Route18 Draft Pick Value

Objective

```r
library(ggplot2)

dat = read.csv("../data/Draft_2014.csv")
dat$Keeper = as.factor(dat$Keeper)

valid = which( dat$Position=="RB")
valid = c(valid, which(dat$Position=="WR"))
valid = c(valid, which(dat$Position=="QB"))
valid = c(valid, which(dat$Position=="TE"))

dat = dat[valid,]

valid = which(dat$PreRank < 500)
dat = dat[valid,]

round = floor((dat$Pick-1) / 12 / 4)+1

dat = data.frame(dat, Round=as.factor(round))

limx=c(1,max(dat$Rank))
```
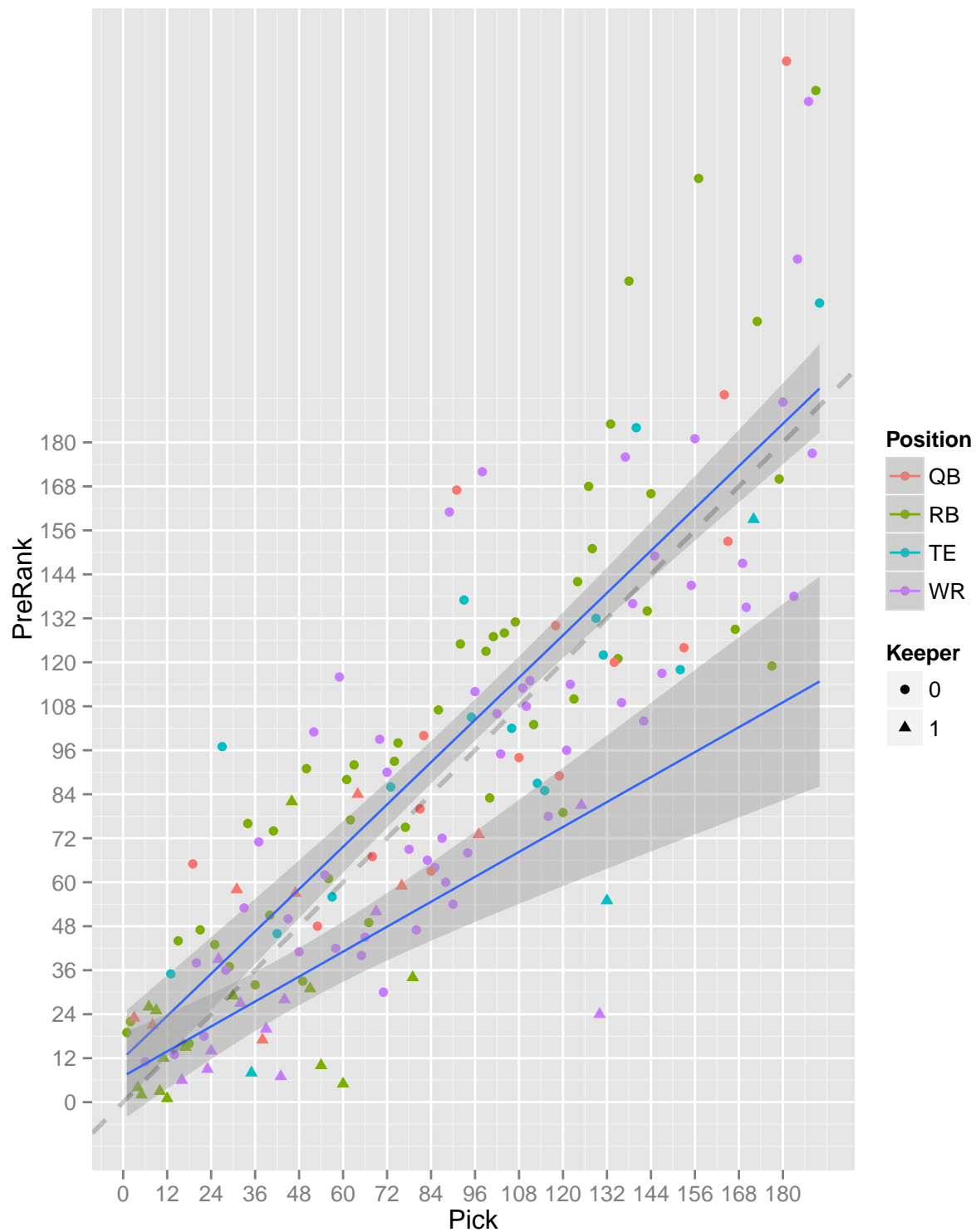
```
## Warning: no non-missing arguments to max; returning -Inf
```

```r
limy=c(1,max(dat$PreRank))
p = ggplot(dat, aes(x=Pick, y=PreRank, colour=Position, shape=Keeper, group=Keeper)) +
  geom_point() + geom_smooth(method="lm", fullrange=T, formula=y ~ poly(x, 1)) + coord_fixed() +
  scale_x_continuous( breaks=12*c(0:15) ) +
  scale_y_continuous( breaks=12*c(0:15) ) +
  geom_abline(size=1,linetype=2,alpha=0.2)
print(p)
```

```
png(filename="all_picks.png", width=500, height=600)
print(p)
dev.off()
```
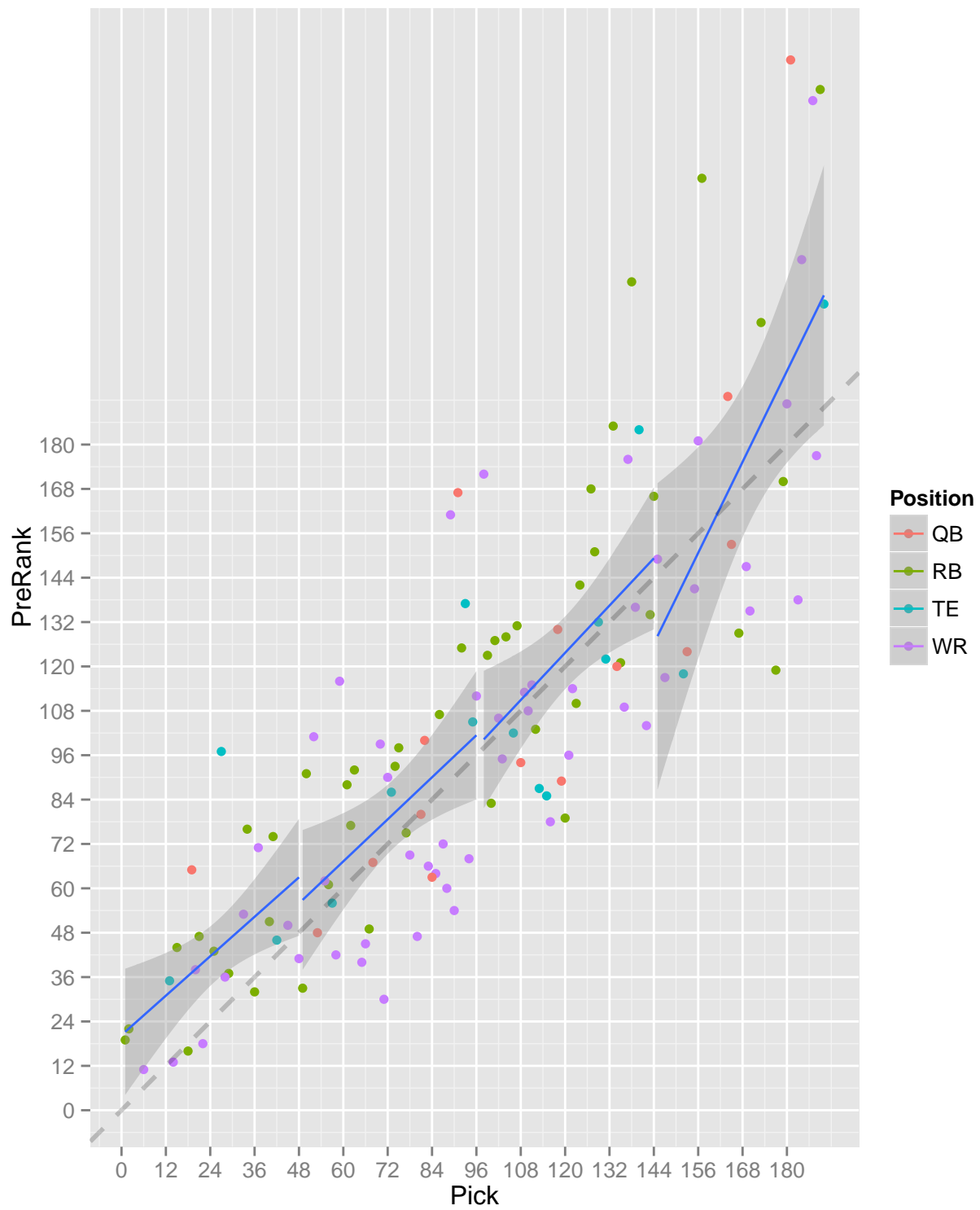
```
## pdf
##   2
```

```
drafted = dat[dat$Keeper=="0",]

p = ggplot(drafted, aes(x=Pick, y=PreRank, colour=Position, group=Round)) +
  geom_point() + geom_smooth(method="lm", fullrange=F, formula=y ~ poly(x, 1)) + coord_fixed() +
  scale_x_continuous( breaks=12*c(0:15) ) +
  scale_y_continuous( breaks=12*c(0:15) ) +
  geom_abline(size=1,linetype=2,alpha=0.2)
print(p)
```
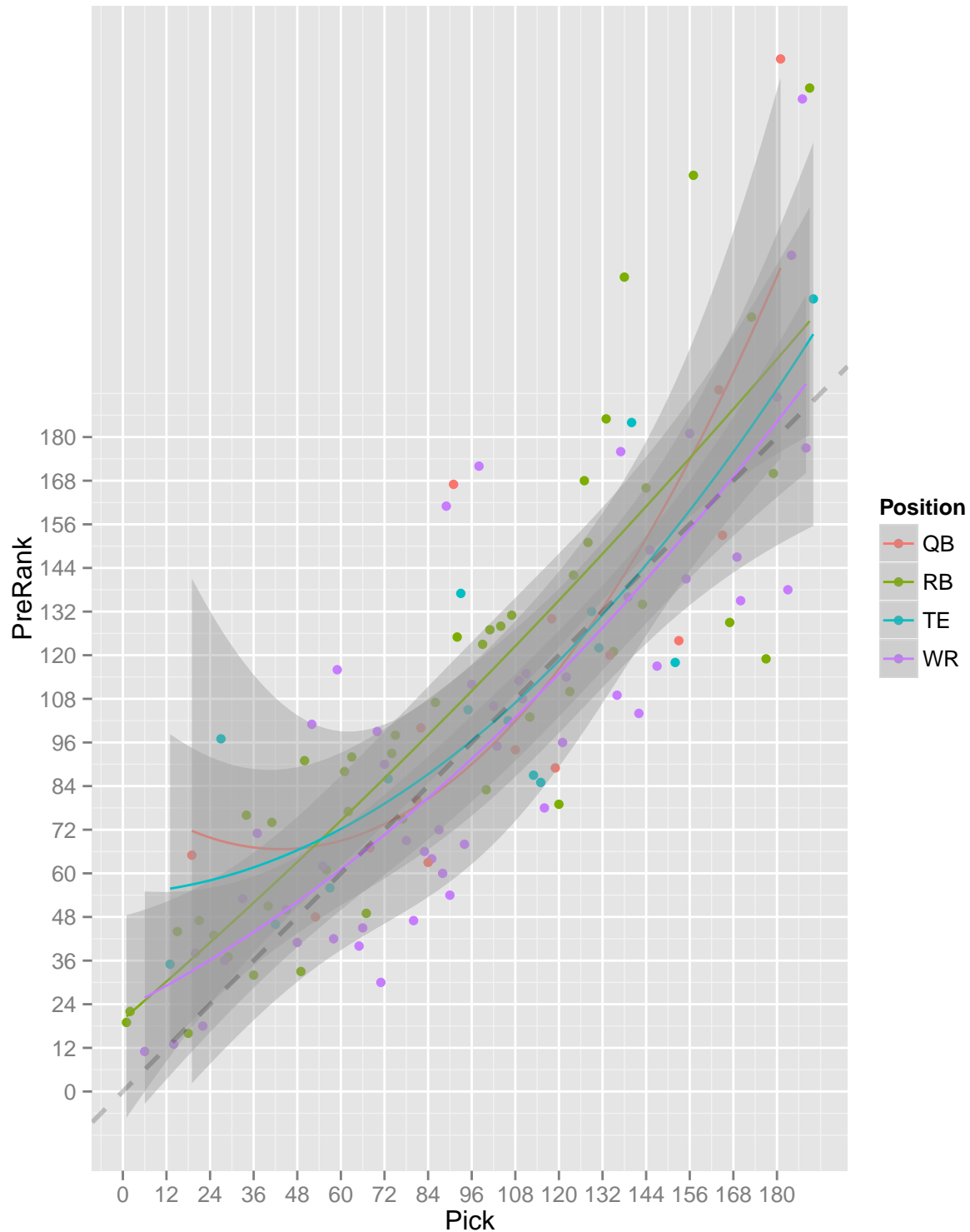
```
png(filename="piecewise_picks.png", width=500, height=600)
print(p)
dev.off()
```

```
## pdf
##   2
```

```
p = ggplot(drafted, aes(x=Pick, y=PreRank, colour=Position, group=Position)) +
  geom_point() + geom_smooth(method="lm", fullrange=F, formula=y ~ poly(x, 2)) + coord_fixed() +
  scale_x_continuous( breaks=12*c(0:15) ) +
  scale_y_continuous( breaks=12*c(0:15) ) +
  geom_abline(size=1,linetype=2,alpha=0.2)
print(p)
```

```
png(filename="poly2_picks.png", width=500, height=600)
print(p)
dev.off()
```

```
## pdf
##   2
```