Thursday, August 6, 2020 10:09:03 PM **1**

The GLM Procedure

Class Level Information					
Class	Levels	Values			
Neighborhood	3	BrkSide Edwards NAmes			

Number of Observations Read	383
Number of Observations Used	383

The GLM Procedure

Dependent Variable: LogSalePrice

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	14.62857557	2.92571511	79.14	<.0001
Error	377	13.93775037	0.03697016		
Corrected Total	382	28.56632594			

R-Square	Coeff Var	Root MSE	LogSalePrice Mean
0.512092	1.629617	0.192276	11.79887

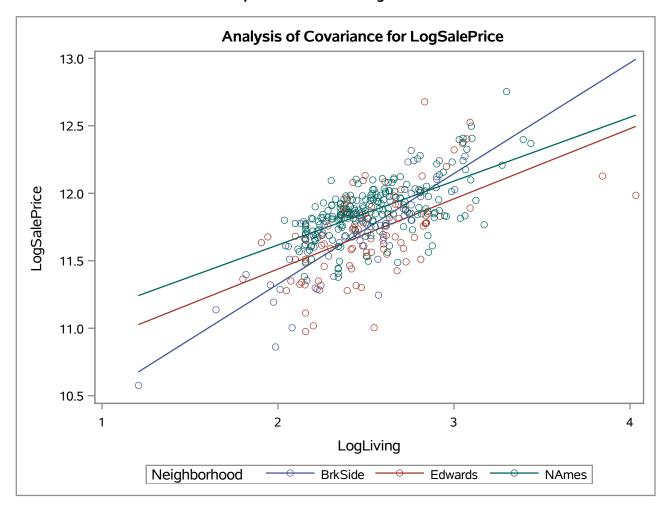
Source	DF	Type I SS	Mean Square	F Value	Pr > F
LogLiving	1	12.00843049	12.00843049	324.81	<.0001
Neighborhood	2	1.98063548	0.99031774	26.79	<.0001
LogLiving*Neighborho	2	0.63950960	0.31975480	8.65	0.0002

Source	DF	Type III SS	Mean Square	F Value	Pr > F
LogLiving	1	11.69403942	11.69403942	316.31	<.0001
Neighborhood	2	0.80762020	0.40381010	10.92	<.0001
LogLiving*Neighborho	2	0.63950960	0.31975480	8.65	0.0002

Parameter	Estimate		Standard Error	t Value	Pr > t
Intercept	10.67108183	В	0.11566818	92.26	<.0001
LogLiving	0.47302360	В	0.04542895	10.41	<.0001
Neighborhood BrkSide	-0.98354230	В	0.21053746	-4.67	<.0001
Neighborhood Edwards	-0.27141855	В	0.18466058	-1.47	0.1424
Neighborhood NAmes	0.00000000	В			
LogLiving*Neighborho BrkSide	0.34662445	В	0.08482008	4.09	<.0001
LogLiving*Neighborho Edwards	0.04664364	В	0.07248011	0.64	0.5203
LogLiving*Neighborho NAmes	0.00000000	В			

Note: The X'X matrix has been found to be singular, and a generalized inverse was used to solve the normal equations. Terms whose estimates are followed by the letter 'B' are not uniquely estimable.

The GLM Procedure Dependent Variable: LogSalePrice



Class Level Information Class Levels Values Neighborhood 3 BrkSide Edwards NAmes

Number of Observations Re	ad	383
Number of Observations Us	ed	383

The GLM Procedure

Dependent Variable: LogSalePrice

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	3	13.98906597	4.66302199	121.24	<.0001
Error	379	14.57725997	0.03846243		
Corrected Total	382	28.56632594			

R-Square	Coeff Var	Root MSE	LogSalePrice Mean
0.489705	1.662180	0.196118	11.79887

Source	DF	Type I SS	Mean Square	F Value	Pr > F
LogLiving	1	12.00843049	12.00843049	312.21	<.0001
Neighborhood	2	1.98063548	0.99031774	25.75	<.0001

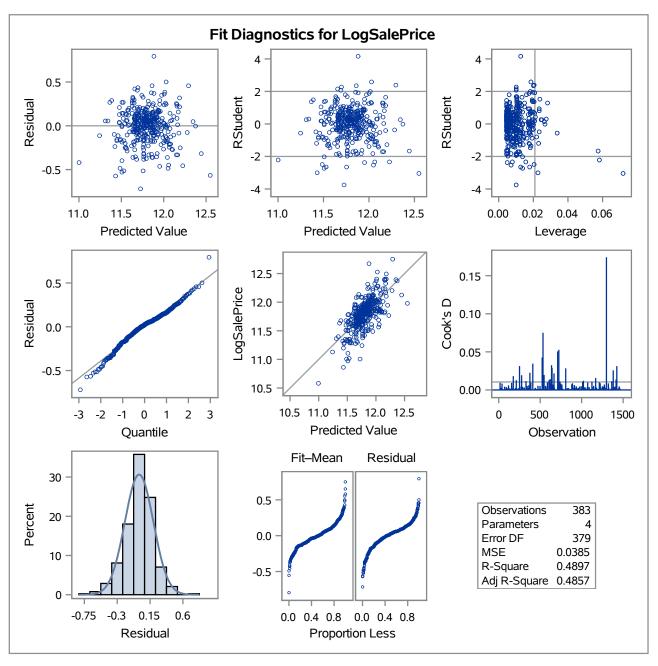
Source	DF	Type III SS	Mean Square	F Value	Pr > F
LogLiving	1	11.33986787	11.33986787	294.83	<.0001
Neighborhood	2	1.98063548	0.99031774	25.75	<.0001

Parameter	Estimate		Standard Error	t Value	Pr > t
Intercept	10.46164964	В	0.08294408	126.13	<.0001
LogLiving	0.55578838		0.03236859	17.17	<.0001
Neighborhood BrkSide	-0.13278863	В	0.02906111	-4.57	<.0001
Neighborhood Edwards	-0.15322623	В	0.02357095	-6.50	<.0001
Neighborhood NAmes	0.00000000	В			

Note: The X'X matrix has been found to be singular, and a generalized inverse was used to solve the normal equations. Terms whose estimates are followed by the letter 'B' are not uniquely estimable.

The GLM Procedure

Dependent Variable: LogSalePrice



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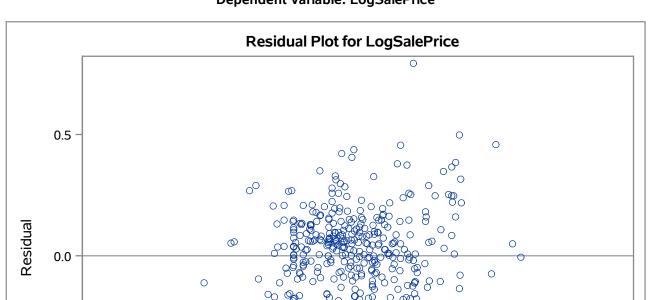
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The GLM Procedure Dependent Variable: LogSalePrice



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LogLiving

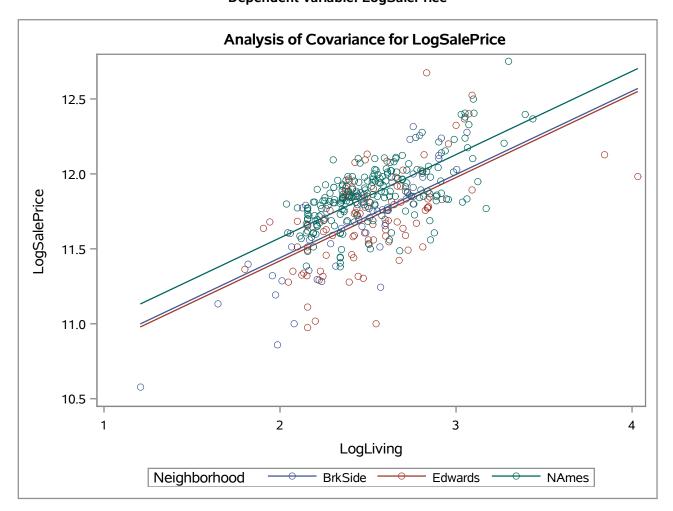
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The GLM Procedure Dependent Variable: LogSalePrice



Data Set	WORK.TRAIN
Test Data Set	WORK.TEST_LOG
Dependent Variable	LogSalePrice
Selection Method	Forward
Select Criterion	Adj R-Sq
Stop Criterion	Cross Validation
Cross Validation Method	Random
Cross Validation Fold	5
Effect Hierarchy Enforced	None
Random Number Seed	359957303

Observation Profile for Analysis Data			
Number of Observations Read			
Number of Observations Used	1371		
Number of Observations Used for Training	1371		

Observation Profile for Test Data				
Number of Observations Read	1459			
Number of Observations Used	0			

Class Level Information					
Class	Levels	Values			
Alley	3	Gr NA Pa			
BldgType	5	1Fam 2fmCon Duplex Twnhs TwnhsE			
BsmtCond	5	Fa Gd NA Po TA			
BsmtExposure	5	Av Gd Mn NA No			
BsmtFinType1	7	ALQ BLQ GLQ LwQ NA Rec Unf			
BsmtFinType2	7	ALQ BLQ GLQ LwQ NA Rec Unf			
BsmtQual	5	Ex Fa Gd NA TA			
CentralAir	2	NY			
Condition1	9	Artery Feedr Norm PosA PosN RRAe RRAn RRNe RRNn			
Condition2	8	Artery Feedr Norm PosA PosN RRAe RRAn RRNn			
Electrical	6	FuseA FuseF FuseP Mix NA SBrkr			
ExterCond	4	Ex Fa Gd TA			
ExterQual	4	Ex Fa Gd TA			
Exterior1st	14	AsbShng BrkComm BrkFace CBlock CemntBd HdBoard ImStucc MetalSd Plywood Stone Stucco VinylSd Wd Sdng WdShing			
Exterior2nd	16	AsbShng AsphShn Brk Cmn BrkFace CBlock CmentBd HdBoard ImStucc MetalSd Other Plywood Stone Stucco VinylSd Wd Sdng Wd Shng			

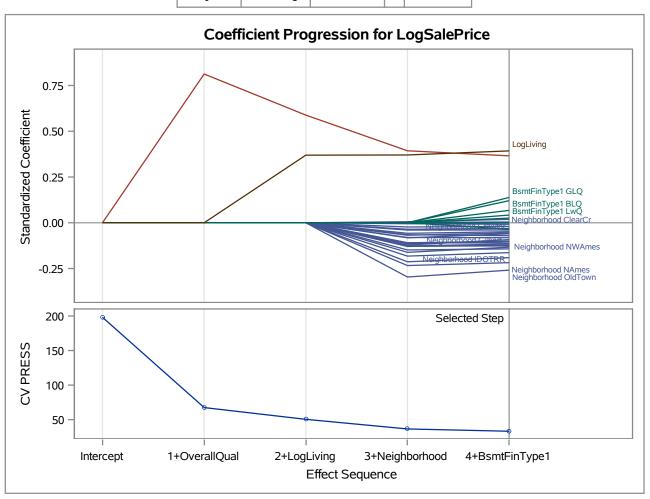
Class Level Information					
Class	Levels	Values			
Fence	5	GdPrv GdWo MnPrv MnWw NA			
FireplaceQu	6	Ex Fa Gd NA Po TA			
Foundation	6	BrkTil CBlock PConc Slab Stone Wood			
Functional	7	Maj1 Maj2 Min1 Min2 Mod Sev Typ			
GarageCond	5	Ex Fa Gd Po TA			
GarageFinish	3	Fin RFn Unf			
GarageQual	5	Ex Fa Gd Po TA			
GarageType	6	2Types Attchd Basment BuiltIn CarPort Detchd			
Heating	6	Floor GasA GasW Grav OthW Wall			
HeatingQC	5	Ex Fa Gd Po TA			
HouseStyle	8	1.5Fin 1.5Unf 1Story 2.5Fin 2.5Unf 2Story SFoyer SLvl			
KitchenQual	4	Ex Fa Gd TA			
LandContour	4	Bnk HLS Low Lvl			
LandSlope	3	Gtl Mod Sev			
LotConfig	5	Corner CulDSac FR2 FR3 Inside			
LotFrontage	81	10 11 12 13 14 15 16 17 18 21 24 30 31 32 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 NA			
LotShape	4	IR1 IR2 IR3 Reg			
MSZoning	5	C (a FV RH RL RM			
MasVnrType	4	BrkCmn BrkFace None Stone			
MiscFeature	5	Gar2 NA Othr Shed TenC			
Neighborhood	25	Blmngtn Blueste BrDale BrkSide ClearCr CollgCr Crawfor Edwards Gilbert IDOTRR MeadowV Mitchel NAmes NPkVill NWAmes NoRidge NridgHt OldTown SWISU Sawyer SawyerW Somerst StoneBr Timber Veenker			
PavedDrive	3	NPY			
PoolQC	4	Ex Fa Gd NA			
RoofMatl	8	ClyTile CompShg Membran Metal Roll Tar&Grv WdShake WdShngl			
RoofStyle	6	Flat Gable Gambrel Hip Mansard Shed			
SaleCondition	6	Abnorml AdjLand Alloca Family Normal Partial			
SaleType	9	COD CWD Con ConLD ConLi ConLw New Oth WD			
Street	2	Grvl Pave			
Utilities	2	AllPub NoSeWa			

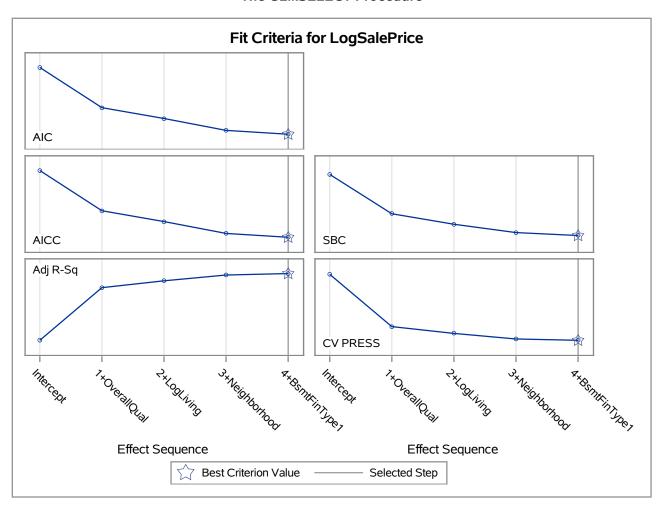
Dimensions			
Number of Effects	81		
Number of Parameters	379		

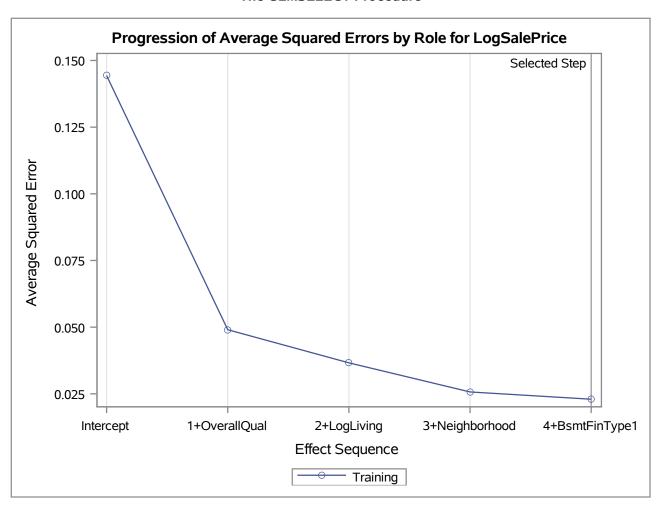
	Forward Selection Summary							
Step	Effect Entered	Number Effects In	Number Parms In	Adjusted R-Square	ASE	CV PRESS		
0	Intercept	1	1	0.0000	0.1444	198.0483		
1	OverallQual	2	2	0.6601	0.0490	67.4668		
2	LogLiving	3	3	0.7460	0.0366	50.4549		
3	Neighborhood	4	27	0.8185	0.0257	36.5441		
4	BsmtFinType1	5	33	0.8370*	0.0230	33.2221*		
	* Optimal Value of Criterion							

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

Stop Details					
Candidate Compare For Effect CV PRESS CV PRESS					
Entry	LotFrontage	33.8661	>	33.2221	







The selected model is the model at the last step (Step 4).

Intercept Neighborhood OverallQual BsmtFinType1 LogLiving

Analysis of Variance							
Source DF Squares Square F Value							
Model	32	166.41511	5.20047	220.86			
Error	1338	31.50522	0.02355				
Corrected Total	1370	197.92032					

Root MSE	0.15345
Dependent Mean	12.05374
R-Square	0.8408
Adj R-Sq	0.8370
AIC	-3733.97842
AICC	-3732.19698
SBC	-4934.60966
ASE (Train)	0.02298
CV PRESS	33.22211

Parameter Estimates						
Parameter	DF	Estimate	Standard Error	t Value		
Intercept	1	10.299776	0.064584	159.48		
Neighborhood Blmngtn	1	-0.167477	0.059781	-2.80		
Neighborhood Blueste	1	-0.393421	0.118184	-3.33		
Neighborhood BrDale	1	-0.521026	0.061280	-8.50		
Neighborhood BrkSide	1	-0.275486	0.052054	-5.29		
Neighborhood ClearCr	1	-0.054117	0.055311	-0.98		
Neighborhood CollgCr	1	-0.124410	0.048343	-2.57		
Neighborhood Crawfor	1	-0.112379	0.051473	-2.18		
Neighborhood Edwards	1	-0.312443	0.050098	-6.24		
Neighborhood Gilbert	1	-0.150920	0.049939	-3.02		
Neighborhood IDOTRR	1	-0.430830	0.055413	-7.77		
Neighborhood MeadowV	1	-0.450159	0.064994	-6.93		
Neighborhood Mitchel	1	-0.176073	0.052113	-3.38		
Neighborhood NAmes	1	-0.226014	0.048017	-4.71		
Neighborhood NPkVill	1	-0.332628	0.069351	-4.80		

Parameter Estimates						
Parameter	DF	Estimate	Standard Error	t Value		
Neighborhood NWAmes	1	-0.214491	0.049860	-4.30		
Neighborhood NoRidge	1	-0.018353	0.053098	-0.35		
Neighborhood NridgHt	1	0.030622	0.050276	0.61		
Neighborhood OldTown	1	-0.376363	0.049512	-7.60		
Neighborhood SWISU	1	-0.368107	0.058230	-6.32		
Neighborhood Sawyer	1	-0.210800	0.050459	-4.18		
Neighborhood SawyerW	1	-0.193573	0.050856	-3.81		
Neighborhood Somerst	1	-0.096258	0.049721	-1.94		
Neighborhood StoneBr	1	0.011962	0.056162	0.21		
Neighborhood Timber	1	-0.071450	0.052735	-1.35		
Neighborhood Veenker	0	0				
OverallQual	1	0.103396	0.005353	19.31		
BsmtFinType1 ALQ	1	0.127562	0.014584	8.75		
BsmtFinType1 BLQ	1	0.084710	0.016428	5.16		
BsmtFinType1 GLQ	1	0.115267	0.011952	9.64		
BsmtFinType1 LwQ	1	0.044263	0.020724	2.14		
BsmtFinType1 NA	1	-0.091237	0.030762	-2.97		
BsmtFinType1 Rec	1	0.055506	0.017024	3.26		
BsmtFinType1 Unf	0	0				
LogLiving	1	0.462127	0.017529	26.36		

Data Set	WORK.TRAIN
Test Data Set	WORK.TEST_LOG
Dependent Variable	LogSalePrice
Selection Method	Backward
Select Criterion	Adj R-Sq
Stop Criterion	Cross Validation
Choose Criterion	Cross Validation
Cross Validation Method	Random
Cross Validation Fold	5
Effect Hierarchy Enforced	None
Random Number Seed	370261942

Observation Profile for Analysis Data		
Number of Observations Read 146		
Number of Observations Used	1371	
Number of Observations Used for Training	1371	

Observation Profile for Test Data			
Number of Observations Read 1459			
Number of Observations Used	0		

	Class Level Information				
Class	Levels	Values			
Alley	3	Gr NA Pa			
BldgType	5	1Fam 2fmCon Duplex Twnhs TwnhsE			
BsmtCond	5	Fa Gd NA Po TA			
BsmtExposure	5	Av Gd Mn NA No			
BsmtFinType1	7	ALQ BLQ GLQ LwQ NA Rec Unf			
BsmtFinType2	7	ALQ BLQ GLQ LwQ NA Rec Unf			
BsmtQual	5	Ex Fa Gd NA TA			
CentralAir	2	NY			
Condition1	9	Artery Feedr Norm PosA PosN RRAe RRAn RRNe RRNn			
Condition2	8	Artery Feedr Norm PosA PosN RRAe RRAn RRNn			
Electrical	6	FuseA FuseF FuseP Mix NA SBrkr			
ExterCond	4	Ex Fa Gd TA			
ExterQual	4	Ex Fa Gd TA			
Exterior1st	14	AsbShng BrkComm BrkFace CBlock CemntBd HdBoard ImStucc MetalSd Plywood Stone Stucco VinylSd Wd Sdng WdShing			

	Class Level Information					
Class	Levels	Values				
Exterior2nd	16	AsbShng AsphShn Brk Cmn BrkFace CBlock CmentBd HdBoard ImStucc MetalSd Other Plywood Stone Stucco VinylSd Wd Sdng Wd Shng				
Fence	5	GdPrv GdWo MnPrv MnWw NA				
FireplaceQu	6	Ex Fa Gd NA Po TA				
Foundation	6	BrkTil CBlock PConc Slab Stone Wood				
Functional	7	Maj1 Maj2 Min1 Min2 Mod Sev Typ				
GarageCond	5	Ex Fa Gd Po TA				
GarageFinish	3	Fin RFn Unf				
GarageQual	5	Ex Fa Gd Po TA				
GarageType	6	2Types Attchd Basment BuiltIn CarPort Detchd				
Heating	6	Floor GasA GasW Grav OthW Wall				
HeatingQC	5	Ex Fa Gd Po TA				
HouseStyle	8	1.5Fin 1.5Unf 1Story 2.5Fin 2.5Unf 2Story SFoyer SLvl				
KitchenQual	4	Ex Fa Gd TA				
LandContour	4	Bnk HLS Low Lvl				
LandSlope	3	Gtl Mod Sev				
LotConfig	5	Corner CulDSac FR2 FR3 Inside				
LotFrontage	81	10 11 12 13 14 15 16 17 18 21 24 30 31 32 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 NA				
LotShape	4	IR1 IR2 IR3 Reg				
MSZoning	5	C (a FV RH RL RM				
MasVnrType	4	BrkCmn BrkFace None Stone				
MiscFeature	5	Gar2 NA Othr Shed TenC				
Neighborhood	25	Blmngtn Blueste BrDale BrkSide ClearCr CollgCr Crawfor Edwards Gilbert IDOTRR MeadowV Mitchel NAmes NPkVill NWAmes NoRidge NridgHt OldTown SWISU Sawyer SawyerW Somerst StoneBr Timber Veenker				
PavedDrive	3	NPY				
PoolQC	4	Ex Fa Gd NA				
RoofMatl	8	ClyTile CompShg Membran Metal Roll Tar&Grv WdShake WdShngl				
RoofStyle	6	Flat Gable Gambrel Hip Mansard Shed				
SaleCondition	6	Abnorml AdjLand Alloca Family Normal Partial				
SaleType	9	COD CWD Con ConLD ConLi ConLw New Oth WD				
Street	2	Grvl Pave				
Utilities	2	AllPub NoSeWa				

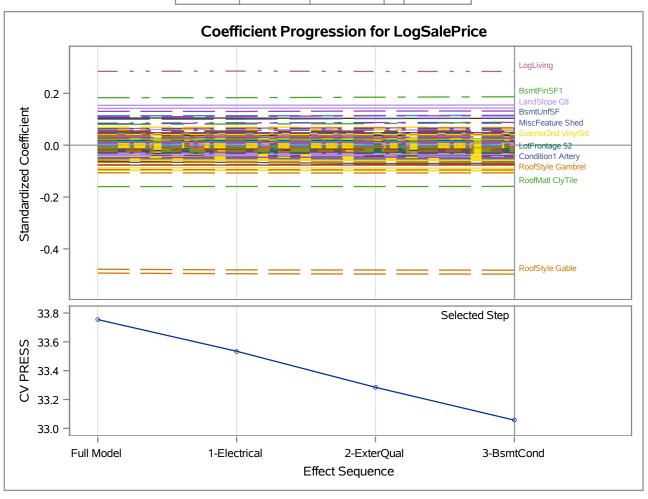
Dimensions		
Number of Effects	81	
Number of Parameters	379	

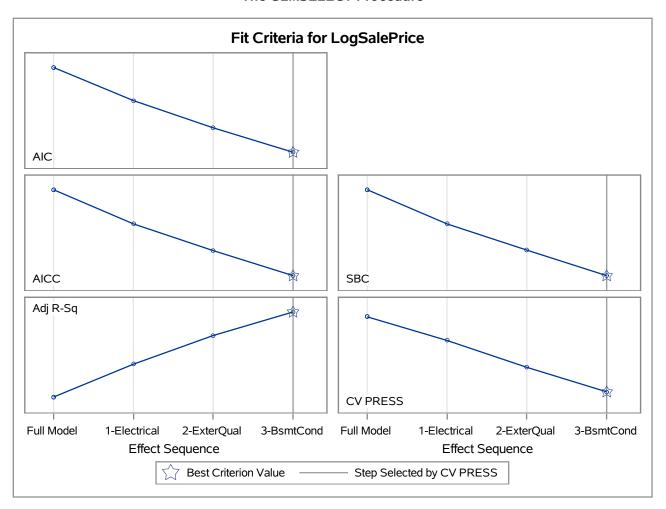
	Backward Selection Summary						
Step	Effect Removed	Number Effects In	Number Parms In	Adjusted R-Square	ASE	CV PRESS	
0		81	329	0.9386	0.0067	33.7549	
	Living	80	329	0.9386	0.0067	33.7549	
	TotalBsmtSF	79	329	0.9386	0.0067	33.7549	
1	Electrical	78	325	0.9388	0.0067	33.5348	
2	ExterQual	77	322	0.9389	0.0068	33.2845	
3	BsmtCond	76	319	0.9390*	0.0068	33.0564*	
	* Optimal Value of Criterion						

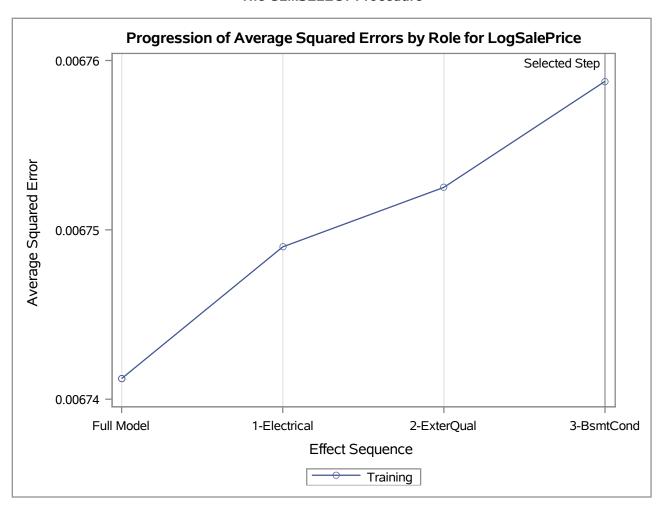
Note: Effects dropped at step 0 are redundant.

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

Stop Details					
Candidate For Effect CV PRESS CV PRESS					
Removal	FireplaceQu	33.0954	>	33.0564	







The selected model, based on Cross Validation, is the model at Step 3.

Effects:

Intercept MSSubClass MSZoning LotFrontage LotArea Street Alley LotShape LandContour Utilities LotConfig LandSlope Neighborhood Condition1 Condition 2 BldgType HouseStyle OverallQual OverallCond YearBuilt YearRemodAdd RoofStyle RoofMatl Exterior1st Exterior2nd MasVnrType MasVnrArea ExterCond Foundation BsmtQual BsmtExposure BsmtFinType1 BsmtFinSF1 BsmtFinType2 BsmtFinSF2 BsmtUnfSF Heating HeatingQC CentralAir _1stFirSF _2ndFirSF LowQualFinSF BsmtFullBath BsmtHalfBath FullBath HalfBath BedroomAbvGr KitchenAbvGr KitchenQual TotRmsAbvGrd Functional Fireplaces FireplaceQu GarageType GarageYrBlt GarageFinish GarageCars GarageArea GarageQual GarageCond PavedDrive WoodDeckSF OpenPorchSF EnclosedPorch _3SsnPorch ScreenPorch PoolArea PoolQC Fence MiscFeature MiscVal MoSold YrSold SaleType SaleCondition LogLiving

Analysis of Variance						
Source DF Squares Square F Value						
Model	318	188.65405	0.59325	67.35		
Error	1052	9.26627	0.00881			
Corrected Total	1370	197.92032				

Root MSE	0.09385
Dependent Mean	12.05374
R-Square	0.9532
Adj R-Sq	0.9390
AIC	-4839.76979
AICC	-4644.11265
SBC	-4546.53847
ASE (Train)	0.00676
CV PRESS	33.05642

Parameter Estimates					
Parameter		DF	Estimate	Standard Error	t Value
Intercept		1	9.913759	4.662119	2.13
MSSubClass		1	-0.000646	0.000362	-1.79
MSZoning	C (a	1	-0.382431	0.045489	-8.41
MSZoning	FV	1	0.088213	0.033871	2.60
MSZoning	RH	1	0.028862	0.037701	0.77
MSZoning	RL	1	0.037941	0.017645	2.15
MSZoning	RM	0	0		
LotFrontage	10	1	0.025976	0.018056	1.44
LotFrontage	11	1	0.066631	0.027360	2.44
LotFrontage	12	1	-0.010828	0.027530	-0.39
LotFrontage	13	1	-0.101334	0.044804	-2.26
LotFrontage	14	1	0.068507	0.051202	1.34
LotFrontage	15	1	-0.219091	0.097798	-2.24
LotFrontage	16	1	0.147404	0.094654	1.56
LotFrontage	17	1	0.084912	0.088064	0.96
LotFrontage	18	1	0.142810	0.107765	1.33
LotFrontage	21	1	-0.051731	0.056995	-0.91
LotFrontage	24	1	-0.036691	0.042237	-0.87
LotFrontage	30	1	-0.024079	0.046453	-0.52
LotFrontage	31	1	-0.048948	0.123104	-0.40
LotFrontage	32	1	-0.001287	0.052954	-0.02
LotFrontage	34	1	0.011950	0.037291	0.32
LotFrontage	35	1	0.029959	0.047922	0.63
LotFrontage	36	1	-0.063763	0.047277	-1.35
LotFrontage	37	1	-0.010988	0.045510	-0.24
LotFrontage	38	1	-0.009641	0.107637	-0.09
LotFrontage	39	1	-0.136536	0.100491	-1.36
LotFrontage	40	1	-0.041680	0.034001	-1.23
LotFrontage	41	1	-0.098415	0.044858	-2.19
LotFrontage	42	1	0.005398	0.060636	0.09
LotFrontage	43	1	-0.061518	0.037447	-1.64
LotFrontage	44	1	-0.045289	0.036276	-1.25
LotFrontage	45	1	-0.151025	0.081640	-1.85
LotFrontage	46	1	0.068122	0.098706	0.69

	F	Param	eter Estimates		
Parameter		DF	Estimate	Standard Error	t Value
LotFrontage	47	1	-0.012861	0.047767	-0.27
LotFrontage	48	1	0.033963	0.041514	0.82
LotFrontage	49	1	0.063603	0.057309	1.11
LotFrontage	50	1	-0.040797	0.018594	-2.19
LotFrontage	51	1	-0.053904	0.032894	-1.64
LotFrontage	52	1	-0.098942	0.030578	-3.24
LotFrontage	53	1	-0.080721	0.039632	-2.04
LotFrontage	54	1	0.092770	0.047160	1.97
LotFrontage	55	1	0.021921	0.033135	0.66
LotFrontage	56	1	0.030241	0.060648	0.50
LotFrontage	57	1	-0.006256	0.030745	-0.20
LotFrontage	58	1	-0.083182	0.044927	-1.85
LotFrontage	59	1	-0.016432	0.029156	-0.56
LotFrontage	60	1	-0.019029	0.013750	-1.38
LotFrontage	61	1	0.058571	0.036953	1.59
LotFrontage	62	1	-0.006457	0.036155	-0.18
LotFrontage	63	1	0.009313	0.028144	0.33
LotFrontage	64	1	0.046026	0.026557	1.73
LotFrontage	65	1	-0.016240	0.018039	-0.90
LotFrontage	66	1	0.024023	0.028934	0.83
LotFrontage	67	1	-0.031021	0.037029	-0.84
LotFrontage	68	1	-0.022291	0.025178	-0.89
LotFrontage	69	1	0.040387	0.034356	1.18
LotFrontage	70	1	0.016562	0.015630	1.06
LotFrontage	71	1	-0.023541	0.031498	-0.75
LotFrontage	72	1	-0.005225	0.026513	-0.20
LotFrontage	73	1	-0.036359	0.025633	-1.42
LotFrontage	74	1	0.008102	0.027682	0.29
LotFrontage	75	1	0.005462	0.017008	0.32
LotFrontage	76	1	-0.011580	0.033432	-0.35
LotFrontage	77	1	0.006460	0.038454	0.17
LotFrontage	78	1	0.013106	0.022571	0.58
LotFrontage	79	1	0.008128	0.025990	0.31
LotFrontage	80	1	0.003927	0.015161	0.26

P	arame	eter Estimates		
Parameter	DF	Estimate	Standard Error	t Value
LotFrontage 81	1	0.008816	0.046663	0.19
LotFrontage 82	1	0.007720	0.032139	0.24
LotFrontage 83	1	0.020480	0.045246	0.45
LotFrontage 84	1	0.040110	0.035342	1.13
LotFrontage 85	1	-0.040419	0.019157	-2.11
LotFrontage 86	1	0.016166	0.033163	0.49
LotFrontage 87	1	0.028574	0.047275	0.60
LotFrontage 88	1	0.024463	0.032544	0.75
LotFrontage 89	1	0.013114	0.049345	0.27
LotFrontage 90	1	-0.035431	0.024890	-1.42
LotFrontage 91	1	0.074620	0.041668	1.79
LotFrontage 92	1	-0.022907	0.040031	-0.57
LotFrontage 93	1	-0.000805	0.035926	-0.02
LotFrontage 94	1	-0.056177	0.045022	-1.25
LotFrontage 95	1	-0.087403	0.045635	-1.92
LotFrontage 96	1	0.005663	0.038330	0.15
LotFrontage 97	1	-0.000063445	0.077239	-0.00
LotFrontage 98	1	-0.046519	0.036883	-1.26
LotFrontage 99	1	0.031559	0.059057	0.53
LotFrontage NA	0	0		
LotArea	1	0.000003845	0.000000514	7.48
Street Grvl	1	-0.169695	0.058369	-2.91
Street Pave	0	0		
Alley Gr	1	-0.005946	0.028592	-0.21
Alley NA	1	-0.003983	0.022203	-0.18
Alley Pa	0	0		
LotShape IR1	1	-0.007778	0.007576	-1.03
LotShape IR2	1	0.012145	0.019863	0.61
LotShape IR3	1	-0.034902	0.041799	-0.83
LotShape Reg	0	0		
LandContour Bnk	1	-0.007756	0.017117	-0.45
LandContour HLS	1	0.014678	0.018711	0.78
LandContour Low	1	-0.040550	0.025104	-1.62
LandContour Lvl	0	0		

Para	meter	Estimates		Parameter Estimates					
Parameter	DF	Estimate	Standard Error	t Value					
Utilities AllPub	1	0.314573	0.110243	2.85					
Utilities NoSeWa	0	0							
LotConfig Corner	1	0.011593	0.008060	1.44					
LotConfig CulDSac	1	0.037404	0.013669	2.74					
LotConfig FR2	1	-0.042950	0.017071	-2.52					
LotConfig FR3	1	-0.077092	0.054952	-1.40					
LotConfig Inside	0	0							
LandSlope Gtl	1	0.242309	0.049067	4.94					
LandSlope Mod	1	0.285693	0.049063	5.82					
LandSlope Sev	0	0							
Neighborhood Blmngtn	1	-0.008369	0.052784	-0.16					
Neighborhood Blueste	1	-0.064241	0.089020	-0.72					
Neighborhood BrDale	1	-0.082633	0.063627	-1.30					
Neighborhood BrkSide	1	0.005575	0.043881	0.13					
Neighborhood ClearCr	1	-0.053690	0.043045	-1.25					
Neighborhood CollgCr	1	-0.071157	0.037446	-1.90					
Neighborhood Crawfor	1	0.045324	0.040267	1.13					
Neighborhood Edwards	1	-0.145575	0.038522	-3.78					
Neighborhood Gilbert	1	-0.061299	0.038986	-1.57					
Neighborhood IDOTRR	1	-0.042468	0.049016	-0.87					
Neighborhood MeadowV	1	-0.224125	0.058042	-3.86					
Neighborhood Mitchel	1	-0.092380	0.039309	-2.35					
Neighborhood NAmes	1	-0.101786	0.036560	-2.78					
Neighborhood NPkVill	1	-0.008111	0.065336	-0.12					
Neighborhood NWAmes	1	-0.102271	0.037162	-2.75					
Neighborhood NoRidge	1	0.019315	0.041617	0.46					
Neighborhood NridgHt	1	0.028078	0.040360	0.70					
Neighborhood OldTown	1	-0.068986	0.043806	-1.57					
Neighborhood SWISU	1	-0.045470	0.047114	-0.97					
Neighborhood Sawyer	1	-0.083943	0.037615	-2.23					
Neighborhood SawyerW	1	-0.051223	0.038303	-1.34					
Neighborhood Somerst	1	-0.050985	0.044485	-1.15					
Neighborhood StoneBr	1	0.104706	0.043799	2.39					
Neighborhood Timber	1	-0.039348	0.040608	-0.97					

Р	arame	eter Estimates		
Parameter	DF	Estimate	Standard Error	t Value
Neighborhood Veenker	0	0		
Condition1 Artery	1	-0.139033	0.056569	-2.46
Condition1 Feedr	1	-0.090139	0.054492	-1.65
Condition1 Norm	1	-0.039400	0.052658	-0.75
Condition1 PosA	1	-0.050202	0.066895	-0.75
Condition1 PosN	1	-0.019804	0.058452	-0.34
Condition1 RRAe	1	-0.166835	0.063791	-2.62
Condition1 RRAn	1	-0.059112	0.055279	-1.07
Condition1 RRNe	1	-0.114023	0.089284	-1.28
Condition1 RRNn	0	0		
Condition2 Artery	1	-0.046516	0.122561	-0.38
Condition2 Feedr	1	-0.043669	0.099557	-0.44
Condition2 Norm	1	0.025580	0.081358	0.31
Condition2 PosA	1	0.202924	0.180625	1.12
Condition2 PosN	1	-0.747472	0.115377	-6.48
Condition2 RRAe	1	-0.275127	0.306653	-0.90
Condition2 RRAn	1	-0.029576	0.127783	-0.23
Condition2 RRNn	0	0		
BldgType 1Fam	1	-0.024807	0.040050	-0.62
BldgType 2fmCon	1	0.018868	0.037883	0.50
BldgType Duplex	1	-0.060158	0.043740	-1.38
BldgType Twnhs	1	-0.036377	0.028616	-1.27
BldgType TwnhsE	0	0		
HouseStyle 1.5Fin	1	-0.044529	0.025051	-1.78
HouseStyle 1.5Unf	1	-0.012658	0.043893	-0.29
HouseStyle 1Story	1	-0.032193	0.026437	-1.22
HouseStyle 2.5Fin	1	-0.123940	0.069213	-1.79
HouseStyle 2.5Unf	1	-0.000457	0.048708	-0.01
HouseStyle 2Story	1	-0.056352	0.023797	-2.37
HouseStyle SFoyer	1	0.006376	0.024522	0.26
HouseStyle SLvl	0	0		
		0.037252	0.004564	8.16
OverallQual	1	0.037232	0.004504	
OverallQual OverallCond	1	0.040443	0.003899	10.37

YearRemodAdd 1 0.000378 0.000253 1.49 RoofStyle Flat 1 -0.389039 0.145639 -2.67 RoofStyle Gable 1 -0.452615 0.128238 -3.53 RoofStyle Gambrel 1 -0.476599 0.132974 -3.58 RoofStyle Hip 1 -0.455473 0.128326 -3.55 RoofStyle Mansard 1 -0.389940 0.127561 -3.06 RoofMatl ClyTile 1 -2.239601 0.265266 -8.44 RoofMatl CompShg 1 -0.072968 0.049594 -1.47 RoofMatl Membran 1 0.319782 0.149075 2.15 RoofMatl Metal 1 0.213524 0.142672 1.50 RoofMatl WdShake 1 -0.072165 0.090416 -0.80 RoofMatl WdShake 1 -0.103306 0.080891 -1.28 RoofMatl WdShngl 0 0 <th>P</th> <th>aram</th> <th>eter Estimates</th> <th></th> <th></th>	P	aram	eter Estimates		
RoofStyle Flat 1 -0.389039 0.145639 -2.67 RoofStyle Gable 1 -0.452615 0.128238 -3.53 RoofStyle Gambrel 1 -0.476599 0.132974 -3.58 RoofStyle Hip 1 -0.455473 0.128326 -3.55 RoofStyle Mansard 1 -0.389940 0.127561 -3.06 RoofMatl ClyTile 1 -0.389940 0.127561 -3.06 RoofMatl ChyTile 1 -0.239601 0.265266 -8.44 RoofMatl Membran 1 -0.072968 0.049594 -1.47 RoofMatl Membran 1 0.319782 0.142672 1.50 RoofMatl Metal 1 0.213524 0.142672 1.50 RoofMatl Metal 1 -0.072165 0.090416 -0.80 RoofMatl WdShngl 0 0 . . Exterior1st AsbShng 1 -	Parameter	DF	Estimate		t Value
RoofStyle Gable 1 -0.452615 0.128238 -3.53 RoofStyle Gambrel 1 -0.476599 0.132974 -3.58 RoofStyle Hip 1 -0.455473 0.128326 -3.55 RoofStyle Mansard 1 -0.389940 0.127561 -3.06 RoofMatl ClyTile 1 -2.239601 0.265266 -8.44 RoofMatl CompShg 1 -0.072968 0.049594 -1.47 RoofMatl Membran 1 0.319782 0.149075 2.15 RoofMatl Membran 1 0.072968 0.049594 -1.47 RoofMatl Membran 1 0.072968 0.049594 -1.47 RoofMatl Membran 1 0.072968 0.049594 -1.47 RoofMatl Metal 1 0.072165 0.090416 -0.80 RoofMatl WdShake 1 -0.072165 0.090416 -0.80 RoofMatl WdShngl 0<	YearRemodAdd	1	0.000378	0.000253	1.49
RoofStyle Gambrel 1 -0.476599 0.132974 -3.58 RoofStyle Hip 1 -0.455473 0.128326 -3.55 RoofStyle Mansard 1 -0.389940 0.127561 -3.06 RoofMatl ClyTile 1 -2.239601 0.265266 -8.44 RoofMatl CompShg 1 -0.072968 0.049594 -1.47 RoofMatl Membran 1 0.319782 0.149075 2.15 RoofMatl Metal 1 0.213524 0.142672 1.50 RoofMatl Metal 1 0.213524 0.142672 1.50 RoofMatl Tar&Grv 1 -0.072165 0.090416 -0.80 RoofMatl WdShake 1 -0.103306 0.080891 -1.28 RoofMatl WdShake 1 -0.012718 0.062662 -0.20 Exterior1st BrkFace 1 0.061166 0.035898 1.70 Exterior1st CemntBd <th< th=""><th>RoofStyle Flat</th><th>1</th><th>-0.389039</th><th>0.145639</th><th>-2.67</th></th<>	RoofStyle Flat	1	-0.389039	0.145639	-2.67
RoofStyle Hip 1 -0.455473 0.128326 -3.55 RoofStyle Mansard 1 -0.389940 0.127561 -3.06 RoofStyle Shed 0 0 . . RoofMatl ClyTile 1 -2.239601 0.265266 -8.44 RoofMatl CompShg 1 -0.072968 0.049594 -1.47 RoofMatl Membran 1 0.319782 0.149075 2.15 RoofMatl Metal 1 0.213524 0.142672 1.50 RoofMatl Roll 1 0.112355 0.127532 0.88 RoofMatl WdShake 1 -0.072165 0.090416 -0.80 RoofMatl WdShake 1 -0.103306 0.080891 -1.28 RoofMatl WdShngl 0 0 . . Exterior1st BrkComm 1 -0.012718 0.062662 -0.20 Exterior1st BrkFace 1 0.061166	RoofStyle Gable	1	-0.452615	0.128238	-3.53
RoofStyle Mansard 1 -0.389940 0.127561 -3.06 RoofStyle Shed 0 0 . . RoofMatl ClyTile 1 -2.239601 0.265266 -8.44 RoofMatl CompShg 1 -0.072968 0.049594 -1.47 RoofMatl Membran 1 0.319782 0.149075 2.15 RoofMatl Metal 1 0.213524 0.142672 1.50 RoofMatl Roll 1 0.112355 0.127532 0.88 RoofMatl Tar&Grv 1 -0.072165 0.090416 -0.80 RoofMatl WdShake 1 -0.103306 0.080891 -1.28 RoofMatl WdShngl 0 0 . . Exterior1st BrkComm 1 -0.012718 0.062662 -0.20 Exterior1st BrkFace 1 0.061166 0.035898 1.70 Exterior1st CenntBd 1 -0.093520	RoofStyle Gambrel	1	-0.476599	0.132974	-3.58
RoofStyle Shed 0 0 0 . <t< th=""><th>RoofStyle Hip</th><th>1</th><th>-0.455473</th><th>0.128326</th><th>-3.55</th></t<>	RoofStyle Hip	1	-0.455473	0.128326	-3.55
RoofMatl ClyTile 1 -2.239601 0.265266 -8.44 RoofMatl CompShg 1 -0.072968 0.049594 -1.47 RoofMatl Membran 1 0.319782 0.149075 2.15 RoofMatl Metal 1 0.213524 0.142672 1.50 RoofMatl Roll 1 0.112355 0.127532 0.88 RoofMatl Tar&Grv 1 -0.072165 0.090416 -0.80 RoofMatl WdShake 1 -0.103306 0.080891 -1.28 RoofMatl WdShake 1 -0.103306 0.080891 -1.28 RoofMatl WdShngl 0 0 . . Exterior1st AsbShngl 1 -0.012718 0.062662 -0.20 Exterior1st BrkFace 1 0.061166 0.035898 1.70 Exterior1st CBlock 1 -0.093520 0.107887 -0.87 Exterior1st HdBoard 1	RoofStyle Mansard	1	-0.389940	0.127561	-3.06
RoofMatl CompShg 1 -0.072968 0.049594 -1.47 RoofMatl Membran 1 0.319782 0.149075 2.15 RoofMatl Metal 1 0.213524 0.142672 1.50 RoofMatl Roll 1 0.112355 0.127532 0.88 RoofMatl Tar&Grv 1 -0.072165 0.090416 -0.80 RoofMatl WdShake 1 -0.103306 0.080891 -1.28 RoofMatl WdShngl 0 0 . . Exterior1st AsbShng 1 -0.012718 0.062662 -0.20 Exterior1st BrkFace 1 0.061166 0.035898 1.70 Exterior1st BrkFace 1 -0.093520 0.107887 -0.87 Exterior1st HdBoard 1 -0.093520 0.107887 -0.87 Exterior1st HdBoard 1 -0.015827 0.033269 -0.48 Exterior1st MetalSd 1	RoofStyle Shed	0	0		
RoofMatl Membran 1 0.319782 0.149075 2.15 RoofMatl Metal 1 0.213524 0.142672 1.50 RoofMatl Roll 1 0.112355 0.127532 0.88 RoofMatl Tar&Grv 1 -0.072165 0.090416 -0.80 RoofMatl WdShake 1 -0.103306 0.080891 -1.28 RoofMatl WdShngl 0 0 . . Exterior1st AsbShng 1 -0.012718 0.062662 -0.20 Exterior1st BrkComm 1 -0.263837 0.119212 -2.21 Exterior1st BrkFace 1 0.061166 0.035898 1.70 Exterior1st CemntBd 1 -0.093520 0.107887 -0.87 Exterior1st HdBoard 1 -0.095122 0.070707 -1.35 Exterior1st ImStucc 1 -0.015827 0.033269 -0.48 Exterior1st MetalSd 1 </th <th>RoofMatl ClyTile</th> <th>1</th> <th>-2.239601</th> <th>0.265266</th> <th>-8.44</th>	RoofMatl ClyTile	1	-2.239601	0.265266	-8.44
RoofMatl Metal 1 0.213524 0.142672 1.50 RoofMatl Roll 1 0.112355 0.127532 0.88 RoofMatl Tar&Grv 1 -0.072165 0.090416 -0.80 RoofMatl WdShake 1 -0.103306 0.080891 -1.28 RoofMatl WdShngl 0 0 . . Exterior1st AsbShng 1 -0.012718 0.062662 -0.20 Exterior1st BrkComm 1 -0.263837 0.119212 -2.21 Exterior1st BrkFace 1 0.061166 0.035898 1.70 Exterior1st CBlock 1 -0.093520 0.107887 -0.87 Exterior1st HdBoard 1 -0.095122 0.070707 -1.35 Exterior1st ImStucc 1 -0.037556 0.122025 -0.31 Exterior1st MetalSd 1 0.061526 0.049271 1.25 Exterior1st Stone 1 </th <th>RoofMatl CompShg</th> <th>1</th> <th>-0.072968</th> <th>0.049594</th> <th>-1.47</th>	RoofMatl CompShg	1	-0.072968	0.049594	-1.47
RoofMatl Roll 1 0.112355 0.127532 0.88 RoofMatl Tar&Grv 1 -0.072165 0.090416 -0.80 RoofMatl WdShake 1 -0.103306 0.080891 -1.28 RoofMatl WdShngl 0 0 . . Exterior1st AsbShng 1 -0.012718 0.062662 -0.20 Exterior1st BrkComm 1 -0.263837 0.119212 -2.21 Exterior1st BrkFace 1 0.061166 0.035898 1.70 Exterior1st CBlock 1 -0.093520 0.107887 -0.87 Exterior1st CemntBd 1 -0.095122 0.070707 -1.35 Exterior1st ImStucc 1 -0.015827 0.033269 -0.48 Exterior1st MetalSd 1 0.061526 0.049271 1.25 Exterior1st Plywood 1 -0.019515 0.033888 -0.58 Exterior1st VinylSd	RoofMatl Membran	1	0.319782	0.149075	2.15
RoofMatl Tar&Grv 1 -0.072165 0.090416 -0.80 RoofMatl WdShake 1 -0.103306 0.080891 -1.28 RoofMatl WdShngl 0 0 . . Exterior1st AsbShng 1 -0.012718 0.062662 -0.20 Exterior1st BrkComm 1 -0.263837 0.119212 -2.21 Exterior1st BrkFace 1 0.061166 0.035898 1.70 Exterior1st CBlock 1 -0.093520 0.107887 -0.87 Exterior1st CemntBd 1 -0.095122 0.070707 -1.35 Exterior1st ImStucc 1 -0.015827 0.033269 -0.48 Exterior1st MetalSd 1 0.061526 0.049271 1.25 Exterior1st Plywood 1 -0.019515 0.033888 -0.58 Exterior1st Stucco 1 0.014202 0.096590 0.15 Exterior1st VinylSd	RoofMatl Metal	1	0.213524	0.142672	1.50
RoofMatl WdShake 1 -0.103306 0.080891 -1.28 RoofMatl WdShngl 0 0 . . Exterior1st AsbShng 1 -0.012718 0.062662 -0.20 Exterior1st BrkComm 1 -0.263837 0.119212 -2.21 Exterior1st BrkFace 1 0.061166 0.035898 1.70 Exterior1st CBlock 1 -0.093520 0.107887 -0.87 Exterior1st CemntBd 1 -0.095122 0.070707 -1.35 Exterior1st HdBoard 1 -0.095122 0.070707 -1.35 Exterior1st ImStucc 1 -0.037556 0.122025 -0.31 Exterior1st MetalSd 1 0.061526 0.049271 1.25 Exterior1st Stone 1 0.014202 0.096590 0.15 Exterior1st VinylSd 1 -0.007357 0.042149 -0.17 Exterior1st Wd Sdng	RoofMatl Roll	1	0.112355	0.127532	0.88
RoofMatl WdShngl 0 0 . . Exterior1st AsbShng 1 -0.012718 0.062662 -0.20 Exterior1st BrkComm 1 -0.263837 0.119212 -2.21 Exterior1st BrkFace 1 0.061166 0.035898 1.70 Exterior1st BrkFace 1 -0.093520 0.107887 -0.87 Exterior1st CemntBd 1 -0.095122 0.070707 -1.35 Exterior1st HdBoard 1 -0.015827 0.033269 -0.48 Exterior1st ImStucc 1 -0.015827 0.033269 -0.48 Exterior1st MetalSd 1 0.061526 0.049271 1.25 Exterior1st Plywood 1 -0.019515 0.033888 -0.58 Exterior1st Stucco 1 0.020119 0.043272 0.46 Exterior1st VinylSd 1 -0.007357 0.042149 -0.17 Exterior2nd AsbShng	RoofMatl Tar&Grv	1	-0.072165	0.090416	-0.80
Exterior1st AsbShng 1 -0.012718 0.062662 -0.20 Exterior1st BrkComm 1 -0.263837 0.119212 -2.21 Exterior1st BrkFace 1 0.061166 0.035898 1.70 Exterior1st CBlock 1 -0.093520 0.107887 -0.87 Exterior1st CemntBd 1 -0.095122 0.070707 -1.35 Exterior1st HdBoard 1 -0.015827 0.033269 -0.48 Exterior1st ImStucc 1 -0.037556 0.122025 -0.31 Exterior1st MetalSd 1 0.061526 0.049271 1.25 Exterior1st Plywood 1 -0.019515 0.033888 -0.58 Exterior1st Stone 1 0.014202 0.096590 0.15 Exterior1st VinylSd 1 -0.007357 0.042149 -0.17 Exterior1st Wd Sdng 1 -0.040767 0.031709 -1.29 Exterior2nd	RoofMatl WdShake	1	-0.103306	0.080891	-1.28
Exterior1st BrkComm 1 -0.263837 0.119212 -2.21 Exterior1st BrkFace 1 0.061166 0.035898 1.70 Exterior1st CBlock 1 -0.093520 0.107887 -0.87 Exterior1st CemntBd 1 -0.095122 0.070707 -1.35 Exterior1st HdBoard 1 -0.015827 0.033269 -0.48 Exterior1st ImStucc 1 -0.015827 0.033269 -0.48 Exterior1st MetalSd 1 -0.037556 0.122025 -0.31 Exterior1st MetalSd 1 0.061526 0.049271 1.25 Exterior1st Stone 1 0.019515 0.033888 -0.58 Exterior1st Stucco 1 0.014202 0.096590 0.15 Exterior1st VinylSd 1 -0.007357 0.042149 -0.17 Exterior1st Wd Sdng 1 -0.040767 0.031709 -1.29 Exterior2nd	RoofMatl WdShngl	0	0		
Exterior1st BrkFace 1 0.061166 0.035898 1.70 Exterior1st CBlock 1 -0.093520 0.107887 -0.87 Exterior1st CemntBd 1 -0.095122 0.070707 -1.35 Exterior1st HdBoard 1 -0.015827 0.033269 -0.48 Exterior1st ImStucc 1 -0.037556 0.122025 -0.31 Exterior1st MetalSd 1 0.061526 0.049271 1.25 Exterior1st Plywood 1 -0.019515 0.033888 -0.58 Exterior1st Stone 1 0.014202 0.096590 0.15 Exterior1st Stucco 1 0.020119 0.043272 0.46 Exterior1st Wd Sdng 1 -0.0907357 0.042149 -0.17 Exterior1st Wd Sdng 1 -0.040767 0.031709 -1.29 Exterior2nd AsbShng 1 -0.050597 0.057680 -0.88 Exterior2nd	Exterior1st AsbShng	1	-0.012718	0.062662	-0.20
Exterior1st CBlock 1 -0.093520 0.107887 -0.87 Exterior1st CemntBd 1 -0.095122 0.070707 -1.35 Exterior1st HdBoard 1 -0.015827 0.033269 -0.48 Exterior1st ImStucc 1 -0.037556 0.122025 -0.31 Exterior1st MetalSd 1 0.061526 0.049271 1.25 Exterior1st Plywood 1 -0.019515 0.033888 -0.58 Exterior1st Stone 1 0.014202 0.096590 0.15 Exterior1st Stucco 1 0.020119 0.043272 0.46 Exterior1st VinylSd 1 -0.007357 0.042149 -0.17 Exterior1st Wd Sdng 1 -0.040767 0.031709 -1.29 Exterior2nd AsbShng 1 -0.050597 0.057680 -0.88 Exterior2nd Brk Cmn 1 0.004666 0.084279 0.06 Exterior2nd	Exterior1st BrkComm	1	-0.263837	0.119212	-2.21
Exterior1st CemntBd 1 -0.095122 0.070707 -1.35 Exterior1st HdBoard 1 -0.015827 0.033269 -0.48 Exterior1st ImStucc 1 -0.037556 0.122025 -0.31 Exterior1st MetalSd 1 0.061526 0.049271 1.25 Exterior1st Plywood 1 -0.019515 0.033888 -0.58 Exterior1st Stone 1 0.014202 0.096590 0.15 Exterior1st Stucco 1 0.020119 0.043272 0.46 Exterior1st VinylSd 1 -0.007357 0.042149 -0.17 Exterior1st Wd Sdng 1 -0.040767 0.031709 -1.29 Exterior2nd AsbShng 1 -0.050597 0.057680 -0.88 Exterior2nd Brk Cmn 1 0.004666 0.084279 0.06 Exterior2nd BrkFace 1 -0.034578 0.038561 -0.90	Exterior1st BrkFace	1	0.061166	0.035898	1.70
Exterior1st HdBoard 1 -0.015827 0.033269 -0.48 Exterior1st ImStucc 1 -0.037556 0.122025 -0.31 Exterior1st MetalSd 1 0.061526 0.049271 1.25 Exterior1st Plywood 1 -0.019515 0.033888 -0.58 Exterior1st Stone 1 0.014202 0.096590 0.15 Exterior1st Stucco 1 0.020119 0.043272 0.46 Exterior1st VinylSd 1 -0.007357 0.042149 -0.17 Exterior1st Wd Sdng 1 -0.040767 0.031709 -1.29 Exterior2nd AsbShng 1 -0.050597 0.057680 -0.88 Exterior2nd AsphShn 1 0.012151 0.088540 0.14 Exterior2nd Brk Cmn 1 0.004666 0.084279 0.06 Exterior2nd BrkFace 1 -0.034578 0.038561 -0.90	Exterior1st CBlock	1	-0.093520	0.107887	-0.87
Exterior1st ImStucc 1 -0.037556 0.122025 -0.31 Exterior1st MetalSd 1 0.061526 0.049271 1.25 Exterior1st Plywood 1 -0.019515 0.033888 -0.58 Exterior1st Stone 1 0.014202 0.096590 0.15 Exterior1st Stucco 1 0.020119 0.043272 0.46 Exterior1st VinylSd 1 -0.007357 0.042149 -0.17 Exterior1st Wd Sdng 1 -0.040767 0.031709 -1.29 Exterior1st WdShing 0 0 . . Exterior2nd AsbShng 1 -0.050597 0.057680 -0.88 Exterior2nd Brk Cmn 1 0.004666 0.084279 0.06 Exterior2nd BrkFace 1 -0.034578 0.038561 -0.90	Exterior1st CemntBd	1	-0.095122	0.070707	-1.35
Exterior1st MetalSd 1 0.061526 0.049271 1.25 Exterior1st Plywood 1 -0.019515 0.033888 -0.58 Exterior1st Stone 1 0.014202 0.096590 0.15 Exterior1st Stucco 1 0.020119 0.043272 0.46 Exterior1st VinylSd 1 -0.007357 0.042149 -0.17 Exterior1st Wd Sdng 1 -0.040767 0.031709 -1.29 Exterior1st WdShing 0 0 . . Exterior2nd AsbShng 1 -0.050597 0.057680 -0.88 Exterior2nd AsphShn 1 0.012151 0.088540 0.14 Exterior2nd Brk Cmn 1 0.004666 0.084279 0.06 Exterior2nd BrkFace 1 -0.034578 0.038561 -0.90	Exterior1st HdBoard	1	-0.015827	0.033269	-0.48
Exterior1st Plywood 1 -0.019515 0.033888 -0.58 Exterior1st Stone 1 0.014202 0.096590 0.15 Exterior1st Stucco 1 0.020119 0.043272 0.46 Exterior1st VinylSd 1 -0.007357 0.042149 -0.17 Exterior1st Wd Sdng 1 -0.040767 0.031709 -1.29 Exterior1st WdShing 0 0 . . Exterior2nd AsbShng 1 -0.050597 0.057680 -0.88 Exterior2nd AsphShn 1 0.012151 0.088540 0.14 Exterior2nd Brk Cmn 1 0.004666 0.084279 0.06 Exterior2nd BrkFace 1 -0.034578 0.038561 -0.90	Exterior1st ImStucc	1	-0.037556	0.122025	-0.31
Exterior1st Stone 1 0.014202 0.096590 0.15 Exterior1st Stucco 1 0.020119 0.043272 0.46 Exterior1st VinylSd 1 -0.007357 0.042149 -0.17 Exterior1st Wd Sdng 1 -0.040767 0.031709 -1.29 Exterior1st WdShing 0 0 . . Exterior2nd AsbShng 1 -0.050597 0.057680 -0.88 Exterior2nd AsphShn 1 0.012151 0.088540 0.14 Exterior2nd Brk Cmn 1 0.004666 0.084279 0.06 Exterior2nd BrkFace 1 -0.034578 0.038561 -0.90	Exterior1st MetalSd	1	0.061526	0.049271	1.25
Exterior1st Stucco 1 0.020119 0.043272 0.46 Exterior1st VinylSd 1 -0.007357 0.042149 -0.17 Exterior1st Wd Sdng 1 -0.040767 0.031709 -1.29 Exterior1st WdShing 0 0 . . Exterior2nd AsbShng 1 -0.050597 0.057680 -0.88 Exterior2nd AsphShn 1 0.012151 0.088540 0.14 Exterior2nd Brk Cmn 1 0.004666 0.084279 0.06 Exterior2nd BrkFace 1 -0.034578 0.038561 -0.90	Exterior1st Plywood	1	-0.019515	0.033888	-0.58
Exterior1st VinylSd 1 -0.007357 0.042149 -0.17 Exterior1st Wd Sdng 1 -0.040767 0.031709 -1.29 Exterior1st WdShing 0 0 . . Exterior2nd AsbShng 1 -0.050597 0.057680 -0.88 Exterior2nd AsphShn 1 0.012151 0.088540 0.14 Exterior2nd Brk Cmn 1 0.004666 0.084279 0.06 Exterior2nd BrkFace 1 -0.034578 0.038561 -0.90	Exterior1st Stone	1	0.014202	0.096590	0.15
Exterior1st Wd Sdng 1 -0.040767 0.031709 -1.29 Exterior1st WdShing 0 0 . . Exterior2nd AsbShng 1 -0.050597 0.057680 -0.88 Exterior2nd AsphShn 1 0.012151 0.088540 0.14 Exterior2nd Brk Cmn 1 0.004666 0.084279 0.06 Exterior2nd BrkFace 1 -0.034578 0.038561 -0.90	Exterior1st Stucco	1	0.020119	0.043272	0.46
Exterior1st WdShing 0 0 . . Exterior2nd AsbShng 1 -0.050597 0.057680 -0.88 Exterior2nd AsphShn 1 0.012151 0.088540 0.14 Exterior2nd Brk Cmn 1 0.004666 0.084279 0.06 Exterior2nd BrkFace 1 -0.034578 0.038561 -0.90	Exterior1st VinylSd	1	-0.007357	0.042149	-0.17
Exterior2nd AsbShng 1 -0.050597 0.057680 -0.88 Exterior2nd AsphShn 1 0.012151 0.088540 0.14 Exterior2nd Brk Cmn 1 0.004666 0.084279 0.06 Exterior2nd BrkFace 1 -0.034578 0.038561 -0.90	Exterior1st Wd Sdng	1	-0.040767	0.031709	-1.29
Exterior2nd AsphShn 1 0.012151 0.088540 0.14 Exterior2nd Brk Cmn 1 0.004666 0.084279 0.06 Exterior2nd BrkFace 1 -0.034578 0.038561 -0.90	Exterior1st WdShing	0	0		
Exterior2nd Brk Cmn 1 0.004666 0.084279 0.06 Exterior2nd BrkFace 1 -0.034578 0.038561 -0.90	Exterior2nd AsbShng	1	-0.050597	0.057680	-0.88
Exterior2nd BrkFace 1 -0.034578 0.038561 -0.90	Exterior2nd AsphShn	1	0.012151	0.088540	0.14
	Exterior2nd Brk Cmn	1	0.004666	0.084279	0.06
Exterior2nd CBlock 0 0	Exterior2nd BrkFace	1	-0.034578	0.038561	-0.90
	Exterior2nd CBlock	0	0		

	Parameter Estimates					
Parameter	DF	Estimate	Standard Error	t Value		
Exterior2nd CmentBd	1	0.138938	0.068726	2.02		
Exterior2nd HdBoard	1	-0.005348	0.031383	-0.17		
Exterior2nd ImStucc	1	0.004347	0.045659	0.10		
Exterior2nd MetalSd	1	-0.049715	0.047569	-1.05		
Exterior2nd Other	1	-0.148993	0.112648	-1.32		
Exterior2nd Plywood	1	-0.001250	0.030304	-0.04		
Exterior2nd Stone	1	0.029092	0.064660	0.45		
Exterior2nd Stucco	1	-0.002063	0.040671	-0.05		
Exterior2nd VinylSd	1	0.018560	0.038730	0.48		
Exterior2nd Wd Sdng	1	0.031026	0.027313	1.14		
Exterior2nd Wd Shng	0	0				
MasVnrType BrkCmn	1	-0.074011	0.030955	-2.39		
MasVnrType BrkFace	1	-0.008428	0.012825	-0.66		
MasVnrType None	1	-0.010055	0.013916	-0.72		
MasVnrType Stone	0	0				
MasVnrArea	1	0.000030239	0.000025334	1.19		
ExterCond Ex	1	0.025377	0.106369	0.24		
ExterCond Fa	1	-0.036150	0.028584	-1.26		
ExterCond Gd	1	-0.034790	0.010294	-3.38		
ExterCond TA	0	0				
Foundation BrkTil	1	0.050299	0.070675	0.71		
Foundation CBlock	1	0.067366	0.069329	0.97		
Foundation PConc	1	0.086557	0.068972	1.25		
Foundation Slab	1	0.075302	0.082054	0.92		
Foundation Stone	1	0.114031	0.085283	1.34		
Foundation Wood	0	0				
BsmtQual Ex	1	0.032154	0.018133	1.77		
	1	0.006763	0.021429	0.32		
BsmtQual Fa				i 7		
BsmtQual Fa BsmtQual Gd	1	0.000390	0.011330	0.03		
•	1	0.000390 0.130116	0.011330 0.154722	0.03		
BsmtQual Gd						
BsmtQual Gd BsmtQual NA	1	0.130116				
BsmtQual Gd BsmtQual NA BsmtQual TA	1 0	0.130116	0.154722	0.84		

ı	Param	eter Estimates		
Parameter	DF	Estimate	Standard Error	t Value
BsmtExposure NA	1	-0.025753	0.096634	-0.27
BsmtExposure No	0	0		
BsmtFinType1 ALQ	1	0.009870	0.013035	0.76
BsmtFinType1 BLQ	1	0.015491	0.013937	1.11
BsmtFinType1 GLQ	1	0.029508	0.012080	2.44
BsmtFinType1 LwQ	1	-0.008468	0.016920	-0.50
BsmtFinType1 NA	0	0		
BsmtFinType1 Rec	1	0.007206	0.014259	0.51
BsmtFinType1 Unf	0	0		
BsmtFinSF1	1	0.000155	0.000024479	6.31
BsmtFinType2 ALQ	1	0.013042	0.032142	0.41
BsmtFinType2 BLQ	1	-0.030794	0.022029	-1.40
BsmtFinType2 GLQ	1	0.017969	0.041152	0.44
BsmtFinType2 LwQ	1	-0.020036	0.020047	-1.00
BsmtFinType2 NA	1	-0.087412	0.105546	-0.83
BsmtFinType2 Rec	1	-0.008769	0.020818	-0.42
BsmtFinType2 Unf	0	0		
BsmtFinSF2	1	0.000141	0.000039918	3.53
BsmtUnfSF	1	0.000088902	0.000022783	3.90
Heating Floor	1	-0.212578	0.126755	-1.68
Heating GasA	1	-0.072937	0.063319	-1.15
Heating GasW	1	0.010899	0.068017	0.16
Heating Grav	1	-0.084424	0.094876	-0.89
Heating OthW	1	-0.036310	0.131018	-0.28
Heating Wall	0	0		
HeatingQC Ex	1	0.029015	0.009220	3.15
HeatingQC Fa	1	0.025775	0.020457	1.26
HeatingQC Gd	1	0.007794	0.009724	0.80
HeatingQC Po	1	-0.014644	0.114439	-0.13
HeatingQC TA	0	0		
CentralAir N	1	-0.081111	0.018981	-4.27
CentralAir Y	0	0		
_1stFlrSF	1	0.000006619	0.000043081	0.15
_2ndFlrSF	1	0.000057589	0.000035354	1.63
			-	

F	Param	eter Estimates		
Parameter	DF	Estimate	Standard Error	t Value
LowQualFinSF	1	-0.000074991	0.000109	-0.69
BsmtFullBath	1	0.014950	0.008863	1.69
BsmtHalfBath	1	0.014815	0.013418	1.10
FullBath	1	0.013476	0.010042	1.34
HalfBath	1	0.013468	0.009464	1.42
BedroomAbvGr	1	-0.001655	0.006336	-0.26
KitchenAbvGr	1	-0.059061	0.030901	-1.91
KitchenQual Ex	1	0.069165	0.017061	4.05
KitchenQual Fa	1	0.005450	0.024132	0.23
KitchenQual Gd	1	0.001622	0.009079	0.18
KitchenQual TA	0	0		
TotRmsAbvGrd	1	0.007602	0.004273	1.78
Functional Maj1	1	-0.061833	0.036702	-1.68
Functional Maj2	1	-0.224888	0.059449	-3.78
Functional Min1	1	-0.045343	0.020768	-2.18
Functional Min2	1	-0.040426	0.020770	-1.95
Functional Mod	1	-0.097513	0.033731	-2.89
Functional Sev	1	-0.314016	0.123582	-2.54
Functional Typ	0	0		
Fireplaces	1	0.025482	0.011348	2.25
FireplaceQu Ex	1	-0.033199	0.024915	-1.33
FireplaceQu Fa	1	-0.017116	0.019881	-0.86
FireplaceQu Gd	1	0.000476	0.009765	0.05
FireplaceQu NA	1	0.005587	0.015905	0.35
FireplaceQu Po	1	-0.006000	0.026999	-0.22
FireplaceQu TA	0	0		
GarageType 2Types	1	-0.084711	0.048561	-1.74
GarageType Attchd	1	0.002355	0.010321	0.23
GarageType Basment	1	0.033824	0.030260	1.12
GarageType BuiltIn	1	-0.000968	0.017838	-0.05
GarageType CarPort	1	0.022276	0.042204	0.53
GarageType Detchd	0	0		
GarageYrBlt	1	0.000064217	0.000276	0.23
GarageFinish Fin	1	0.006004	0.010437	0.58

Parameter Estimates					
Parameter	DF	Estimate	Standard Error	t Value	
GarageFinish RFn	1	0.005176	0.009332	0.55	
GarageFinish Unf	0	0			
GarageCars	1	0.024170	0.010038	2.41	
GarageArea	1	0.000104	0.000034532	3.00	
GarageQual Ex	1	0.440333	0.132915	3.31	
GarageQual Fa	1	-0.055123	0.021589	-2.55	
GarageQual Gd	1	0.045925	0.033109	1.39	
GarageQual Po	1	-0.136244	0.088024	-1.55	
GarageQual TA	0	0			
GarageCond Ex	1	-0.394408	0.151629	-2.60	
GarageCond Fa	1	-0.023088	0.023767	-0.97	
GarageCond Gd	1	-0.002488	0.039191	-0.06	
GarageCond Po	1	0.092257	0.062121	1.49	
GarageCond TA	0	0			
PavedDrive N	1	-0.005222	0.017001	-0.31	
PavedDrive P	1	-0.030398	0.022217	-1.37	
PavedDrive Y	0	0			
WoodDeckSF	1	0.000090323	0.000025917	3.49	
OpenPorchSF	1	0.000072325	0.000053784	1.34	
EnclosedPorch	1	0.000088614	0.000057064	1.55	
_3SsnPorch	1	0.000111	0.000099782	1.11	
ScreenPorch	1	0.000239	0.000054329	4.41	
PoolArea	1	0.000814	0.001005	0.81	
PoolQC Ex	1	-0.347179	0.546773	-0.63	
PoolQC Fa	1	-0.433595	0.661970	-0.66	
PoolQC Gd	1	-0.293549	0.652185	-0.45	
PoolQC NA	0	0			
Fence GdPrv	1	-0.010823	0.016000	-0.68	
Fence GdWo	1	-0.019440	0.015679	-1.24	
Fence MnPrv	1	0.007011	0.010129	0.69	
Fence MnWw	1	-0.030825	0.032231	-0.96	
Fence NA	0	0			
MiscFeature Gar2	1	-0.316018	0.481622	-0.66	
MiscFeature NA	1	0.170120	0.208971	0.81	

F	Param	eter Estimates		
Parameter	DF	Estimate	Standard Error	t Value
MiscFeature Othr	1	0.213243	0.231356	0.92
MiscFeature Shed	1	0.131167	0.204080	0.64
MiscFeature TenC	0	0		
MiscVal	1	0.000035114	0.000031898	1.10
MoSold	1	-0.000777	0.001089	-0.71
YrSold	1	-0.001732	0.002296	-0.75
SaleType COD	1	0.016975	0.017937	0.95
SaleType CWD	1	0.104876	0.051334	2.04
SaleType Con	1	0.091369	0.076666	1.19
SaleType ConLD	1	0.158324	0.043598	3.63
SaleType ConLI	1	-0.046152	0.055555	-0.83
SaleType ConLw	1	-0.016934	0.052875	-0.32
SaleType New	1	0.077949	0.064605	1.21
SaleType Oth	1	0.211076	0.105834	1.99
SaleType WD	0	0		
SaleCondition Abnorml	1	-0.017824	0.064628	-0.28
SaleCondition AdjLand	1	0.228712	0.120934	1.89
SaleCondition Alloca	1	-0.014499	0.076256	-0.19
SaleCondition Family	1	-0.011090	0.067943	-0.16
SaleCondition Normal	1	0.035064	0.063866	0.55
SaleCondition Partial	0	0		
LogLiving	1	0.334777	0.057545	5.82

Data Set	WORK.TRAIN
Test Data Set	WORK.TEST_LOG
Dependent Variable	LogSalePrice
Selection Method	Stepwise
Select Criterion	Adj R-Sq
Stop Criterion	Cross Validation
Cross Validation Method	Random
Cross Validation Fold	5
Effect Hierarchy Enforced	None
Random Number Seed	389744590

Observation Profile for Analysis Data				
Number of Observations Read	1460			
Number of Observations Used	1371			
Number of Observations Used for Training	1371			

Observation Profile for Test Data				
Number of Observations Read	1459			
Number of Observations Used	0			

Class Level Information					
Class	Levels	Values			
Alley	3	Gr NA Pa			
BldgType	5	1Fam 2fmCon Duplex Twnhs TwnhsE			
BsmtCond	5	Fa Gd NA Po TA			
BsmtExposure	5	Av Gd Mn NA No			
BsmtFinType1	7	ALQ BLQ GLQ LwQ NA Rec Unf			
BsmtFinType2	7	ALQ BLQ GLQ LwQ NA Rec Unf			
BsmtQual	5	Ex Fa Gd NA TA			
CentralAir	2	NY			
Condition1	9	Artery Feedr Norm PosA PosN RRAe RRAn RRNe RRNn			
Condition2	8	Artery Feedr Norm PosA PosN RRAe RRAn RRNn			
Electrical	6	FuseA FuseF FuseP Mix NA SBrkr			
ExterCond	4	Ex Fa Gd TA			
ExterQual	4	Ex Fa Gd TA			
Exterior1st	14	AsbShng BrkComm BrkFace CBlock CemntBd HdBoard ImStucc MetalSd Plywood Stone Stucco VinylSd Wd Sdng WdShing			
Exterior2nd	16	AsbShng AsphShn Brk Cmn BrkFace CBlock CmentBd HdBoard ImStucc MetalSd Other Plywood Stone Stucco VinylSd Wd Sdng Wd Shng			

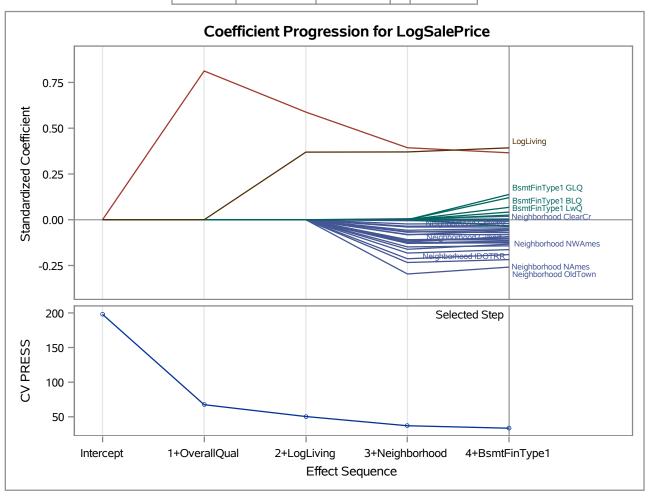
Class Level Information					
Class	Levels	Values			
Fence	5	GdPrv GdWo MnPrv MnWw NA			
FireplaceQu	6	Ex Fa Gd NA Po TA			
Foundation	6	BrkTil CBlock PConc Slab Stone Wood			
Functional	7	Maj1 Maj2 Min1 Min2 Mod Sev Typ			
GarageCond	5	Ex Fa Gd Po TA			
GarageFinish	3	Fin RFn Unf			
GarageQual	5	Ex Fa Gd Po TA			
GarageType	6	2Types Attchd Basment BuiltIn CarPort Detchd			
Heating	6	Floor GasA GasW Grav OthW Wall			
HeatingQC	5	Ex Fa Gd Po TA			
HouseStyle	8	1.5Fin 1.5Unf 1Story 2.5Fin 2.5Unf 2Story SFoyer SLVI			
KitchenQual	4	Ex Fa Gd TA			
LandContour	4	Bnk HLS Low Lvl			
LandSlope	3	Gtl Mod Sev			
LotConfig	5	Corner CulDSac FR2 FR3 Inside			
LotFrontage	81	10 11 12 13 14 15 16 17 18 21 24 30 31 32 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 NA			
LotShape	4	IR1 IR2 IR3 Reg			
MSZoning	5	C (a FV RH RL RM			
MasVnrType	4	BrkCmn BrkFace None Stone			
MiscFeature	5	Gar2 NA Othr Shed TenC			
Neighborhood	25	Blmngtn Blueste BrDale BrkSide ClearCr CollgCr Crawfor Edwards Gilbert IDOTRR MeadowV Mitchel NAmes NPkVill NWAmes NoRidge NridgHt OldTown SWISU Sawyer SawyerW Somerst StoneBr Timber Veenker			
PavedDrive	3	NPY			
PoolQC	4	Ex Fa Gd NA			
RoofMatl	8	ClyTile CompShg Membran Metal Roll Tar&Grv WdShake WdShngl			
RoofStyle	6	Flat Gable Gambrel Hip Mansard Shed			
SaleCondition	6	Abnorml AdjLand Alloca Family Normal Partial			
SaleType	9	COD CWD Con ConLD ConLw New Oth WD			
Street	2	Grvl Pave			
Utilities	2	AllPub NoSeWa			

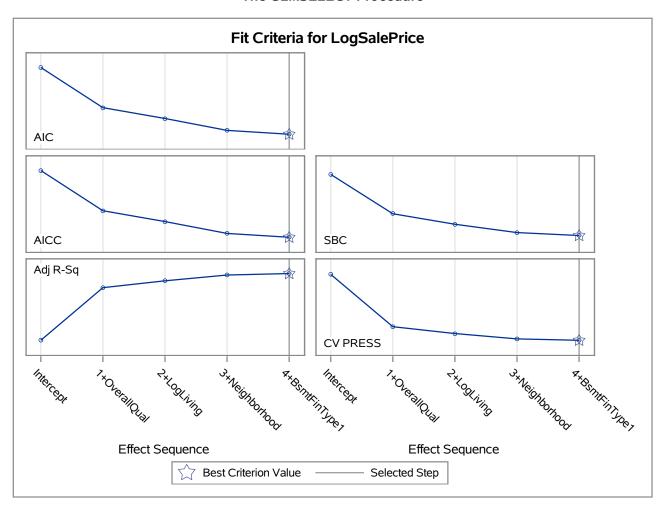
Dimensions				
Number of Effects	81			
Number of Parameters	379			

	Stepwise Selection Summary						
Step	Effect Entered	Effect Removed	Number Effects In	Number Parms In	Adjusted R-Square	ASE	CV PRESS
0	Intercept		1	1	0.0000	0.1444	198.0080
1	OverallQual		2	2	0.6601	0.0490	67.4622
2	LogLiving		3	3	0.7460	0.0366	50.3832
3	Neighborhood		4	27	0.8185	0.0257	37.0682
4	BsmtFinType1		5	33	0.8370*	0.0230	33.5197*
* Optimal Value of Criterion							

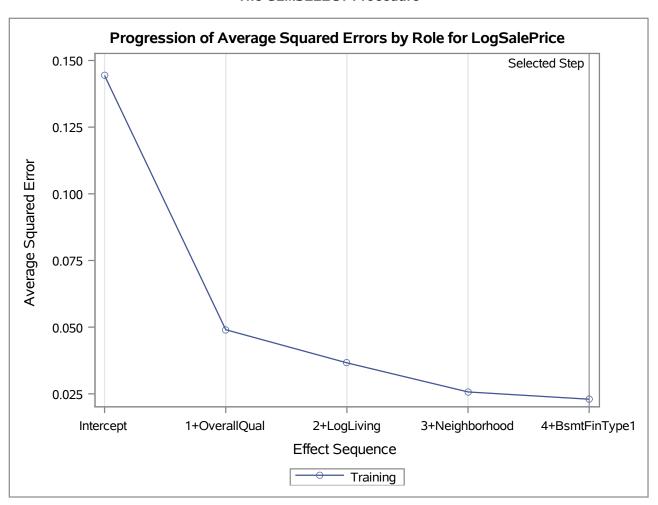
Selection stopped at a local minimum of the cross validation PRESS.

Stop Details						
Candidate For	Candidate Effect CV PRESS			Compare CV PRESS		
Entry	LotFrontage	35.4919	>	33.5197		
Removal	BsmtFinType1	37.0682	>	33.5197		





The GLMSELECT Procedure



The GLMSELECT Procedure **Selected Model**

The selected model is the model at the last step (Step 4).

Effects: Intercept Neighborhood OverallQual BsmtFinType1 LogLiving

Analysis of Variance							
Source DF Squares Square F Value							
Model	32	166.41511	5.20047	220.86			
Error	1338	31.50522	0.02355				
Corrected Total	1370	197.92032					

Root MSE	0.15345
Dependent Mean	12.05374
R-Square	0.8408
Adj R-Sq	0.8370
AIC	-3733.97842
AICC	-3732.19698
SBC	-4934.60966
ASE (Train)	0.02298
CV PRESS	33.51970

Parameter Estimates								
Parameter	DF	Estimate	Standard Error	t Value				
Intercept	1	10.299776	0.064584	159.48				
Neighborhood Blmngtn	1	-0.167477	0.059781	-2.80				
Neighborhood Blueste	1	-0.393421	0.118184	-3.33				
Neighborhood BrDale	1	-0.521026	0.061280	-8.50				
Neighborhood BrkSide	1	-0.275486	0.052054	-5.29				
Neighborhood ClearCr	1	-0.054117	0.055311	-0.98				
Neighborhood CollgCr	1	-0.124410	0.048343	-2.57				
Neighborhood Crawfor	1	-0.112379	0.051473	-2.18				
Neighborhood Edwards	1	-0.312443	0.050098	-6.24				
Neighborhood Gilbert	1	-0.150920	0.049939	-3.02				
Neighborhood IDOTRR	1	-0.430830	0.055413	-7.77				
Neighborhood MeadowV	1	-0.450159	0.064994	-6.93				
Neighborhood Mitchel	1	-0.176073	0.052113	-3.38				
Neighborhood NAmes	1	-0.226014	0.048017	-4.71				
Neighborhood NPkVill	1	-0.332628	0.069351	-4.80				

The GLMSELECT Procedure **Selected Model**

Parameter Estimates							
Parameter	DF	Estimate	Standard Error	t Value			
Neighborhood NWAmes	1	-0.214491	0.049860	-4.30			
Neighborhood NoRidge	1	-0.018353	0.053098	-0.35			
Neighborhood NridgHt	1	0.030622	0.050276	0.61			
Neighborhood OldTown	1	-0.376363	0.049512	-7.60			
Neighborhood SWISU	1	-0.368107	0.058230	-6.32			
Neighborhood Sawyer	1	-0.210800	0.050459	-4.18			
Neighborhood SawyerW	1	-0.193573	0.050856	-3.81			
Neighborhood Somerst	1	-0.096258	0.049721	-1.94			
Neighborhood StoneBr	1	0.011962	0.056162	0.21			
Neighborhood Timber	1	-0.071450	0.052735	-1.35			
Neighborhood Veenker	0	0					
OverallQual	1	0.103396	0.005353	19.31			
BsmtFinType1 ALQ	1	0.127562	0.014584	8.75			
BsmtFinType1 BLQ	1	0.084710	0.016428	5.16			
BsmtFinType1 GLQ	1	0.115267	0.011952	9.64			
BsmtFinType1 LwQ	1	0.044263	0.020724	2.14			
BsmtFinType1 NA	1	-0.091237	0.030762	-2.97			
BsmtFinType1 Rec	1	0.055506	0.017024	3.26			
BsmtFinType1 Unf	0	0					
LogLiving	1	0.462127	0.017529	26.36			

	Class Level Information					
Class	Levels	Values				
Neighborhood	25	Blmngtn Blueste BrDale BrkSide ClearCr CollgCr Crawfor Edwards Gilbert IDOTRR MeadowV Mitchel NAmes NPkVill NWAmes NoRidge NridgHt OldTown SWISU Sawyer SawyerW Somerst StoneBr Timber Veenker				
MSZoning	5	C (a FV RH RL RM				
HouseStyle	8	1.5Fin 1.5Unf 1Story 2.5Fin 2.5Unf 2Story SFoyer SLvl				
CentralAir	2	NY				
GarageFinish	4	Fin NA RFn Unf				
SaleCondition	6	Abnorml AdjLand Alloca Family Normal Partial				
BsmtQual	5	Ex Fa Gd NA TA				
ExterQual	4	Ex Fa Gd TA				
KitchenQual	4	Ex Fa Gd TA				
LotFrontage	82	10 11 12 13 14 15 16 17 18 21 24 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 NA				
BsmtFinType1	7	ALQ BLQ GLQ LwQ NA Rec Unf				

Number of Observations Read	1460
Number of Observations Used	1460

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	179	212.9681220	1.1897660	76.79	<.0001
Error	1280	19.8325370	0.0154942		
Corrected Total	1459	232.8006590			

R-Square	Coeff Var	Root MSE	LogSalePrice Mean	
0.914809	1.035222	0.124476	12.02405	

Source	DF	Type I SS	Mean Square	F Value	Pr > F
LogLiving	1	124.1461074	124.1461074	8012.44	<.0001
Neighborhood	24	54.9638197	2.2901592	147.81	<.0001
MSZoning	4	2.2319221	0.5579805	36.01	<.0001
HouseStyle	7	4.7794910	0.6827844	44.07	<.0001
GarageArea	1	3.7848638	3.7848638	244.28	<.0001
GarageCars	1	0.5052837	0.5052837	32.61	<.0001
OverallQual	1	8.7566370	8.7566370	565.16	<.0001
TotalBsmtSF	1	0.7374537	0.7374537	47.60	<.0001
CentralAir	1	1.6419946	1.6419946	105.97	<.0001
GarageFinish	3	0.7465125	0.2488375	16.06	<.0001
ExterQual	3	0.3514356	0.1171452	7.56	<.0001
_1stFlrSF	1	0.4442622	0.4442622	28.67	<.0001
FullBath	1	0.0015261	0.0015261	0.10	0.7537
YearBuilt	1	0.1714621	0.1714621	11.07	0.0009
YearRemodAdd	1	1.2228707	1.2228707	78.92	<.0001
SaleCondition	5	0.7945063	0.1589013	10.26	<.0001
KitchenQual	3	0.6731951	0.2243984	14.48	<.0001
BsmtQual	4	0.4527875	0.1131969	7.31	<.0001
BsmtFinType1	5	1.8645457	0.3729091	24.07	<.0001
TotalBsmt*BsmtFinTyp	5	0.2894162	0.0578832	3.74	0.0023
TotRmsAbvGrd	1	0.0034624	0.0034624	0.22	0.6365
LotFrontage	81	2.4811075	0.0306310	1.98	<.0001
LogLiving*Neighborho	24	1.9234591	0.0801441	5.17	<.0001

Source	DF	Type III SS	Mean Square	F Value	Pr > F
LogLiving	1	2.05688406	2.05688406	132.75	<.0001
Neighborhood	24	1.61567106	0.06731963	4.34	<.0001
MSZoning	4	0.71411092	0.17852773	11.52	<.0001
HouseStyle	7	0.33186294	0.04740899	3.06	0.0034
GarageArea	1	0.02291531	0.02291531	1.48	0.2242
GarageCars	1	0.15908640	0.15908640	10.27	0.0014
OverallQual	1	2.31489420	2.31489420	149.40	<.0001
TotalBsmtSF	1	0.21386490	0.21386490	13.80	0.0002
CentralAir	1	0.59777274	0.59777274	38.58	<.0001
GarageFinish	3	0.16860767	0.05620256	3.63	0.0126
ExterQual	3	0.00271179	0.00090393	0.06	0.9815
_1stFlrSF	1	0.09183245	0.09183245	5.93	0.0150
FullBath	1	0.01603165	0.01603165	1.03	0.3093
YearBuilt	1	0.03928835	0.03928835	2.54	0.1115
YearRemodAdd	1	0.58196387	0.58196387	37.56	<.0001
SaleCondition	5	0.78392725	0.15678545	10.12	<.0001
KitchenQual	3	0.34524323	0.11508108	7.43	<.0001
BsmtQual	3	0.12390982	0.04130327	2.67	0.0465
BsmtFinType1	5	0.42123093	0.08424619	5.44	<.0001
TotalBsmt*BsmtFinTyp	5	0.09938768	0.01987754	1.28	0.2687
TotRmsAbvGrd	1	0.01046788	0.01046788	0.68	0.4113
LotFrontage	81	1.92028379	0.02370721	1.53	0.0022
LogLiving*Neighborho	24	1.92345912	0.08014413	5.17	<.0001

Parameter		Estimate		Standard Error	t Value	Pr > t
Intercept		4.489087079	В	0.99503601	4.51	<.0001
LogLiving		1.116837513	В	0.21963816	5.08	<.0001
Neighborhood	Blmngtn	0.379583616	В	1.04971448	0.36	0.7177
Neighborhood	Blueste	-0.101281339	В	2.07100138	-0.05	0.9610
Neighborhood	BrDale	0.216597082	В	0.90450404	0.24	0.8108
Neighborhood	BrkSide	1.370316046	В	0.60361478	2.27	0.0234
Neighborhood	ClearCr	1.545078450	В	0.65148964	2.37	0.0179
Neighborhood	CollgCr	1.503444642	В	0.59562274	2.52	0.0117
Neighborhood	Crawfor	1.507004210	В	0.61535421	2.45	0.0145
Neighborhood	Edwards	2.048677412	В	0.59879106	3.42	0.0006
Neighborhood	Gilbert	1.151606083	В	0.63270841	1.82	0.0690
Neighborhood	IDOTRR	1.077571862	В	0.62177740	1.73	0.0833
Neighborhood	MeadowV	1.910013382	В	0.64551866	2.96	0.0031
Neighborhood	Mitchel	1.664081090	В	0.61262947	2.72	0.0067
Neighborhood	NAmes	1.741661215	В	0.59450970	2.93	0.0035
Neighborhood	NPkVill	0.794378817	В	0.86648500	0.92	0.3594
Neighborhood	NWAmes	1.200971855	В	0.61593997	1.95	0.0514
Neighborhood	NoRidge	0.650219392	В	0.67653454	0.96	0.3367
Neighborhood	NridgHt	0.756333880	В	0.63246071	1.20	0.2320
Neighborhood	OldTown	1.300738734	В	0.59721841	2.18	0.0296
Neighborhood	SWISU	1.481927788	В	0.62098643	2.39	0.0172
Neighborhood	Sawyer	1.731795516	В	0.60779996	2.85	0.0045
Neighborhood	SawyerW	1.141885928	В	0.60583882	1.88	0.0597
Neighborhood	Somerst	0.928924089	В	0.63690654	1.46	0.1449
Neighborhood	StoneBr	0.803310946	В	0.65978151	1.22	0.2236
Neighborhood	Timber	0.872583019	В	0.65766804	1.33	0.1848
Neighborhood	Veenker	0.000000000	В			
MSZoning	C (a	-0.289328862	В	0.04829497	-5.99	<.0001
MSZoning	FV	0.091938017	В	0.03951500	2.33	0.0201
MSZoning	RH	0.038485631	В	0.04188555	0.92	0.3584
MSZoning	RL	0.054089046	В	0.01934125	2.80	0.0052
MSZoning	RM	0.000000000	В			
HouseStyle	1.5Fin	-0.074474182	В	0.02466759	-3.02	0.0026
HouseStyle	1.5Unf	0.011260652	В	0.04125113	0.27	0.7849
HouseStyle	1Story	-0.009302758	В	0.01904204	-0.49	0.6253

Parameter		Estimate		Standard Error	t Value	Pr > t
HouseStyle	2.5Fin	-0.083285449	В	0.06104943	-1.36	0.1727
HouseStyle	2.5Unf	-0.061318194	В	0.04928156	-1.24	0.2136
HouseStyle	2Story	-0.107034100	В	0.02588997	-4.13	<.0001
HouseStyle	SFoyer	0.000692938	В	0.02986527	0.02	0.9815
HouseStyle	SLvl	0.000000000	В			
GarageArea		0.000047491		0.00003905	1.22	0.2242
GarageCars		0.038440199		0.01199646	3.20	0.0014
OverallQual		0.062675907		0.00512766	12.22	<.0001
TotalBsmtSF		0.000105277	В	0.00002703	3.89	0.0001
CentralAir	N	-0.108142602	В	0.01741057	-6.21	<.0001
CentralAir	Υ	0.000000000	В			
GarageFinish	Fin	0.030092114	В	0.01212261	2.48	0.0132
GarageFinish	NA	-0.036213891	В	0.02138046	-1.69	0.0905
GarageFinish	RFn	0.023860091	В	0.01062720	2.25	0.0249
GarageFinish	Unf	0.000000000	В			
ExterQual	Ex	0.000611534	В	0.02799196	0.02	0.9826
ExterQual	Fa	-0.009491116	В	0.03963015	-0.24	0.8108
ExterQual	Gd	-0.003925747	В	0.01293529	-0.30	0.7616
ExterQual	TA	0.000000000	В			
_1stFlrSF		-0.000085637		0.00003518	-2.43	0.0150
FullBath		0.010341202		0.01016637	1.02	0.3093
YearBuilt		0.000531253		0.00033362	1.59	0.1115
YearRemodAdd		0.001567165		0.00025571	6.13	<.0001
SaleCondition	Abnorml	-0.128752392	В	0.02043627	-6.30	<.0001
SaleCondition	AdjLand	-0.032523293	В	0.06894584	-0.47	0.6372
SaleCondition	Alloca	-0.061196511	В	0.04333622	-1.41	0.1582
SaleCondition	Family	-0.106211522	В	0.03384199	-3.14	0.0017
SaleCondition	Normal	-0.041653369	В	0.01527282	-2.73	0.0065
SaleCondition	Partial	0.000000000	В			
KitchenQual	Ex	0.097465334	В	0.02115994	4.61	<.0001
KitchenQual	Fa	-0.016767701	В	0.02437562	-0.69	0.4916
KitchenQual	Gd	0.030636897	В	0.01119614	2.74	0.0063
KitchenQual	TA	0.000000000	В			
BsmtQual	Ex	0.060187449	В	0.02182100	2.76	0.0059
BsmtQual	Fa	-0.010388859	В	0.02410100	-0.43	0.6665

Parameter	Estimate		Standard Error	t Value	Pr > t
BsmtQual Gd	0.014869300	В	0.01295446	1.15	0.2513
BsmtQual NA	-0.001121118	В	0.03628804	-0.03	0.9754
BsmtQual TA	0.000000000	В			
BsmtFinType1 ALQ	0.114981912	В	0.03555465	3.23	0.0013
BsmtFinType1 BLQ	0.048636916	В	0.04768448	1.02	0.3079
BsmtFinType1 GLQ	0.137759387	В	0.02882693	4.78	<.0001
BsmtFinType1 LwQ	0.046313467	В	0.05432017	0.85	0.3940
BsmtFinType1 NA	0.000000000	В			
BsmtFinType1 Rec	0.121536168	В	0.04793167	2.54	0.0113
BsmtFinType1 Unf	0.000000000	В			
TotalBsmt*BsmtFinTyp ALQ	-0.000008106	В	0.00003276	-0.25	0.8046
TotalBsmt*BsmtFinTyp BLQ	0.000025571	В	0.00004594	0.56	0.5779
TotalBsmt*BsmtFinTyp GLQ	-0.000047724	В	0.00002393	-1.99	0.0463
TotalBsmt*BsmtFinTyp LwQ	-0.000020737	В	0.00005093	-0.41	0.6840
TotalBsmt*BsmtFinTyp NA	0.000000000	В			
TotalBsmt*BsmtFinTyp Rec	-0.000059195	В	0.00004571	-1.29	0.1956
TotalBsmt*BsmtFinTyp Unf	0.000000000	В			
TotRmsAbvGrd	-0.003486176		0.00424135	-0.82	0.4113
LotFrontage 10	0.022818042	В	0.02164290	1.05	0.2919
LotFrontage 11	0.041907207	В	0.03418560	1.23	0.2205
LotFrontage 12	-0.031830937	В	0.03349160	-0.95	0.3421
LotFrontage 13	-0.117805850	В	0.05088540	-2.32	0.0208
LotFrontage 14	0.199753718	В	0.06603146	3.03	0.0025
LotFrontage 15	-0.042504604	В	0.07578557	-0.56	0.5750
LotFrontage 16	0.168038654	В	0.09655832	1.74	0.0820
LotFrontage 17	0.025862396	В	0.09250149	0.28	0.7798
LotFrontage 18	0.191100242	В	0.12999096	1.47	0.1418
LotFrontage 21	-0.082124354	В	0.06874222	-1.19	0.2324
LotFrontage 24	-0.134608330	В	0.04388403	-3.07	0.0022
LotFrontage 30	-0.050445699	В	0.05687954	-0.89	0.3753
LotFrontage 31	-0.361173308	В	0.10191068	-3.54	0.0004
LotFrontage 32	-0.060401664	В	0.06109881	-0.99	0.3231
LotFrontage 33	0.017732571	В	0.12865501	0.14	0.8904
LotFrontage 34	-0.018722387	В	0.04374699	-0.43	0.6687
LotFrontage 35	-0.036046296	В	0.04686014	-0.77	0.4419

					ī	
Parameter		Estimate		Standard Error	t Value	Pr > t
LotFrontage	36	-0.156667934	В	0.05434104	-2.88	0.0040
LotFrontage	37	-0.040331659	В	0.05856552	-0.69	0.4912
LotFrontage	38	0.039211411	В	0.13807974	0.28	0.7765
LotFrontage	39	-0.104765300	В	0.12885345	-0.81	0.4163
LotFrontage	40	-0.041047946	В	0.03935562	-1.04	0.2971
LotFrontage	41	-0.075368267	В	0.05793430	-1.30	0.1935
LotFrontage	42	0.141428632	В	0.06921277	2.04	0.0412
LotFrontage	43	-0.033794234	В	0.04822791	-0.70	0.4836
LotFrontage	44	-0.013785769	В	0.04533457	-0.30	0.7611
LotFrontage	45	-0.199239927	В	0.07603353	-2.62	0.0089
LotFrontage	46	0.092911888	В	0.12746553	0.73	0.4662
LotFrontage	47	0.017696018	В	0.05908335	0.30	0.7646
LotFrontage	48	0.047152357	В	0.05364220	0.88	0.3796
LotFrontage	49	0.139127453	В	0.06619094	2.10	0.0358
LotFrontage	50	-0.050874991	В	0.02133107	-2.39	0.0172
LotFrontage	51	-0.075485577	В	0.03684457	-2.05	0.0407
LotFrontage	52	-0.055447911	В	0.03740566	-1.48	0.1385
LotFrontage	53	-0.067249528	В	0.04862875	-1.38	0.1669
LotFrontage	54	0.049696123	В	0.05456681	0.91	0.3626
LotFrontage	55	-0.004867035	В	0.03412481	-0.14	0.8866
LotFrontage	56	-0.082182220	В	0.05894125	-1.39	0.1635
LotFrontage	57	0.018420547	В	0.03777930	0.49	0.6259
LotFrontage	58	-0.101259885	В	0.05059833	-2.00	0.0456
LotFrontage	59	0.005728145	В	0.03646867	0.16	0.8752
LotFrontage	60	-0.022659302	В	0.01510584	-1.50	0.1339
LotFrontage	61	0.007673838	В	0.04585031	0.17	0.8671
LotFrontage	62	0.023574006	В	0.04343629	0.54	0.5874
LotFrontage	63	-0.049747836	В	0.03248535	-1.53	0.1259
LotFrontage	64	-0.007970796	В	0.03241738	-0.25	0.8058
LotFrontage	65	-0.036513226	В	0.02125586	-1.72	0.0861
LotFrontage	66	0.025593714	В	0.03481353	0.74	0.4624
LotFrontage	67	-0.066723061	В	0.03895486	-1.71	0.0870
LotFrontage	68	-0.067237392	В	0.03093749	-2.17	0.0299
LotFrontage	69	0.018511393	В	0.03954614	0.47	0.6398
LotFrontage	70	-0.007172550	В	0.01771204	-0.40	0.6856

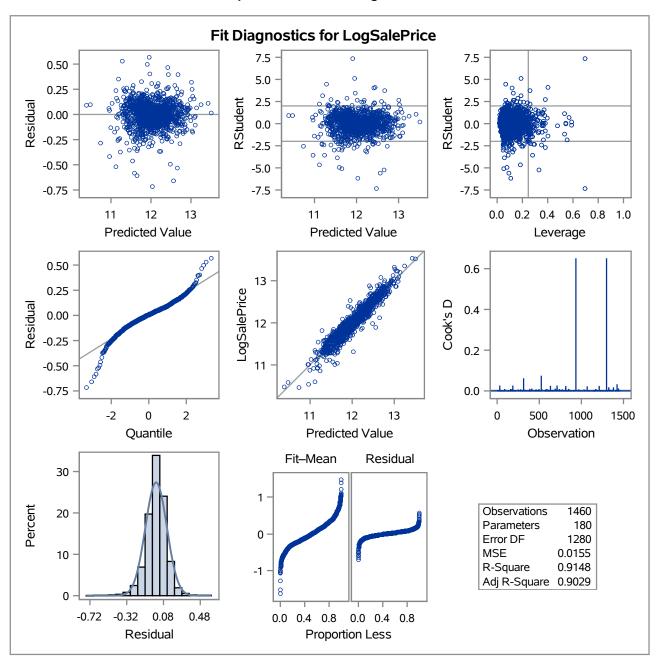
Parameter	Estimate		Standard Error	t Value	Pr > t
LotFrontage 71	0.006876113	В	0.03774064	0.18	0.8555
LotFrontage 72	-0.000149399	В	0.03197842	-0.00	0.9963
LotFrontage 73	-0.037359004	В	0.03182907	-1.17	0.2407
LotFrontage 74	-0.019138277	В	0.03421291	-0.56	0.5760
LotFrontage 75	0.006583621	В	0.02001160	0.33	0.7422
LotFrontage 76	-0.018439832	В	0.03955198	-0.47	0.6411
LotFrontage 77	0.019710857	В	0.04389627	0.45	0.6535
LotFrontage 78	0.012061253	В	0.02757379	0.44	0.6619
LotFrontage 79	-0.002621466	В	0.03220225	-0.08	0.9351
LotFrontage 80	-0.011336628	В	0.01774630	-0.64	0.5231
LotFrontage 81	-0.018577463	В	0.05319808	-0.35	0.7270
LotFrontage 82	-0.051891752	В	0.03869203	-1.34	0.1801
LotFrontage 83	-0.027036865	В	0.05809119	-0.47	0.6417
LotFrontage 84	0.010317926	В	0.04402677	0.23	0.8147
LotFrontage 85	-0.057613447	В	0.02257818	-2.55	0.0108
LotFrontage 86	0.027564208	В	0.04215540	0.65	0.5133
LotFrontage 87	-0.001364829	В	0.05892658	-0.02	0.9815
LotFrontage 88	0.003352414	В	0.04181007	0.08	0.9361
LotFrontage 89	-0.016749761	В	0.05494400	-0.30	0.7605
LotFrontage 90	-0.030667798	В	0.02836120	-1.08	0.2798
LotFrontage 91	0.068017526	В	0.05360032	1.27	0.2047
LotFrontage 92	-0.057379033	В	0.04199649	-1.37	0.1721
LotFrontage 93	-0.015070355	В	0.04618234	-0.33	0.7442
LotFrontage 94	-0.033774686	В	0.05267101	-0.64	0.5215
LotFrontage 95	-0.044307991	В	0.05004944	-0.89	0.3762
LotFrontage 96	0.028227555	В	0.04688823	0.60	0.5473
LotFrontage 97	0.023370479	В	0.09167103	0.25	0.7988
LotFrontage 98	-0.074061618	В	0.04674298	-1.58	0.1133
LotFrontage 99	-0.001626740	В	0.07416580	-0.02	0.9825
LotFrontage NA	0.000000000	В			
LogLiving*Neighborho Blmngtn	-0.206728318	В	0.38964932	-0.53	0.5958
LogLiving*Neighborho Blueste	0.012975685	В	0.78540837	0.02	0.9868
LogLiving*Neighborho BrDale	-0.091896903	В	0.34767314	-0.26	0.7916
LogLiving*Neighborho BrkSide	-0.524240669	В	0.22161780	-2.37	0.0182
LogLiving*Neighborho ClearCr	-0.575805429	В	0.23655339	-2.43	0.0151
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Dependent Variable: LogSalePrice

Parameter	Estimate		Standard Error	t Value	Pr > t
LogLiving*Neighborho CollgCr	-0.601390400	В	0.21792816	-2.76	0.0059
LogLiving*Neighborho Crawfor	-0.550232883	В	0.22412350	-2.46	0.0142
LogLiving*Neighborho Edwards	-0.840440850	В	0.21925050	-3.83	0.0001
LogLiving*Neighborho Gilbert	-0.478139458	В	0.23065280	-2.07	0.0384
LogLiving*Neighborho IDOTRR	-0.431327844	В	0.23023441	-1.87	0.0612
LogLiving*Neighborho MeadowV	-0.826108298	В	0.23954351	-3.45	0.0006
LogLiving*Neighborho Mitchel	-0.683460020	В	0.22536118	-3.03	0.0025
LogLiving*Neighborho NAmes	-0.704202294	В	0.21749405	-3.24	0.0012
LogLiving*Neighborho NPkVill	-0.333124498	В	0.33452797	-1.00	0.3195
LogLiving*Neighborho NWAmes	-0.506973203	В	0.22466826	-2.26	0.0242
LogLiving*Neighborho NoRidge	-0.284406534	В	0.23893845	-1.19	0.2342
LogLiving*Neighborho NridgHt	-0.320490256	В	0.22962098	-1.40	0.1630
LogLiving*Neighborho OldTown	-0.539003892	В	0.21880860	-2.46	0.0139
LogLiving*Neighborho SWISU	-0.596350931	В	0.22636570	-2.63	0.0085
LogLiving*Neighborho Sawyer	-0.710013715	В	0.22355525	-3.18	0.0015
LogLiving*Neighborho SawyerW	-0.475604203	В	0.22138984	-2.15	0.0319
LogLiving*Neighborho Somerst	-0.397959538	В	0.23211848	-1.71	0.0867
LogLiving*Neighborho StoneBr	-0.316127009	В	0.23813001	-1.33	0.1846
LogLiving*Neighborho Timber	-0.362296138	В	0.23854681	-1.52	0.1291
LogLiving*Neighborho Veenker	0.000000000	В			

Note: The X'X matrix has been found to be singular, and a generalized inverse was used to solve the normal equations. Terms whose estimates are followed by the letter 'B' are not uniquely estimable.

The GLM Procedure



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