19/2021 and 12/21/2021-12/31/2021. Seasons were calculated based on the date in the "started_at" column.
4/3/2022	SQL - bikes_2021 table	5590146	Addition	Create column "trip_type"; update records based on type of trip recorded (Canceled, Out-and-Back, Point-to-Point).	Categorize data to aid with analysis.	"Canceled" trips refer to those with distance_traveled = 0 and ride_length of less than 1 minute. "Out-and-Back" trips refer to those that started and ended at the same station, with distance_traveled = 0 and ride_length greater than 1 minute. "Point-to-Point" trips refer to those that started and ended at different stations and had distance_traveled > 0.
4/6/2022	SQL - bikes_2021 table	811	Removal	Remove records where "ended_at" was greater than 1 day after "started_at"	Accuracy - it is not typical for users to rent a bike for longer than a 24 hour period and this could be indicative of a glitch in how data was encoded.	
4/6/2022	SQL - bikes_2021 table	1	Removal	Removed an outlier which placed the end point of a particular ride ~70 miles from the start point in less than an hour.	Accuracy - this appears to be an error with how this ride data was encoded.	