data NewYork2005;

State='New York 2005';

input Sex $ Age $ Incidence PYear;

datalines;

Female 00-14 0 1829978

Female 15-39 208 3308605

Female 40-64 503 3657966

Female 65+ 250 1131029

data NewYork2016;

State='New York 2016';

input Sex $ Age $ Incidence PYear;

datalines;

Female 00-14 0 1690067

Female 15-39 187 3393894

Female 40-64 441 3337074

Female 65+ 197 1445591

;

data TwoStates;

length State $ 20.;

set NewYork2005 NewYork2016;

run;

data US2005;

input Sex $ Age $ PYear;

datalines;

Female 00-14 29564085

Female 15-39 50616918

Female 40-64 48936660

Female 65+ 21201859

;

data US2016;

input Sex $ Age $ PYear;

datalines;

Female 00-14 29851000

Female 15-39 53417000

Female 40-64 53057000

Female 65+ 26337000

;

data US20052016;

length State $ 20.;

set US2005 US2016;

run;

ods graphics on;

proc stdrate data=TwoStates

refdata=US20052016

method=direct

stat=rate(mult=100000)

effect

plots(only)=(dist effect)

;

population group=State event=Incidence total=PYear;

reference total=PYear;

strata Sex Age / effect;

run;

ods graphics off;