Statistics/Data analysis

```
      name:  <unnamed>
       log:  C:\Users\akshayaj\Box\NHTSAnalysis\Logs/CausalNHTS.smcl
  log type:  smcl
 opened on:  20 Sep 2024, 22:43:57

. 
. local year = 2017

. 
. 
. 
. 
. 
. 
. // local outcome_vars = "num_new_vehweighted single_vehicle_mean_ageweighted multi_v
> ehicle_mean_ageweighted max_veh_ageweighted min_milesweighted multi_vehicle_num_vehi
> clesweight"
. local outcome_vars = "single_vehicle_mean_ageweighted multi_vehicle_mean_ageweighted
>  multi_vehicle_num_vehiclesweight num_new_vehweighted max_veh_ageweighted min_milesw
> eighted num_vehiclesweighted num_newly_bought_vehweighted sum_total_milesweighted ol
> dest_veh_travelweighted all_hh_new_vehweighted all_hh_newly_bought_vehweighted"

. 
. local i = 0

. foreach year of num 2017 2009{
  2.         clear
  3. 
. if(`year'==2017){
  4.                 local ind_vars = "hhsizeweighted drvrcntweighted incomeweighted h
> bppopdnweighted wrkcountweighted numadltweighted youngchildweighted ageweighted"
  5.         }
  6.         else{
  7.                 local ind_vars = "hhsizeweighted drvrcntweighted incomeweighted h
> bppopdnweighted wrkcountweighted numadltweighted ageweighted"
  8.         }
  9. 
. import delimited "CleanData/NHTS`year'.csv"
 10.         gen nosafetyweighted = 1-hassafetyweighted
 11.         drop if treatmentyearweighted>=(`year'-2) & treatmentyearweighted<=(`year
> '+2)
 12. 
. 
. 
. //      local treat_var = "hassafetyweighted"
. local treat_var = "nosafetyweighted"
 13. 
. gen x = 0
 14.         gen y = 0
 15. 
. 
. 
. local j = 0
 16.         local out_vars = ""
 17. 
. reg y x
 18.         est sto model`i'
 19. 
. foreach outcome_var in `outcome_vars'{
 20. 
```

```
26.                 if("`outcome_var'"=="num_new_vehweighted" | "`outcome_var'"=="all_hh
  > _new_vehweighted" | "`outcome_var'"=="all_hh_newly_bought_vehweighted"){
   21.                         local floatFormat = "%4.3f"
   22.                 }
   23.                 else{
   24.                         local floatFormat = "%4.2f"
   25.                 }
   26.
27.                 di "`outcome_var'"
   27.                 teffects psmatch (`outcome_var') (`treat_var' `ind_vars'), base
   28.                 di e(cmdline)
   29.                 ereturn list
   30.
28.                 local tempMean = string(round(e(b)[1,1], .001), "`floatFormat'")
   31.                 local tempSD = string(round(sqrt(e(V)[1,1]), .001), "`floatFormat
  > '")
   32.                 local tempT = e(b)[1,1]/sqrt(e(V)[1,1])
   33.                 local tempP = normal(-abs(`tempT'))*2
   34.
29.                 if(`tempP'<0.01){
   35.                         local tempStars = "***"
   36.                 }
   37.                 else if(`tempP'<0.05){
   38.                         local tempStars = "**"
   39.                 }
   40.                 else if(`tempP'<0.1){
   41.                         local tempStars = "*"
   42.                 }
   43.                 else{
   44.                         local tempStars = ""
   45.                 }
   46.
30.
31.
32.                 local prefix = "\makecell{"
   47.                 local suffix = "}"
   48.
33.                 local tempEntry = "`prefix'"+"`tempMean'`tempStars' \nextline (`temp
  > SD')"+"`suffix'"
   49.                 est res model`i'
   50.                 estadd local var`j' = "`tempEntry'"
   51.                 local out_vars = "`out_vars' var`j'"
   52.                 local j = `j'+1
   53.
34.         }
   54.
35.         local i = `i'+1
   55. }
(encoding automatically selected: ISO-8859-1)
(37 vars, 51 obs)
(1 observation deleted)
note: x omitted because of collinearity.
```

Source	SS	df	MS		
Model	0	0	.	Number of obs	50
Residual	0	49	0	F(0, 49)	0.00
				Prob > F	.
				R-squared	.
				Adj R-squared	.
Total	0	49	0	Root MSE	0

y	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
x	0	(omitted)				
_cons	0	(omitted)				

single_vehicle_mean_ageweighted

```
Treatment-effects estimation                    Number of obs      =         50
Estimator      : propensity-score matching      Matches: requested =          1
Outcome model  : matching                                   min =          1
Treatment model: logit                                      max =          1
```

single_vehicle~d	Coefficient	AI robust std. err.	z	P>|z|	[95% conf.	interval]
ATE						
nosafetyweighted (1 vs 0)	**.8149942**	**.2134534**	**3.82**	**0.000**	**.3966331**	**1.233355**

```
teffects psmatch (single_vehicle_mean_ageweighted) (nosafetyweighted hhsizeweighted dr
> vrcntweighted incomeweighted hbppopdnweighted wrkcountweighted numadltweighted young
> childweighted ageweighted), base

scalars:
                  e(N) =  50
                 e(n0) =  16
                 e(n1) =  34
            e(caliper) =  .
            e(treated) =  1
            e(control) =  0
        e(k_nneighbor) =  1
            e(k_nnmin) =  1
            e(k_nnmax) =  1
           e(k_robust) =  2
           e(k_levels) =  2

macros:
               e(cmd) : "teffects"
            e(cmdline) : "teffects psmatch (single_vehicle_mean_ageweighted) (nosafety
> weighted hhsizew.."
            e(predict) : "teffects_p"
          e(estat_cmd) : "teffects_estat"
       e(marginsnotok) : "_ALL"
             e(depvar) : "single_vehicle_mean_ageweighted"
               e(tvar) : "nosafetyweighted"
             e(subcmd) : "psmatch"
             e(tmodel) : "logit"
               e(stat) : "ate"
              e(title) : "Treatment-effects estimation"
            e(tlevels) : "0 1"
         e(psvarlist) : "hhsizeweighted drvrcntweighted incomeweighted hbppopdnweight
> ed wrkcountweigh.."
               e(vce) : "robust"
            e(vcetype) : "AI robust"
  e(datasignaturevars) : "single_vehicle_mean_ageweighted nosafetyweighted hhsizeweigh
> ted drvrcntweigh.."
      e(datasignature) : "50:10:3049593412:2668042368"
         e(properties) : "b V"

matrices:
                  e(b) :  1 x 1
                  e(V) :  1 x 1
                 e(Vps) :  9 x 9
                 e(bps) :  1 x 9

functions:
             e(sample)
(results model0 are active now)

added macro:
               e(var0) : "\makecell{0.82*** \nextline (0.21)}"
multi_vehicle_mean_ageweighted
```

```
Treatment-effects estimation                    Number of obs      =         50
Estimator      : propensity-score matching      Matches: requested =          1
Outcome model  : matching                                   min =          1
Treatment model: logit                                      max =          1
```

multi_vehicle_~d	Coefficient	AI robust std. err.	z	P>|z|	[95% conf.	interval]
ATE						
nosafetyweighted (1 vs 0)	**.9960611**	**.1924572**	**5.18**	**0.000**	**.6188518**	**1.37327**

```
teffects psmatch (multi_vehicle_mean_ageweighted) (nosafetyweighted hhsizeweighted drv
> rcntweighted incomeweighted hbppopdnweighted wrkcountweighted numadltweighted youngc
> hildweighted ageweighted), base

scalars:
                  e(N) =  50
                 e(n0) =  16
                 e(n1) =  34
            e(caliper) =  .
            e(treated) =  1
            e(control) =  0
        e(k_nneighbor) =  1
            e(k_nnmin) =  1
            e(k_nnmax) =  1
           e(k_robust) =  2
           e(k_levels) =  2

macros:
               e(cmd) : "teffects"
            e(cmdline) : "teffects psmatch (multi_vehicle_mean_ageweighted) (nosafetyw
> eighted hhsizewe.."
            e(predict) : "teffects_p"
          e(estat_cmd) : "teffects_estat"
       e(marginsnotok) : "_ALL"
             e(depvar) : "multi_vehicle_mean_ageweighted"
               e(tvar) : "nosafetyweighted"
             e(subcmd) : "psmatch"
             e(tmodel) : "logit"
               e(stat) : "ate"
              e(title) : "Treatment-effects estimation"
            e(tlevels) : "0 1"
         e(psvarlist) : "hhsizeweighted drvrcntweighted incomeweighted hbppopdnweight
> ed wrkcountweigh.."
               e(vce) : "robust"
            e(vcetype) : "AI robust"
  e(datasignaturevars) : "multi_vehicle_mean_ageweighted nosafetyweighted hhsizeweight
> ed drvrcntweight.."
      e(datasignature) : "50:10:3790461411:1122515279"
         e(properties) : "b V"

matrices:
                  e(b) :  1 x 1
                  e(V) :  1 x 1
                e(Vps) :  9 x 9
                e(bps) :  1 x 9

functions:
             e(sample)
(results model0 are active now)

added macro:
               e(var1) : "\makecell{1.00*** \nextline (0.19)}"
multi_vehicle_num_vehiclesweight
```

```
Treatment-effects estimation                    Number of obs      =         50
Estimator      : propensity-score matching      Matches: requested =          1
Outcome model  : matching                                   min =          1
Treatment model: logit                                      max =          1
```

multi_vehicle_~t	Coefficient	AI robust std. err.	z	P>|z|	[95% conf.	interval]
ATE						
nosafetyweighted (1 vs 0)	**.1322746**	**.040532**	**3.26**	**0.001**	**.0528334**	**.2117158**

```
teffects psmatch (multi_vehicle_num_vehiclesweight) (nosafetyweighted hhsizeweighted d
> rvrcntweighted incomeweighted hbppopdnweighted wrkcountweighted numadltweighted youn
> gchildweighted ageweighted), base

scalars:
                  e(N) =  50
                 e(n0) =  16
                 e(n1) =  34
            e(caliper) =  .
            e(treated) =  1
            e(control) =  0
        e(k_nneighbor) =  1
            e(k_nnmin) =  1
            e(k_nnmax) =  1
           e(k_robust) =  2
           e(k_levels) =  2

macros:
               e(cmd) : "teffects"
            e(cmdline) : "teffects psmatch (multi_vehicle_num_vehiclesweight) (nosafet
> yweighted hhsize.."
            e(predict) : "teffects_p"
          e(estat_cmd) : "teffects_estat"
       e(marginsnotok) : "_ALL"
             e(depvar) : "multi_vehicle_num_vehiclesweight"
               e(tvar) : "nosafetyweighted"
             e(subcmd) : "psmatch"
             e(tmodel) : "logit"
               e(stat) : "ate"
              e(title) : "Treatment-effects estimation"
            e(tlevels) : "0 1"
         e(psvarlist) : "hhsizeweighted drvrcntweighted incomeweighted hbppopdnweight
> ed wrkcountweigh.."
               e(vce) : "robust"
            e(vcetype) : "AI robust"
  e(datasignaturevars) : "multi_vehicle_num_vehiclesweight nosafetyweighted hhsizeweig
> hted drvrcntweig.."
      e(datasignature) : "50:10:340582803:4015522999"
         e(properties) : "b V"

matrices:
                  e(b) :  1 x 1
                  e(V) :  1 x 1
                e(Vps) :  9 x 9
                e(bps) :  1 x 9

functions:
             e(sample)
(results model0 are active now)

added macro:
               e(var2) : "\makecell{0.13*** \nextline (0.04)}"
num_new_vehweighted
```

```
Treatment-effects estimation                    Number of obs      =         50
Estimator      : propensity-score matching      Matches: requested =          1
Outcome model  : matching                                   min =          1
Treatment model: logit                                      max =          1
```

num_new_vehwei~d	Coefficient	AI robust std. err.	z	P>|z|	[95% conf. interval]	
ATE						
nosafetyweighted (1 vs 0)	**-.0052657**	**.0026401**	**-1.99**	**0.046**	**-.0104401**	**-.0000912**

```
teffects psmatch (num_new_vehweighted) (nosafetyweighted hhsizeweighted drvrcntweighte
> d incomeweighted hbppopdnweighted wrkcountweighted numadltweighted youngchildweighte
> d ageweighted), base

scalars:
                  e(N) =  50
                 e(n0) =  16
                 e(n1) =  34
            e(caliper) =  .
            e(treated) =  1
            e(control) =  0
        e(k_nneighbor) =  1
            e(k_nnmin) =  1
            e(k_nnmax) =  1
           e(k_robust) =  2
           e(k_levels) =  2

macros:
               e(cmd) : "teffects"
            e(cmdline) : "teffects psmatch (num_new_vehweighted) (nosafetyweighted hhs
> izeweighted drvr.."
            e(predict) : "teffects_p"
          e(estat_cmd) : "teffects_estat"
       e(marginsnotok) : "_ALL"
             e(depvar) : "num_new_vehweighted"
               e(tvar) : "nosafetyweighted"
            e(subcmd) : "psmatch"
            e(tmodel) : "logit"
              e(stat) : "ate"
             e(title) : "Treatment-effects estimation"
           e(tlevels) : "0 1"
         e(psvarlist) : "hhsizeweighted drvrcntweighted incomeweighted hbppopdnweight
> ed wrkcountweigh.."
               e(vce) : "robust"
            e(vcetype) : "AI robust"
  e(datasignaturevars) : "num_new_vehweighted nosafetyweighted hhsizeweighted drvrcntw
> eighted incomewe.."
      e(datasignature) : "50:10:3158282587:1980312717"
         e(properties) : "b V"

matrices:
                  e(b) :  1 x 1
                  e(V) :  1 x 1
                e(Vps) :  9 x 9
                e(bps) :  1 x 9

functions:
             e(sample)
(results model0 are active now)

added macro:
               e(var3) : "\makecell{-0.005** \nextline (0.003)}"
max_veh_ageweighted
```

```
Treatment-effects estimation                    Number of obs      =         50
Estimator      : propensity-score matching      Matches: requested =          1
Outcome model  : matching                                   min =          1
Treatment model: logit                                      max =          1
```

max_veh_agewei~d	Coefficient	AI robust std. err.	z	P>|z|	[95% conf. interval]	
ATE						
nosafetyweighted (1 vs 0)	**1.450991**	**.3209027**	**4.52**	**0.000**	**.8220334**	**2.079949**

```
teffects psmatch (max_veh_ageweighted) (nosafetyweighted hhsizeweighted drvrcntweighte
> d incomeweighted hbppopdnweighted wrkcountweighted numadltweighted youngchildweighte
> d ageweighted), base

scalars:
                  e(N) =  50
                 e(n0) =  16
                 e(n1) =  34
            e(caliper) =  .
            e(treated) =  1
            e(control) =  0
        e(k_nneighbor) =  1
            e(k_nnmin) =  1
            e(k_nnmax) =  1
           e(k_robust) =  2
           e(k_levels) =  2

macros:
               e(cmd) : "teffects"
            e(cmdline) : "teffects psmatch (max_veh_ageweighted) (nosafetyweighted hhs
> izeweighted drvr.."
            e(predict) : "teffects_p"
          e(estat_cmd) : "teffects_estat"
       e(marginsnotok) : "_ALL"
             e(depvar) : "max_veh_ageweighted"
               e(tvar) : "nosafetyweighted"
             e(subcmd) : "psmatch"
             e(tmodel) : "logit"
               e(stat) : "ate"
              e(title) : "Treatment-effects estimation"
            e(tlevels) : "0 1"
          e(psvarlist) : "hhsizeweighted drvrcntweighted incomeweighted hbppopdnweight
> ed wrkcountweigh.."
               e(vce) : "robust"
            e(vcetype) : "AI robust"
  e(datasignaturevars) : "max_veh_ageweighted nosafetyweighted hhsizeweighted drvrcntw
> eighted incomewe.."
      e(datasignature) : "50:10:933391600:1581828112"
         e(properties) : "b V"

matrices:
                  e(b) :  1 x 1
                  e(V) :  1 x 1
                e(Vps) :  9 x 9
                e(bps) :  1 x 9

functions:
             e(sample)
(results model0 are active now)

added macro:
               e(var4) : "\makecell{1.45*** \nextline (0.32)}"
min_milesweighted
```

```
Treatment-effects estimation                    Number of obs      =         50
Estimator      : propensity-score matching      Matches: requested =          1
Outcome model  : matching                                   min =          1
Treatment model: logit                                      max =          1
```

min_milesweigh~d	Coefficient	AI robust std. err.	z	P>|z|	[95% conf. interval]	
ATE						
nosafetyweighted (1 vs 0)	**-1219.546**	**352.579**	**-3.46**	**0.001**	**-1910.588**	**-528.5035**

```
teffects psmatch (min_milesweighted) (nosafetyweighted hhsizeweighted drvrcntweighted
> incomeweighted hbppopdnweighted wrkcountweighted numadltweighted youngchildweighted
> ageweighted), base

scalars:
                  e(N) =  50
                 e(n0) =  16
                 e(n1) =  34
            e(caliper) =  .
            e(treated) =  1
            e(control) =  0
        e(k_nneighbor) =  1
            e(k_nnmin) =  1
            e(k_nnmax) =  1
           e(k_robust) =  2
           e(k_levels) =  2

macros:
               e(cmd) : "teffects"
            e(cmdline) : "teffects psmatch (min_milesweighted) (nosafetyweighted hhsiz
> eweighted drvrcn.."
            e(predict) : "teffects_p"
          e(estat_cmd) : "teffects_estat"
       e(marginsnotok) : "_ALL"
             e(depvar) : "min_milesweighted"
               e(tvar) : "nosafetyweighted"
             e(subcmd) : "psmatch"
             e(tmodel) : "logit"
               e(stat) : "ate"
              e(title) : "Treatment-effects estimation"
            e(tlevels) : "0 1"
          e(psvarlist) : "hhsizeweighted drvrcntweighted incomeweighted hbppopdnweight
> ed wrkcountweigh.."
               e(vce) : "robust"
            e(vcetype) : "AI robust"
  e(datasignaturevars) : "min_milesweighted nosafetyweighted hhsizeweighted drvrcntwei
> ghted incomeweig.."
      e(datasignature) : "50:10:3398581352:2939492302"
         e(properties) : "b V"

matrices:
                  e(b) :  1 x 1
                  e(V) :  1 x 1
                 e(Vps) :  9 x 9
                 e(bps) :  1 x 9

functions:
             e(sample)
(results model0 are active now)

added macro:
               e(var5) : "\makecell{-1219.55*** \nextline (352.58)}"
num_vehiclesweighted
```

```
Treatment-effects estimation                    Number of obs      =         50
Estimator      : propensity-score matching      Matches: requested =          1
Outcome model  : matching                                   min =          1
Treatment model: logit                                      max =          1
```

num_vehicleswe~d	Coefficient	AI robust std. err.	z	P>|z|	[95% conf.	interval]
ATE						
nosafetyweighted (1 vs 0)	**.1597361**	**.0348044**	**4.59**	**0.000**	**.0915207**	**.2279515**

```
teffects psmatch (num_vehiclesweighted) (nosafetyweighted hhsizeweighted drvrcntweight
> ed incomeweighted hbppopdnweighted wrkcountweighted numadltweighted youngchildweight
> ed ageweighted), base

scalars:
                  e(N) =  50
                 e(n0) =  16
                 e(n1) =  34
            e(caliper) =  .
            e(treated) =  1
            e(control) =  0
        e(k_nneighbor) =  1
            e(k_nnmin) =  1
            e(k_nnmax) =  1
           e(k_robust) =  2
           e(k_levels) =  2

macros:
               e(cmd) : "teffects"
            e(cmdline) : "teffects psmatch (num_vehiclesweighted) (nosafetyweighted hh
> sizeweighted drv.."
            e(predict) : "teffects_p"
          e(estat_cmd) : "teffects_estat"
       e(marginsnotok) : "_ALL"
             e(depvar) : "num_vehiclesweighted"
               e(tvar) : "nosafetyweighted"
             e(subcmd) : "psmatch"
             e(tmodel) : "logit"
               e(stat) : "ate"
              e(title) : "Treatment-effects estimation"
            e(tlevels) : "0 1"
          e(psvarlist) : "hhsizeweighted drvrcntweighted incomeweighted hbppopdnweight
> ed wrkcountweigh.."
               e(vce) : "robust"
            e(vcetype) : "AI robust"
  e(datasignaturevars) : "num_vehiclesweighted nosafetyweighted hhsizeweighted drvrcnt
> weighted incomew.."
      e(datasignature) : "50:10:107246294:1364833888"
         e(properties) : "b V"

matrices:
                  e(b) :  1 x 1
                  e(V) :  1 x 1
                e(Vps) :  9 x 9
                e(bps) :  1 x 9

functions:
             e(sample)
(results model0 are active now)

added macro:
              e(var6) : "\makecell{0.16*** \nextline (0.04)}"
num_newly_bought_vehweighted
```

```
Treatment-effects estimation                    Number of obs      =         50
Estimator      : propensity-score matching      Matches: requested =          1
Outcome model  : matching                                   min =          1
Treatment model: logit                                      max =          1
```

num_newly_boug~d	Coefficient	AI robust std. err.	z	P>|z|	[95% conf. interval]	
ATE						
nosafetyweighted (1 vs 0)	**.0153638**	**.0118028**	**1.30**	**0.193**	**-.0077693**	**.0384969**

```
teffects psmatch (num_newly_bought_vehweighted) (nosafetyweighted hhsizeweighted drvrc
> ntweighted incomeweighted hbppopdnweighted wrkcountweighted numadltweighted youngchi
> ldweighted ageweighted), base

scalars:
                  e(N) =  50
                 e(n0) =  16
                 e(n1) =  34
            e(caliper) =  .
            e(treated) =  1
            e(control) =  0
        e(k_nneighbor) =  1
            e(k_nnmin) =  1
            e(k_nnmax) =  1
           e(k_robust) =  2
           e(k_levels) =  2

macros:
               e(cmd) : "teffects"
            e(cmdline) : "teffects psmatch (num_newly_bought_vehweighted) (nosafetywei
> ghted hhsizeweig.."
            e(predict) : "teffects_p"
          e(estat_cmd) : "teffects_estat"
       e(marginsnotok) : "_ALL"
             e(depvar) : "num_newly_bought_vehweighted"
               e(tvar) : "nosafetyweighted"
             e(subcmd) : "psmatch"
             e(tmodel) : "logit"
               e(stat) : "ate"
              e(title) : "Treatment-effects estimation"
            e(tlevels) : "0 1"
          e(psvarlist) : "hhsizeweighted drvrcntweighted incomeweighted hbppopdnweight
> ed wrkcountweigh.."
               e(vce) : "robust"
            e(vcetype) : "AI robust"
  e(datasignaturevars) : "num_newly_bought_vehweighted nosafetyweighted hhsizeweighted
>  drvrcntweighted.."
      e(datasignature) : "50:10:458945202:3034338823"
         e(properties) : "b V"

matrices:
                  e(b) :  1 x 1
                  e(V) :  1 x 1
                e(Vps) :  9 x 9
                e(bps) :  1 x 9

functions:
             e(sample)
(results model0 are active now)

added macro:
               e(var7) : "\makecell{0.01 \nextline (0.01)}"
sum_total_milesweighted
```

```
Treatment-effects estimation                    Number of obs      =         50
Estimator      : propensity-score matching      Matches: requested =          1
Outcome model  : matching                                   min =          1
Treatment model: logit                                      max =          1
```

sum_total_mile~d	Coefficient	AI robust std. err.	z	P>|z|	[95% conf. interval]	
ATE						
nosafetyweighted (1 vs 0)	**-152.1085**	**491.951**	**-0.31**	**0.757**	**-1116.315**	**812.0978**

```
teffects psmatch (sum_total_milesweighted) (nosafetyweighted hhsizeweighted drvrcntwei
> ghted incomeweighted hbppopdnweighted wrkcountweighted numadltweighted youngchildwei
> ghted ageweighted), base

scalars:
                  e(N) =  50
                 e(n0) =  16
                 e(n1) =  34
            e(caliper) =  .
            e(treated) =  1
            e(control) =  0
        e(k_nneighbor) =  1
            e(k_nnmin) =  1
            e(k_nnmax) =  1
           e(k_robust) =  2
           e(k_levels) =  2

macros:
               e(cmd) : "teffects"
            e(cmdline) : "teffects psmatch (sum_total_milesweighted) (nosafetyweighted
>  hhsizeweighted .."
            e(predict) : "teffects_p"
          e(estat_cmd) : "teffects_estat"
       e(marginsnotok) : "_ALL"
             e(depvar) : "sum_total_milesweighted"
               e(tvar) : "nosafetyweighted"
            e(subcmd) : "psmatch"
            e(tmodel) : "logit"
              e(stat) : "ate"
             e(title) : "Treatment-effects estimation"
           e(tlevels) : "0 1"
         e(psvarlist) : "hhsizeweighted drvrcntweighted incomeweighted hbppopdnweight
> ed wrkcountweigh.."
               e(vce) : "robust"
           e(vcetype) : "AI robust"
  e(datasignaturevars) : "sum_total_milesweighted nosafetyweighted hhsizeweighted drvr
> cntweighted inco.."
      e(datasignature) : "50:10:3720508245:941023990"
         e(properties) : "b V"

matrices:
                  e(b) :  1 x 1
                  e(V) :  1 x 1
                e(Vps) :  9 x 9
                e(bps) :  1 x 9

functions:
             e(sample)
(results model0 are active now)

added macro:
               e(var8) : "\makecell{-152.11 \nextline (491.95)}"
oldest_veh_travelweighted
```

```
Treatment-effects estimation                    Number of obs      =         50
Estimator      : propensity-score matching      Matches: requested =          1
Outcome model  : matching                                   min =          1
Treatment model: logit                                      max =          1
```

oldest_veh_tra~d	Coefficient	AI robust std. err.	z	P>|z|	[95% conf.	interval]
ATE						
nosafetyweighted (1 vs 0)	**-1680.719**	**608.0839**	**-2.76**	**0.006**	**-2872.542**	**-488.8965**

```
teffects psmatch (oldest_veh_travelweighted) (nosafetyweighted hhsizeweighted drvrcntw
> eighted incomeweighted hbppopdnweighted wrkcountweighted numadltweighted youngchildw
> eighted ageweighted), base

scalars:
                  e(N) =  50
                 e(n0) =  16
                 e(n1) =  34
            e(caliper) =  .
            e(treated) =  1
            e(control) =  0
        e(k_nneighbor) =  1
            e(k_nnmin) =  1
            e(k_nnmax) =  1
           e(k_robust) =  2
           e(k_levels) =  2

macros:
               e(cmd) : "teffects"
            e(cmdline) : "teffects psmatch (oldest_veh_travelweighted) (nosafetyweight
> ed hhsizeweighte.."
            e(predict) : "teffects_p"
          e(estat_cmd) : "teffects_estat"
       e(marginsnotok) : "_ALL"
             e(depvar) : "oldest_veh_travelweighted"
               e(tvar) : "nosafetyweighted"
             e(subcmd) : "psmatch"
             e(tmodel) : "logit"
               e(stat) : "ate"
              e(title) : "Treatment-effects estimation"
            e(tlevels) : "0 1"
          e(psvarlist) : "hhsizeweighted drvrcntweighted incomeweighted hbppopdnweight
> ed wrkcountweigh.."
               e(vce) : "robust"
            e(vcetype) : "AI robust"
  e(datasignaturevars) : "oldest_veh_travelweighted nosafetyweighted hhsizeweighted dr
> vrcntweighted in.."
      e(datasignature) : "50:10:2537986941:3483051322"
         e(properties) : "b V"

matrices:
                  e(b) :  1 x 1
                  e(V) :  1 x 1
                 e(Vps) :  9 x 9
                 e(bps) :  1 x 9

functions:
             e(sample)
(results model0 are active now)

added macro:
               e(var9) : "\makecell{-1680.72*** \nextline (608.08)}"
all_hh_new_vehweighted
note: variance correction results in a negative variance estimate; ignoring the
      correction term
```

```
Treatment-effects estimation                    Number of obs      =         50
Estimator      : propensity-score matching      Matches: requested =          1
Outcome model  : matching                                   min =          1
Treatment model: logit                                      max =          1
```

all_hh_new_veh~d	Coefficient	AI robust std. err.	z	P>|z|	[95% conf.	interval]
ATE						
nosafetyweighted (1 vs 0)	**-.0042241**	**.0074646**	**-0.57**	**0.571**	**-.0188544**	**.0104062**

```
teffects psmatch (all_hh_new_vehweighted) (nosafetyweighted hhsizeweighted drvrcntweig
> hted incomeweighted hbppopdnweighted wrkcountweighted numadltweighted youngchildweig
> hted ageweighted), base

scalars:
                  e(N) =  50
                 e(n0) =  16
                 e(n1) =  34
            e(caliper) =  .
            e(treated) =  1
            e(control) =  0
        e(k_nneighbor) =  1
            e(k_nnmin) =  1
            e(k_nnmax) =  1
           e(k_robust) =  2
           e(k_levels) =  2

macros:
               e(cmd) : "teffects"
            e(cmdline) : "teffects psmatch (all_hh_new_vehweighted) (nosafetyweighted
> hhsizeweighted d.."
            e(predict) : "teffects_p"
          e(estat_cmd) : "teffects_estat"
       e(marginsnotok) : "_ALL"
             e(depvar) : "all_hh_new_vehweighted"
               e(tvar) : "nosafetyweighted"
             e(subcmd) : "psmatch"
             e(tmodel) : "logit"
               e(stat) : "ate"
              e(title) : "Treatment-effects estimation"
            e(tlevels) : "0 1"
          e(psvarlist) : "hhsizeweighted drvrcntweighted incomeweighted hbppopdnweight
> ed wrkcountweigh.."
               e(vce) : "robust"
            e(vcetype) : "AI robust"
  e(datasignaturevars) : "all_hh_new_vehweighted nosafetyweighted hhsizeweighted drvrc
> ntweighted incom.."
      e(datasignature) : "50:10:299588085:118450788"
         e(properties) : "b V"

matrices:
                  e(b) :  1 x 1
                  e(V) :  1 x 1
                e(Vps) :  9 x 9
                e(bps) :  1 x 9

functions:
             e(sample)
(results model0 are active now)

added macro:
             e(var10) : "\makecell{-0.004 \nextline (0.007)}"
all_hh_newly_bought_vehweighted
```

```
Treatment-effects estimation                   Number of obs      =         50
Estimator      : propensity-score matching     Matches: requested =          1
Outcome model  : matching                                  min =          1
Treatment model: logit                                     max =          1
```

all_hh_newly_b~d	Coefficient	AI robust std. err.	z	P>|z|	[95% conf.	interval]
ATE						
nosafetyweighted (1 vs 0)	**.0177091**	**.0105975**	**1.67**	**0.095**	**-.0030617**	**.0384799**

```
teffects psmatch (all_hh_newly_bought_vehweighted) (nosafetyweighted hhsizeweighted dr
> vrcntweighted incomeweighted hbppopdnweighted wrkcountweighted numadltweighted young
> childweighted ageweighted), base

scalars:
                  e(N) =  50
                 e(n0) =  16
                 e(n1) =  34
            e(caliper) =  .
            e(treated) =  1
            e(control) =  0
        e(k_nneighbor) =  1
            e(k_nnmin) =  1
            e(k_nnmax) =  1
           e(k_robust) =  2
           e(k_levels) =  2

macros:
               e(cmd) : "teffects"
            e(cmdline) : "teffects psmatch (all_hh_newly_bought_vehweighted) (nosafety
> weighted hhsizew.."
            e(predict) : "teffects_p"
          e(estat_cmd) : "teffects_estat"
       e(marginsnotok) : "_ALL"
             e(depvar) : "all_hh_newly_bought_vehweighted"
               e(tvar) : "nosafetyweighted"
             e(subcmd) : "psmatch"
             e(tmodel) : "logit"
               e(stat) : "ate"
              e(title) : "Treatment-effects estimation"
            e(tlevels) : "0 1"
          e(psvarlist) : "hhsizeweighted drvrcntweighted incomeweighted hbppopdnweight
> ed wrkcountweigh.."
               e(vce) : "robust"
            e(vcetype) : "AI robust"
  e(datasignaturevars) : "all_hh_newly_bought_vehweighted nosafetyweighted hhsizeweigh
> ted drvrcntweigh.."
      e(datasignature) : "50:10:2325852941:1835557083"
         e(properties) : "b V"

matrices:
                  e(b) :  1 x 1
                  e(V) :  1 x 1
                e(Vps) :  9 x 9
                e(bps) :  1 x 9

functions:
             e(sample)
(results model0 are active now)

added macro:
              e(var11) : "\makecell{0.018* \nextline (0.011)}"
(encoding automatically selected: ISO-8859-1)
(37 vars, 51 obs)
(2 observations deleted)
note: x omitted because of collinearity.
```

Source	SS	df	MS		
Model	**0**	**0**	**.**	Prob > F	= **.**
Residual	**0**	**48**	**0**	R-squared	= **.**
				Adj R-squared	= **.**
Total	**0**	**48**	**0**	Root MSE	= **0**

Number of obs	= **49**
F(0, 48)	= **0.00**

y	Coefficient	Std. err.	t	P>|t|	[95% conf. interval]
x	**0**	(omitted)			
_cons	**0**	(omitted)			

single_vehicle_mean_ageweighted

Treatment-effects estimation — Number of obs = **49**
Estimator : **propensity-score matching** — Matches: requested = **1**
Outcome model : **matching** — min = **1**
Treatment model: **logit** — max = **1**

single_vehicle~d	Coefficient	AI robust std. err.	z	P>|z|	[95% conf. interval]	
ATE						
nosafetyweighted (1 vs 0)	**1.050993**	**.3687287**	**2.85**	**0.004**	**.3282977**	**1.773688**

```
teffects psmatch (single_vehicle_mean_ageweighted) (nosafetyweighted hhsizeweighted dr
> vrcntweighted incomeweighted hbppopdnweighted wrkcountweighted numadltweighted agewe
> ighted), base

scalars:
                  e(N) =  49
                 e(n0) =  16
                 e(n1) =  33
            e(caliper) =  .
            e(treated) =  1
            e(control) =  0
        e(k_nneighbor) =  1
            e(k_nnmin) =  1
            e(k_nnmax) =  1
           e(k_robust) =  2
           e(k_levels) =  2

macros:
                e(cmd) : "teffects"
             e(cmdline) : "teffects psmatch (single_vehicle_mean_ageweighted) (nosafety
> weighted hhsizew.."
            e(predict) : "teffects_p"
          e(estat_cmd) : "teffects_estat"
       e(marginsnotok) : "_ALL"
             e(depvar) : "single_vehicle_mean_ageweighted"
               e(tvar) : "nosafetyweighted"
             e(subcmd) : "psmatch"
             e(tmodel) : "logit"
               e(stat) : "ate"
              e(title) : "Treatment-effects estimation"
            e(tlevels) : "0 1"
           e(psvarlist) : "hhsizeweighted drvrcntweighted incomeweighted hbppopdnweight
> ed wrkcountweigh.."
                e(vce) : "robust"
            e(vcetype) : "AI robust"
  e(datasignaturevars) : "single_vehicle_mean_ageweighted nosafetyweighted hhsizeweigh
> ted drvrcntweigh.."
      e(datasignature) : "49:9:51071771:228102266"
         e(properties) : "b V"
```

```
matrices:
                  e(b) :  1 x 1
                  e(V) :  1 x 1
                 e(Vps) :  8 x 8
                 e(bps) :  1 x 8

functions:
             e(sample)
(results model1 are active now)

added macro:
               e(var0) : "\makecell{1.05*** \nextline (0.37)}"
multi_vehicle_mean_ageweighted
note: variance correction results in a negative variance estimate; ignoring the
      correction term

Treatment-effects estimation                   Number of obs      =         49
Estimator      : propensity-score matching     Matches: requested =          1
Outcome model  : matching                                  min =          1
Treatment model: logit                                     max =          1
------------------------------------------------------------------------------
multi_vehicle_~d | Coefficient  AI robust std. err.      z    P>|z|     [95% conf. interval]
-----------------+------------------------------------------------------------
ATE              |
nosafetyweighted |
       (1 vs 0)  |    .7031077   .4610893     1.52   0.127    -.2006108    1.606826
------------------------------------------------------------------------------

teffects psmatch (multi_vehicle_mean_ageweighted) (nosafetyweighted hhsizeweighted drv
> rcntweighted incomeweighted hbppopdnweighted wrkcountweighted numadltweighted agewei
> ghted), base

scalars:
                  e(N) =  49
                 e(n0) =  16
                 e(n1) =  33
            e(caliper) =  .
            e(treated) =  1
            e(control) =  0
        e(k_nneighbor) =  1
            e(k_nnmin) =  1
            e(k_nnmax) =  1
           e(k_robust) =  2
           e(k_levels) =  2

macros:
               e(cmd) : "teffects"
            e(cmdline) : "teffects psmatch (multi_vehicle_mean_ageweighted) (nosafetyw
> eighted hhsizewe.."
            e(predict) : "teffects_p"
          e(estat_cmd) : "teffects_estat"
       e(marginsnotok) : "_ALL"
             e(depvar) : "multi_vehicle_mean_ageweighted"
               e(tvar) : "nosafetyweighted"
            e(subcmd) : "psmatch"
            e(tmodel) : "logit"
              e(stat) : "ate"
             e(title) : "Treatment-effects estimation"
            e(tlevels) : "0 1"
          e(psvarlist) : "hhsizeweighted drvrcntweighted incomeweighted hbppopdnweight
> ed wrkcountweigh.."
               e(vce) : "robust"
            e(vcetype) : "AI robust"
  e(datasignaturevars) : "multi_vehicle_mean_ageweighted nosafetyweighted hhsizeweight
> ed drvrcntweight.."
      e(datasignature) : "49:9:13846297:2786468894"
         e(properties) : "b V"
```

```
matrices:
                  e(b) :  1 x 1
                  e(V) :  1 x 1
                e(Vps) :  8 x 8
                e(bps) :  1 x 8

functions:
             e(sample)
(results model1 are active now)

added macro:
               e(var1) : "\makecell{0.70 \nextline (0.46)}"
multi_vehicle_num_vehiclesweight

Treatment-effects estimation                   Number of obs      =         49
Estimator      : propensity-score matching     Matches: requested =          1
Outcome model  : matching                                  min =          1
Treatment model: logit                                     max =          1
------------------------------------------------------------------------------
multi_vehicle_~t | Coefficient  AI robust std. err.      z    P>|z|     [95% conf. interval]
-----------------+------------------------------------------------------------
ATE              |
nosafetyweighted |
       (1 vs 0)  |   .0859398   .0171366     5.01   0.000     .0523526     .119527
------------------------------------------------------------------------------

teffects psmatch (multi_vehicle_num_vehiclesweight) (nosafetyweighted hhsizeweighted d
> rvrcntweighted incomeweighted hbppopdnweighted wrkcountweighted numadltweighted agew
> eighted), base

scalars:
                  e(N) =  49
                 e(n0) =  16
                 e(n1) =  33
            e(caliper) =  .
            e(treated) =  1
            e(control) =  0
        e(k_nneighbor) =  1
            e(k_nnmin) =  1
            e(k_nnmax) =  1
           e(k_robust) =  2
           e(k_levels) =  2

macros:
               e(cmd) : "teffects"
            e(cmdline) : "teffects psmatch (multi_vehicle_num_vehiclesweight) (nosafet
> yweighted hhsize.."
            e(predict) : "teffects_p"
          e(estat_cmd) : "teffects_estat"
       e(marginsnotok) : "_ALL"
             e(depvar) : "multi_vehicle_num_vehiclesweight"
               e(tvar) : "nosafetyweighted"
            e(subcmd) : "psmatch"
            e(tmodel) : "logit"
              e(stat) : "ate"
             e(title) : "Treatment-effects estimation"
           e(tlevels) : "0 1"
         e(psvarlist) : "hhsizeweighted drvrcntweighted incomeweighted hbppopdnweight
> ed wrkcountweigh.."
               e(vce) : "robust"
            e(vcetype) : "AI robust"
  e(datasignaturevars) : "multi_vehicle_num_vehiclesweight nosafetyweighted hhsizeweig
> hted drvrcntweig.."
      e(datasignature) : "49:9:3955129635:2984674408"
         e(properties) : "b V"

matrices:
                  e(b) :  1 x 1
                  e(V) :  1 x 1
                e(Vps) :  8 x 8
                e(bps) :  1 x 8
```

```
functions:
             e(sample)
(results model1 are active now)

added macro:
               e(var2) : "\makecell{0.09*** \nextline (0.02)}"
num_new_vehweighted

Treatment-effects estimation                   Number of obs      =         49
Estimator      : propensity-score matching     Matches: requested =          1
Outcome model  : matching                                  min =          1
Treatment model: logit                                     max =          1
------------------------------------------------------------------------------
num_new_vehwei~d | Coefficient  AI robust std. err.      z    P>|z|     [95% conf. interval]
-----------------+------------------------------------------------------------
ATE              |
nosafetyweighted |
       (1 vs 0)  |  -.0098355   .0046922    -2.10   0.036    -.0190321   -.0006389
------------------------------------------------------------------------------

teffects psmatch (num_new_vehweighted) (nosafetyweighted hhsizeweighted drvrcntweighte
> d incomeweighted hbppopdnweighted wrkcountweighted numadltweighted ageweighted), bas
> e

scalars:
                  e(N) =  49
                 e(n0) =  16
                 e(n1) =  33
            e(caliper) =  .
            e(treated) =  1
            e(control) =  0
        e(k_nneighbor) =  1
            e(k_nnmin) =  1
            e(k_nnmax) =  1
           e(k_robust) =  2
           e(k_levels) =  2

macros:
               e(cmd) : "teffects"
            e(cmdline) : "teffects psmatch (num_new_vehweighted) (nosafetyweighted hhs
> izeweighted drvr.."
            e(predict) : "teffects_p"
          e(estat_cmd) : "teffects_estat"
       e(marginsnotok) : "_ALL"
             e(depvar) : "num_new_vehweighted"
               e(tvar) : "nosafetyweighted"
            e(subcmd) : "psmatch"
            e(tmodel) : "logit"
              e(stat) : "ate"
             e(title) : "Treatment-effects estimation"
           e(tlevels) : "0 1"
         e(psvarlist) : "hhsizeweighted drvrcntweighted incomeweighted hbppopdnweight
> ed wrkcountweigh.."
               e(vce) : "robust"
            e(vcetype) : "AI robust"
  e(datasignaturevars) : "num_new_vehweighted nosafetyweighted hhsizeweighted drvrcntw
> eighted incomewe.."
      e(datasignature) : "49:9:1960277135:1583456000"
         e(properties) : "b V"

matrices:
                  e(b) :  1 x 1
                  e(V) :  1 x 1
                e(Vps) :  8 x 8
                e(bps) :  1 x 8

functions:
             e(sample)
(results model1 are active now)
```

```
added macro:
              e(var3) : "\makecell{-0.010** \nextline (0.005)}"
max_veh_ageweighted

Treatment-effects estimation                   Number of obs      =         49
Estimator      : propensity-score matching     Matches: requested =          1
Outcome model  : matching                                 min =          1
Treatment model: logit                                    max =          1
```

max_veh_agewei~d	Coefficient	AI robust std. err.	z	P>|z|	[95% conf.	interval]
ATE						
nosafetyweighted (1 vs 0)	**1.274442**	**.0457939**	**27.83**	**0.000**	**1.184687**	**1.364196**

```
teffects psmatch (max_veh_ageweighted) (nosafetyweighted hhsizeweighted drvrcntweighte
> d incomeweighted hbppopdnweighted wrkcountweighted numadltweighted ageweighted), bas
> e

scalars:
                  e(N) =  49
                 e(n0) =  16
                 e(n1) =  33
            e(caliper) =  .
           e(treated) =  1
           e(control) =  0
        e(k_nneighbor) =  1
           e(k_nnmin) =  1
           e(k_nnmax) =  1
          e(k_robust) =  2
          e(k_levels) =  2

macros:
               e(cmd) : "teffects"
            e(cmdline) : "teffects psmatch (max_veh_ageweighted) (nosafetyweighted hhs
> izeweighted drvr.."
            e(predict) : "teffects_p"
          e(estat_cmd) : "teffects_estat"
       e(marginsnotok) : "_ALL"
             e(depvar) : "max_veh_ageweighted"
               e(tvar) : "nosafetyweighted"
            e(subcmd) : "psmatch"
            e(tmodel) : "logit"
              e(stat) : "ate"
             e(title) : "Treatment-effects estimation"
           e(tlevels) : "0 1"
         e(psvarlist) : "hhsizeweighted drvrcntweighted incomeweighted hbppopdnweight
> ed wrkcountweigh.."
               e(vce) : "robust"
            e(vcetype) : "AI robust"
  e(datasignaturevars) : "max_veh_ageweighted nosafetyweighted hhsizeweighted drvrcntw
> eighted incomewe.."
      e(datasignature) : "49:9:3897577000:4210471139"
         e(properties) : "b V"

matrices:
                  e(b) :  1 x 1
                  e(V) :  1 x 1
                e(Vps) :  8 x 8
                e(bps) :  1 x 8

functions:
             e(sample)
(results model1 are active now)

added macro:
              e(var4) : "\makecell{1.27*** \nextline (0.05)}"
min_milesweighted
```

```
Treatment-effects estimation                   Number of obs      =         49
Estimator      : propensity-score matching     Matches: requested =          1
Outcome model  : matching                                  min =          1
Treatment model: logit                                     max =          1
```

min_milesweigh~d	Coefficient	AI robust std. err.	z	P>|z|	[95% conf. interval]	
ATE						
nosafetyweighted (1 vs 0)	**-394.4711**	**209.7487**	**-1.88**	**0.060**	**-805.571**	**16.62879**

```
teffects psmatch (min_milesweighted) (nosafetyweighted hhsizeweighted drvrcntweighted
> incomeweighted hbppopdnweighted wrkcountweighted numadltweighted ageweighted), base

scalars:
                  e(N) =  49
                 e(n0) =  16
                 e(n1) =  33
            e(caliper) =  .
            e(treated) =  1
            e(control) =  0
        e(k_nneighbor) =  1
            e(k_nnmin) =  1
            e(k_nnmax) =  1
           e(k_robust) =  2
           e(k_levels) =  2

macros:
               e(cmd) : "teffects"
            e(cmdline) : "teffects psmatch (min_milesweighted) (nosafetyweighted hhsiz
> eweighted drvrcn.."
            e(predict) : "teffects_p"
          e(estat_cmd) : "teffects_estat"
       e(marginsnotok) : "_ALL"
             e(depvar) : "min_milesweighted"
               e(tvar) : "nosafetyweighted"
            e(subcmd) : "psmatch"
            e(tmodel) : "logit"
              e(stat) : "ate"
             e(title) : "Treatment-effects estimation"
           e(tlevels) : "0 1"
         e(psvarlist) : "hhsizeweighted drvrcntweighted incomeweighted hbppopdnweight
> ed wrkcountweigh.."
               e(vce) : "robust"
            e(vcetype) : "AI robust"
  e(datasignaturevars) : "min_milesweighted nosafetyweighted hhsizeweighted drvrcntwei
> ghted incomeweig.."
      e(datasignature) : "49:9:3215404966:2707890815"
         e(properties) : "b V"

matrices:
                  e(b) :  1 x 1
                  e(V) :  1 x 1
                e(Vps) :  8 x 8
                e(bps) :  1 x 8

functions:
             e(sample)
(results model1 are active now)

added macro:
              e(var5) : "\makecell{-394.47* \nextline (209.75)}"
num_vehiclesweighted
```

```
Treatment-effects estimation                    Number of obs      =         49
Estimator      : propensity-score matching      Matches: requested =          1
Outcome model  : matching                                   min =          1
Treatment model: logit                                      max =          1
```

num_vehicleswe~d	Coefficient	AI robust std. err.	z	P>|z|	[95% conf. interval]	
ATE						
nosafetyweighted (1 vs 0)	**.0964655**	**.0272158**	**3.54**	**0.000**	**.0431235**	**.1498074**

```
teffects psmatch (num_vehiclesweighted) (nosafetyweighted hhsizeweighted drvrcntweight
> ed incomeweighted hbppopdnweighted wrkcountweighted numadltweighted ageweighted), ba
> se

scalars:
                  e(N) =  49
                 e(n0) =  16
                 e(n1) =  33
            e(caliper) =  .
            e(treated) =  1
            e(control) =  0
        e(k_nneighbor) =  1
            e(k_nnmin) =  1
            e(k_nnmax) =  1
           e(k_robust) =  2
           e(k_levels) =  2

macros:
               e(cmd) : "teffects"
            e(cmdline) : "teffects psmatch (num_vehiclesweighted) (nosafetyweighted hh
> sizeweighted drv.."
            e(predict) : "teffects_p"
          e(estat_cmd) : "teffects_estat"
       e(marginsnotok) : "_ALL"
             e(depvar) : "num_vehiclesweighted"
               e(tvar) : "nosafetyweighted"
             e(subcmd) : "psmatch"
             e(tmodel) : "logit"
               e(stat) : "ate"
              e(title) : "Treatment-effects estimation"
            e(tlevels) : "0 1"
          e(psvarlist) : "hhsizeweighted drvrcntweighted incomeweighted hbppopdnweight
> ed wrkcountweigh.."
               e(vce) : "robust"
            e(vcetype) : "AI robust"
  e(datasignaturevars) : "num_vehiclesweighted nosafetyweighted hhsizeweighted drvrcnt
> weighted incomew.."
      e(datasignature) : "49:9:468238150:500291946"
         e(properties) : "b V"

matrices:
                  e(b) :  1 x 1
                  e(V) :  1 x 1
                e(Vps) :  8 x 8
                e(bps) :  1 x 8

functions:
             e(sample)
(results model1 are active now)

added macro:
              e(var6) : "\makecell{0.10*** \nextline (0.03)}"
num_newly_bought_vehweighted
```

```
Treatment-effects estimation                   Number of obs      =         49
Estimator      : propensity-score matching     Matches: requested =          1
Outcome model  : matching                                  min =          1
Treatment model: logit                                     max =          1
```

num_newly_boug~d	Coefficient	AI robust std. err.	z	P>|z|	[95% conf. interval]	
ATE						
nosafetyweighted (1 vs 0)	**-.0177456**	**.0064072**	**-2.77**	**0.006**	**-.0303035**	**-.0051877**

```
teffects psmatch (num_newly_bought_vehweighted) (nosafetyweighted hhsizeweighted drvrc
> ntweighted incomeweighted hbppopdnweighted wrkcountweighted numadltweighted ageweigh
> ted), base

scalars:
                  e(N) =  49
                 e(n0) =  16
                 e(n1) =  33
            e(caliper) =  .
            e(treated) =  1
            e(control) =  0
        e(k_nneighbor) =  1
            e(k_nnmin) =  1
            e(k_nnmax) =  1
           e(k_robust) =  2
           e(k_levels) =  2

macros:
               e(cmd) : "teffects"
            e(cmdline) : "teffects psmatch (num_newly_bought_vehweighted) (nosafetywei
> ghted hhsizeweig.."
            e(predict) : "teffects_p"
          e(estat_cmd) : "teffects_estat"
       e(marginsnotok) : "_ALL"
             e(depvar) : "num_newly_bought_vehweighted"
               e(tvar) : "nosafetyweighted"
             e(subcmd) : "psmatch"
             e(tmodel) : "logit"
               e(stat) : "ate"
              e(title) : "Treatment-effects estimation"
            e(tlevels) : "0 1"
          e(psvarlist) : "hhsizeweighted drvrcntweighted incomeweighted hbppopdnweight
> ed wrkcountweigh.."
               e(vce) : "robust"
            e(vcetype) : "AI robust"
  e(datasignaturevars) : "num_newly_bought_vehweighted nosafetyweighted hhsizeweighted
>  drvrcntweighted.."
      e(datasignature) : "49:9:3573417527:3729756001"
         e(properties) : "b V"

matrices:
                  e(b) :  1 x 1
                  e(V) :  1 x 1
                 e(Vps) :  8 x 8
                 e(bps) :  1 x 8

functions:
             e(sample)
(results model1 are active now)

added macro:
               e(var7) : "\makecell{-0.02*** \nextline (0.01)}"
sum_total_milesweighted
note: variance correction results in a negative variance estimate; ignoring the
      correction term
```

```
Treatment-effects estimation                    Number of obs      =         49
Estimator      : propensity-score matching      Matches: requested =          1
Outcome model  : matching                                   min =          1
Treatment model: logit                                      max =          1
```

sum_total_mile~d	Coefficient	AI robust std. err.	z	P>|z|	[95% conf.	interval]
ATE						
nosafetyweighted (1 vs 0)	**415.6768**	**684.1917**	**0.61**	**0.543**	**-925.3142**	**1756.668**

```
teffects psmatch (sum_total_milesweighted) (nosafetyweighted hhsizeweighted drvrcntwei
> ghted incomeweighted hbppopdnweighted wrkcountweighted numadltweighted ageweighted),
>  base

scalars:
                  e(N) =  49
                 e(n0) =  16
                 e(n1) =  33
            e(caliper) =  .
            e(treated) =  1
            e(control) =  0
        e(k_nneighbor) =  1
            e(k_nnmin) =  1
            e(k_nnmax) =  1
           e(k_robust) =  2
           e(k_levels) =  2

macros:
               e(cmd) : "teffects"
            e(cmdline) : "teffects psmatch (sum_total_milesweighted) (nosafetyweighted
>  hhsizeweighted .."
            e(predict) : "teffects_p"
          e(estat_cmd) : "teffects_estat"
       e(marginsnotok) : "_ALL"
             e(depvar) : "sum_total_milesweighted"
               e(tvar) : "nosafetyweighted"
            e(subcmd) : "psmatch"
            e(tmodel) : "logit"
              e(stat) : "ate"
             e(title) : "Treatment-effects estimation"
           e(tlevels) : "0 1"
         e(psvarlist) : "hhsizeweighted drvrcntweighted incomeweighted hbppopdnweight
> ed wrkcountweigh.."
               e(vce) : "robust"
            e(vcetype) : "AI robust"
  e(datasignaturevars) : "sum_total_milesweighted nosafetyweighted hhsizeweighted drvr
> cntweighted inco.."
      e(datasignature) : "49:9:3659988643:956617398"
         e(properties) : "b V"

matrices:
                  e(b) :  1 x 1
                  e(V) :  1 x 1
                e(Vps) :  8 x 8
                e(bps) :  1 x 8

functions:
             e(sample)
(results model1 are active now)

added macro:
               e(var8) : "\makecell{415.68 \nextline (684.19)}"
oldest_veh_travelweighted
```

```
Treatment-effects estimation                    Number of obs      =         49
Estimator      : propensity-score matching      Matches: requested =          1
Outcome model  : matching                                   min =          1
Treatment model: logit                                      max =          1
```

oldest_veh_tra~d	Coefficient	AI robust std. err.	z	P>|z|	[95% conf. interval]	
ATE						
nosafetyweighted (1 vs 0)	**-461.1934**	**293.1358**	**-1.57**	**0.116**	**-1035.729**	**113.3422**

```
teffects psmatch (oldest_veh_travelweighted) (nosafetyweighted hhsizeweighted drvrcntw
> eighted incomeweighted hbppopdnweighted wrkcountweighted numadltweighted ageweighted
> ), base

scalars:
                  e(N) =  49
                 e(n0) =  16
                 e(n1) =  33
            e(caliper) =  .
            e(treated) =  1
            e(control) =  0
        e(k_nneighbor) =  1
            e(k_nnmin) =  1
            e(k_nnmax) =  1
           e(k_robust) =  2
           e(k_levels) =  2

macros:
               e(cmd) : "teffects"
            e(cmdline) : "teffects psmatch (oldest_veh_travelweighted) (nosafetyweight
> ed hhsizeweighte.."
            e(predict) : "teffects_p"
          e(estat_cmd) : "teffects_estat"
       e(marginsnotok) : "_ALL"
             e(depvar) : "oldest_veh_travelweighted"
               e(tvar) : "nosafetyweighted"
             e(subcmd) : "psmatch"
             e(tmodel) : "logit"
               e(stat) : "ate"
              e(title) : "Treatment-effects estimation"
            e(tlevels) : "0 1"
          e(psvarlist) : "hhsizeweighted drvrcntweighted incomeweighted hbppopdnweight
> ed wrkcountweigh.."
               e(vce) : "robust"
            e(vcetype) : "AI robust"
  e(datasignaturevars) : "oldest_veh_travelweighted nosafetyweighted hhsizeweighted dr
> vrcntweighted in.."
      e(datasignature) : "49:9:3665942418:2539088885"
         e(properties) : "b V"

matrices:
                  e(b) :  1 x 1
                  e(V) :  1 x 1
                e(Vps) :  8 x 8
                e(bps) :  1 x 8

functions:
             e(sample)
(results model1 are active now)

added macro:
               e(var9) : "\makecell{-461.19 \nextline (293.14)}"
all_hh_new_vehweighted
```

```
Treatment-effects estimation                    Number of obs      =         49
Estimator      : propensity-score matching      Matches: requested =          1
Outcome model  : matching                                   min =          1
Treatment model: logit                                      max =          1
```

all_hh_new_veh~d	Coefficient	AI robust std. err.	z	P>|z|	[95% conf.	interval]
ATE						
nosafetyweighted (1 vs 0)	**-.0084764**	**.0041558**	**-2.04**	**0.041**	**-.0166217**	**-.0003311**

```
teffects psmatch (all_hh_new_vehweighted) (nosafetyweighted hhsizeweighted drvrcntweig
> hted incomeweighted hbppopdnweighted wrkcountweighted numadltweighted ageweighted),
> base

scalars:
                  e(N) =  49
                 e(n0) =  16
                 e(n1) =  33
            e(caliper) =  .
            e(treated) =  1
            e(control) =  0
        e(k_nneighbor) =  1
            e(k_nnmin) =  1
            e(k_nnmax) =  1
           e(k_robust) =  2
           e(k_levels) =  2

macros:
               e(cmd) : "teffects"
            e(cmdline) : "teffects psmatch (all_hh_new_vehweighted) (nosafetyweighted
> hhsizeweighted d.."
            e(predict) : "teffects_p"
          e(estat_cmd) : "teffects_estat"
       e(marginsnotok) : "_ALL"
             e(depvar) : "all_hh_new_vehweighted"
               e(tvar) : "nosafetyweighted"
            e(subcmd) : "psmatch"
            e(tmodel) : "logit"
              e(stat) : "ate"
             e(title) : "Treatment-effects estimation"
           e(tlevels) : "0 1"
         e(psvarlist) : "hhsizeweighted drvrcntweighted incomeweighted hbppopdnweight
> ed wrkcountweigh.."
               e(vce) : "robust"
           e(vcetype) : "AI robust"
  e(datasignaturevars) : "all_hh_new_vehweighted nosafetyweighted hhsizeweighted drvrc
> ntweighted incom.."
      e(datasignature) : "49:9:1310804481:4051873444"
         e(properties) : "b V"

matrices:
                  e(b) :  1 x 1
                  e(V) :  1 x 1
                e(Vps) :  8 x 8
                e(bps) :  1 x 8

functions:
             e(sample)
(results model1 are active now)

added macro:
             e(var10) : "\makecell{-0.008** \nextline (0.004)}"
all_hh_newly_bought_vehweighted
```

```
Treatment-effects estimation                    Number of obs      =         49
Estimator      : propensity-score matching      Matches: requested =          1
Outcome model  : matching                                   min =          1
Treatment model: logit                                      max =          1
```

all_hh_newly_b~d	Coefficient	AI robust std. err.	z	P>|z|	[95% conf.	interval]
ATE						
nosafetyweighted (1 vs 0)	**-.0145707**	**.0058399**	**-2.50**	**0.013**	**-.0260167**	**-.0031247**

```
teffects psmatch (all_hh_newly_bought_vehweighted) (nosafetyweighted hhsizeweighted dr
> vrcntweighted incomeweighted hbppopdnweighted wrkcountweighted numadltweighted agewe
> ighted), base

scalars:
                  e(N) =  49
                 e(n0) =  16
                 e(n1) =  33
            e(caliper) =  .
            e(treated) =  1
            e(control) =  0
        e(k_nneighbor) =  1
            e(k_nnmin) =  1
            e(k_nnmax) =  1
           e(k_robust) =  2
           e(k_levels) =  2

macros:
               e(cmd) : "teffects"
            e(cmdline) : "teffects psmatch (all_hh_newly_bought_vehweighted) (nosafety
> weighted hhsizew.."
            e(predict) : "teffects_p"
          e(estat_cmd) : "teffects_estat"
       e(marginsnotok) : "_ALL"
             e(depvar) : "all_hh_newly_bought_vehweighted"
               e(tvar) : "nosafetyweighted"
            e(subcmd) : "psmatch"
            e(tmodel) : "logit"
              e(stat) : "ate"
             e(title) : "Treatment-effects estimation"
           e(tlevels) : "0 1"
         e(psvarlist) : "hhsizeweighted drvrcntweighted incomeweighted hbppopdnweight
> ed wrkcountweigh.."
               e(vce) : "robust"
           e(vcetype) : "AI robust"
  e(datasignaturevars) : "all_hh_newly_bought_vehweighted nosafetyweighted hhsizeweigh
> ted drvrcntweigh.."
      e(datasignature) : "49:9:1848371731:1857011780"
         e(properties) : "b V"

matrices:
                  e(b) :  1 x 1
                  e(V) :  1 x 1
                e(Vps) :  8 x 8
                e(bps) :  1 x 8

functions:
             e(sample)
(results model1 are active now)

added macro:
              e(var11) : "\makecell{-0.015** \nextline (0.006)}"
```

```
36.
37. esttab model1 model0 using "Tables/causal-NHTS.tex", drop(*) stats(`out_vars', label
  > s("\makecell{Single-Vehicle Household \nextline Vehicle Age}" "\makecell{Multi-Vehic
  > le Household \nextline Vehicle Age}" "\makecell{Multi-Vehicle Households \nextline V
  > ehicle Count}" "\makecell{Vehicle-Owning Households \nextline New Vehicles Count}" "
  > \makecell{Vehicle-Owning Households \nextline Maximum Vehicle Age}" "\makecell{Vehic
  > le-Owning Households \nextline Minimum Self-Reported Annual VMT}" "\makecell{All Hou
  > seholds \nextline Vehicle Count}" "\makecell{Vehicle-Owning Households \nextline New
  > ly-Purchased Vehicle Count}" "\makecell{All Households \nextline Self-Reported Aggre
  > gate Household VMT}" "\makecell{Vehicle-Owning Households \nextline Oldest Vehicle S
  > elf-Reported Annual VMT}" "\makecell{All Households \nextline New Vehicles Count}" "
  > \makecell{All Households \nextline Newly-Purchased Vehicle Count}")) nostar mtitles(
  > "NHTS 2009" "NHTS 2017") nonumbers not nolines  replace sub(\_ _) align(l|ll)
  (output written to Tables/causal-NHTS.tex)

38. log close
      name:  <unnamed>
       log:  C:\Users\akshayaj\Box\NHTSAnalysis\Logs/CausalNHTS.smcl
  log type:  smcl
 closed on:  20 Sep 2024, 22:44:10
-------------------------------------------------------------------------------
```