

```
> pmodel <- ols_step_forward_p(model1)
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Forward Selection Method
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Candidate Terms:

1. Population
2. Crime
3. Average_age
4. Household_income

We are selecting variables based on p value...

Final Model Output

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Model Summary			
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

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RMSE: Root Mean Square Error

MSE: Mean Square Error

MAE: Mean Absolute Error

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

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```

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^2 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")
```

