#### The FREQ Procedure

state_name	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Alabama	1900406	1.54	1900406	1.54
Alaska	257193	0.21	2157599	1.75
Arizona	2675608	2.17	4833207	3.91
Arkansas	1143632	0.93	5976839	4.84
California	13180886	10.67	19157725	15.51
Colorado	2259861	1.83	21417586	17.34
Connecticut	1381897	1.12	22799483	18.46
Delaware	380454	0.31	23179937	18.76
District of Columbia	316453	0.26	23496390	19.02
Florida	8062164	6.53	31558554	25.55
Georgia	3881405	3.14	35439959	28.69
Hawaii	474378	0.38	35914337	29.07
Idaho	656511	0.53	36570848	29.61
Illinois	4900521	3.97	41471369	33.57
Indiana	2599597	2.10	44070966	35.68
Iowa	1281948	1.04	45352914	36.71
Kansas	1127072	0.91	46479986	37.63
Kentucky	1738263	1.41	48218249	39.03
Louisiana	1727226	1.40	49945475	40.43
Maine	564535	0.46	50510010	40.89
Maryland	2281335	1.85	52791345	42.74
Massachusetts	2713778	2.20	55505123	44.93
Michigan	3918917	3.17	59424040	48.11
Minnesota	2229783	1.81	61653823	49.91
Mississippi	1084534	0.88	62738357	50.79
Missouri	2429813	1.97	65168170	52.76
Montana	433329	0.35	65601499	53.11
Nebraska	765201	0.62	66366700	53.73
Nevada	1139409	0.92	67506109	54.65
New Hampshire	538443	0.44	68044552	55.08
New Jersey	3393983	2.75	71438535	57.83
New Mexico	787053	0.64	72225588	58.47
New York	7521120	6.09	79746708	64.56
North Carolina	4012739	3.25	83759447	67.81
North Dakota	315573	0.26	84075020	68.06
Ohio	4739001	3.84	88814021	71.90
Oklahoma	1492833	1.21	90306854	73.11
Oregon	1654154	1.34	91961008	74.44
Pennsylvania	5128400	4.15	97089408	78.60
Rhode Island	418689	0.34	97508097	78.94
South Carolina	1970536	1.60	99478633	80.53
South Dakota	346425	0.28	99825058	80.81
Tennessee	2657514	2.15	1.0248E8	82.96
Texas	10255403	8.30	1.1274E8	91.26
Utah	1039997	0.84	1.1378E8	92.11
Vermont	258824	0.21	1.1404E8	92.32
Virginia	3242014	2.62	1.1728E8	94.94
3	JE 12017	2.02	0_0	U-7.U- <del>1</del>

state_name	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Washington	2939032	2.38	1.2022E8	97.32
West Virginia	696161	0.56	1.2091E8	97.88
Wisconsin	2388876	1.93	1.233E8	99.82
Wyoming	226146	0.18	1.2353E8	100.00

Obs	state_name	COUNT	PERCENT
1	California	13180886.00	10.6703
2	Texas	10255403.00	8.3020
3	Florida	8062164.00	6.5265
4	New York	7521120.00	6.0885
5	Pennsylvania	5128400.00	4.1516
6	Illinois	4900521.00	3.9671
7	Ohio	4739001.00	3.8363
8	North Carolina	4012739.00	3.2484
9	Michigan	3918917.00	3.1725
10	Georgia	3881405.00	3.1421
11	New Jersey	3393983.00	2.7475
12	Virginia	3242014.00	2.6245
13	Washington	2939032.00	2.3792
14	Massachusetts	2713778.00	2.1969
15	Arizona	2675608.00	2.1660
16	Tennessee	2657514.00	2.1513
17	Indiana	2599597.00	2.1044
18	Missouri	2429813.00	1.9670
19	Wisconsin	2388876.00	1.9339
20	Maryland	2281335.00	1.8468
21	Colorado	2259861.00	1.8294
22	Minnesota	2229783.00	1.8051
23	South Carolina	1970536.00	1.5952
24	Alabama	1900406.00	1.5384
25	Kentucky	1738263.00	1.4072
26	Louisiana	1727226.00	1.3982
27	Oregon	1654154.00	1.3391
28	Oklahoma	1492833.00	1.2085
29	Connecticut	1381897.00	1.1187
30	Iowa	1281948.00	1.0378
31	Arkansas	1143632.00	0.9258
32	Nevada	1139409.00	0.9224
33	Kansas	1127072.00	0.9124
34	Mississippi	1084534.00	0.8780
35	Utah	1039997.00	0.8419
36	New Mexico	787053.00	0.6371
37	Nebraska	765201.00	0.6195
38	West Virginia	696161.00	0.5636
39	Idaho	656511.00	0.5315
40	Maine	564535.00	0.4570
41	New Hampshire	538443.00	0.4359

Obs	state_name	COUNT	PERCENT
42	Hawaii	474378.00	0.3840
43	Montana	433329.00	0.3508
44	Rhode Island	418689.00	0.3389
45	Delaware	380454.00	0.3080
46	South Dakota	346425.00	0.2804
47	District of Columbia	316453.00	0.2562
48	North Dakota	315573.00	0.2555
49	Vermont	258824.00	0.2095
50	Alaska	257193.00	0.2082
51	Wyoming	226146.00	0.1831

Obs	state_name	COUNT	PERCENT
1	Michigan	3918917	3.17247

#### The histogram of total electricity cost

# The UNIVARIATE Procedure Variable: DOLLAREL

Moments					
N	18481	Sum Weights	18481		
Mean	1426.06646	Sum Observations	26355134.3		
Std Deviation	861.277417	Variance	741798.79		
Skewness	2.13904168	Kurtosis	13.1508069		
Uncorrected SS	5.12926E10	Corrected SS	1.37084E10		
Coeff Variation	60.3953209	Std Error Mean	6.33549171		

Basic Statistical Measures				
Location Variability				
Mean	1426.066	Std Deviation 861.277		
Median	1258.600	Variance	741799	
Mode	656.660	Range	15677	
		Interquartile Range	981.79000	

Tests for Location: Mu0=0					
Test	Statistic p Value				
Student's t	t 225.0917		Pr >  t	<.0001	
Sign	М	9240.5	Pr >=  M	<.0001	
Signed Rank	S	85391461	Pr >=  S	<.0001	

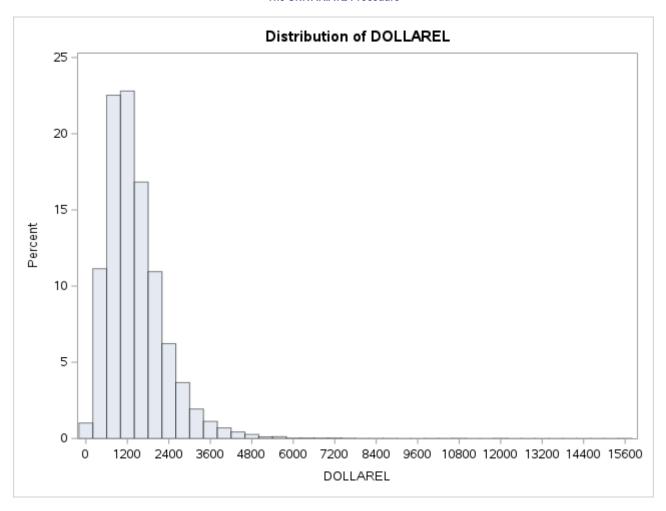
Quantiles (Definition 5)		
Level	Quantile	
100% Max	15680.18	
99%	4267.36	
95%	2978.88	
90%	2475.08	
75% Q3	1819.12	
50% Median	1258.60	

Quantiles (Definition 5)		
Level	Quantile	
25% Q1	837.33	
10%	549.63	
5%	415.03	
1%	197.90	
0% Min	2.85	

Extreme Observations				
Lowest		Highest		
Value	Obs	Value	Obs	
2.85	3326	10714.3	5837	
5.48	6647	10716.4	10470	
7.39	6864	12036.4	6658	
8.51	17029	12064.8	14329	
11.50	16490	15680.2	10454	

### The histogram of total electricity cost

The UNIVARIATE Procedure



#### Variable: log\_of\_cost

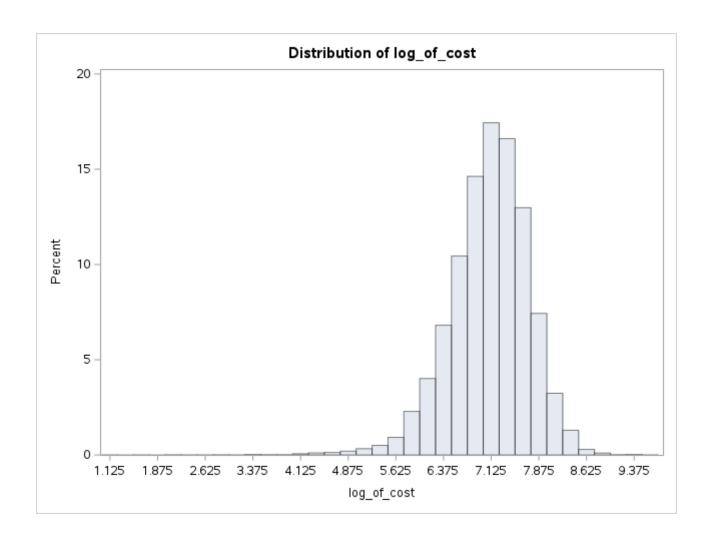
Moments					
N	18481	Sum Weights	18481		
Mean	7.0882232	Sum Observations	130997.453		
Std Deviation	0.62667352	Variance	0.39271971		
Skewness	-0.841461	Kurtosis	3.20442521		
Uncorrected SS	935796.645	Corrected SS	7257.46015		
Coeff Variation	8.84105235	Std Error Mean	0.00460976		

Basic Statistical Measures						
Location Variability						
Mean	7.088223	Std Deviation	0.62667			
Median	7.137755	Variance	0.39272			
Mode	6.487166	Range	8.61283			
		Interquartile Range	0.77589			

Tests for Location: Mu0=0						
Test	Statistic p Value					
Student's t	t	1537.655	Pr >  t	<.0001		
Sign	M	9240.5	Pr >=  M	<.0001		
Signed Rank	S	85391461	Pr >=  S	<.0001		

Quantiles (Definition 5)				
Level	Quantile			
100% Max	9.66015			
99%	8.35875			
95%	7.99930			
90%	7.81403			
75% Q3	7.50611			
50% Median	7.13776			
25% Q1	6.73022			
10%	6.30925			
5%	6.02835			
1%	5.28776			
0% Min	1.04732			

Extreme Observations						
Low	est	Highest				
Value	Obs	Value Ob				
1.04732	3326	9.27933	5837			
1.70111	6647	9.27953	10470			
2.00013	6864	9.39569	6658			
2.14124	17029	9.39805	14329			
2.44235	16490	9.66015	10454			



#### The histogram of log of the total electricity cost

#### The GLM Procedure

Number of Observations Read	18496
Number of Observations Used	18481

## The histogram of log of the total electricity cost

#### The GLM Procedure

Dependent Variable: logcost

Weight: NWEIGHT

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	8899106.26	4449553.13	1949.17	<.0001
Error	18478	42181548.31	2282.80		
Corrected Total	18480	51080654.57			

R-Square	Coeff Var	Root MSE	logcost Mean
0.174217	677.7836	47.77864	7.049247

Source	DF	Type I SS	Mean Square	F Value	Pr > F
TOTROOMS	1	8275720.875	8275720.875	3625.25	<.0001

Source	DF	Type I SS	Mean Square	F Value	Pr > F
PRKGPLC1	1	623385.389	623385.389	273.08	<.0001

Source	DF	Type III SS	Mean Square	F Value	Pr > F
TOTROOMS	1	3448193.798	3448193.798	1510.51	<.0001
PRKGPLC1	1	623385.389	623385.389	273.08	<.0001

Parameter	Estimate	Standard Error	t Value	Pr >  t
Intercept	6.515232973	0.01527602	426.50	<.0001
TOTROOMS	0.087801948	0.00225913	38.87	<.0001
PRKGPLC1	0.068778053	0.00416203	16.53	<.0001

