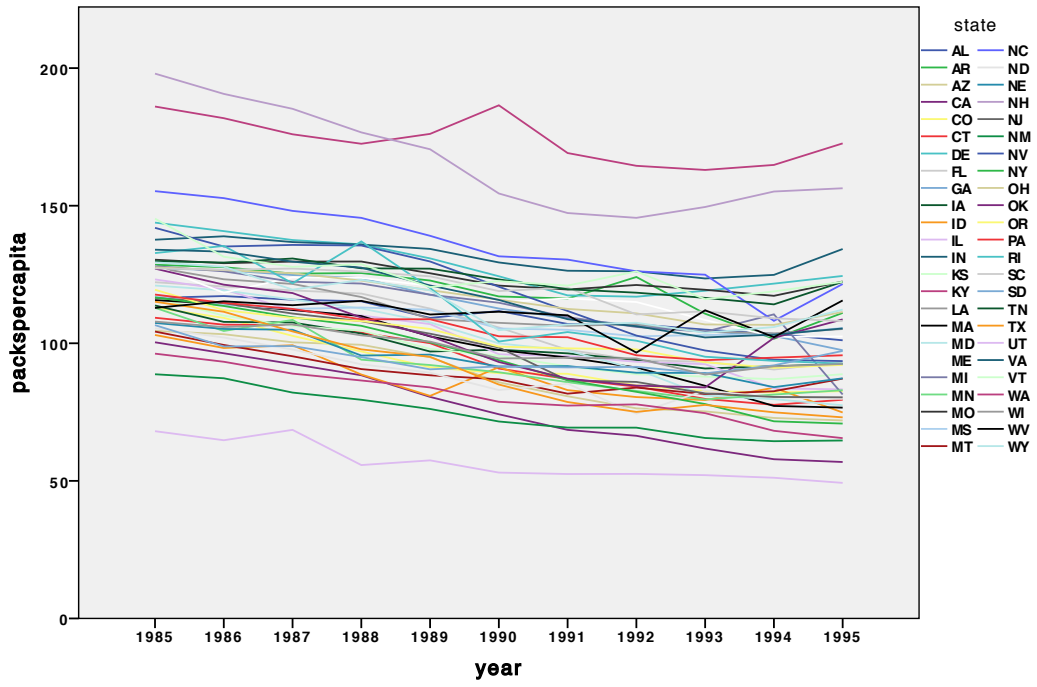
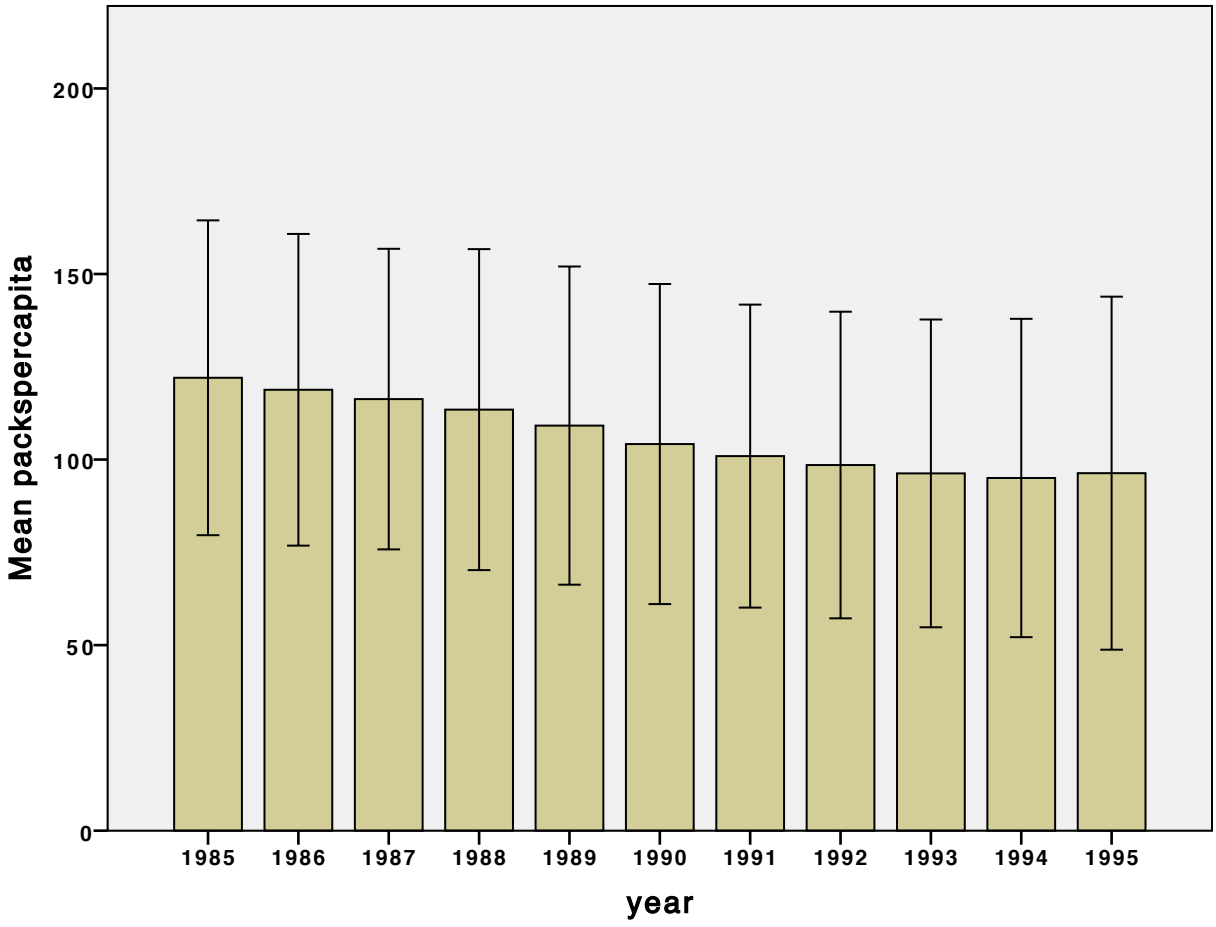



```
 * Chart Builder.
GGRAPH
  /GRAPHDATASET NAME="graphdataset" VARIABLES=year MEANSD(packspercapita, 2)[n
ame="MEAN_packspercapita" LOW="MEAN_packspercapita_LOW" HIGH="MEAN_packspercap
ita_HIGH"] MISSING=LISTWISE REPORTMISSING=NO
  /GRAPHSPEC SOURCE=INLINE.
BEGIN GPL
  SOURCE: s=userSource(id("graphdataset"))
  DATA: year=col(source(s), name("year"), unit.category())
  DATA: MEAN_packspercapita=col(source(s), name("MEAN_packspercapita"))
  DATA: LOW=col(source(s), name("MEAN_packspercapita_LOW"))
  DATA: HIGH=col(source(s), name("MEAN_packspercapita_HIGH"))
  GUIDE: axis(dim(1), label("year"))
  GUIDE: axis(dim(2), label("Mean packspercapita"))
  GUIDE: text.footnote(label("Error Bars: +/- 2 SD"))
  SCALE: linear(dim(2), include(0))
  ELEMENT: interval(position(year*MEAN_packspercapita), shape.interior(shape.s
quare))
  ELEMENT: interval(position(region.spread.range(year*(LOW+HIGH))), shape.inte
rior(shape.ibeam))
END GPL.
```

GGraph

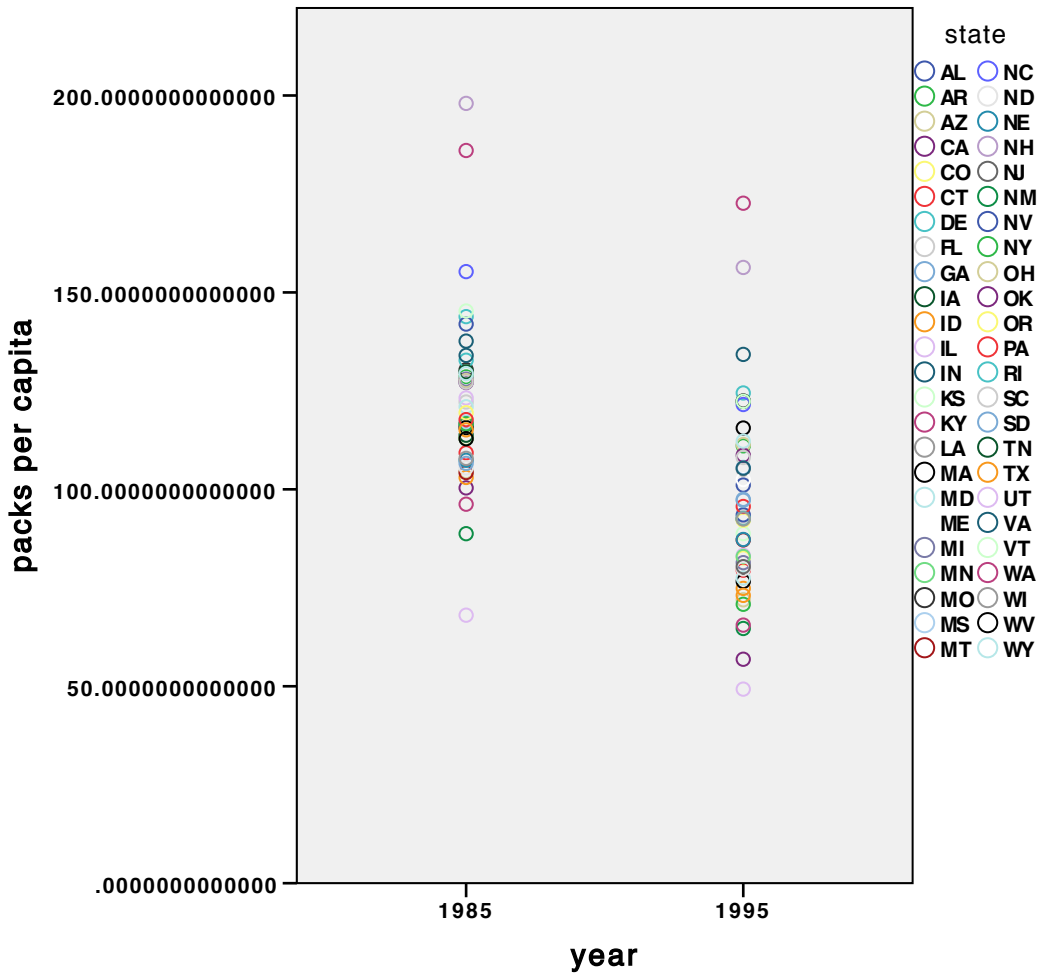
Notes

Resources	Processor Time	00:00:00.20
	Elapsed Time	00:00:01.00



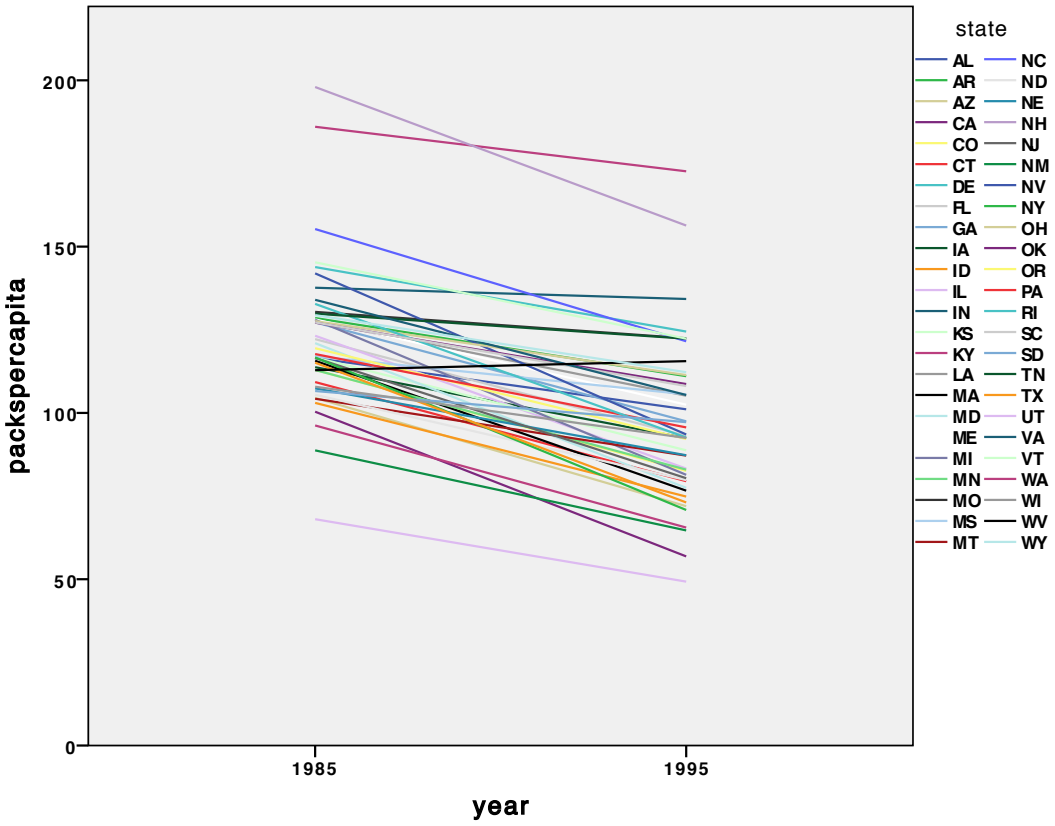
Error Bars: +/- 2 SD

```
 DATASET COPY  firstAndLastYears
DATASET ACTIVATE  firstAndLastYears
FILTER OFF.
USE ALL.
SELECT IF (year = 1985 or year = 1995).
EXECUTE.
DATASET ACTIVATE  DataSet1.
DATASET ACTIVATE firstAndLastYears
* Chart Builder.
GGRAPH
  /GRAPHDATASET NAME="graphdataset" VARIABLES=year packspercapita state MISSIN
G=LISTWISE REPORTMISSING=NO
  /GRAPHSPEC SOURCE=INLINE.
BEGIN GPL
  SOURCE: s=userSource(id("graphdataset"))
```



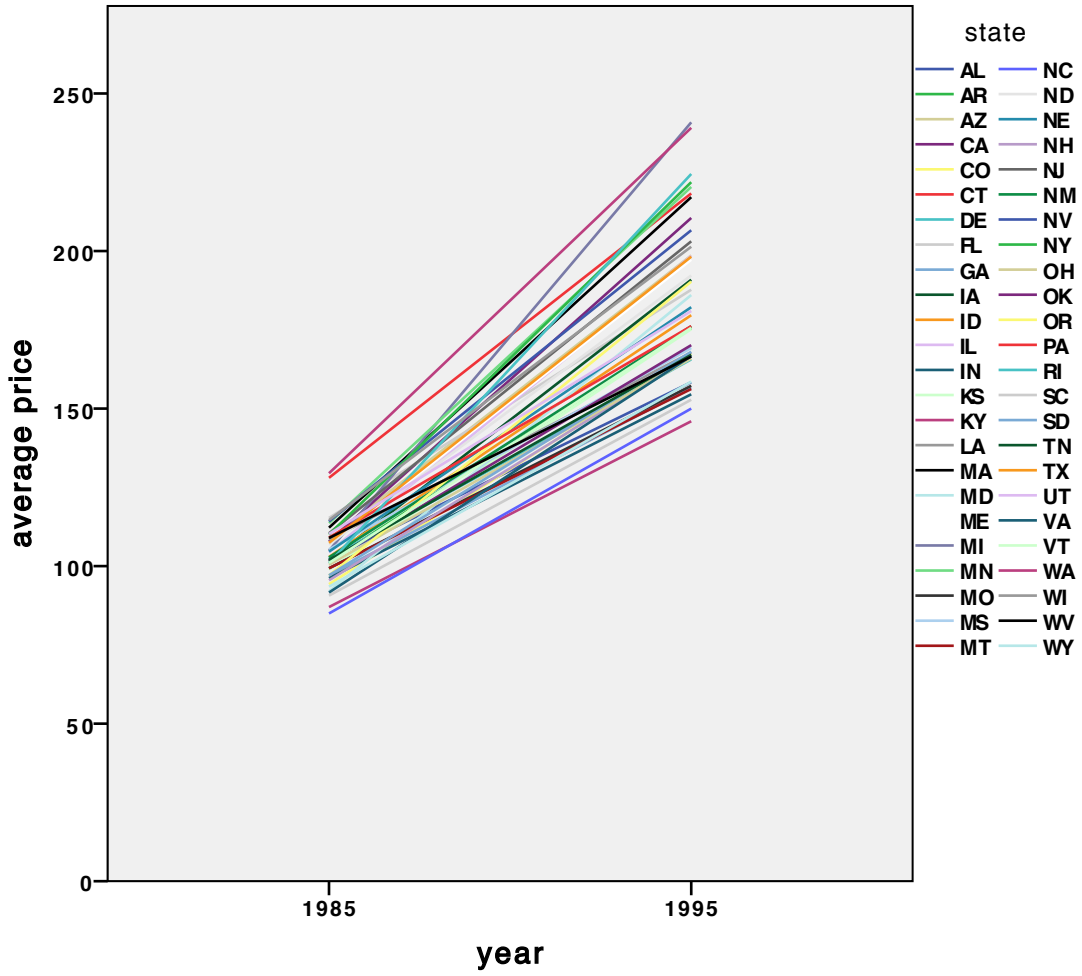

```
 * Chart Builder.
GGRAPH
  /GRAPHDATASET NAME="graphdataset" VARIABLES=year packspercapita state MISSIN
G=LISTWISE REPORTMISSING=NO
  /GRAPHSPEC SOURCE=INLINE.
BEGIN GPL
  SOURCE: s=userSource(id("graphdataset"))
  DATA: year=col(source(s), name("year"), unit.category())
  DATA: packspercapita=col(source(s), name("packspercapita"))
  DATA: state=col(source(s), name("state"), unit.category())
  GUIDE: axis(dim(1), label("year"))
  GUIDE: axis(dim(2), label("packspercapita"))
  GUIDE: legend(aesthetic(aesthetic.color.interior), label("state"))
  SCALE: linear(dim(2), include(0))
  ELEMENT: line(position(year*packspercapita), color.interior(state), missing.
wings())
END GPL.
```

GGraph



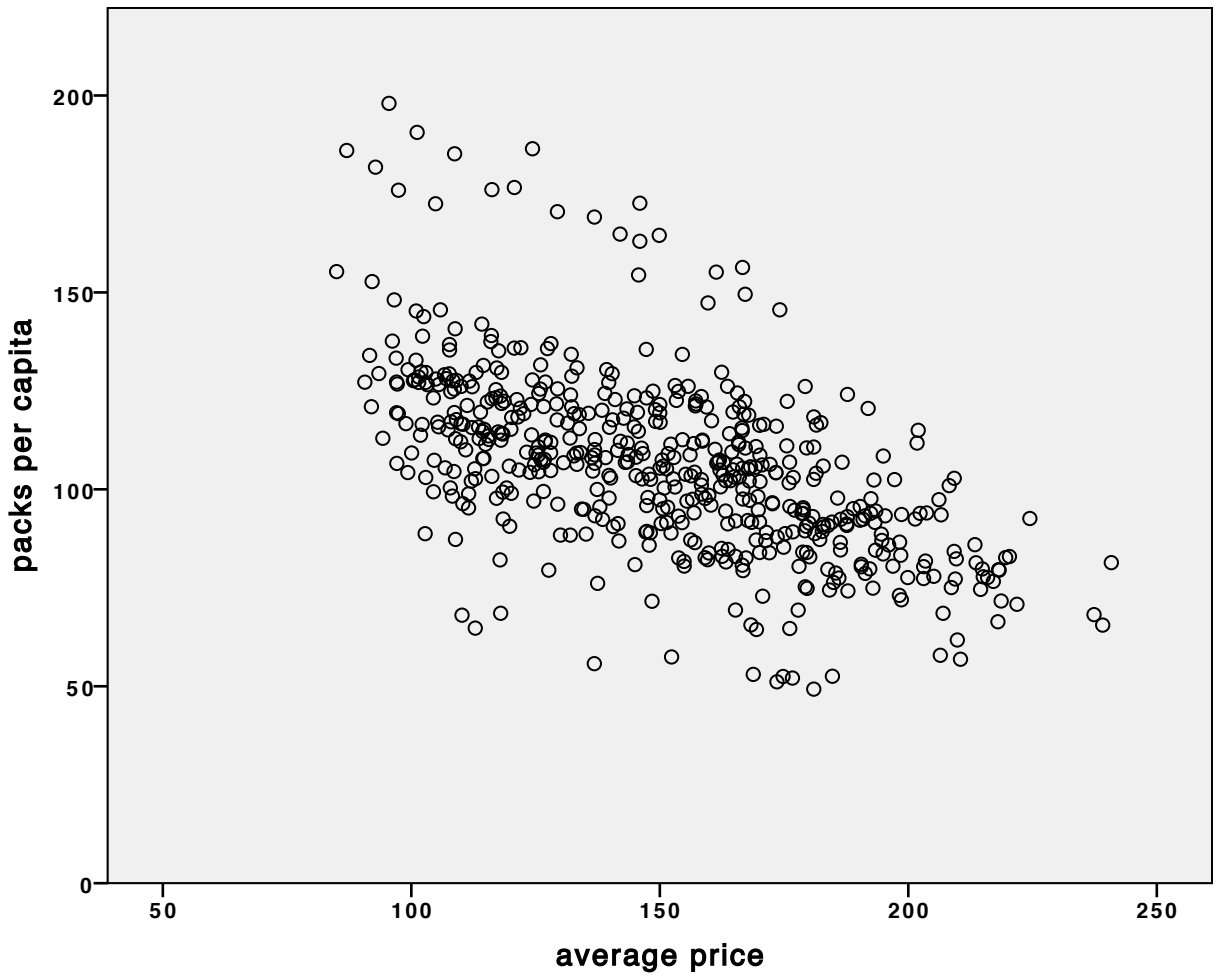

```
 * Chart Builder.
GGRAPH
  /GRAPHDATASET NAME="graphdataset" VARIABLES=year averageprice state MISSING=
LISTWISE REPORTMISSING=NO
  /GRAPHSPEC SOURCE=INLINE.
BEGIN GPL
  SOURCE: s=userSource(id("graphdataset"))
  DATA: year=col(source(s), name("year"), unit.category())
  DATA: averageprice=col(source(s), name("averageprice"))
  DATA: state=col(source(s), name("state"), unit.category())
  GUIDE: axis(dim(1), label("year"))
  GUIDE: axis(dim(2), label("average price"))
  GUIDE: legend(aesthetic(aesthetic.color.interior), label("state"))
  SCALE: linear(dim(2), include(0))
  ELEMENT: line(position(year*averageprice), color.interior(state), missing.wi
ngs())
END GPL.
```

GGraph



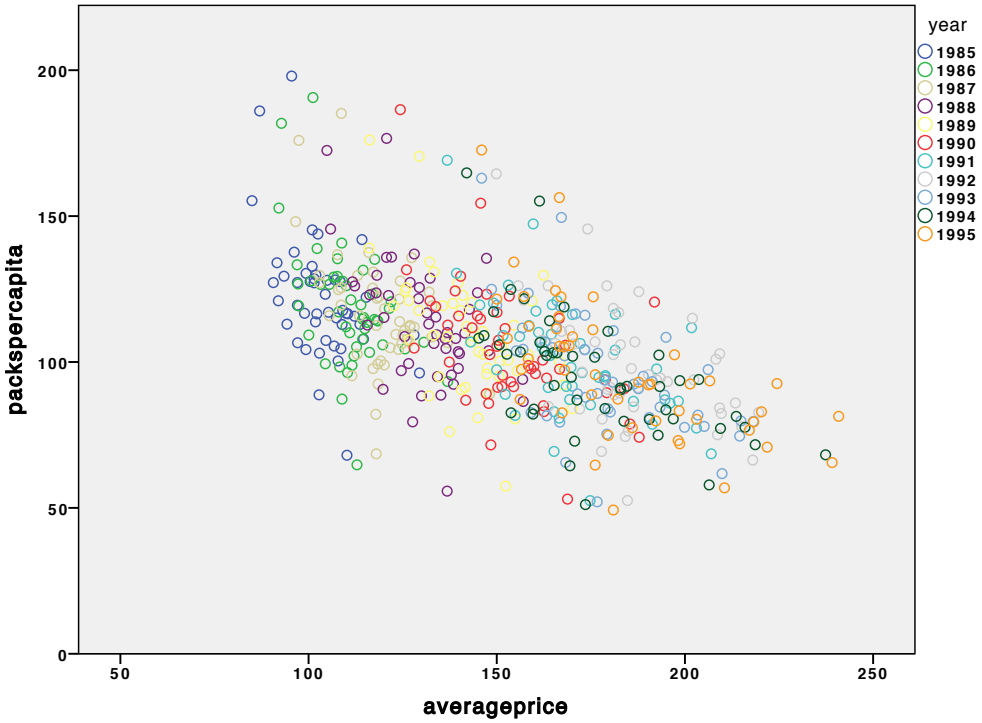

```
 DATASET ACTIVATE DataSet1.
* Chart Builder.
GGRAPH
  /GRAPHDATASET NAME="graphdataset" VARIABLES=averageprice packspercapita MISS
ING=LISTWISE REPORTMISSING=NO
  /GRAPHSPEC SOURCE=INLINE.
BEGIN GPL
  SOURCE: s=userSource(id("graphdataset"))
  DATA: averageprice=col(source(s), name("averageprice"))
  DATA: packspercapita=col(source(s), name("packspercapita"))
  GUIDE: axis(dim(1), label("average price"))
  GUIDE: axis(dim(2), label("packs per capita"))
  ELEMENT: point(position(averageprice*packspercapita))
END GPL.
```

GGraph




```
 * Chart Builder.
GGRAPH
  /GRAPHDATASET NAME="graphdataset" VARIABLES=averageprice packspercapita year
 MISSING=LISTWISE REPORTMISSING=NO
  /GRAPHSPEC SOURCE=INLINE.
BEGIN GPL
  SOURCE: s=userSource(id("graphdataset"))
  DATA: averageprice=col(source(s), name("averageprice"))
  DATA: packspercapita=col(source(s), name("packspercapita"))
  DATA: year=col(source(s), name("year"), unit.category())
  GUIDE: axis(dim(1), label("averageprice"))
  GUIDE: axis(dim(2), label("packspercapita"))
  GUIDE: legend(aesthetic(aesthetic.color.exterior), label("year"))
  ELEMENT: point(position(averageprice*packspercapita), color.exterior(year))
END GPL.
```

GGraph

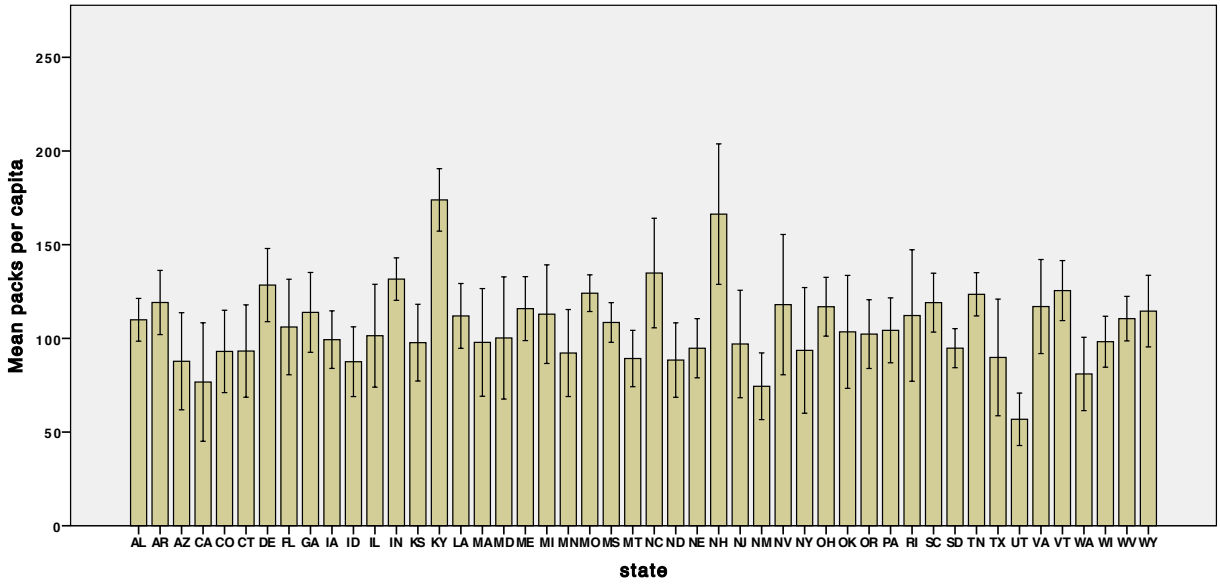



```
 * Chart Builder.
GGRAPH
  /GRAPHDATASET NAME="graphdataset" VARIABLES=state MEANSD(packspercapita, 2)[
name="MEAN_packspercapita" LOW="MEAN_packspercapita_LOW" HIGH="MEAN_packsperca
pita_HIGH"] MISSING=LISTWISE REPORTMISSING=NO
  /GRAPHSPEC SOURCE=INLINE.
BEGIN GPL
  SOURCE: s=userSource(id("graphdataset"))
  DATA: state=col(source(s), name("state"), unit.category())
  DATA: MEAN_packspercapita=col(source(s), name("MEAN_packspercapita"))
  DATA: LOW=col(source(s), name("MEAN_packspercapita_LOW"))
  DATA: HIGH=col(source(s), name("MEAN_packspercapita_HIGH"))
  GUIDE: axis(dim(1), label("state"))
  GUIDE: axis(dim(2), label("Mean packs per capita"))
  GUIDE: text.footnote(label("Error Bars: +/- 2 SD"))
  SCALE: linear(dim(2), include(0))
  ELEMENT: interval(position(state*MEAN_packspercapita), shape.interior(shape.
square))
  ELEMENT: interval(position(region.spread.range(state*(LOW+HIGH))), shape.int
erior(shape.ibeam))
END GPL.
```

GGraph

Notes

Resources	**Processor Time**	**00:00:00.15**
	Elapsed Time	**00:00:00.00**




```
 DATASET ACTIVATE firstAndLastYears.
* Chart Builder.
GGRAPH
  /GRAPHDATASET NAME="graphdataset" VARIABLES=state MEANSD(packspercapita, 2)[
name="MEAN_packspercapita" LOW="MEAN_packspercapita_LOW" HIGH="MEAN_packsperca
pita_HIGH"] year MISSING=LISTWISE REPORTMISSING=NO
  /GRAPHSPEC SOURCE=INLINE.
BEGIN GPL
  SOURCE: s=userSource(id("graphdataset"))
  DATA: state=col(source(s), name("state"), unit.category())
  DATA: MEAN_packspercapita=col(source(s), name("MEAN_packspercapita"))
  DATA: year=col(source(s), name("year"), unit.category())
  DATA: LOW=col(source(s), name("MEAN_packspercapita_LOW"))
  DATA: HIGH=col(source(s), name("MEAN_packspercapita_HIGH"))
  COORD: rect(dim(1,2), cluster(3,0))
  GUIDE: axis(dim(3), label("state"))
  GUIDE: axis(dim(2), label("Mean packs per capita"))
  GUIDE: legend(aesthetic(aesthetic.color.interior), label("year"))
  GUIDE: text.footnote(label("Error Bars: +/- 2 SD"))
  SCALE: linear(dim(2), include(0))
  ELEMENT: interval(position(year*MEAN_packspercapita*state), color.interior(y
ear), shape.interior(shape.square))
  ELEMENT: interval(position(region.spread.range(year*(LOW+HIGH)*state)), shap
e.interior(shape.ibeam))
END GPL.
```

GGraph

Notes

Resources	**Processor Time**	**00:00:00.18**
	Elapsed Time	**00:00:00.00**

[firstAndLastYears]

Warnings

One or more error bar calculations yielded infinite results. These error bars have been removed from the chart.