

In [2]:

```
PRIVATE_AUTH_TOKEN_SEATGEEK = "MjM5ODM1NjZ8MTYzNDU5Mjg2NS43NjMwMTI0"  
PRIVATE_RAPIDAPI_KEY = "b2f21b901bmsh120d61f7f0c1fd7p19ded6jsnce8f2ed3e01a"
```

In [46]:

```
import requests  
import json  
import tabulate  
import math  
import pandas  
import numpy  
import matplotlib.pyplot  
pandas.set_option('display.max_rows', None)  
pandas.set_option('display.max_colwidth', 60)
```

In [4]:

```
url = "https://worldwide-restaurants.p.rapidapi.com/search"  
payload = "language=en_US&limit=50&location_id=37209&currency=USD"  
headers = {  
    'content-type': "application/x-www-form-urlencoded",  
    'x-rapidapi-host': "worldwide-restaurants.p.rapidapi.com",  
    'x-rapidapi-key': PRIVATE_RAPIDAPI_KEY  
}  
  
restaurants = requests.request("POST", url, data=payload, headers=headers)  
eventsSeatgeek = requests.get("https://api.seatgeek.com/2/events?datetime_utc.gte=2022-05-22&datetime_utc.lte=2022-07-31&venue.city=indianapolis&client_id=" + PRIVATE_AUTH_TOKEN_SEATGEEK)
```

In [6]:

```
eventsJson = json.loads(eventsSeatgeek.text)  
eventDict = {}  
for event in eventsJson["events"]:  
    eventDict[event['title'] + ' ' + event['datetime_utc']] = (float(event['venue']['location']['lat']), float(event['venue']['location']['lon']))  
restaurantsJson = json.loads(restaurants.text)  
for restaurant in restaurantsJson["results"]["data"]:  
    eventDict[restaurant['name']] = (float(restaurant['latitude']), float(restaurant['longitude']))  
## Some conferences that APIs couldn't find!  
eventDict["APIC Annual Conference"] = (39.764340,-86.162410)  
eventDict["Information/Cybersecurity Officer/IT Officer /Operations Officer Forum"] = (39.909480,-86.118700)
```

In [48]:

```
IUPUIDict = {}  
IUPUILat = 39.773889979448384  
IUPUILon = -86.18491170181358  
header = ["Events", "Distance"]  
for event, loc in eventDict.items():  
    IUPUIDict[event] = math.sqrt((loc[0] - IUPUILat) ** 2 + (loc[1] - IUPUILon) ** 2)  
sorted_IUPUIDict = sorted(IUPUIDict.items(), key=lambda item: item[1])  
dfIUPUI = pandas.DataFrame(sorted_IUPUIDict, columns=header)  
within2IUPUI = 0  
for field in sorted_IUPUIDict:  
    if (field[1] <= .03): ##within 2ish miles  
        within2IUPUI += 1  
print("Total viable places within 2 miles: " + str(within2IUPUI))  
print(dfIUPUI)
```

Total viable places within 2 miles: 19

		Events	Distance
0	Tedeschi Trucks Band with Gabe Dixon and St. Paul & The ...		0.016795
1	Reverend Tedious (Reverend Tedious 7/5/2022 - 7/6/2022) 2		0.016795

1	Barenaked Ladies (Rescheduled from 7/5/2020, 7/27/2021) 2...	0.016795
2	5 Seconds of Summer with The Band Camino 2022-07-15T23:0...	0.016795
3	OP Italian	0.018569
4	High Velocity	0.019070
5	Long's Bakery	0.021137
6	Conner's Kitchen + Bar	0.021878
7	APIC Annual Conference	0.024444
8	Tony's of Indianapolis	0.025280
9	Tastings A Wine Experience	0.026082
10	Ruth's Chris Steak House	0.026223
11	The Capital Grille	0.026522
12	St. Elmo Steak House	0.026525
13	Harry and Izzy's	0.026823
14	Yard House	0.027157
15	Nada	0.027249
16	The Oceanaire Seafood Room	0.027872
17	Slippery Noodle Inn	0.028988
18	Fogo de Chao Brazilian Steakhouse	0.029927
19	Shapiro's Delicatessen	0.030976
20	The Eagle on Mass Ave	0.031069
21	Bazbeaux Pizza	0.031364
22	Greek Islands Restaurant INC	0.031522
23	Bakersfield	0.031623
24	Iozzo's Garden of Italy	0.032214
25	Bru Burger Bar	0.032989
26	Yolk - City Way	0.033577
27	Wallows 2022-06-07T00:00:00	0.033816
28	Celtic Woman 2022-06-03T23:30:00	0.034317
29	Tom Segura 2022-06-11T23:00:00	0.034317
30	Union 50	0.035881
31	Vida	0.038136
32	Mesh	0.038906
33	St. Joseph Brewery & Public House	0.039276
34	Livery	0.039484
35	Bosphorus Istanbul Cafe	0.040526
36	Iaria's Italian Restaurant	0.040957
37	Milktooth	0.040992
38	Bluebeard	0.042229
39	Mimi Blue Meatballs	0.042470
40	Indianapolis 500 Legends Day 2022-05-28T14:00:00	0.054787
41	Indianapolis 500 2022-05-29T16:45:00	0.054787
42	The Tamale Place	0.064676
43	Indianapolis Chamber Orchestra - Indianapolis 2022-05-22...	0.067905
44	Indianapolis Chamber Orchestra - Indianapolis 2022-05-22...	0.067905
45	Cafe Patachou	0.075356
46	The Library Restaurant and Pub	0.080290
47	Delicia	0.083232
48	Good Morning Mama's Cafe	0.088394
49	Mama Carolla's Old Italian Restaurant	0.088742
50	BRICS - Broad Ripple Ice Cream Station	0.107314
51	Fire by the Monon	0.108881
52	Information/Cybersecurity Officer/IT Officer /Operations...	0.150893
53	Seasons 52	0.157076
54	Sullivan's Steakhouse	0.157812
55	Ocean Prime	0.158638
56	Burger Theory at the Holiday Inn Indianapolis Airport	0.159739
57	Harry & Izzy's Northside	0.161308
58	Brozinni Pizzeria	0.168906
59	Cooper's Hawk Winery & Restaurants	0.173870
60	Caplinger's Fresh Catch	0.180729

In [47]:

```

SpeakEasyDict = {}
SpeakEasyLat = 39.848926068681784
SpeakEasyLon = -86.1410815306477
header = ["Events", "Distance"]
for event, loc in eventDict.items():
    SpeakEasyDict[event] = math.sqrt((loc[0] - SpeakEasyLat) ** 2 + (loc[1] - SpeakEasyL
on) ** 2)
sorted_SpeakEasyDict = sorted(SpeakEasyDict.items(), key=lambda item: item[1])
dfSpeakEasy = pandas.DataFrame(sorted_SpeakEasyDict, columns=header)

```

```

within2SpeakEasy = 0
for field in sorted_SpeakEasyDict:
    if (field[1] <= .03): ##within 2ish miles
        within2SpeakEasy += 1
print("Total viable places within 2 miles: " + str(within2SpeakEasy))
print(dfSpeakEasy)

```

Total viable places within 2 miles: 8

	Events	Distance
0	Good Morning Mama's Cafe	0.001919
1	Mama Carolla's Old Italian Restaurant	0.001994
2	Delicia	0.004796
3	Cafe Patachou	0.014612
4	BRICS - Broad Ripple Ice Cream Station	0.023408
5	Fire by the Monon	0.025651
6	Indianapolis Chamber Orchestra - Indianapolis 2022-05-22...	0.029692
7	Indianapolis Chamber Orchestra - Indianapolis 2022-05-22...	0.029692
8	Information/Cybersecurity Officer/IT Officer /Operations...	0.064558
9	Mimi Blue Meatballs	0.069711
10	Seasons 52	0.070381
11	Sullivan's Steakhouse	0.071050
12	Ocean Prime	0.071743
13	Livery	0.072337
14	Mesh	0.072364
15	Union 50	0.073404
16	St. Joseph Brewery & Public House	0.074111
17	Harry & Izzy's Northside	0.074721
18	Celtic Woman 2022-06-03T23:30:00	0.075032
19	Tom Segura 2022-06-11T23:00:00	0.075032
20	Wallows 2022-06-07T00:00:00	0.075196
21	Bru Burger Bar	0.076506
22	Bakersfield	0.077982
23	Vida	0.078199
24	Bazbeaux Pizza	0.078244
25	The Eagle on Mass Ave	0.078280
26	Fogo de Chao Brazilian Steakhouse	0.083482
27	The Capital Grille	0.083508
28	Tastings A Wine Experience	0.083593
29	Tony's of Indianapolis	0.083961
30	Ruth's Chris Steak House	0.084821
31	The Oceanaire Seafood Room	0.084831
32	Nada	0.084976
33	Yard House	0.085527
34	Long's Bakery	0.085540
35	OP Italian	0.086028
36	St. Elmo Steak House	0.086160
37	Conner's Kitchen + Bar	0.086182
38	Harry and Izzy's	0.086653
39	High Velocity	0.086950
40	Iaria's Italian Restaurant	0.086989
41	Cooper's Hawk Winery & Restaurants	0.087043
42	APIC Annual Conference	0.087234
43	Yolk - City Way	0.088270
44	Tedeschi Trucks Band with Gabe Dixon and St. Paul & The ...	0.088872
45	Barenaked Ladies (Rescheduled from 7/5/2020, 7/2/2021) 2...	0.088872
46	5 Seconds of Summer with The Band Camino 2022-07-15T23:0...	0.088872
47	Slippery Noodle Inn	0.089013
48	Milktooth	0.090052
49	Bluebeard	0.091453
50	Shapiro's Delicatessen	0.094416
51	Bosphorus Istanbul Cafe	0.094736
52	Greek Islands Restaurant INC	0.095405
53	Iozzo's Garden of Italy	0.096495
54	Caplinger's Fresh Catch	0.103061
55	Indianapolis 500 Legends Day 2022-05-28T14:00:00	0.108361
56	Indianapolis 500 2022-05-29T16:45:00	0.108361
57	The Tamale Place	0.136481
58	The Library Restaurant and Pub	0.163356
59	Brozinni Pizzeria	0.217871
60	Burger Theory at the Holiday Inn Indianapolis Airport	0.242705

```

zWORKSDict = {}
zWORKSLat = 39.951492279416236
zWORKSLon = -86.26088043062407
header = ["Events", "Distance"]
for event, loc in eventDict.items():
    zWORKSDict[event] = math.sqrt((loc[0] - zWORKSLat) ** 2 + (loc[1] - zWORKSLon) ** 2)
sorted_zWORKSDict = sorted(zWORKSDict.items(), key=lambda item: item[1])
dfzWORKS = pandas.DataFrame(sorted_zWORKSDict, columns=header)
within2zWORKS = 0
for field in sorted_zWORKSDict:
    if (field[1] <= .03): ##within 2ish miles
        within2zWORKS += 1
print("Total viable places within 2 miles: " + str(within2zWORKS))
print(dfzWORKS)

```

Total viable places within 2 miles: 0

	Events	Distance
0	Fire by the Monon	0.140595
1	BRICS - Broad Ripple Ice Cream Station	0.142724
2	Indianapolis Chamber Orchestra - Indianapolis 2022-05-22...	0.144219
3	Indianapolis Chamber Orchestra - Indianapolis 2022-05-22...	0.144219
4	Information/Cybersecurity Officer/IT Officer /Operations...	0.148258
5	Cafe Patachou	0.152234
6	Seasons 52	0.153789
7	Sullivan's Steakhouse	0.155203
8	Delicia	0.155453
9	Good Morning Mama's Cafe	0.156253
10	Mama Carolla's Old Italian Restaurant	0.156629
11	Indianapolis 500 Legends Day 2022-05-28T14:00:00	0.158174
12	Indianapolis 500 2022-05-29T16:45:00	0.158174
13	Ocean Prime	0.160214
14	Cooper's Hawk Winery & Restaurants	0.161251
15	Harry & Izzy's Northside	0.170784
16	Long's Bakery	0.174393
17	The Tamale Place	0.186454
18	OP Italian	0.206633
19	Tedeschi Trucks Band with Gabe Dixon and St. Paul & The ...	0.207105
20	Barenaked Ladies (Rescheduled from 7/5/2020, 7/2/2021) 2...	0.207105
21	5 Seconds of Summer with The Band Camino 2022-07-15T23:0...	0.207105
22	High Velocity	0.207586
23	Union 50	0.208107
24	Wallows 2022-06-07T00:00:00	0.208359
25	Celtic Woman 2022-06-03T23:30:00	0.208538
26	Tom Segura 2022-06-11T23:00:00	0.208538
27	Mimi Blue Meatballs	0.208854
28	Bru Burger Bar	0.208952
29	Conner's Kitchen + Bar	0.209042
30	Mesh	0.209073
31	The Eagle on Mass Ave	0.209198
32	Bakersfield	0.209310
33	Bazbeaux Pizza	0.209359
34	Livery	0.209401
35	Tony's of Indianapolis	0.209807
36	Tastings A Wine Experience	0.210074
37	The Capital Grille	0.210304
38	St. Joseph Brewery & Public House	0.210815
39	Ruth's Chris Steak House	0.211046
40	APIC Annual Conference	0.211477
41	Nada	0.211832
42	The Oceanaire Seafood Room	0.212138
43	Yard House	0.212152
44	St. Elmo Steak House	0.212165
45	Fogo de Chao Brazilian Steakhouse	0.212505
46	Harry and Izzy's	0.212690
47	Vida	0.213523
48	Slippery Noodle Inn	0.215619
49	Yolk - City Way	0.218097
50	Shapiro's Delicatessen	0.219986
51	Greek Islands Restaurant INC	0.220856
52	Iaria's Italian Restaurant	0.221701
53	Iozzo's Garden of Italy	0.221859

54	Caplinger's Fresh Catch	0.222720
55	Milktooth	0.223766
56	The Library Restaurant and Pub	0.224014
57	Bluebeard	0.225393
58	Bosphorus Istanbul Cafe	0.226357
59	Burger Theory at the Holiday Inn Indianapolis Airport	0.280885
60	Brozinni Pizzeria	0.359490

In [50]:

```
FishersDict = {}
FishersLat = 39.966755356658545
FishersLon = -86.00881953064528
header = ["Events", "Distance"]
for event, loc in eventDict.items():
    FishersDict[event] = math.sqrt((loc[0] - FishersLat) ** 2 + (loc[1] - FishersLon) **
2)
sorted_FishersDict = sorted(FishersDict.items(), key=lambda item: item[1])
dfFishers = pandas.DataFrame(sorted_FishersDict, columns=header)
within2Fishers = 0
for field in sorted_FishersDict:
    if (field[1] <= .03): ##within 2ish miles
        within2Fishers += 1
print("Total viable places within 2 miles: " + str(within2Fishers))
print(dfFishers)
```

Total viable places within 2 miles: 0

	Events	Distance
0	Caplinger's Fresh Catch	0.085280
1	Cooper's Hawk Winery & Restaurants	0.101123
2	Harry & Izzy's Northside	0.104706
3	Ocean Prime	0.111652
4	Sullivan's Steakhouse	0.114995
5	Seasons 52	0.116325
6	Information/Cybersecurity Officer/IT Officer /Operations...	0.123912
7	Fire by the Monon	0.163050
8	BRICS - Broad Ripple Ice Cream Station	0.163381
9	Mama Carolla's Old Italian Restaurant	0.175630
10	Good Morning Mama's Cafe	0.176105
11	Delicia	0.181619
12	Cafe Patachou	0.191174
13	Indianapolis Chamber Orchestra - Indianapolis 2022-05-22...	0.204580
14	Indianapolis Chamber Orchestra - Indianapolis 2022-05-22...	0.204580
15	Mimi Blue Meatballs	0.230454
16	Livery	0.234096
17	Mesh	0.234426
18	St. Joseph Brewery & Public House	0.235605
19	Union 50	0.236809
20	Celtic Woman 2022-06-03T23:30:00	0.238880
21	Tom Segura 2022-06-11T23:00:00	0.238880
22	Wallows 2022-06-07T00:00:00	0.239258
23	Vida	0.239595
24	Bru Burger Bar	0.240722
25	Bakersfield	0.242594
26	Bazbeaux Pizza	0.242935
27	The Eagle on Mass Ave	0.243102
28	Iaria's Italian Restaurant	0.246245
29	Fogo de Chao Brazilian Steakhouse	0.248224
30	Milktooth	0.249304
31	The Capital Grille	0.249706
32	Tastings A Wine Experience	0.249966
33	Bluebeard	0.250099
34	The Oceanaire Seafood Room	0.250373
35	Tony's of Indianapolis	0.250633
36	Nada	0.250773
37	Ruth's Chris Steak House	0.251053
38	Yolk - City Way	0.251177
39	Yard House	0.251336
40	St. Elmo Steak House	0.252205
41	Harry and Izzy's	0.252559
42	Slippery Noodle Inn	0.253983
43	Conner's Kitchen + Bar	0.254060

44	APIC Annual Conference	0.254091
45	Bosphorus Istanbul Cafe	0.254494
46	OP Italian	0.255116
47	High Velocity	0.255831
48	Tedeschi Trucks Band with Gabe Dixon and St. Paul & The ...	0.258530
49	Barenaked Ladies (Rescheduled from 7/5/2020, 7/2/2021) 2...	0.258530
50	5 Seconds of Summer with The Band Camino 2022-07-15T23:0...	0.258530
51	Shapiro's Delicatessen	0.258779
52	Greek Islands Restaurant INC	0.259616
53	Iozzo's Garden of Italy	0.260511
54	Long's Bakery	0.262538
55	Indianapolis 500 Legends Day 2022-05-28T14:00:00	0.284000
56	Indianapolis 500 2022-05-29T16:45:00	0.284000
57	The Tamale Place	0.313431
58	Brozinni Pizzeria	0.336363
59	The Library Restaurant and Pub	0.339994
60	Burger Theory at the Holiday Inn Indianapolis Airport	0.419581

In [51]:

```

IndustriousDict = {}
IndustriousLat = 39.772380233351356
IndustriousLon = -86.15310153064928
header = ["Events", "Distance"]
for event, loc in eventDict.items():
    IndustriousDict[event] = math.sqrt((loc[0] - IndustriousLat) ** 2 + (loc[1] - IndustriousLon) ** 2)
sorted_IndustriousDict = sorted(IndustriousDict.items(), key=lambda item: item[1])
dfIndustrious = pandas.DataFrame(sorted_IndustriousDict, columns=header)
within2Industrious = 0
for field in sorted_IndustriousDict:
    if (field[1] <= .03): ##within 2ish miles
        within2Industrious += 1
print("Total viable places within 2 miles: " + str(within2Industrious))
print(dfIndustrious)

```

Total viable places within 2 miles: 39

	Events	Distance
0	Bakersfield	0.000527
1	Bazbeaux Pizza	0.000863
2	The Eagle on Mass Ave	0.001060
3	Bru Burger Bar	0.001426
4	Wallows 2022-06-07T00:00:00	0.002844
5	Celtic Woman 2022-06-03T23:30:00	0.003279
6	Tom Segura 2022-06-11T23:00:00	0.003279
7	Union 50	0.005377
8	Fogo de Chao Brazilian Steakhouse	0.006255
9	Vida	0.006376
10	The Capital Grille	0.007866
11	St. Joseph Brewery & Public House	0.007884
12	Tastings A Wine Experience	0.008211
13	Mesh	0.008238
14	The Oceanaire Seafood Room	0.008304
15	Livery	0.008730
16	Nada	0.008731
17	Tony's of Indianapolis	0.009022
18	Ruth's Chris Steak House	0.009140
19	Yard House	0.009285
20	St. Elmo Steak House	0.010183
21	Harry and Izzy's	0.010505
22	Yolk - City Way	0.010836
23	Slippery Noodle Inn	0.012062
24	APIC Annual Conference	0.012300
25	Mimi Blue Meatballs	0.012391
26	Iaria's Italian Restaurant	0.012700
27	Conner's Kitchen + Bar	0.013076
28	Milktooth	0.014788
29	OP Italian	0.015459
30	High Velocity	0.015722
31	Bluebeard	0.016417
32	Shapiro's Delicatessen	0.017268
33	Greek Islands Restaurant INC	0.018216

34	Bosphorus Istanbul Cafe	0.018234
35	Tedeschi Trucks Band with Gabe Dixon and St. Paul & The ...	0.018953
36	Barenaked Ladies (Rescheduled from 7/5/2020, 7/2/2021) 2...	0.018953
37	5 Seconds of Summer with The Band Camino 2022-07-15T23:0...	0.018953
38	Iozzo's Garden of Italy	0.019258
39	Long's Bakery	0.050180
40	Indianapolis Chamber Orchestra - Indianapolis 2022-05-22...	0.069556
41	Indianapolis Chamber Orchestra - Indianapolis 2022-05-22...	0.069556
42	Cafe Patachou	0.070392
43	Delicia	0.075235
44	Good Morning Mama's Cafe	0.079313
45	Mama Carolla's Old Italian Restaurant	0.079477
46	Indianapolis 500 Legends Day 2022-05-28T14:00:00	0.085361
47	Indianapolis 500 2022-05-29T16:45:00	0.085361
48	The Tamale Place	0.096181
49	BRICS - Broad Ripple Ice Cream Station	0.100530
50	Fire by the Monon	0.102579
51	The Library Restaurant and Pub	0.107238
52	Information/Cybersecurity Officer/IT Officer /Operations...	0.141350
53	Seasons 52	0.146518
54	Ocean Prime	0.146835
55	Sullivan's Steakhouse	0.146989
56	Harry & Izzy's Northside	0.147520
57	Brozinni Pizzeria	0.150617
58	Caplinger's Fresh Catch	0.158861
59	Cooper's Hawk Winery & Restaurants	0.162494
60	Burger Theory at the Holiday Inn Indianapolis Airport	0.184968

In [52]:

```
LaunchDict = {}
LaunchLat = 39.7593320841315
LaunchLon = -86.15805743064958
header = ["Events", "Distance"]
for event, loc in eventDict.items():
    LaunchDict[event] = math.sqrt((loc[0] - LaunchLat) ** 2 + (loc[1] - LaunchLon) ** 2)
sorted_LaunchDict = sorted(LaunchDict.items(), key=lambda item: item[1])
dfLaunch = pandas.DataFrame(sorted_LaunchDict, columns=header)
within2Launch = 0
for field in sorted_LaunchDict:
    if (field[1] <= .03): ##within 2ish miles
        within2Launch += 1
print("Total viable places within 2 miles: " + str(within2Launch))
print(dfLaunch)
```

Total viable places within 2 miles: 39

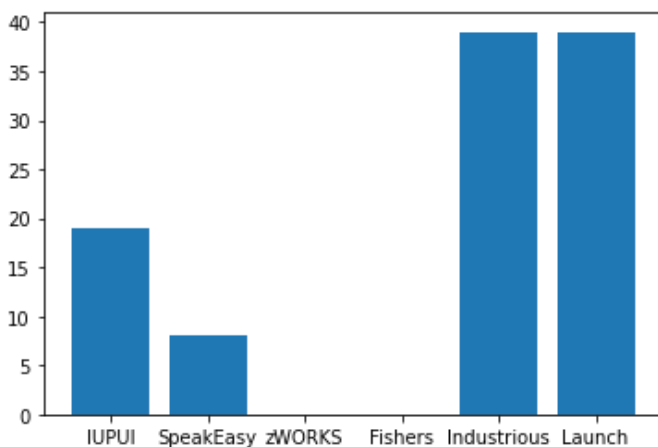
	Events	Distance
0	Slippery Noodle Inn	0.002397
1	Shapiro's Delicatessen	0.003315
2	Greek Islands Restaurant INC	0.004260
3	Yolk - City Way	0.004912
4	Harry and Izzy's	0.005310
5	Iozzo's Garden of Italy	0.005321
6	St. Elmo Steak House	0.005851
7	Yard House	0.006092
8	The Oceanaire Seafood Room	0.006516
9	Nada	0.006555
10	APIC Annual Conference	0.006635
11	Ruth's Chris Steak House	0.007100
12	Fogo de Chao Brazilian Steakhouse	0.007750
13	The Capital Grille	0.008154
14	Tastings A Wine Experience	0.008242
15	Tony's of Indianapolis	0.008288
16	Conner's Kitchen + Bar	0.009272
17	Bosphorus Istanbul Cafe	0.009979
18	Milktooth	0.011361
19	High Velocity	0.011620
20	Bluebeard	0.012230
21	OP Italian	0.012326
22	Iaria's Italian Restaurant	0.012655
23	The Eagle on Mass Ave	0.013047
24	Bazbeaux Pizza	0.013133

25		Bakersfield	0.013435
26	Tedeschi Trucks Band with Gabe Dixon and St. Paul & The ...		0.013805
27	Barenaked Ladies (Rescheduled from 7/5/2020, 7/2/2021) 2...		0.013805
28	5 Seconds of Summer with The Band Camino 2022-07-15T23:0...		0.013805
29		Bru Burger Bar	0.015155
30		Vida	0.016110
31		Wallows 2022-06-07T00:00:00	0.016597
32		Celtic Woman 2022-06-03T23:30:00	0.016902
33		Tom Segura 2022-06-11T23:00:00	0.016902
34		Union 50	0.018892
35		St. Joseph Brewery & Public House	0.019951
36		Mesh	0.021111
37		Livery	0.021436
38		Mimi Blue Meatballs	0.025091
39		Long's Bakery	0.051386
40	Indianapolis Chamber Orchestra - Indianapolis 2022-05-22...		0.081461
41	Indianapolis Chamber Orchestra - Indianapolis 2022-05-22...		0.081461
42		Cafe Patachou	0.083513
43	Indianapolis 500 Legends Day 2022-05-28T14:00:00		0.085249
44	Indianapolis 500 2022-05-29T16:45:00		0.085249
45		Delicia	0.088787
46		The Tamale Place	0.091176
47		Good Morning Mama's Cafe	0.092998
48		Mama Carolla's Old Italian Restaurant	0.093179
49		The Library Restaurant and Pub	0.097790
50		BRICS - Broad Ripple Ice Cream Station	0.114094
51		Fire by the Monon	0.116101
52		Brozinni Pizzeria	0.141717
53	Information/Cybersecurity Officer/IT Officer /Operations...		0.155221
54		Seasons 52	0.160436
55		Ocean Prime	0.160784
56		Sullivan's Steakhouse	0.160916
57		Harry & Izzy's Northside	0.161468
58		Caplinger's Fresh Catch	0.171945
59	Burger Theory at the Holiday Inn Indianapolis Airport		0.174092
60		Cooper's Hawk Winery & Restaurants	0.176441

In [54]:

```
height = [within2IUPUI, within2SpeakEasy, within2zWORKS, within2Fishers, within2Industrious, within2Launch]
bars = ('IUPUI', 'SpeakEasy', 'zWORKS', 'Fishers', 'Industrious', 'Launch')
y_pos = numpy.arange(len(bars))

matplotlib.pyplot.bar(y_pos, height)
matplotlib.pyplot.xticks(y_pos, bars)
matplotlib.pyplot.show()
```



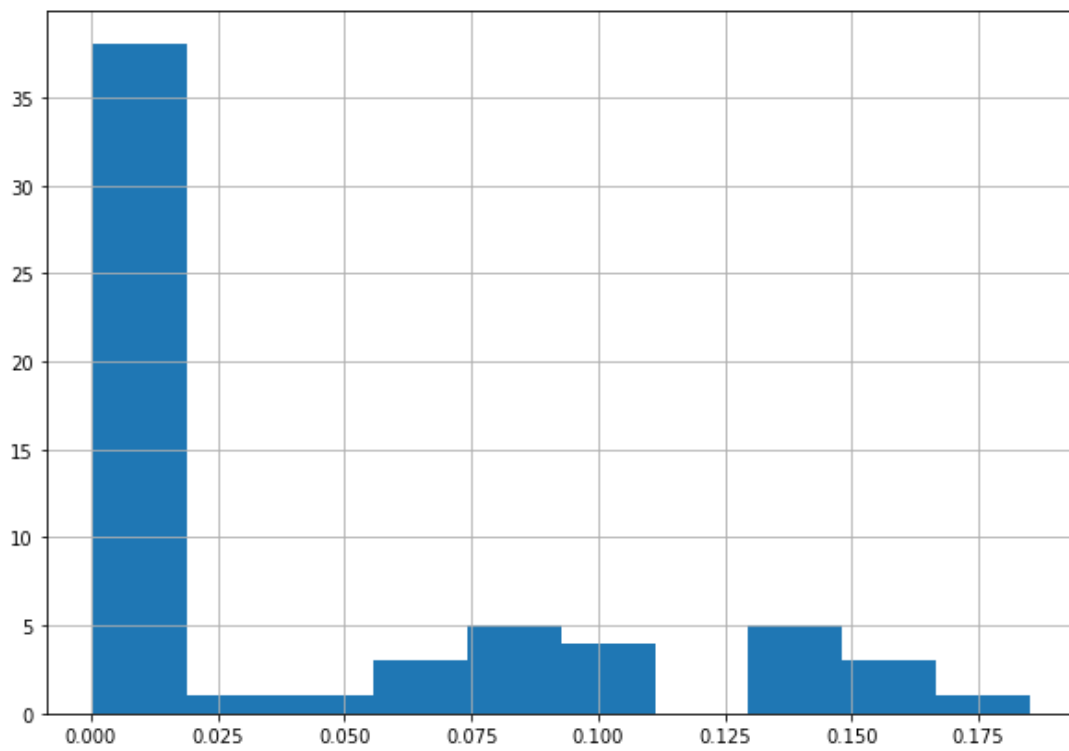
In [162]:

```
dfIndustrious.hist(column = "Distance", figsize = [10,7])
```

Out[162]:

```
array([[<AxesSubplot:title={'center':'Distance'}>]], dtype=object)
```

Distance



In [161]:

```
dfLaunch.hist(column = "Distance", figsize = [10,7])
```

Out[161]:

```
array([[<AxesSubplot:title={'center':'Distance'}>]], dtype=object)
```

