Updated Review of UC Percent Variable

9.21.23

Quick Descriptives for uc_percent (original metric)

```
summary(Z_and_Final_Variables_10.28.22$uc_percent)
```

```
   Min. 1st Qu.  Median    Mean 3rd Qu.    Max.    NA's
  1.061   3.854   5.350   6.884   7.985  54.000     157
```

Statewide Averages for uc_percent

Highest Ten

```
Z_and_Final_Variables_10.28.22 %>%
  group_by(State.x) %>%
  summarize(state_level_ucp = mean(uc_percent, na.rm = TRUE)) %>%
  arrange(desc(state_level_ucp)) %>%
  head(10)
```

```
# A tibble: 10 x 2
   State.x state_level_ucp
   <chr>             <dbl>
 1 il                37.6
 2 tx                13.3
 3 ak                11.6
 4 nd                11.3
 5 ok                10.2
 6 wy                 9.70
```

```
 7 nv                9.30
 8 sd                9.04
 9 mt                8.94
10 ut                8.79
```

Statewide Averages for uc_percent

Lowest Ten

```
Z_and_Final_Variables_10.28.22 %>%
  group_by(State.x) %>%
  summarize(state_level_ucp = mean(uc_percent, na.rm = TRUE)) %>%
  arrange(desc(state_level_ucp)) %>%
  tail(10)
```

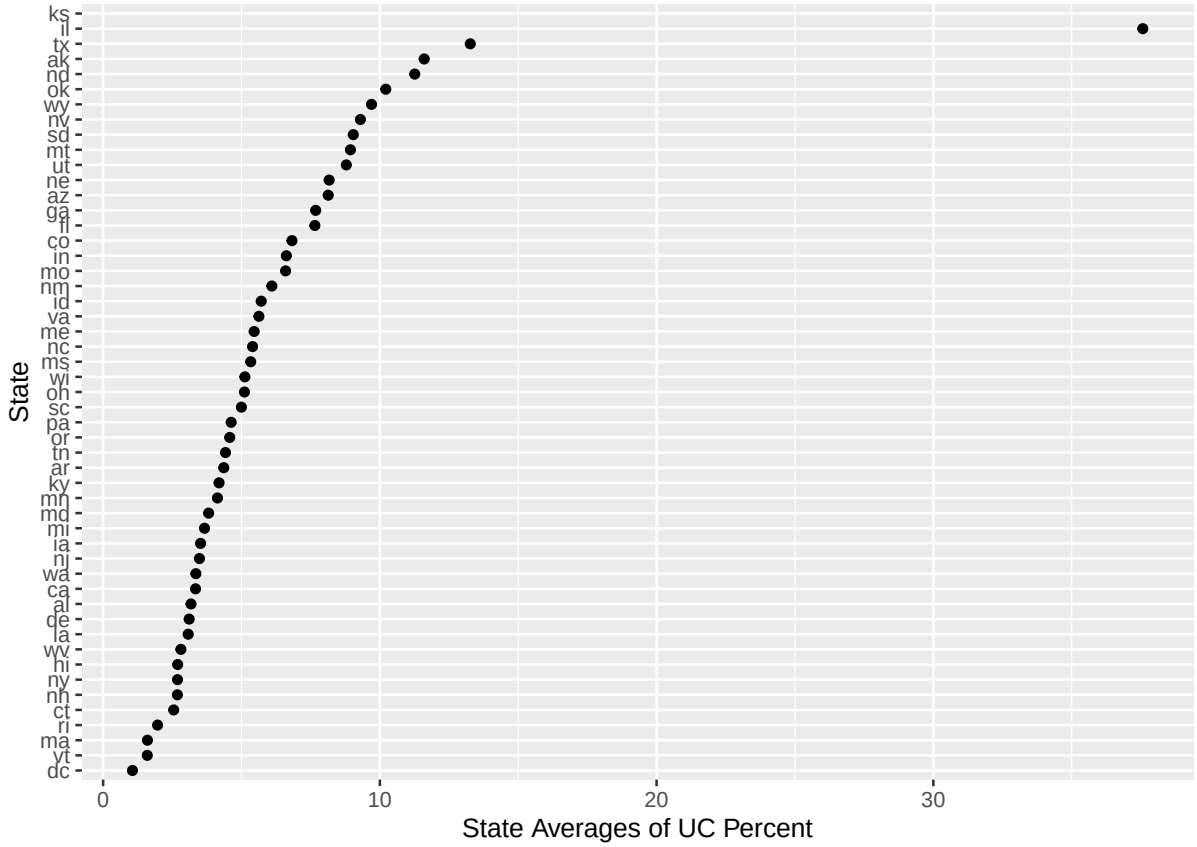
```
# A tibble: 10 x 2
   State.x state_level_ucp
   <chr>             <dbl>
 1 wv                 2.81
 2 hi                 2.69
 3 ny                 2.69
 4 nh                 2.68
 5 ct                 2.55
 6 ri                 1.97
 7 ma                 1.60
 8 vt                 1.60
 9 dc                 1.06
10 ks                NaN
```

Plot of Statwide Averages for uc_percent

No data for Kansas

```
ggplot(Z_and_Final_Variables_9.20.23, mapping = aes(x = reorder(State.x,
    state_level_ucp), y = state_level_ucp)) + geom_point() +
    labs(x = "State", y = "State Averages of UC Percent") + coord_flip()
```

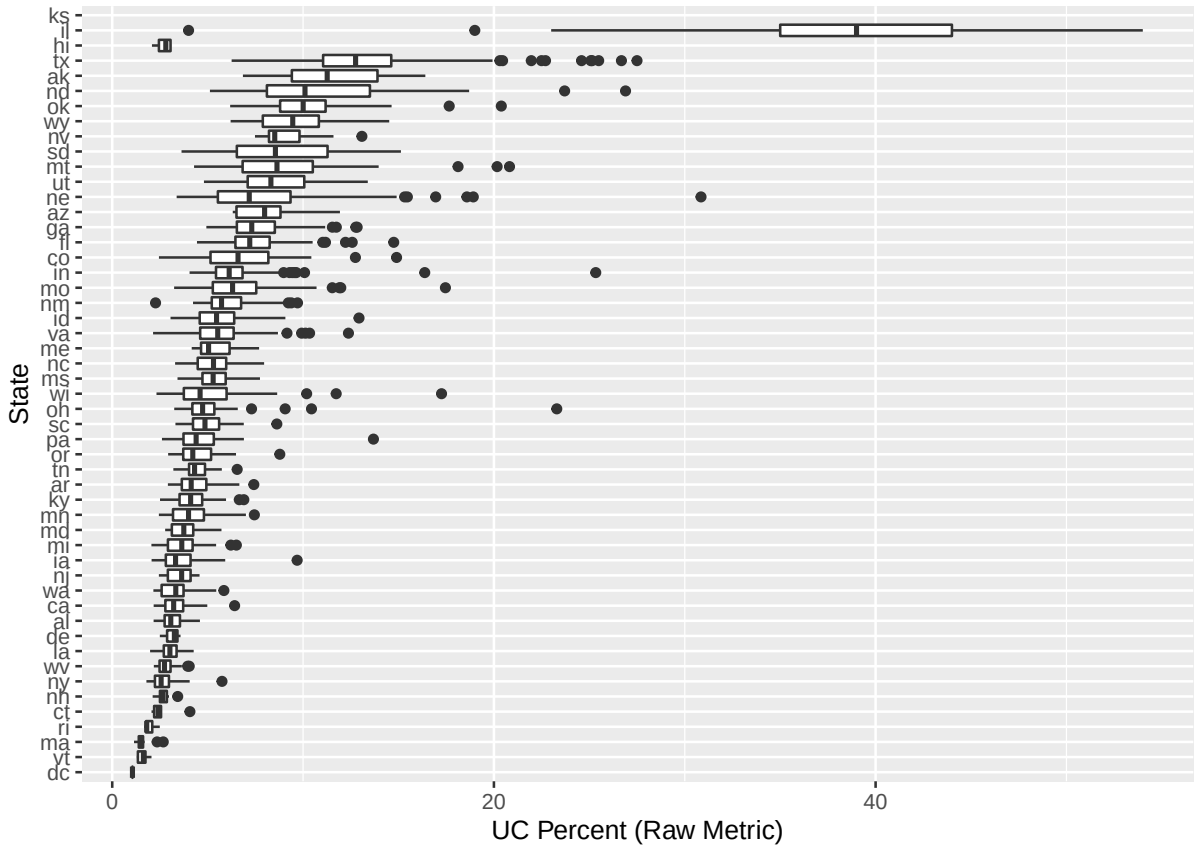
```
Warning: Removed 1 rows containing missing values (geom_point).
```



Boxplot for county-level uc_percent

```
Z_and_Final_Variables_10.28.22 %>%
    ggplot(mapping = aes(x = reorder(State.x, uc_percent), y = uc_percent)) +
    geom_boxplot() + labs(x = "State", y = "UC Percent (Raw Metric)") +
    coord_flip()
```

```
Warning: Removed 157 rows containing non-finite values (stat_boxplot).
```




```
Just_IL <- Z_and_Final_Variables_10.28.22 %>%
  filter(State.x == "il") %>%
  select(uc_percent)
```

Here are the values for the Illinois uc_percent (with the missing NAs excluded)

```
 na.omit(Just_IL)
```

```
  uc_percent
1         35
4         36
6         37
```

8	38
9	4
10	37
14	25
15	23
16	41
19	38
21	35
22	44
28	19
29	36
32	32
37	46
38	25
39	30
41	38
43	50
45	37
46	35
47	40
48	45
49	40
50	40
52	32
53	44
56	43
57	44
58	33
59	44
60	45
61	39
69	41
71	45
72	46
78	40
81	47
82	43
83	25
84	44
89	43
90	54
91	45
92	23

94	27
98	39
99	37
100	45
101	42