Statistics/Data Analysis

```
      name:  <unnamed>
       log:  F:\fiscal research\mayor\PSRM data\PSRM_descstat2_log.smcl
  log type:  smcl
 opened on:  19 Dec 2023, 10:05:58

1 .
2 . ** Log file for Analysis: Table B.3, Figure 2, Figure 3, Figure A.2, Figure A.3 **
3 .
4 .
5 .
6 .
7 . * Table B.3
8 . tabstat fed_act_yr_city_2012_pc mayor_pres_party strong_mayor_pres_party mayor_pres_
  > gover_party str_mayor_pres_gover_party pres_elec_yr tot_pop income_pc pov_rate, col(
  > stat) stat(n min max mean sd)

    variable |         N       min       max      mean        sd
-------------+--------------------------------------------------
fed_act~2_pc |      8328 -47.18482  2852.289   15.8597  51.69907
mayo~s_party |      8620         0         1  .4451276  .4970087
strong_may~y |      8620         0         1  .1726218  .3779419
mayo~r_party |      8620         0         1  .2339907  .4233909
str_mayor_~y |      8620         0         1  .0961717  .2948437
pres_elec_yr |      8620         0         1  .2529002  .4346995
     tot_pop |      8328     38989   8560072    191162  456600.5
   income_pc |      8328     10544     93085  28070.69  9092.925
    pov_rate |      8022  .0090554  .3092537  .0766316  .0395542
-------------+--------------------------------------------------

9 .
10.
11.
12.
13. gen city_name_st = city_name + " (" + stabbr + ")"

14.
15. * Figure 2
16. sort primary_place_of_performance_cit

17.
18. graph bar fed_act_city_mil if fed_act_city_mil>250 & !missing(fed_act_city_mil), ///
  > over (city_name_st, label(labsize(vsmall) angle(65)) sort(fed_act_city_mil) descendi
  > ng) ///
  > legend(label(1 "Grant")) ylabel(,labsize(small)) ytitle("") ///
  > ytitle("Grant ($ million)") b1title("City")

19. graph export "${work}\desc stat\grant_city.png", as(png) replace
  (file F:\fiscal research\mayor\grant\desc stat\grant_city.png written in PNG format)

20.
21.
22. * Figure 3-(a)
23. graph bar fed_act_yr_city_pc if year==2019 & fed_act_yr_city_2012_pc>80 & !missing(f
  > ed_act_yr_city_2012_pc), ///
  > over (city_name_st, label(labsize(vsmall) angle(65)) sort(fed_act_yr_city_2012_pc) d
  > escending) ///
  > legend(label(1 "Grant")) ylabel(,labsize(small)) ytitle("") ///
  > ytitle("Grant ($ Per Capita)") b1title("City")
```

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24. graph export "${work}\desc stat\grant_city_pc_fy2020.png", as(png) replace
  (file F:\fiscal research\mayor\grant\desc stat\grant_city_pc_fy2020.png written in PNG
  >  format)

25.
26.
27. * Figure 3-(b)
28. graph bar fed_act_yr_city_pc if year==2020 & fed_act_yr_city_2012_pc>80 & !missing(f
  > ed_act_yr_city_2012_pc), ///
  > over (city_name_st, label(labsize(vsmall) angle(65)) sort(fed_act_yr_city_2012_pc) d
  > escending) ///
  > legend(label(1 "Grant")) ylabel(,labsize(small)) ytitle("") ///
  > ytitle("Grant ($ Per Capita)") b1title("City")

29. graph export "${work}\desc stat\grant_city_pc_fy2021.png", as(png) replace
  (file F:\fiscal research\mayor\grant\desc stat\grant_city_pc_fy2021.png written in PNG
  >  format)

30.
31.
32. * Housing
33.
34. gen fed_act_house_yr_mil=fed_act_house_yr/1000000
  (116 missing values generated)

35.
36. gen fed_act_house_city_mil=fed_act_house_city/1000000
  (405 missing values generated)

37.
38. sort year city_name

39.
40. * Figure A.2-(a)
41. graph bar fed_act_house_city_mil if fed_act_house_city_mil>30 & !missing(fed_act_hou
  > se_city_mil), ///
  > over (city_name_st, label(labsize(vsmall) angle(65)) sort(fed_act_house_city_mil) de
  > scending) ///
  > legend(label(1 "Grant")) ylabel(,labsize(small)) ytitle("") ///
  > ytitle("Grant ($ million)") b1title("City")

42. graph export "${work}\desc stat\grant_city_house.png", as(png) replace
  (file F:\fiscal research\mayor\grant\desc stat\grant_city_house.png written in PNG for
  > mat)

43.
44.
45. bysort geo_fips: egen sum_fed_act_house_yr_city_pc=total(fed_act_house_yr_city_pc) i
  > f !missing(fed_act_house_yr_city_pc)
  (404 missing values generated)

46.
47. * Figure A.2-(b)
48. graph bar sum_fed_act_house_yr_city_pc if sum_fed_act_house_yr_city_pc>100 & !missin
  > g(sum_fed_act_house_yr_city_pc), ///
  > over (city_name_st, label(labsize(vsmall) angle(65)) sort(sum_fed_act_house_yr_city_
  > pc) descending) ///
  > legend(label(1 "Grant")) ylabel(,labsize(small)) ytitle("") ///
  > ytitle("$") b1title("City")
```

```
49. graph export "${work}\desc stat\grant_city_house_pc.png", as(png) replace
  (file F:\fiscal research\mayor\grant\desc stat\grant_city_house_pc.png written in PNG
  > format)

50.
51.
52. * Transportation
53. gen fed_act_transport_yr_mil=fed_act_transport_yr/1000000
  (116 missing values generated)

54.
55. gen fed_act_transport_city_mil=fed_act_transport_city/1000000
  (405 missing values generated)

56.
57. sort year city_name

58.
59. * Figure A.3-(a)
60. graph bar fed_act_transport_city_mil if fed_act_transport_city_mil>100 & !missing(fe
  > d_act_transport_city_mil), ///
  > over (city_name_st, label(labsize(vsmall) angle(65)) sort(fed_act_transport_city_mil
  > ) descending) ///
  > legend(label(1 "Grant")) ylabel(,labsize(small)) ytitle("") ///
  > ytitle("Grant ($ million)") b1title("City")

61. graph export "${work}\desc stat\grant_city_transportation.png", as(png) replace
  (file F:\fiscal research\mayor\grant\desc stat\grant_city_transportation.png written i
  > n PNG format)

62.
63.
64. bysort geo_fips: egen sum_fed_act_trans_yr_city_pc=total(fed_act_trans_yr_city_pc) i
  > f !missing(fed_act_trans_yr_city_pc)
  (404 missing values generated)

65.
66. * Figure A.3-(b)
67. graph bar sum_fed_act_trans_yr_city_pc if sum_fed_act_trans_yr_city_pc>400 & !missin
  > g(sum_fed_act_trans_yr_city_pc), ///
  > over (city_name_st, label(labsize(vsmall) angle(65)) sort(sum_fed_act_trans_yr_city_
  > pc) descending) ///
  > legend(label(1 "Grant")) ylabel(,labsize(small)) ytitle("") ///
  > ytitle("$") b1title("City")

68. graph export "${work}\desc stat\grant_city_transportation_pc.png", as(png) replace
  (file F:\fiscal research\mayor\grant\desc stat\grant_city_transportation_pc.png writte
  > n in PNG format)

69.
70.
71.
72. log close
       name:  <unnamed>
        log:  F:\fiscal research\mayor\PSRM data\PSRM_descstat2_log.smcl
   log type:  smcl
  closed on:  19 Dec 2023, 10:06:06
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