Charleston Police Calls Data

1. Cleaned up all the street name data along with the crossroads. Key collisions weren’t particularly helpful in this. “Nearest neighbors” was more helpful in catching smaller errors as we adjusted the blocks and the radius. It helped us catch errors which were one letter apart (e.g. “Ave” and “Av”). We sifted through a number of street names that had one letter differences on Google Maps to make sure they were accurate and existed.
2. Created a new column based on the length of the call by differencing the time of the call from the time the call was closed.
3. Parts of date:
   * Extracted Month from calltime using the datePart function with the month parameter.
   * Extracted Day of the Week from calltime using the datePart function with the weekday parameter.
   * Extracted Time of day from calltime using the datePart function with the hour parameter.
   * We created a new column that calculates the days since the call was made using the difference and now() function.
   * Created a new column that showed the count of the number of calls on any given weekday using the facetCount function.
4. Time\_since\_Jan1st
   * We created a column that calculated the difference between the date called and January 1st 2010.
   * We created a column that calculated the difference between the hours since the call was made and 12:00 January 1st 2010.
   * We created a column that calculated the difference between the weeks since the call was made and the week of January 1st 2010.
   * We created a column that calculated the difference between the months since the call was made and January 2010.
5. Column based on Nature – At first the categories we came up with were not broad enough and encompassed a small number of crimes in precise categories. There were some categories that could not be explained or categorized correctly so they were put into miscellaneous.
   * We first reduced a large number of categories to fewer by combining a number of facets that contained the same word into one category – by using if statements, and string functions contain and replace.
   * Common facets such as Walk and Talk, Keep a Check were put under Officer Initiated, which then became Officer Initiated/Required.
   * All types of accidents and traffic incidents were put under Traffic/Accident.
   * Vehicular, trespassing, burglary, robbery were all put under Property.
   * All violent crimes such as arson, stabbing, shooting, homicide, deaths, bomb threats, explosives etc. were put under Violent Crimes/Threat.
   * All crimes involving fire alarms etc. were put under Fire.
   * All crimes involving animals were put under Animals.
   * All crimes involving children as victims or perpetrators were put under Underage Committed/Victim.
   * All crimes involving Drugs or Overdose were put under Narcotics.