Week 2 Assignment

January 18, 2021

```
[4]: import geopandas as gpd
     data = gpd.read_file('totalmiles.csv')
     type(data)
[4]: geopandas.geodataframe.GeoDataFrame
[5]: data.head ()
[5]:
      Date Name
                              Date Value Total Miles of Bicycle Lanes and Paths \
          FY2009 07/01/2009 12:00:00 AM
                                                                          203.46
     1
         FY2010 07/01/2010 12:00:00 AM
                                                                           205.2
     2
         FY2011 07/01/2011 12:00:00 AM
                                                                          228.61
     3
          FY2012 07/01/2012 12:00:00 AM
                                                                          283.15
     4
          FY2013 07/01/2013 12:00:00 AM
                                                                          385.65
      geometry
     0
           None
     1
           None
     2
           None
           None
     3
     4
           None
[7]: #running the shape command
     data.shape
[7]: (5, 4)
[8]: #running the info command
     data.info
[8]: <bound method DataFrame.info of
                                       Date Name
                                                               Date Value Total Miles
     of Bicycle Lanes and Paths \
          FY2009 07/01/2009 12:00:00 AM
                                                                          203.46
          FY2010 07/01/2010 12:00:00 AM
                                                                           205.2
     2
         FY2011 07/01/2011 12:00:00 AM
                                                                          228.61
     3
          FY2012 07/01/2012 12:00:00 AM
                                                                          283.15
          FY2013 07/01/2013 12:00:00 AM
                                                                          385.65
```

```
geometry
      0
            None
      1
            None
      2
            None
      3
            None
            None >
 [9]: #running the head command
      data.head ()
 [9]:
       Date Name
                               Date Value Total Miles of Bicycle Lanes and Paths \
      0
           FY2009 07/01/2009 12:00:00 AM
                                                                           203.46
           FY2010 07/01/2010 12:00:00 AM
                                                                             205.2
      1
      2
           FY2011 07/01/2011 12:00:00 AM
                                                                           228.61
      3
           FY2012 07/01/2012 12:00:00 AM
                                                                           283.15
           FY2013 07/01/2013 12:00:00 AM
                                                                           385.65
        geometry
            None
      0
            None
      1
      2
            None
      3
            None
      4
            None
[10]: #running the plot command
      data.plot ()
[10]: <bound method GeoDataFrame.plot of
                                           Date Name
                                                                   Date Value Total
      Miles of Bicycle Lanes and Paths \
           FY2009 07/01/2009 12:00:00 AM
                                                                           203.46
      1
           FY2010 07/01/2010 12:00:00 AM
                                                                             205.2
      2
           FY2011 07/01/2011 12:00:00 AM
                                                                           228.61
      3
           FY2012 07/01/2012 12:00:00 AM
                                                                           283.15
           FY2013 07/01/2013 12:00:00 AM
                                                                           385.65
        geometry
      0
            None
      1
            None
      2
            None
      3
            None
      4
            None >
[13]: #running the data value count command
      data['Total Miles of Bicycle Lanes and Paths'].value_counts()
[13]: 228.61
                1
      205.2
                1
```

```
385.65
                1
      283.15
                1
      203.46
      Name: Total Miles of Bicycle Lanes and Paths, dtype: int64
[24]: #query command
      data_trimmed = data['geometry'].copy()
      {\tt data\_trimmed}
[24]: 0
           None
      1
           None
      2
           None
           None
      3
      4
           None
      Name: geometry, dtype: geometry
 []:
```