> pmodel <- ols\_step\_forward\_p(model1)
Forward Selection Method</pre>

-----

## Candidate Terms:

- 1. Population
- 2. Crime
- 3. Average age
- 4. Household income

We are selecting variables based on p value...

Final Model Output

-----

R	0.247	RMSE	9365.686
R-Squared	0.061	Coef. Var	4.678
Adj. R-Squared	0.053	MSE	87716066.079
Pred R-Squared	0.039	MAE	7416.676

Model Summary

RMSE: Root Mean Square Error

MSE: Mean Square Error MAE: Mean Absolute Error

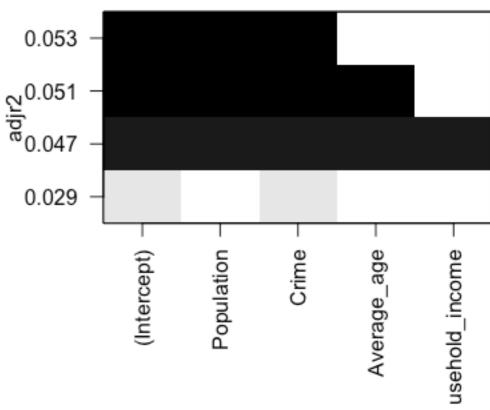
## Parameter Estimates

model	Beta	Std. Error	Std. Beta	t	Sig	lower	upper
(Intercept) Crime Population	173635.236 -334.335 0.666	12426.603 114.679 0.244	-0.180 0.168	13.973 -2.915 2.729	0.000 0.004 0.007	149159.616 -560.208 0.185	198110.857 -108.461 1.147

The model determined by p-value improvement is also the one with the lowest AIC value - but this may not always be the case.

• Visualise the possible models (incl. the one with the largest adjusted R<sup>2</sup> value) using the *leaps* package.

```
> library (leaps)
> leapsmodels <- regsubsets (House_price ~
Population + Crime + Average_age +
Household_income, data = data)
> plot(leapsmodels, scale = "adjr2", main
= "Models")
```



Models