

## Simple Regression with HINCP as Regressor

### The REG Procedure

Model: MODEL1

Dependent Variable: VALP property\_value

|  |       |
|--|-------|
| Number of Observations Read                | 58206 |
| Number of Observations Used                | 36171 |
| Number of Observations with Missing Values | 22035 |

| Analysis of Variance |       |                |             |         |        |
|----------------------|-------|----------------|-------------|---------|--------|
| Source               | DF    | Sum of Squares | Mean Square | F Value | Pr > F |
| Model                | 1     | 5.641755E14    | 5.641755E14 | 11593.6 | <.0001 |
| Error                | 36169 | 1.760082E15    | 48662712546 |         |        |
| Corrected Total      | 36170 | 2.324257E15    |             |         |        |

|                |           |          |        |
|----------------|-----------|----------|--------|
| Root MSE       | 220596    | R-Square | 0.2427 |
| Dependent Mean | 208437    | Adj R-Sq | 0.2427 |
| Coeff Var      | 105.83363 |          |        |

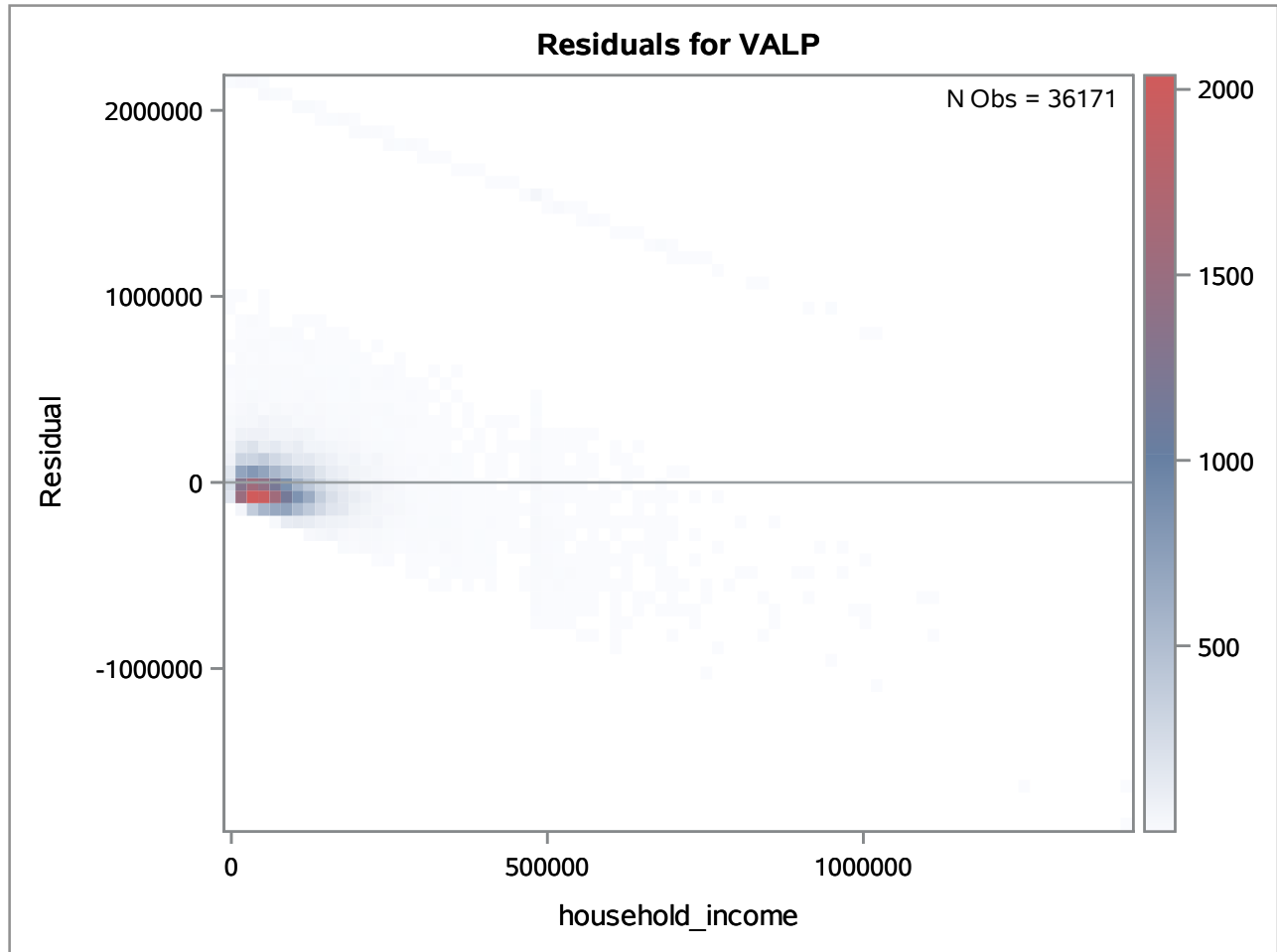
| Parameter Estimates |                  |    |                    |                |         |         |
|---------------------|------------------|----|--------------------|----------------|---------|---------|
| Variable            | Label            | DF | Parameter Estimate | Standard Error | t Value | Pr >  t |
| Intercept           | Intercept        | 1  | 86549              | 1620.74042     | 53.40   | <.0001  |
| HINCP               | household_income | 1  | 1.33510            | 0.01240        | 107.67  | <.0001  |

## Simple Regression with HINCP as Regressor

The REG Procedure

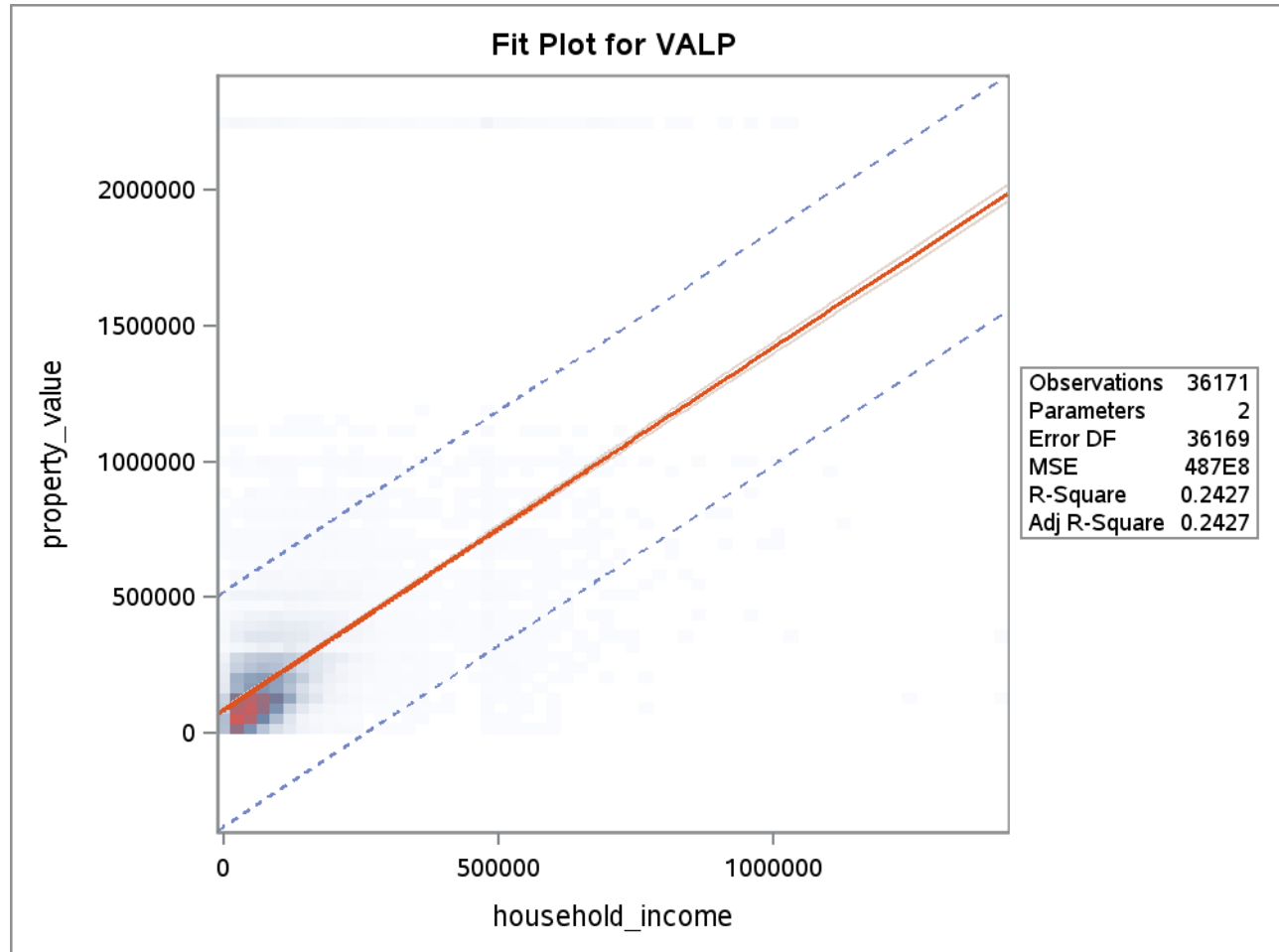
Model: MODEL1

Dependent Variable: VALP property\_value



## Simple Regression with HINCP as Regressor

The REG Procedure  
Model: MODEL1  
Dependent Variable: VALP property\_value



## Simple Regression with HINCP as Regressor

### The SURVEYSELECT Procedure

|                  |                        |
|------------------|------------------------|
| Selection Method | Simple Random Sampling |
|------------------|------------------------|

|                       |                  |
|-----------------------|------------------|
| Input Data Set        | PSAM_H17_SUBSET1 |
| Random Number Seed    | 85072769         |
| Sample Size           | 301              |
| Selection Probability | 0.005171         |
| Sampling Weight       | 193.37542        |
| Output Data Set       | GLM              |

# One-Way ANOVA with Moved, Lot size and Access to the Internet as Predictor

## The GLM Procedure

| Class Level Information |        |   |
|-------------------------|--------|---|
| Class                   | Levels | Values  |
| <b>MV</b>               | 7      | 10~19 years 12 months or less 13~23 months 20~29 years 2~4 years 30 years or more run 5~9 years |
| <b>ACR</b>              | 3      | less than one acre less than ten acres ten or more acres run                                    |
| <b>ACCESS</b>           | 3      | Internet access with subscription Internet access without subscription No Internet access run   |

|                                    |     |
|------------------------------------|-----|
| <b>Number of Observations Read</b> | 301 |
| <b>Number of Observations Used</b> | 161 |

**One-Way ANOVA with Moved, Lot size and Access to the Internet as Predictor****The GLM Procedure****Dependent Variable: VALP Property Value**

| Source                 | DF  | Sum of Squares | Mean Square  | F Value | Pr > F |
|------------------------|-----|----------------|--------------|---------|--------|
| <b>Model</b>           | 10  | 1.0881334E12   | 108813340149 | 1.02    | 0.4291 |
| <b>Error</b>           | 150 | 1.5998031E13   | 106653541221 |         |        |
| <b>Corrected Total</b> | 160 | 1.7086165E13   |              |         |        |

| R-Square | Coeff Var | Root MSE | VALP Mean |
|----------|-----------|----------|-----------|
| 0.063685 | 137.0374  | 326578.5 | 238313.4  |

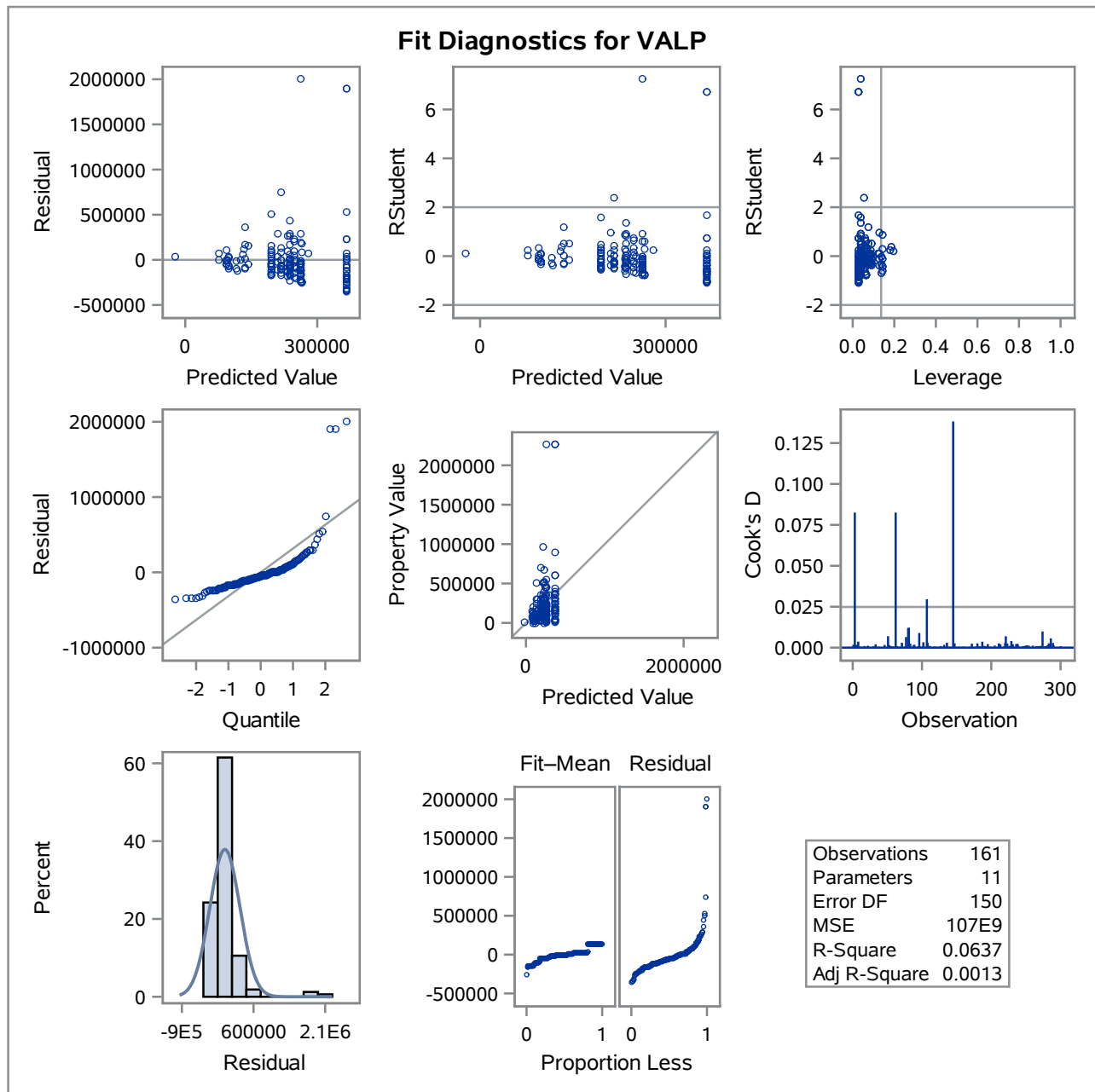
| Source        | DF | Type I SS    | Mean Square  | F Value | Pr > F |
|---------------|----|--------------|--------------|---------|--------|
| <b>MV</b>     | 6  | 693991840196 | 115665306699 | 1.08    | 0.3743 |
| <b>ACR</b>    | 2  | 191936942457 | 95968471229  | 0.90    | 0.4088 |
| <b>ACCESS</b> | 2  | 202204618835 | 101102309418 | 0.95    | 0.3898 |

| Source        | DF | Type III SS  | Mean Square  | F Value | Pr > F |
|---------------|----|--------------|--------------|---------|--------|
| <b>MV</b>     | 6  | 709193646135 | 118198941022 | 1.11    | 0.3602 |
| <b>ACR</b>    | 2  | 232856582158 | 116428291079 | 1.09    | 0.3383 |
| <b>ACCESS</b> | 2  | 202204618835 | 101102309418 | 0.95    | 0.3898 |

# One-Way ANOVA with Moved, Lot size and Access to the Internet as Predictor

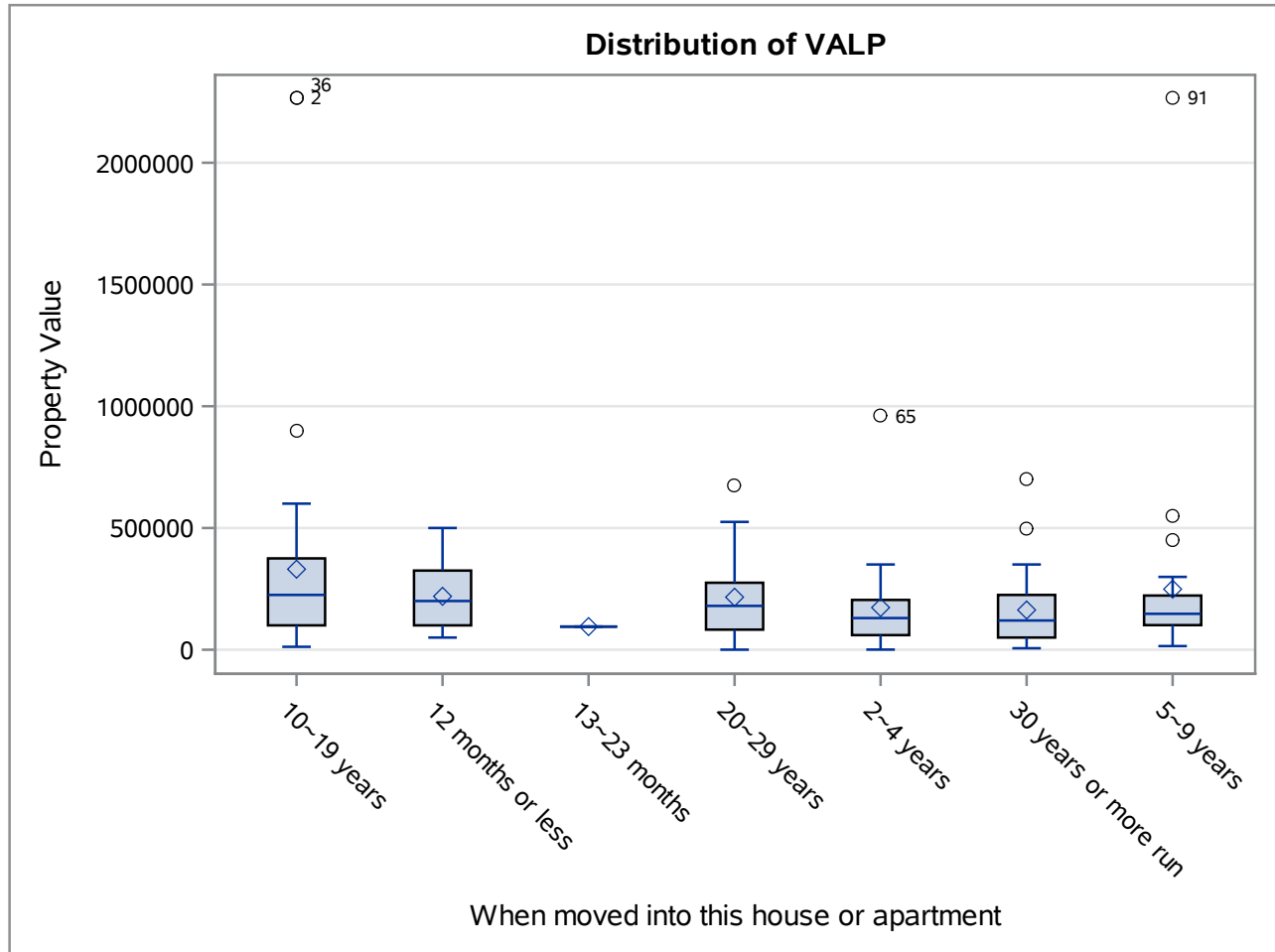
## The GLM Procedure

Dependent Variable: VALP Property Value



# One-Way ANOVA with Moved, Lot size and Access to the Internet as Predictor

## The GLM Procedure

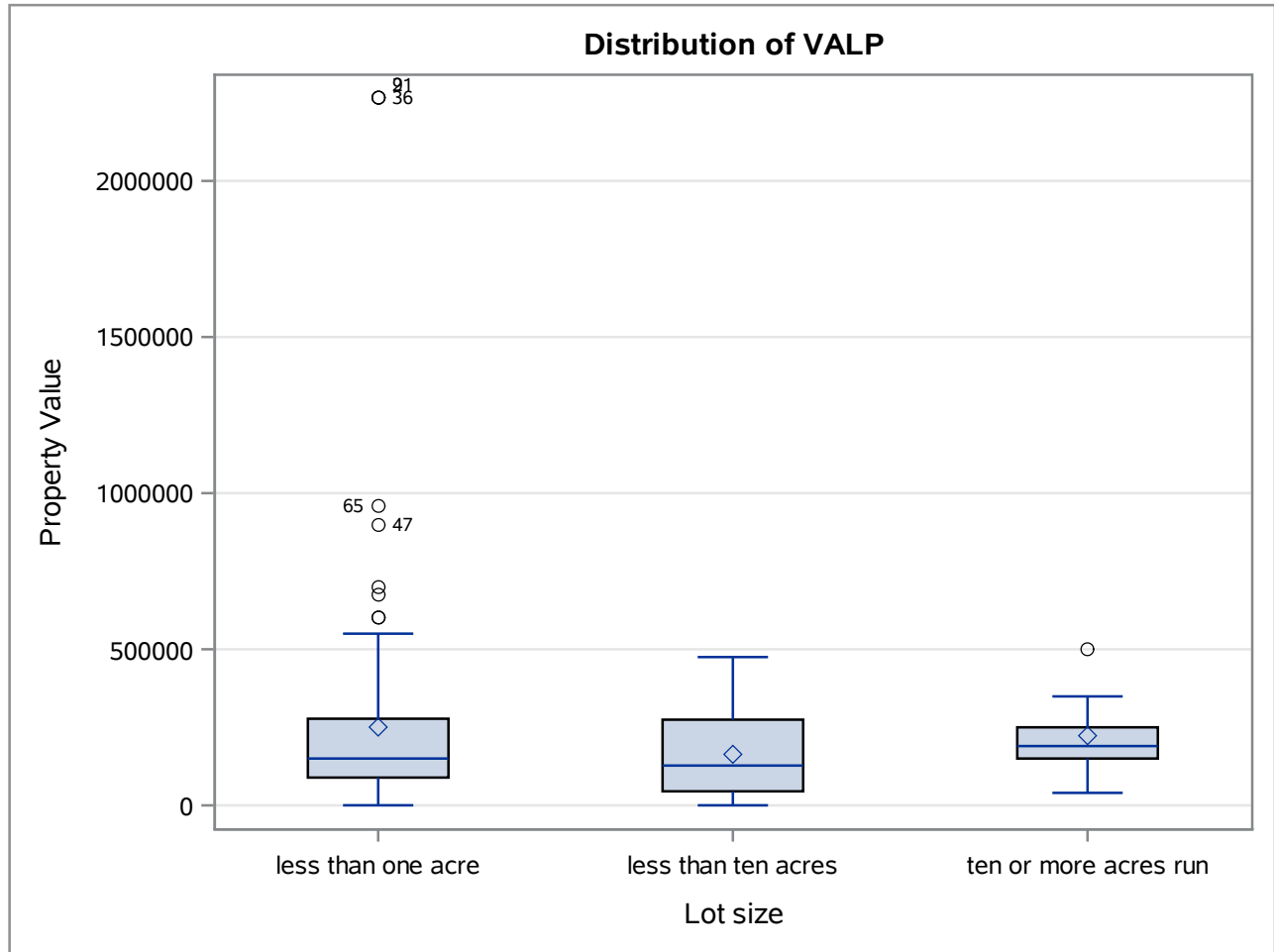


| Level of MV          | N  | VALP       |            |
|----------------------|----|------------|------------|
|                      |    | Mean       | Std Dev    |
| 10~19 years          | 46 | 330771.739 | 456953.653 |
| 12 months or less    | 7  | 219285.714 | 156056.309 |
| 13~23 months         | 1  | 95000.000  | .          |
| 20~29 years          | 28 | 215731.429 | 170921.115 |
| 2~4 years            | 20 | 173123.500 | 206164.893 |
| 30 years or more run | 31 | 163096.774 | 149216.700 |
| 5~9 years            | 28 | 248714.286 | 412105.242 |



# One-Way ANOVA with Moved, Lot size and Access to the Internet as Predictor

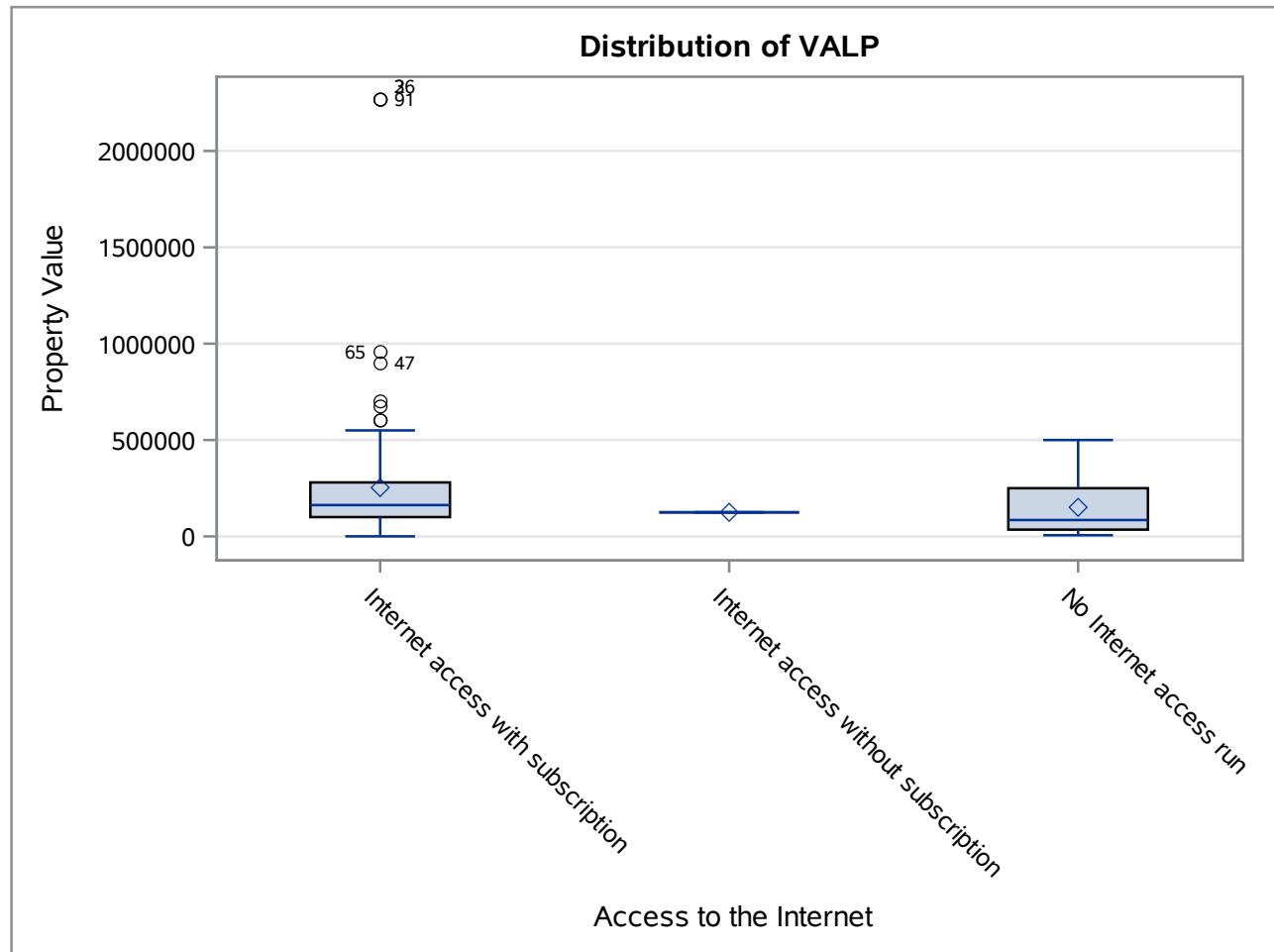
## The GLM Procedure



| Level of ACR          | N   | VALP       |            |
|-----------------------|-----|------------|------------|
|                       |     | Mean       | Std Dev    |
| less than one acre    | 132 | 250672.727 | 353814.606 |
| less than ten acres   | 20  | 163532.500 | 145449.337 |
| ten or more acres run | 9   | 223222.222 | 137362.456 |

# One-Way ANOVA with Moved, Lot size and Access to the Internet as Predictor

## The GLM Procedure



| Level of ACCESS                      | N   | VALP       |            |
|--------------------------------------|-----|------------|------------|
|                                      |     | Mean       | Std Dev    |
| Internet access with subscription    | 138 | 253075.725 | 345916.134 |
| Internet access without subscription | 1   | 125000.000 | .          |
| No Internet access run               | 22  | 150863.636 | 151479.150 |

**LOGISTIC MODEL (1):Value=ACR and ACCESS****The LOGISTIC Procedure**

| Model Information         |                         |                                   |
|---------------------------|-------------------------|-----------------------------------|
| Data Set                  | CENSUS.PSAM_H17_SUBSET1 |                                   |
| Response Variable         | value                   | HINCP(Household Income)>\$100,000 |
| Number of Response Levels | 2                       |                                   |
| Model                     | binary logit            |                                   |
| Optimization Technique    | Fisher's scoring        |                                   |

|                             |       |
|-----------------------------|-------|
| Number of Observations Read | 58206 |
| Number of Observations Used | 37388 |

| Response Profile |       |                 |
|------------------|-------|-----------------|
| Ordered Value    | value | Total Frequency |
| 1                | 0     | 26695           |
| 2                | 1     | 10693           |

**Probability modeled is value=1.**

**Note:** 20818 observations were deleted due to missing values for the response or explanatory variables.

| Class Level Information |                                      |                  |    |    |    |    |    |
|-------------------------|--------------------------------------|------------------|----|----|----|----|----|
| Class                   | Value                                | Design Variables |    |    |    |    |    |
| MV                      | 10~19 years                          | 1                | 0  | 0  | 0  | 0  | 0  |
|                         | 12 months or less                    | 0                | 1  | 0  | 0  | 0  | 0  |
|                         | 13~23 months                         | 0                | 0  | 1  | 0  | 0  | 0  |
|                         | 20~29 years                          | 0                | 0  | 0  | 1  | 0  | 0  |
|                         | 2~4 years                            | 0                | 0  | 0  | 0  | 1  | 0  |
|                         | 30 years or more run                 | 0                | 0  | 0  | 0  | 0  | 1  |
|                         | 5~9 years                            | -1               | -1 | -1 | -1 | -1 | -1 |
| ACR                     | less than one acre                   | 1                | 0  |    |    |    |    |
|                         | less than ten acres                  | 0                | 1  |    |    |    |    |
|                         | ten or more acres run                | -1               | -1 |    |    |    |    |
| ACCESS                  | Internet access with subscription    | 1                | 0  |    |    |    |    |
|                         | Internet access without subscription | 0                | 1  |    |    |    |    |
|                         | No Internet access run               | -1               | -1 |    |    |    |    |

| Model Convergence Status                      |
|---|
| Convergence criterion (GCONV=1E-8) satisfied. |

**LOGISTIC MODEL (1):Value=ACR and ACCESS****The LOGISTIC Procedure**

| Model Fit Statistics |                |                          |
|----------------------|----------------|--------------------------|
| Criterion            | Intercept Only | Intercept and Covariates |
| AIC                  | 44757.827      | 41501.898                |
| SC                   | 44766.356      | 41595.718                |
| -2 Log L             | 44755.827      | 41479.898                |

| Testing Global Null Hypothesis: BETA=0 |            |    |            |
|--|------------|----|------------|
| Test                                   | Chi-Square | DF | Pr > ChiSq |
| Likelihood Ratio                       | 3275.9285  | 10 | <.0001     |
| Score                                  | 2686.1889  | 10 | <.0001     |
| Wald                                   | 2148.5775  | 10 | <.0001     |

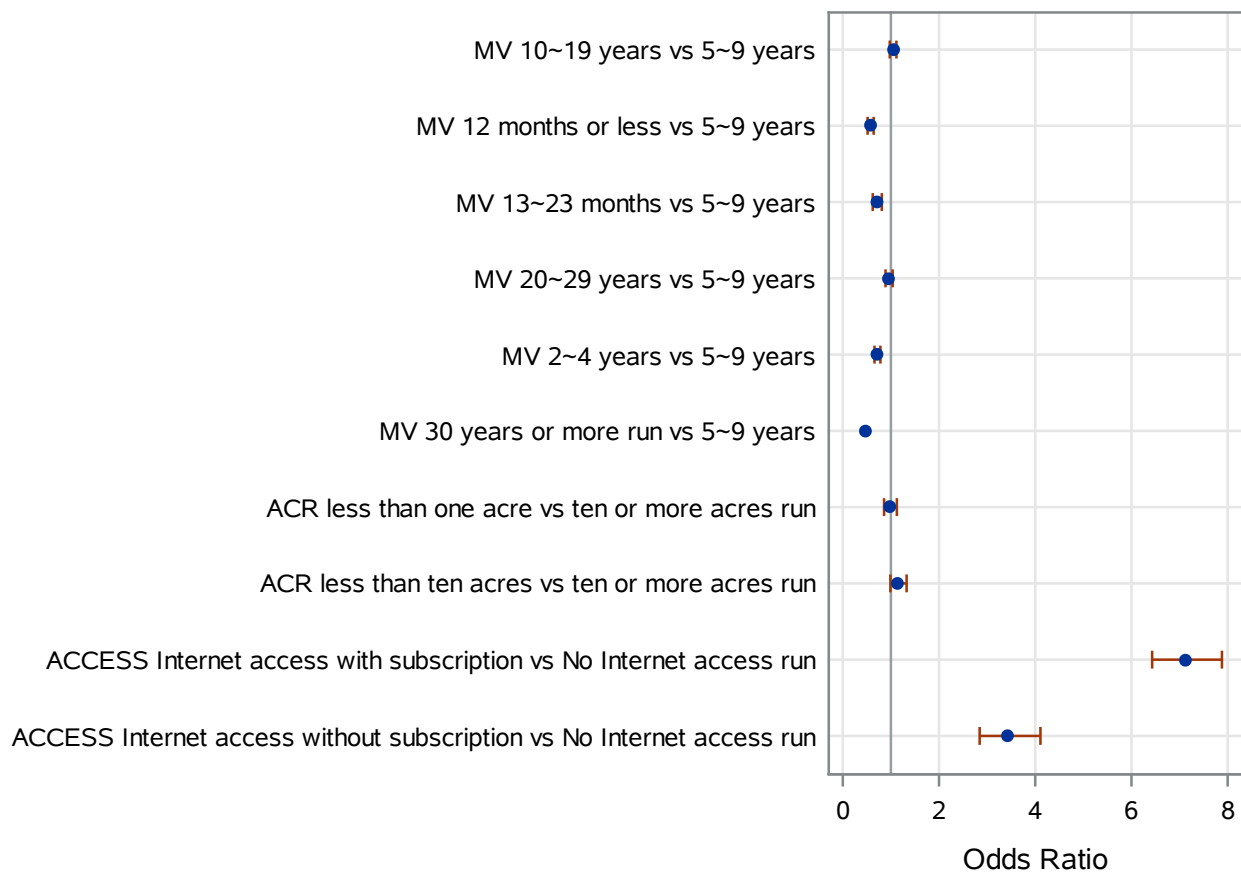
| Type 3 Analysis of Effects |    |                 |            |
|----------------------------|----|-----------------|------------|
| Effect                     | DF | Wald Chi-Square | Pr > ChiSq |
| MV                         | 6  | 512.5108        | <.0001     |
| ACR                        | 2  | 19.9300         | <.0001     |
| ACCESS                     | 2  | 1489.0346       | <.0001     |

| Analysis of Maximum Likelihood Estimates |                                      |    |          |                |                 |            |
|--|--------------------------------------|----|----------|----------------|-----------------|------------|
| Parameter                                |                                      | DF | Estimate | Standard Error | Wald Chi-Square | Pr > ChiSq |
| Intercept                                |                                      | 1  | -1.6226  | 0.0394         | 1691.9353       | <.0001     |
| MV                                       | 10~19 years                          | 1  | 0.3224   | 0.0236         | 186.4318        | <.0001     |
| MV                                       | 12 months or less                    | 1  | -0.2724  | 0.0443         | 37.8321         | <.0001     |
| MV                                       | 13~23 months                         | 1  | -0.0612  | 0.0548         | 1.2435          | 0.2648     |
| MV                                       | 20~29 years                          | 1  | 0.2390   | 0.0291         | 67.5310         | <.0001     |
| MV                                       | 2~4 years                            | 1  | -0.0517  | 0.0332         | 2.4304          | 0.1190     |
| MV                                       | 30 years or more run                 | 1  | -0.4566  | 0.0329         | 192.2527        | <.0001     |
| ACR                                      | less than one acre                   | 1  | -0.0581  | 0.0264         | 4.8330          | 0.0279     |
| ACR                                      | less than ten acres                  | 1  | 0.0965   | 0.0313         | 9.4842          | 0.0021     |
| ACCESS                                   | Internet access with subscription    | 1  | 0.8974   | 0.0323         | 770.8215        | <.0001     |
| ACCESS                                   | Internet access without subscription | 1  | 0.1665   | 0.0555         | 9.0133          | 0.0027     |

**LOGISTIC MODEL (1):Value=ACR and ACCESS****The LOGISTIC Procedure**

| Association of Predicted Probabilities and Observed Responses |           |           |       |
|---|-----------|-----------|-------|
| Percent Concordant  | 61.5      | Somers' D | 0.322 |
| Percent Discordant  | 29.3      | Gamma     | 0.354 |
| Percent Tied  | 9.1       | Tau-a     | 0.132 |
| Pairs   | 285449635 | c         | 0.661 |

| Odds Ratio Estimates and Profile-Likelihood Confidence Intervals |  |        |          |                       |       |
|--|--|--------|----------|-----------------------|-------|
| Effect   |  | Unit   | Estimate | 95% Confidence Limits |       |
| MV   | 10~19 years vs 5~9 years                                       | 1.0000 | 1.043    | 0.976                 | 1.114 |
| MV   | 12 months or less vs 5~9 years                                 | 1.0000 | 0.575    | 0.516                 | 0.641 |
| MV   | 13~23 months vs 5~9 years                                      | 1.0000 | 0.711    | 0.622                 | 0.811 |
| MV   | 20~29 years vs 5~9 years                                       | 1.0000 | 0.959    | 0.888                 | 1.036 |
| MV   | 2~4 years vs 5~9 years   | 1.0000 | 0.717    | 0.659                 | 0.781 |
| MV   | 30 years or more run vs 5~9 years                              | 1.0000 | 0.479    | 0.439                 | 0.521 |
| ACR  | less than one acre vs ten or more acres run                    | 1.0000 | 0.981    | 0.858                 | 1.123 |
| ACR  | less than ten acres vs ten or more acres run                   | 1.0000 | 1.144    | 0.989                 | 1.326 |
| ACCESS   | Internet access with subscription vs No Internet access run    | 1.0000 | 7.109    | 6.430                 | 7.881 |
| ACCESS   | Internet access without subscription vs No Internet access run | 1.0000 | 3.423    | 2.845                 | 4.108 |

**LOGISTIC MODEL (1):Value=ACR and ACCESS****The LOGISTIC Procedure****Odds Ratios with 95% Profile-Likelihood Confidence Limits**

# LOGISTIC MODEL (1):Value=ACR and ACCESS

## The LOGISTIC Procedure

