

**The GLMSELECT Procedure**

|                                  |                      |
|----------------------------------|----------------------|
| <b>Data Set</b>                  | WORK.FORMODELANDPRED |
| <b>Dependent Variable</b>        | price_doc            |
| <b>Selection Method</b>          | Forward              |
| <b>Select Criterion</b>          | SBC                  |
| <b>Stop Criterion</b>            | Cross Validation     |
| <b>Choose Criterion</b>          | Cross Validation     |
| <b>Cross Validation Method</b>   | Random               |
| <b>Cross Validation Fold</b>     | 5                    |
| <b>Effect Hierarchy Enforced</b> | None                 |
| <b>Random Number Seed</b>        | 1                    |

|                                    |       |
|------------------------------------|-------|
| <b>Number of Observations Read</b> | 30446 |
| <b>Number of Observations Used</b> | 25452 |

| <b>Dimensions</b>           |    |
|-----------------------------|----|
| <b>Number of Effects</b>    | 38 |
| <b>Number of Parameters</b> | 38 |

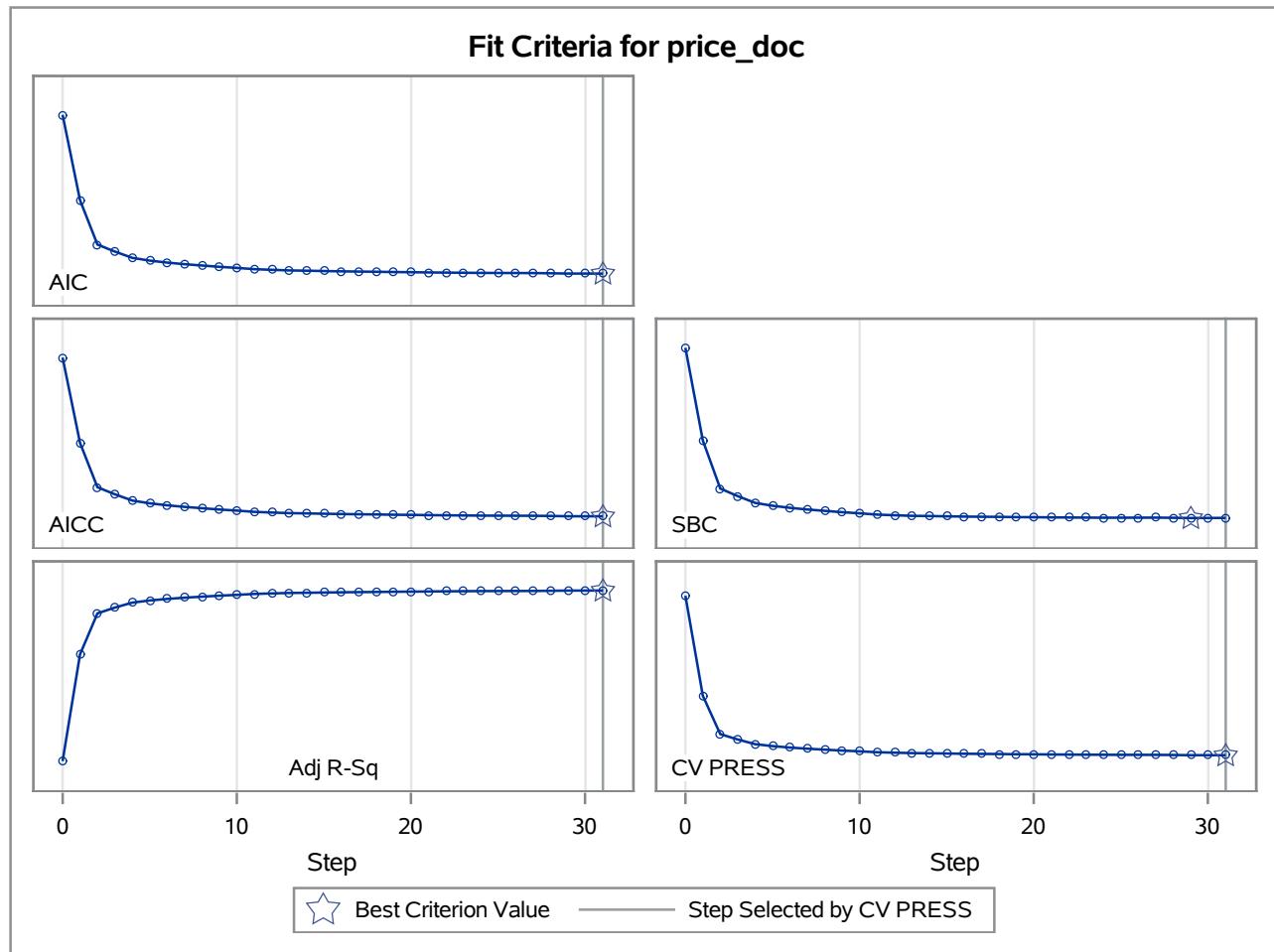
## The GLMSELECT Procedure

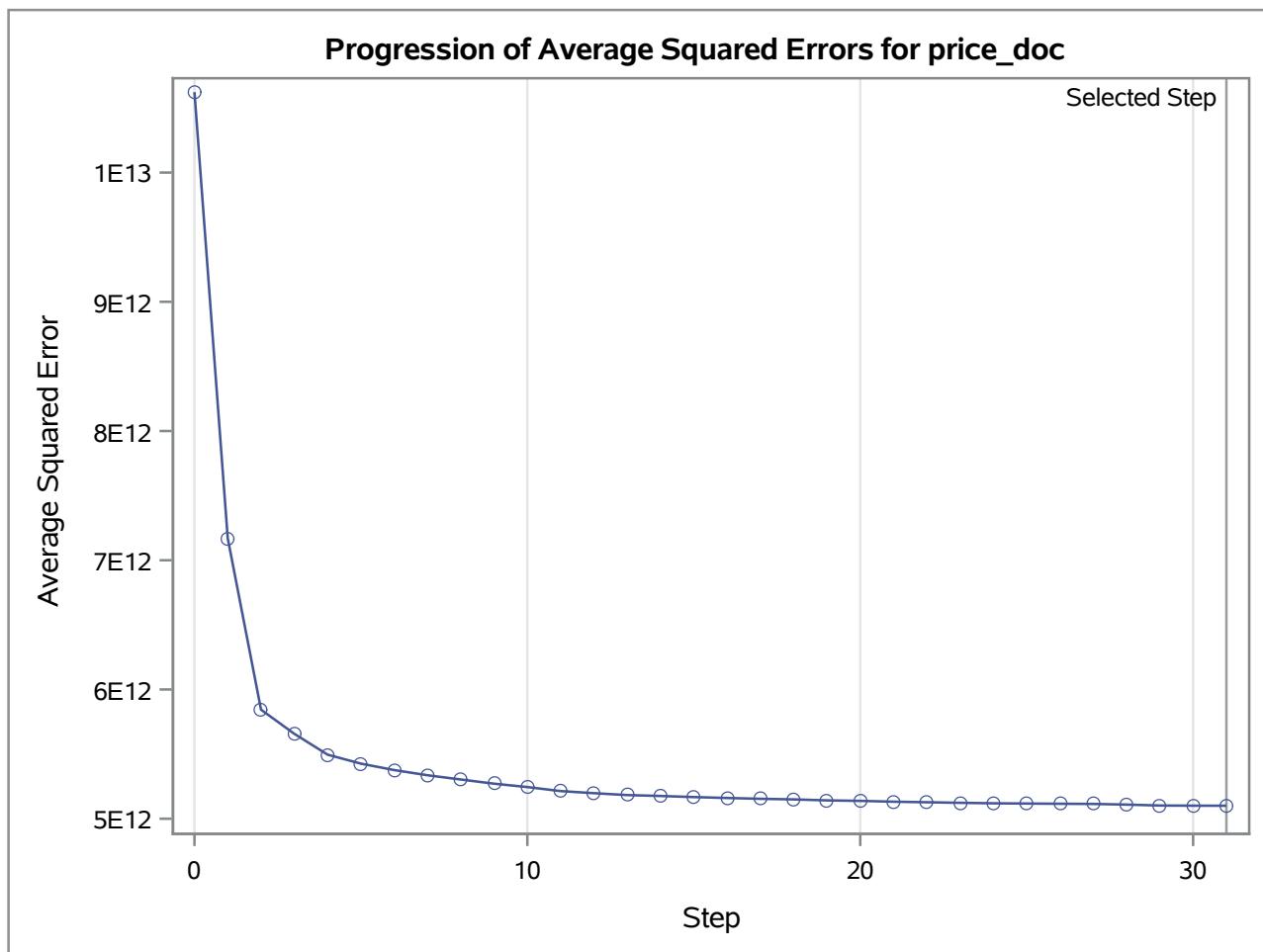
| Forward Selection Summary    |                      |                   |             |             |
|------------------------------|----------------------|-------------------|-------------|-------------|
| Step                         | Effect Entered       | Number Effects In | SBC         | CV PRESS    |
| 0                            | Intercept            | 1                 | 763416.682  | 2.70406E17  |
| 1                            | full_sq              | 2                 | 753422.632  | 1.8253E17   |
| 2                            | kremlin_km           | 3                 | 748227.786  | 1.48771E17  |
| 3                            | swim_pool_km         | 4                 | 747411.086  | 1.44031E17  |
| 4                            | timestamp            | 5                 | 746684.465  | 1.39939E17  |
| 5                            | raion_popul          | 6                 | 746371.194  | 1.3821E17   |
| 6                            | big_road1_km         | 7                 | 746146.906  | 1.3695E17   |
| 7                            | floor                | 8                 | 745966.383  | 1.3594E17   |
| 8                            | kitch_sq             | 9                 | 745819.375  | 1.35112E17  |
| 9                            | big_market_km        | 10                | 745673.579  | 1.34289E17  |
| 10                           | ice_rink_km          | 11                | 745556.982  | 1.33631E17  |
| 11                           | university_km        | 12                | 745415.470  | 1.32846E17  |
| 12                           | fitness_km           | 13                | 745346.142  | 1.32438E17  |
| 13                           | build_count_wood     | 14                | 745284.201  | 1.32078E17  |
| 14                           | metro_km_walk        | 15                | 745260.531  | 1.31906E17  |
| 15                           | railroad_km          | 16                | 745228.669  | 1.31697E17  |
| 16                           | build_count_frame    | 17                | 745204.238  | 1.31521E17  |
| 17                           | healthcare_centers_r | 18                | 745183.617  | 1.31373E17  |
| 18                           | bus_terminal_avto_km | 19                | 745170.152  | 1.31262E17  |
| 19                           | hospital_beds_raion  | 20                | 745143.269  | 1.31102E17  |
| 20                           | build_count_block    | 21                | 745134.438  | 1.31012E17  |
| 21                           | shopping_centers_rai | 22                | 745113.586  | 1.30874E17  |
| 22                           | preschool_quota      | 23                | 745101.791  | 1.30765E17  |
| 23                           | market_shop_km       | 24                | 745091.049  | 1.30672E17  |
| 24                           | university_top_20_ra | 25                | 745081.301  | 1.30603E17  |
| 25                           | big_road2_km         | 26                | 745082.728  | 1.30562E17  |
| 26                           | life_sq              | 27                | 745084.599  | 1.30544E17  |
| 27                           | X7_14_all            | 28                | 745087.914  | 1.30529E17  |
| 28                           | X0_17_all            | 29                | 745072.754  | 1.30411E17  |
| 29                           | X0_13_all            | 30                | 745046.745* | 1.30231E17  |
| 30                           | X16_29_all           | 31                | 745051.518  | 1.30204E17  |
| 31                           | build_count_before_1 | 32                | 745058.832  | 1.30197E17* |
| * Optimal Value of Criterion |                      |                   |             |             |

Selection stopped at a local minimum of the cross validation PRESS.

## The GLMSELECT Procedure

| Stop Details  |                      |                    |                  |            |
|---------------|----------------------|--------------------|------------------|------------|
| Candidate For | Effect               | Candidate CV PRESS | Compare CV PRESS |            |
| Entry         | public_transport_sta | 1.30201E17         | >                | 1.30197E17 |



**The GLMSELECT Procedure**

**The GLMSELECT Procedure**  
**Selected Model**

**The selected model, based on Cross Validation, is the model at Step 31.**

|                 |   |
|-----------------|---|
| <b>Effects:</b> | Intercept timestamp full_sq floor hospital_beds_raion life_sq raion_popul kitch_sq preschool_quota healthcare_centers_r university_top_20_ra shopping_centers_rai build_count_block build_count_wood build_count_frame build_count_before_1 kremlin_km big_road1_km big_road2_km railroad_km bus_terminal_auto_km big_market_km market_shop_km metro_km_walk ice_rink_km swim_pool_km fitness_km university_km X7_14_all X0_17_all X16_29_all X0_13_all |
|-----------------|---|

| Analysis of Variance   |       |                |             |         |
|------------------------|-------|----------------|-------------|---------|
| Source                 | DF    | Sum of Squares | Mean Square | F Value |
| <b>Model</b>           | 31    | 1.405416E17    | 4.533599E15 | 887.75  |
| <b>Error</b>           | 25420 | 1.298155E17    | 5.106827E12 |         |
| <b>Corrected Total</b> | 25451 | 2.703571E17    |             |         |

|                       |             |
|-----------------------|-------------|
| <b>Root MSE</b>       | 2259829     |
| <b>Dependent Mean</b> | 6782908     |
| <b>R-Square</b>       | 0.5198      |
| <b>Adj R-Sq</b>       | 0.5193      |
| <b>AIC</b>            | 770252      |
| <b>AICC</b>           | 770252      |
| <b>SBC</b>            | 745059      |
| <b>CV PRESS</b>       | 1.301966E17 |

| Cross Validation Details |                     |                 |                 |
|--------------------------|---------------------|-----------------|-----------------|
| <b>Index</b>             | <b>Observations</b> |                 | <b>CV PRESS</b> |
|                          | <b>Fitted</b>       | <b>Left Out</b> |                 |
| 1                        | 20444               | 5008            | 2.5513E16       |
| 2                        | 20319               | 5133            | 2.56079E16      |
| 3                        | 20473               | 4979            | 2.60731E16      |
| 4                        | 20224               | 5228            | 2.62571E16      |
| 5                        | 20348               | 5104            | 2.67454E16      |
| Total                    |                     |                 | 1.30197E17      |

**The GLMSELECT Procedure**  
**Selected Model**

| Parameter Estimates  |    |              |                |         |
|----------------------|----|--------------|----------------|---------|
| Parameter            | DF | Estimate     | Standard Error | t Value |
| Intercept            | 1  | -52501394    | 1776019        | -29.56  |
| timestamp            | 1  | 1294.374600  | 42.585180      | 30.39   |
| full_sq              | 1  | 111009       | 1255.326836    | 88.43   |
| floor                | 1  | 40798        | 2918.779033    | 13.98   |
| hospital_beds_raion  | 1  | 106.625155   | 15.044242      | 7.09    |
| life_sq              | 1  | -3614.519009 | 1187.376620    | -3.04   |
| raion_popul          | 1  | 6.304327     | 1.253842       | 5.03    |
| kitch_sq             | 1  | 36230        | 4143.317375    | 8.74    |
| preschool_quota      | 1  | -71.105205   | 20.260337      | -3.51   |
| healthcare_centers_r | 1  | 54671        | 14417          | 3.79    |
| university_top_20_ra | 1  | 254376       | 59456          | 4.28    |
| shopping_centers_rai | 1  | -24603       | 6287.642793    | -3.91   |
| build_count_block    | 1  | -3731.103071 | 532.351756     | -7.01   |
| build_count_wood     | 1  | -1518.007310 | 186.837753     | -8.12   |
| build_count_frame    | 1  | 8480.330470  | 2099.667031    | 4.04    |
| build_count_before_1 | 1  | 568.288857   | 338.011304     | 1.68    |
| kremlin_km           | 1  | -75225       | 5792.903935    | -12.99  |
| big_road1_km         | 1  | -117688      | 13955          | -8.43   |
| big_road2_km         | 1  | -27588       | 12713          | -2.17   |
| railroad_km          | 1  | 105656       | 13216          | 7.99    |
| bus_terminal_avto_km | 1  | 25279        | 4040.927759    | 6.26    |
| big_market_km        | 1  | 41834        | 2769.657619    | 15.10   |
| market_shop_km       | 1  | 47474        | 8425.716457    | 5.63    |
| metro_km_walk        | 1  | -78533       | 8513.077736    | -9.23   |
| ice_rink_km          | 1  | 98960        | 6242.677776    | 15.85   |
| swim_pool_km         | 1  | -142882      | 10259          | -13.93  |
| fitness_km           | 1  | -183803      | 20825          | -8.83   |
| university_km        | 1  | -64237       | 6457.898460    | -9.95   |
| X7_14_all            | 1  | -247.704619  | 53.505219      | -4.63   |
| X0_17_all            | 1  | 461.431599   | 57.600445      | 8.01    |
| X16_29_all           | 1  | 2.743709     | 1.106349       | 2.48    |
| X0_13_all            | 1  | -450.011239  | 69.336577      | -6.49   |