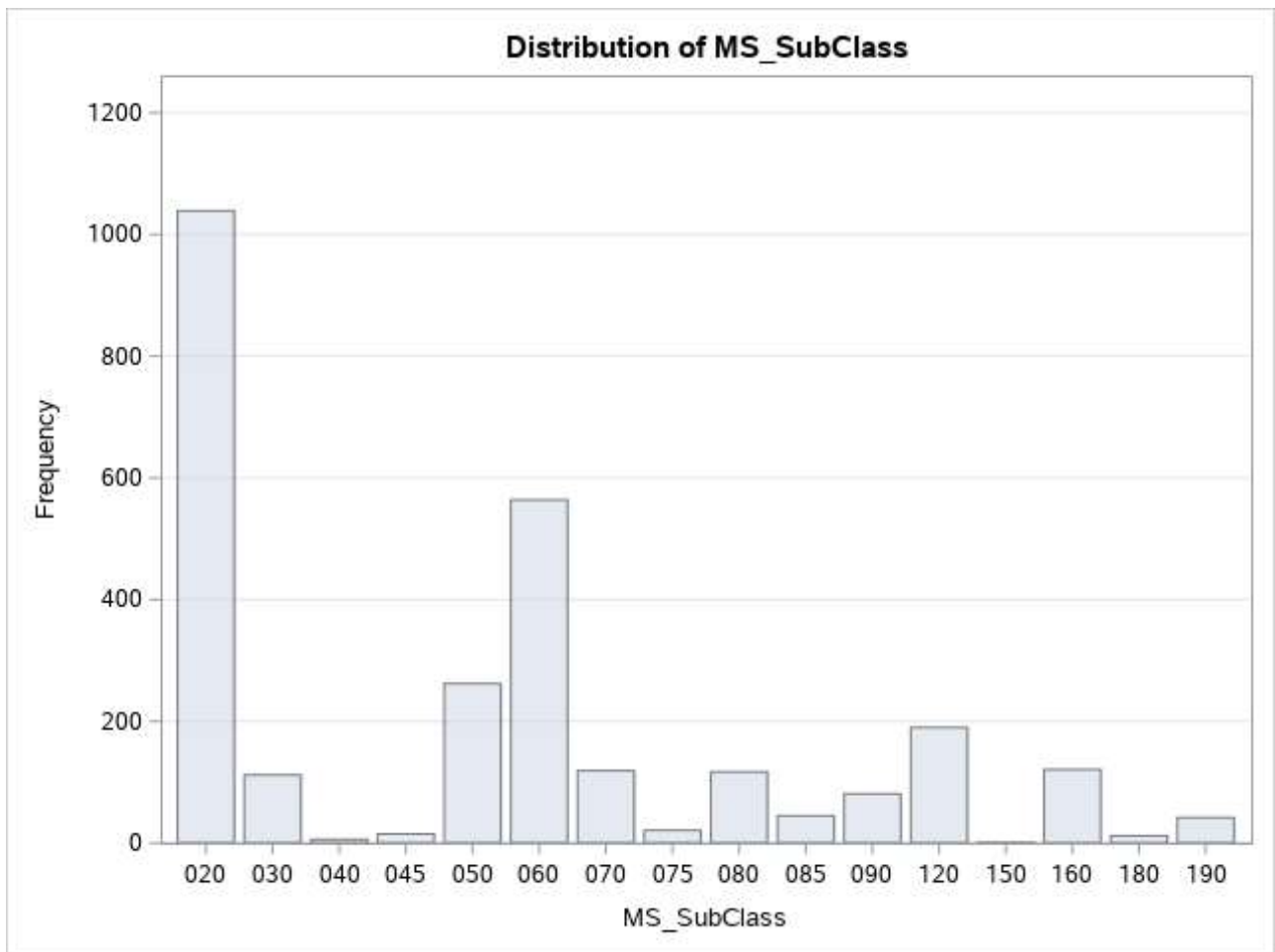


## Frequencies for Categorical Variables

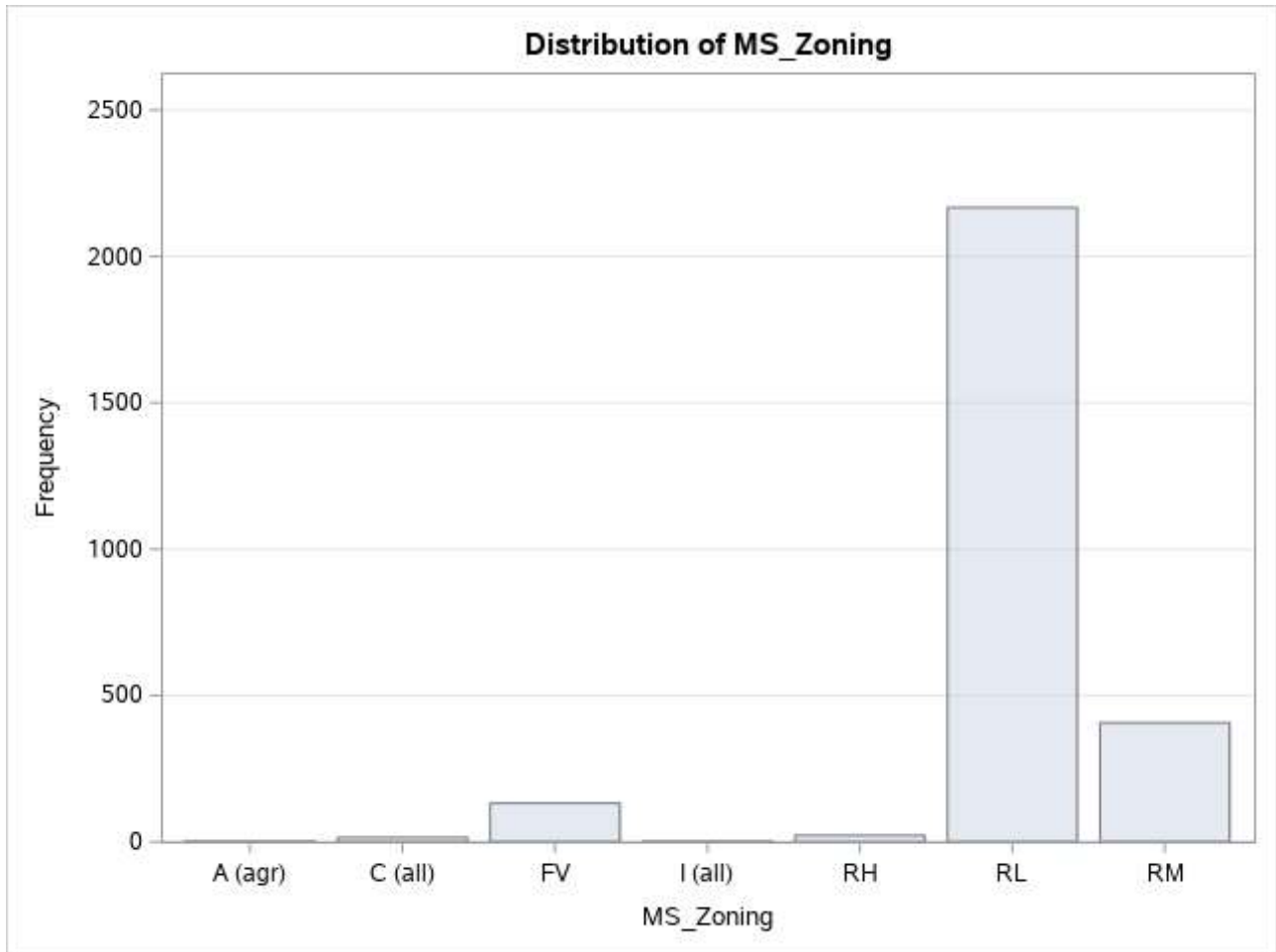
### The FREQ Procedure

MS_SubClass				
MS_SubClass	Frequency	Percent	Cumulative Frequency	Cumulative Percent
020	1039	37.82	1039	37.82
030	112	4.08	1151	41.90
040	6	0.22	1157	42.12
045	15	0.55	1172	42.66
050	262	9.54	1434	52.20
060	564	20.53	1998	72.73
070	119	4.33	2117	77.07
075	21	0.76	2138	77.83
080	117	4.26	2255	82.09
085	45	1.64	2300	83.73
090	81	2.95	2381	86.68
120	190	6.92	2571	93.59
150	1	0.04	2572	93.63
160	121	4.40	2693	98.03
180	12	0.44	2705	98.47
190	42	1.53	2747	100.00

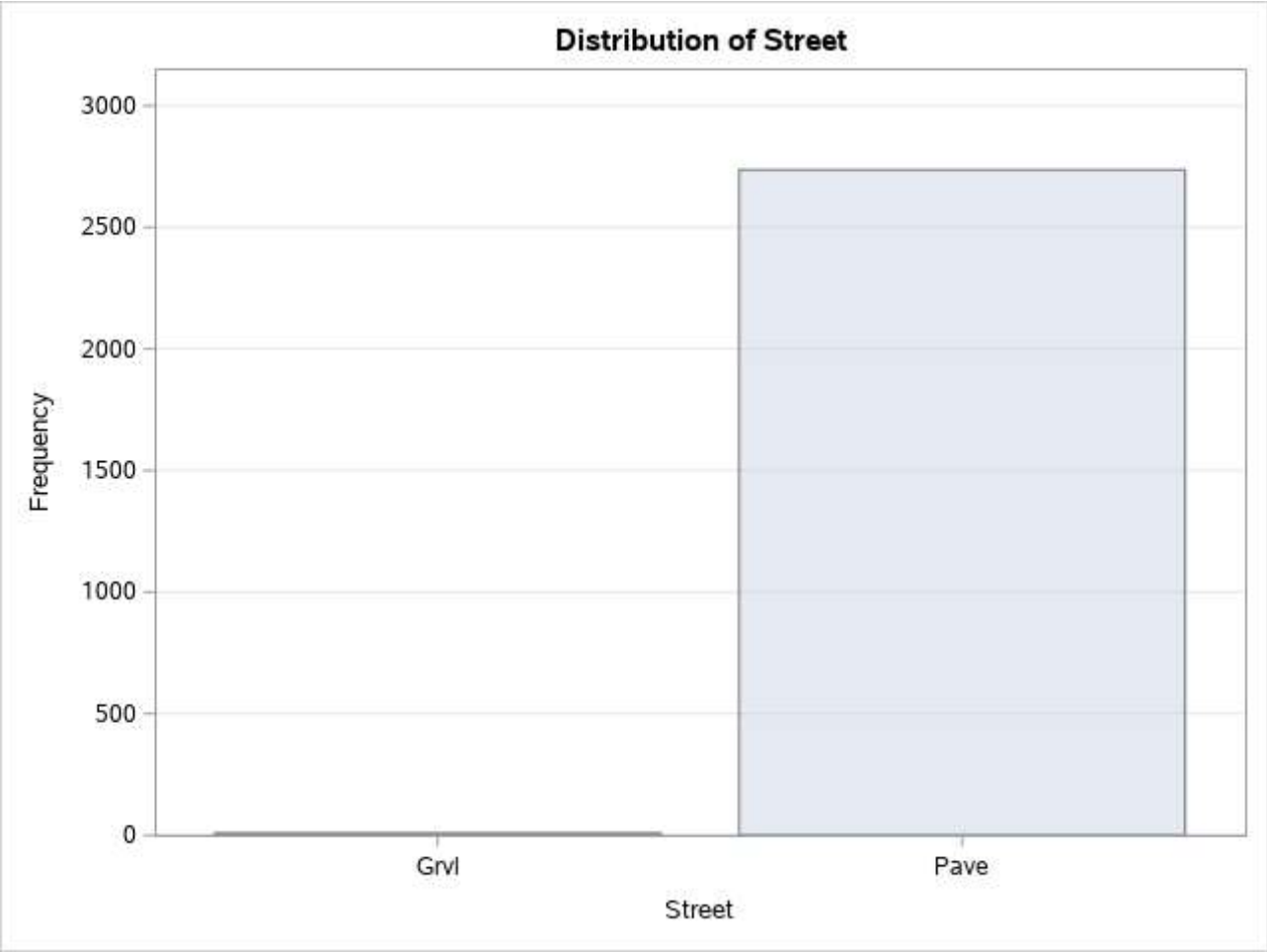


MS_Zoning				
MS_Zoning	Frequency	Percent	Cumulative Frequency	Cumulative Percent
A (agr)	2	0.07	2	0.07
C (all)	15	0.55	17	0.62

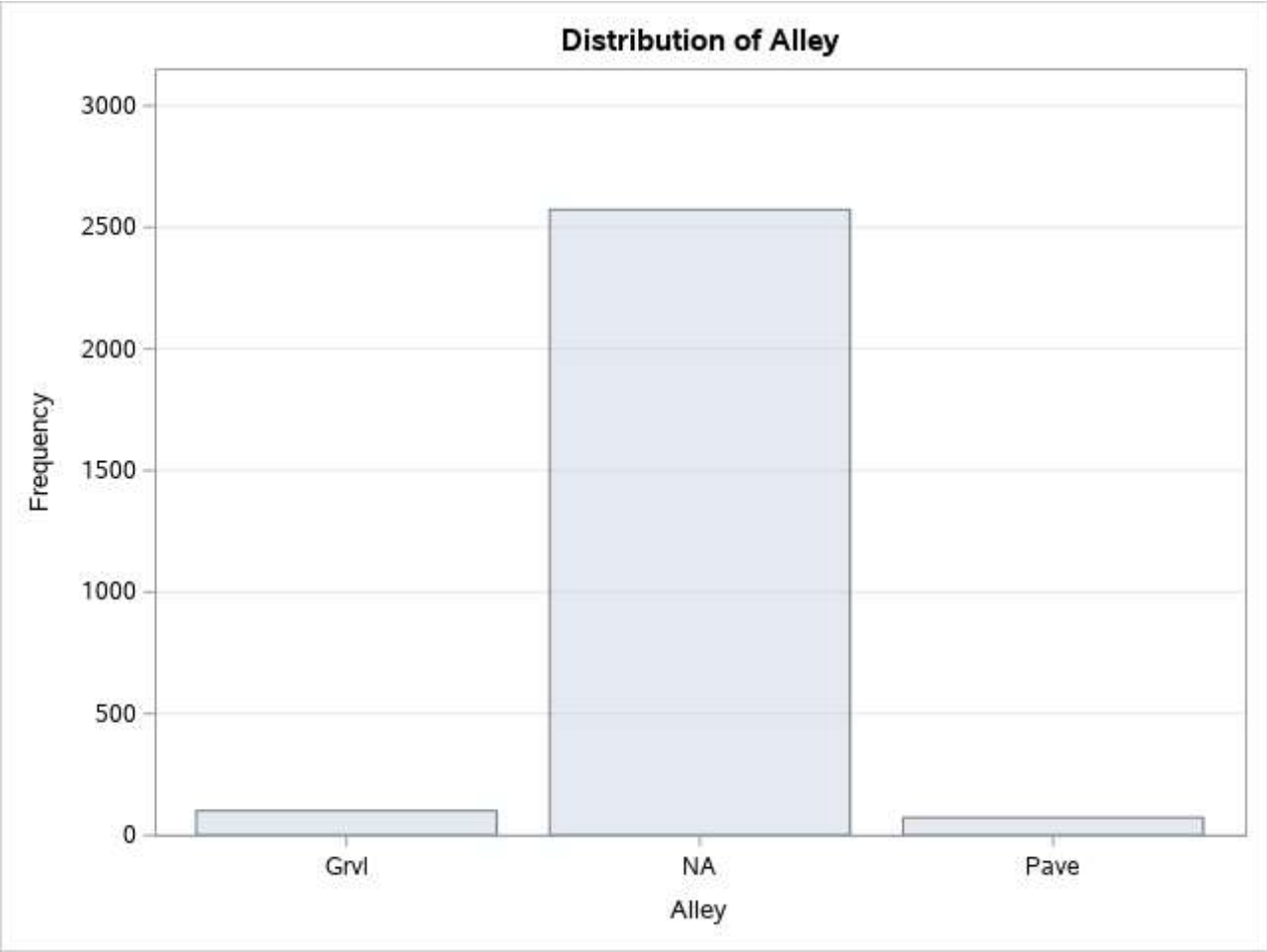
MS_Zoning				
MS_Zoning	Frequency	Percent	Cumulative Frequency	Cumulative Percent
FV	132	4.81	149	5.42
I (all)	2	0.07	151	5.50
RH	22	0.80	173	6.30
RL	2167	78.89	2340	85.18
RM	407	14.82	2747	100.00



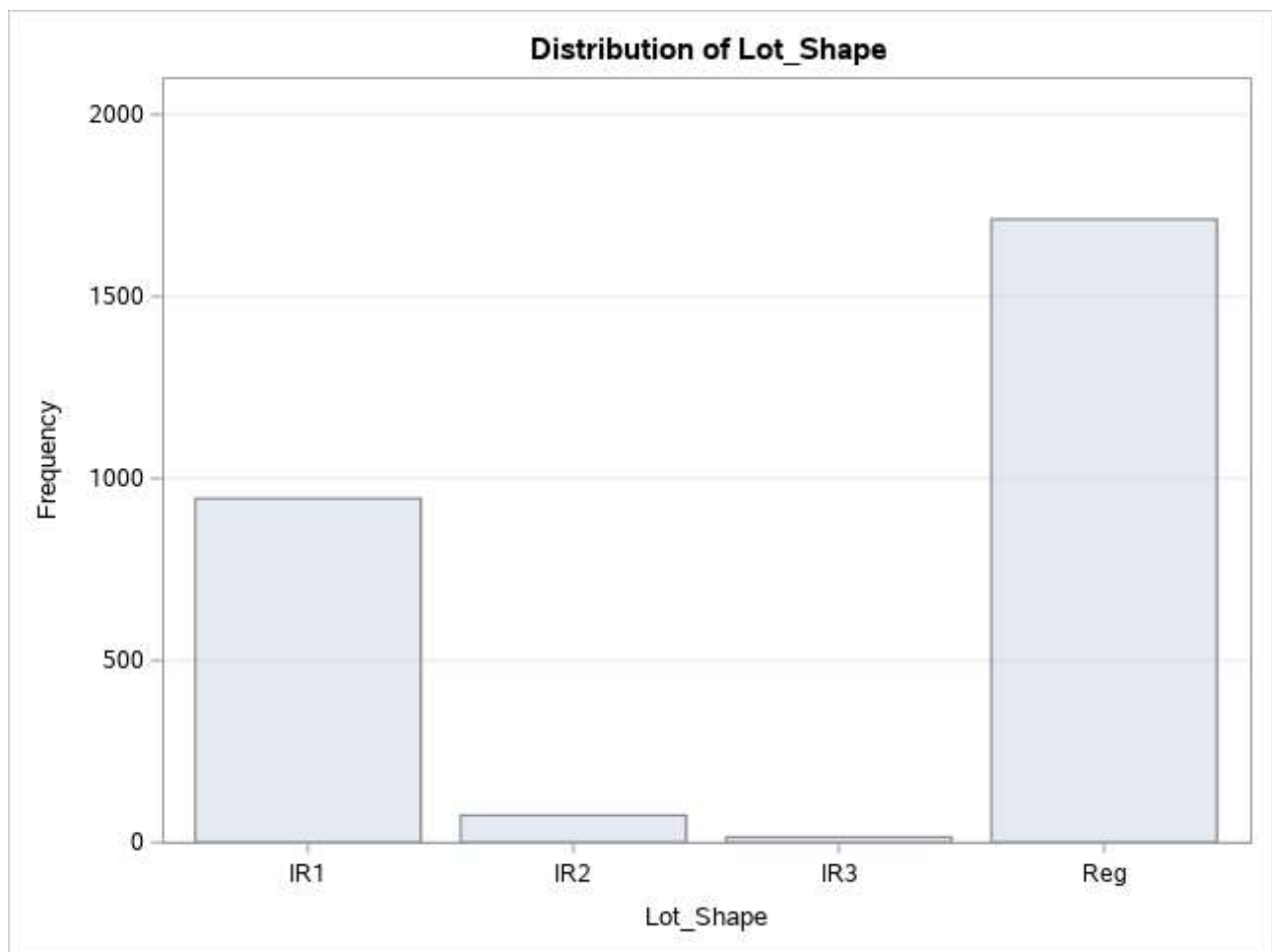
Street				
Street	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Gvl	10	0.36	10	0.36
Pave	2737	99.64	2747	100.00



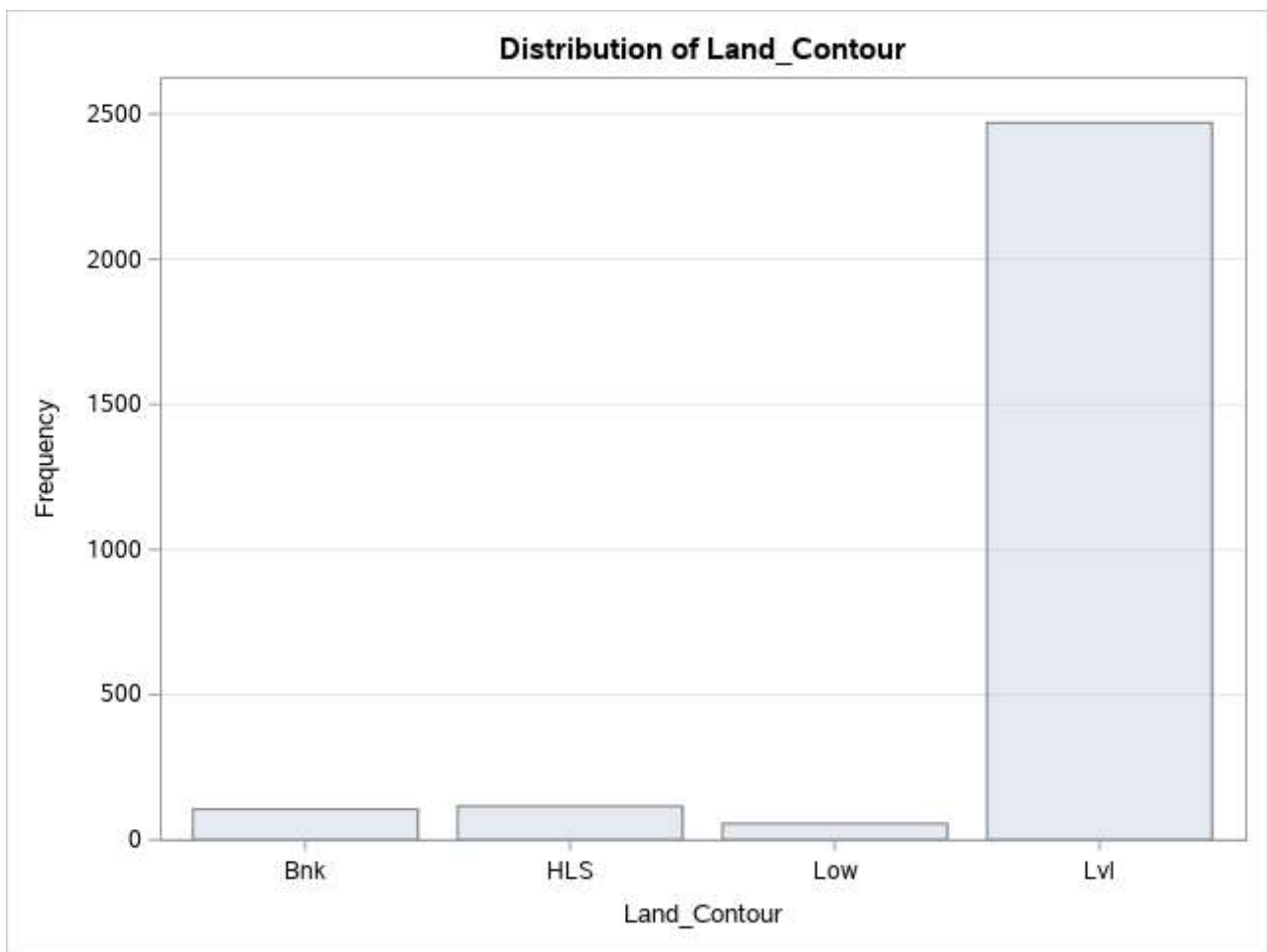
Alley				
Alley	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Grvl	101	3.68	101	3.68
NA	2573	93.67	2674	97.34
Pave	73	2.66	2747	100.00



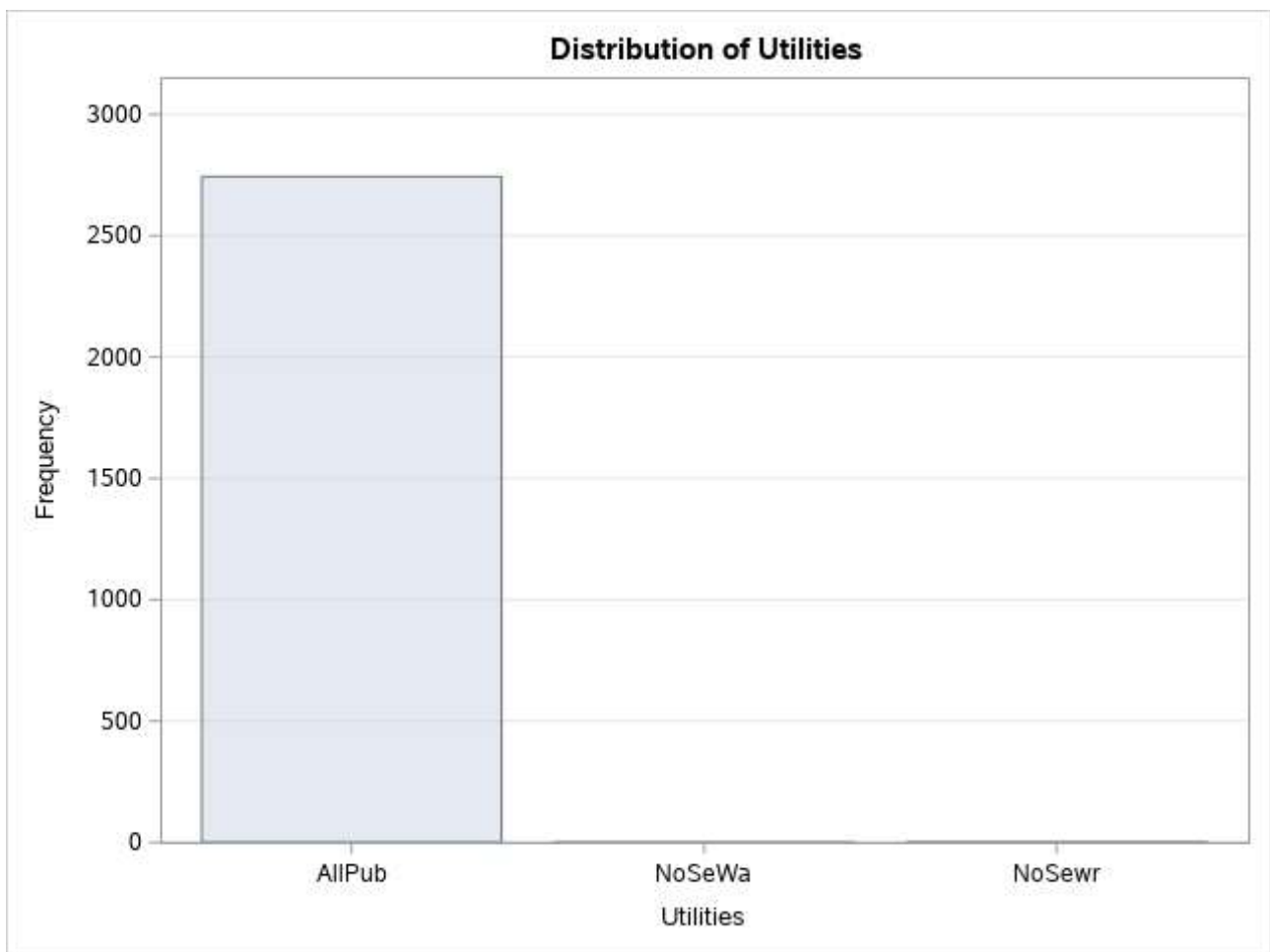
Lot_Shape				
Lot_Shape	Frequency	Percent	Cumulative Frequency	Cumulative Percent
IR1	945	34.40	945	34.40
IR2	75	2.73	1020	37.13
IR3	15	0.55	1035	37.68
Reg	1712	62.32	2747	100.00



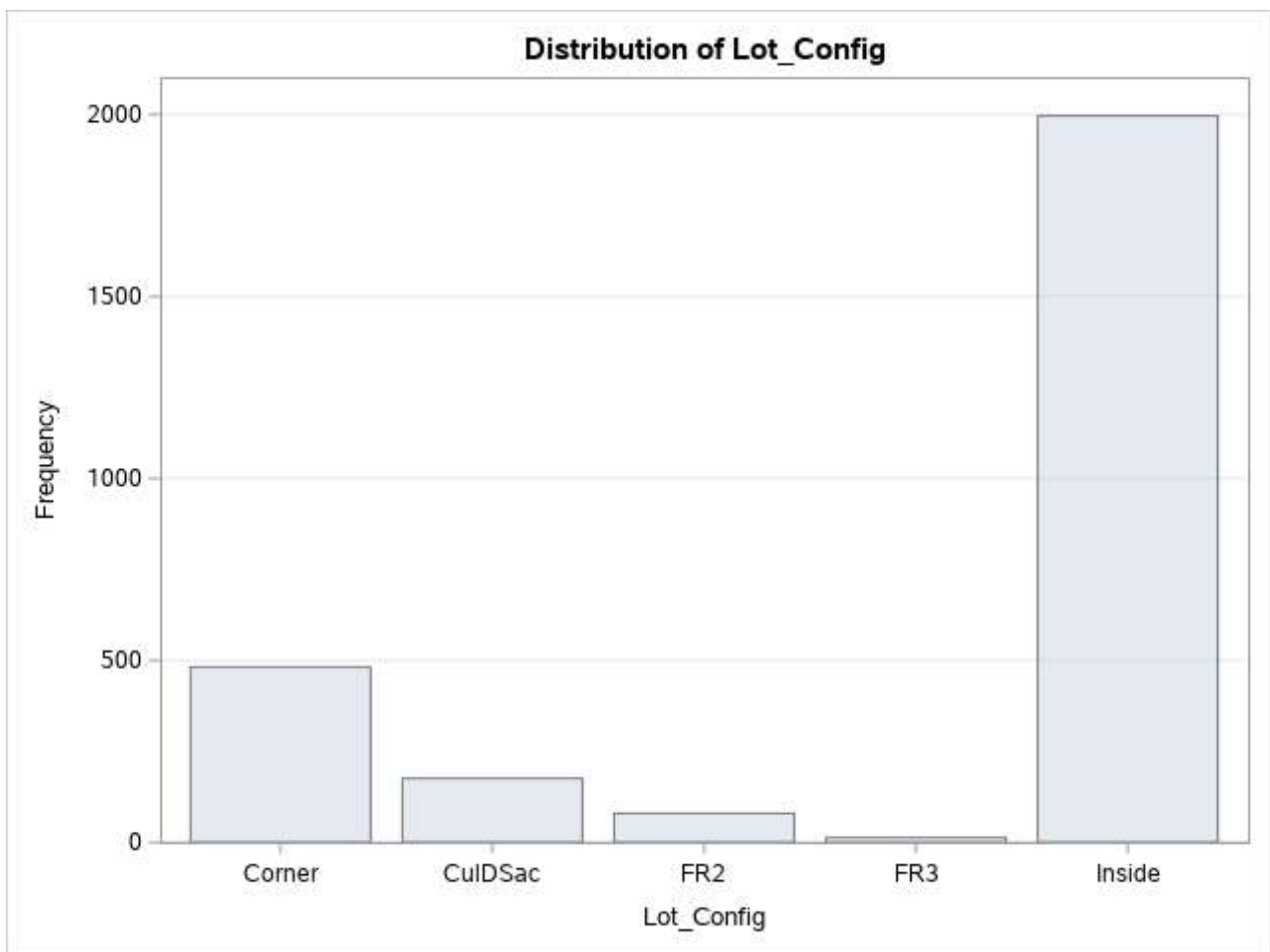
Land_Contour				
Land_Contour	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Bnk	105	3.82	105	3.82
HLS	116	4.22	221	8.05
Low	56	2.04	277	10.08
Lvl	2470	89.92	2747	100.00



Utilities				
Utilities	Frequency	Percent	Cumulative Frequency	Cumulative Percent
AllPub	2744	99.89	2744	99.89
NoSeWa	1	0.04	2745	99.93
NoSewr	2	0.07	2747	100.00

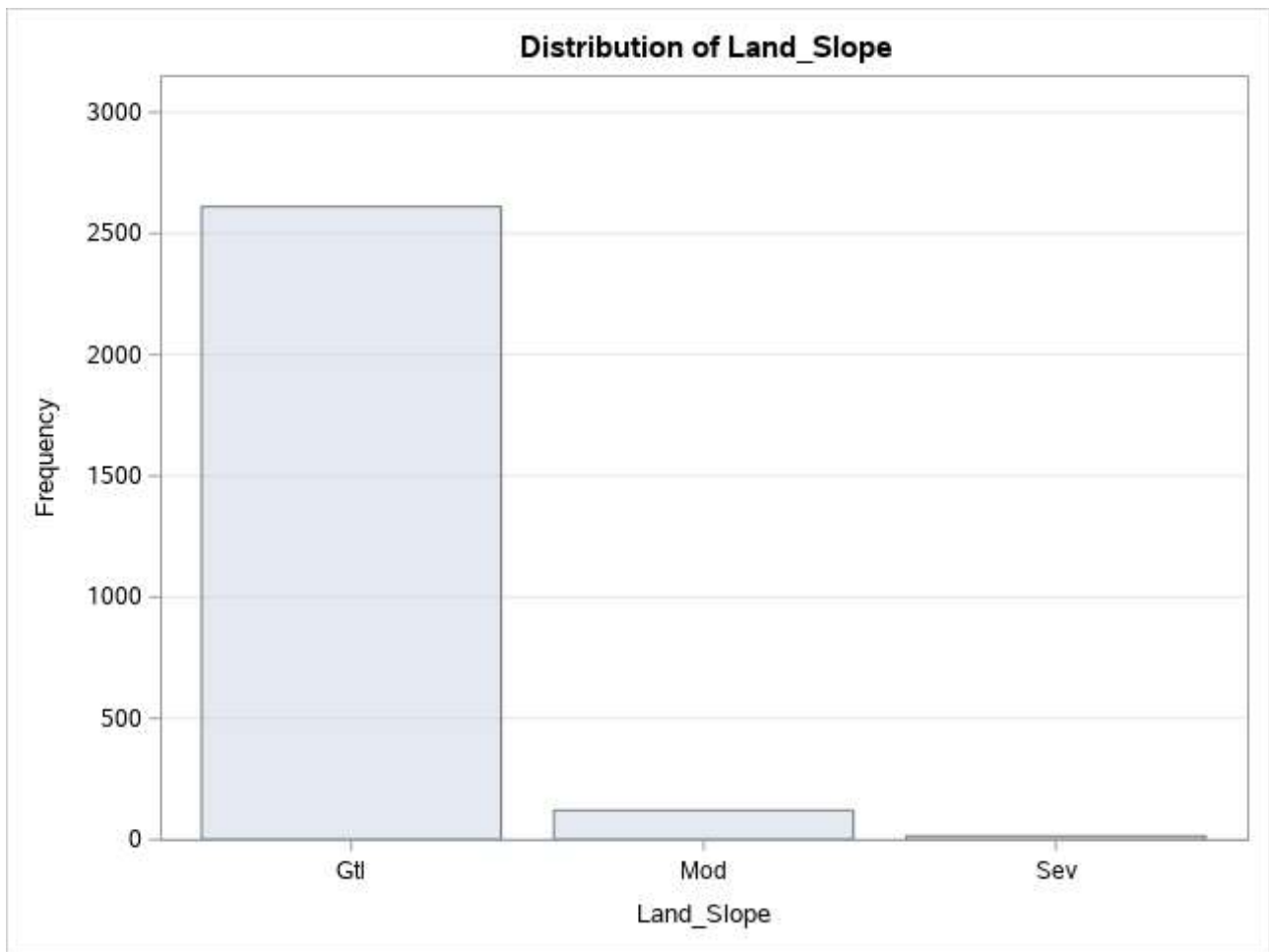


Lot_Config				
Lot_Config	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Corner	482	17.55	482	17.55
CulDSac	176	6.41	658	23.95
FR2	80	2.91	738	26.87
FR3	13	0.47	751	27.34
Inside	1996	72.66	2747	100.00



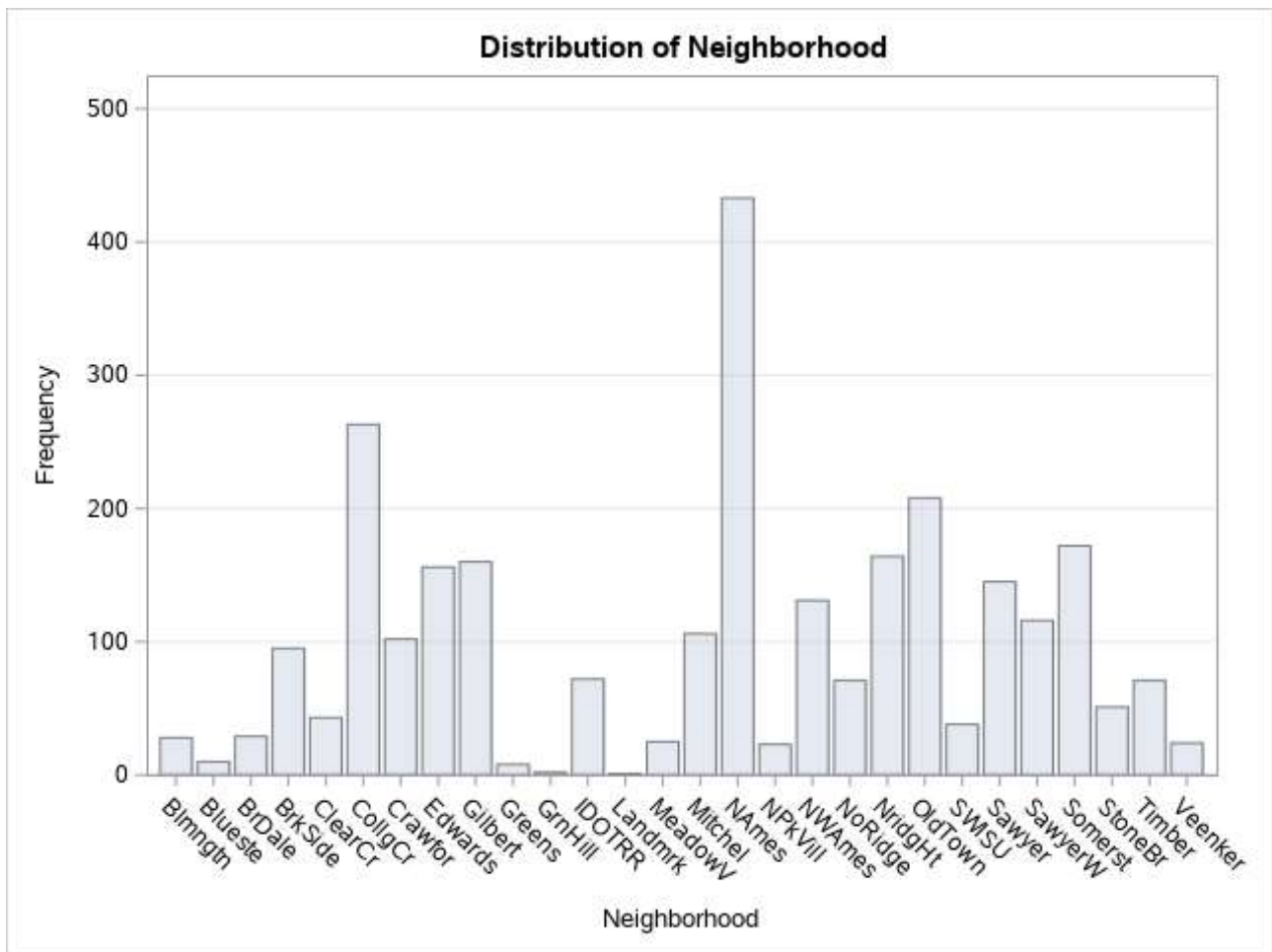
Land_Slope				
Land_Slope	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Gtl	2611	95.05	2611	95.05
Mod	121	4.40	2732	99.45
Sev	15	0.55	2747	100.00



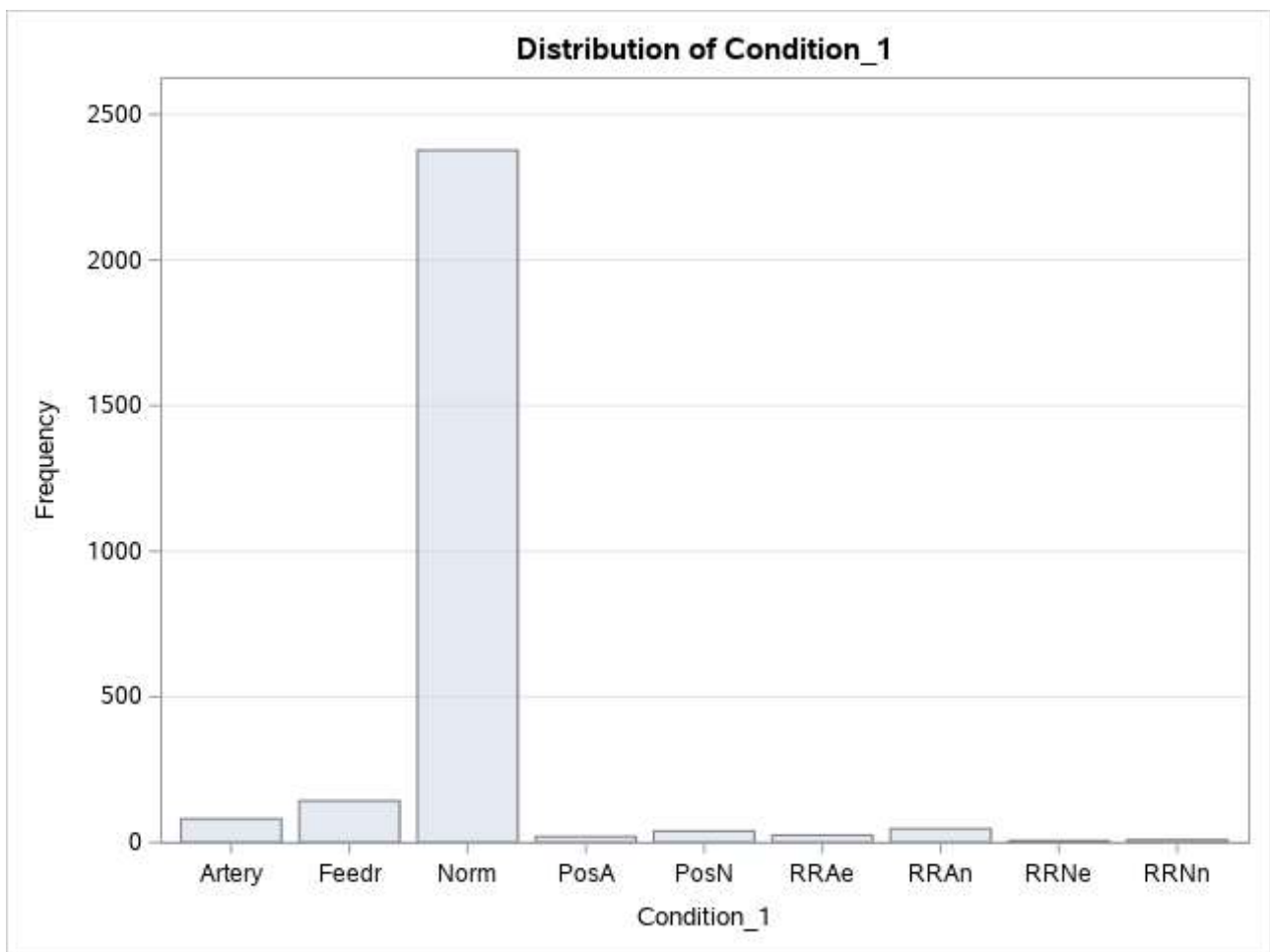


Neighborhood				
Neighborhood	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Blmngtn	28	1.02	28	1.02
Blueste	10	0.36	38	1.38
BrDale	29	1.06	67	2.44
BrkSide	95	3.46	162	5.90
ClearCr	43	1.57	205	7.46
CollgCr	263	9.57	468	17.04
Crawfor	102	3.71	570	20.75
Edwards	156	5.68	726	26.43
Gilbert	160	5.82	886	32.25
Greens	8	0.29	894	32.54
GrnHill	2	0.07	896	32.62
IDOTRR	72	2.62	968	35.24
Landmrk	1	0.04	969	35.27
MeadowV	25	0.91	994	36.18
Mitchel	106	3.86	1100	40.04
NAmes	433	15.76	1533	55.81
NPkVill	23	0.84	1556	56.64
NWAmes	131	4.77	1687	61.41
NoRidge	71	2.58	1758	64.00
NridgHt	164	5.97	1922	69.97
OldTown	208	7.57	2130	77.54
SWISU	38	1.38	2168	78.92
Sawyer	145	5.28	2313	84.20
SawyerW	116	4.22	2429	88.42
Somerst	172	6.26	2601	94.69

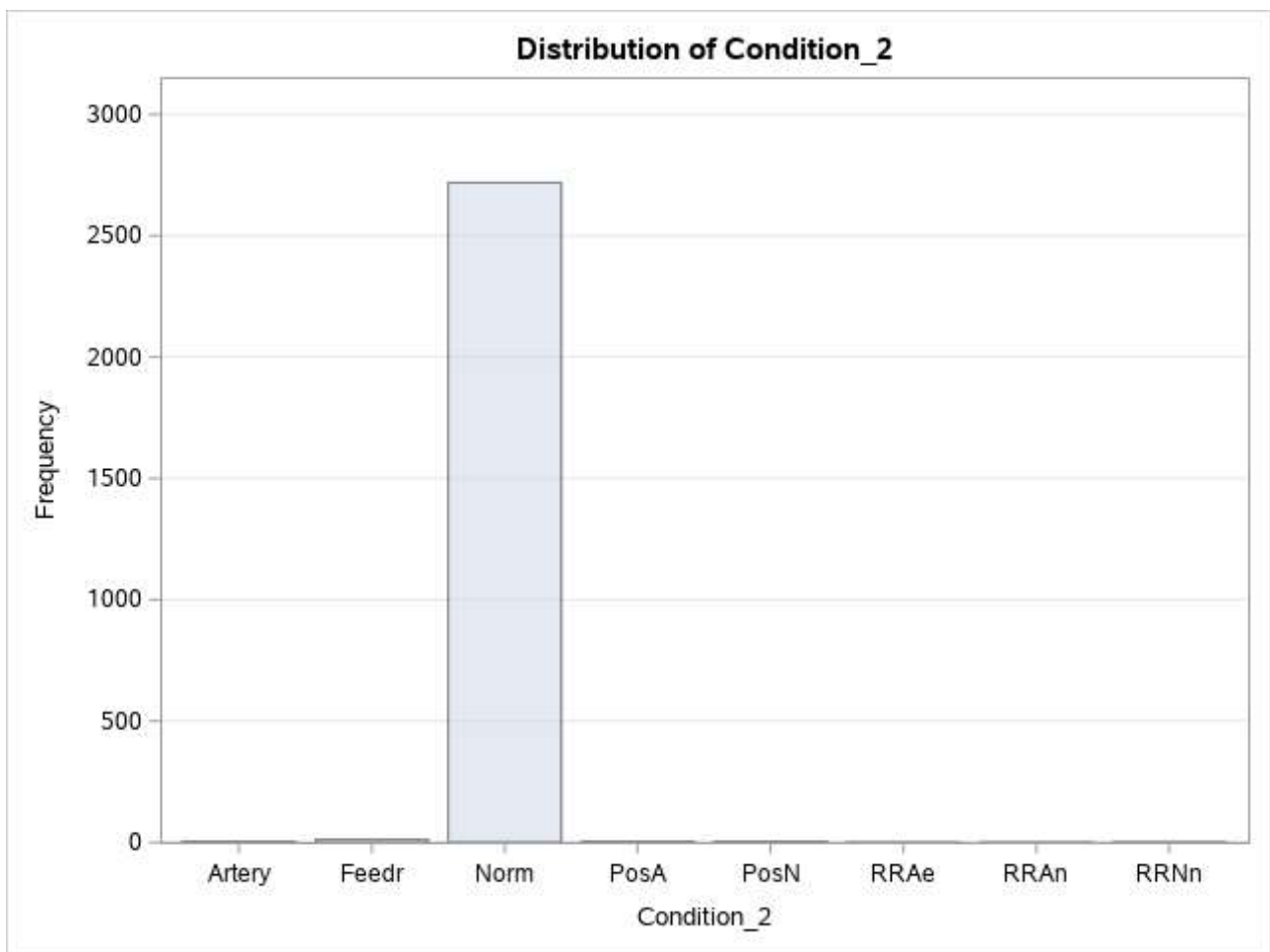
Neighborhood				
Neighborhood	Frequency	Percent	Cumulative Frequency	Cumulative Percent
StoneBr	51	1.86	2652	96.54
Timber	71	2.58	2723	99.13
Veenker	24	0.87	2747	100.00



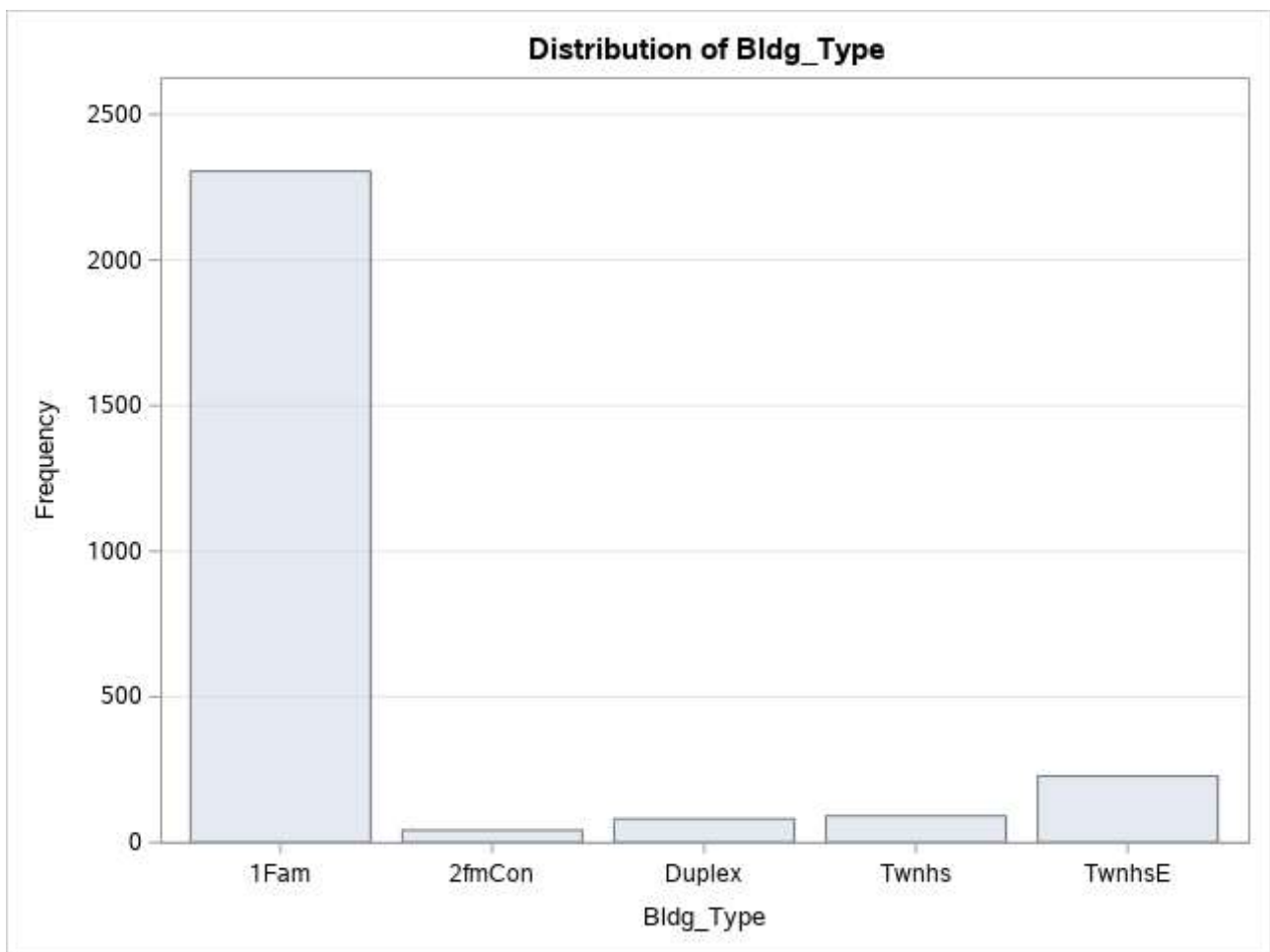
Condition_1				
Condition_1	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Artery	81	2.95	81	2.95
Feedr	143	5.21	224	8.15
Norm	2377	86.53	2601	94.69
PosA	20	0.73	2621	95.41
PosN	39	1.42	2660	96.83
RR Ae	25	0.91	2685	97.74
RR An	47	1.71	2732	99.45
RR Ne	6	0.22	2738	99.67
RR Nn	9	0.33	2747	100.00



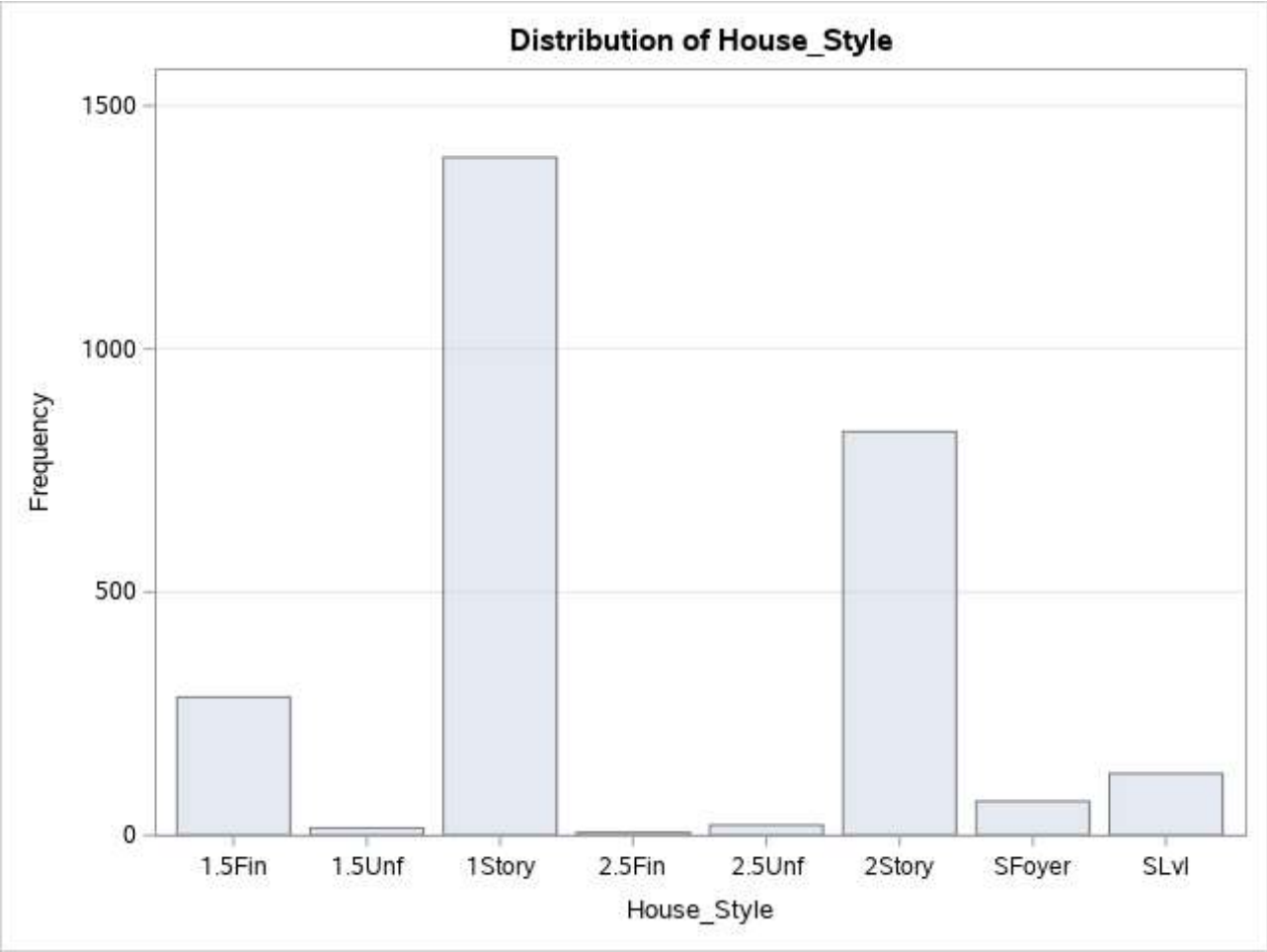
Condition_2				
Condition_2	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Artery	4	0.15	4	0.15
Feedr	12	0.44	16	0.58
Norm	2719	98.98	2735	99.56
PosA	4	0.15	2739	99.71
PosN	4	0.15	2743	99.85
RRAe	1	0.04	2744	99.89
RRAn	1	0.04	2745	99.93
RRNn	2	0.07	2747	100.00



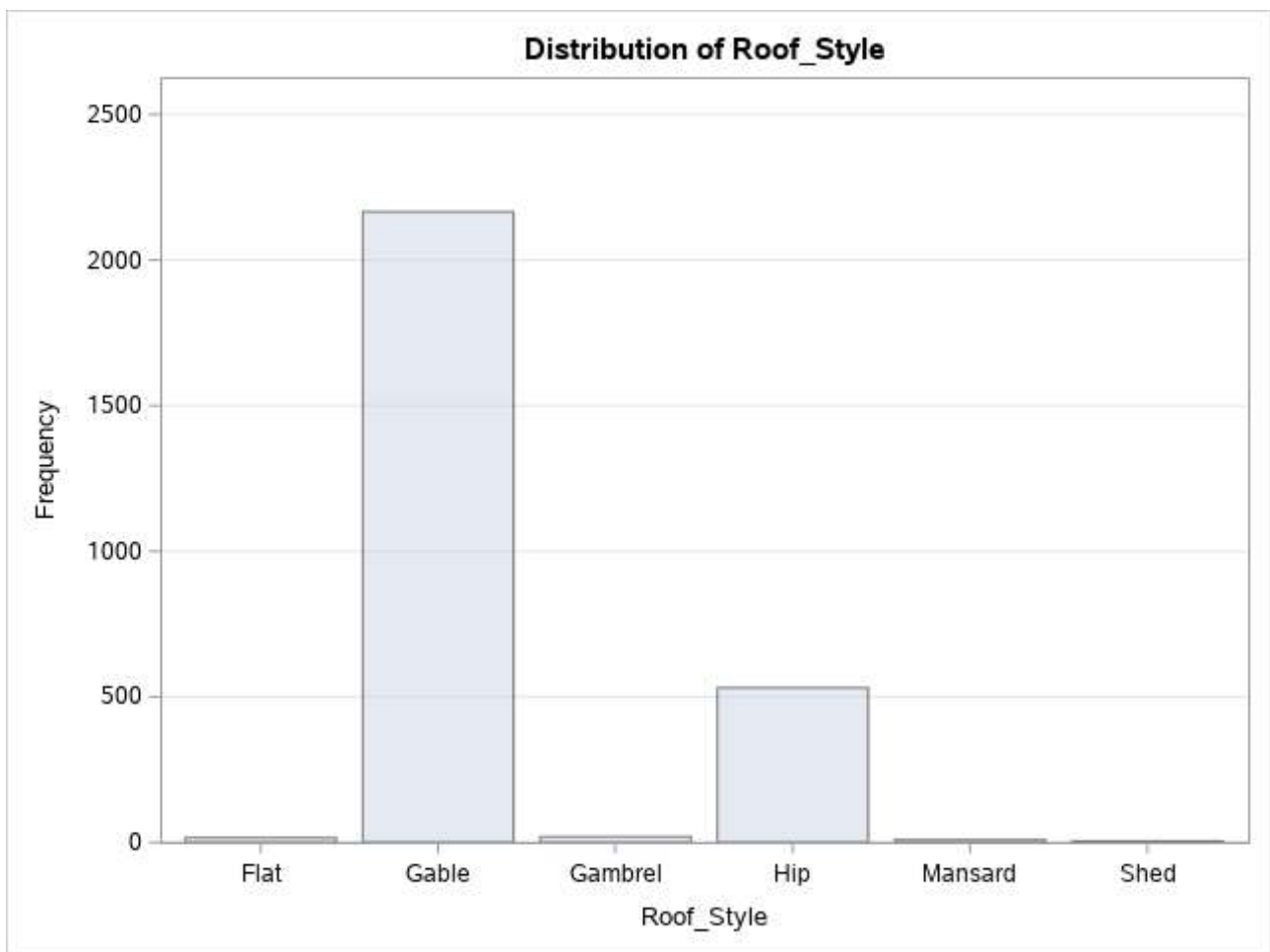
Bldg_Type				
Bldg_Type	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1Fam	2305	83.91	2305	83.91
2fmCon	42	1.53	2347	85.44
Duplex	81	2.95	2428	88.39
Twnhs	91	3.31	2519	91.70
TwnhsE	228	8.30	2747	100.00



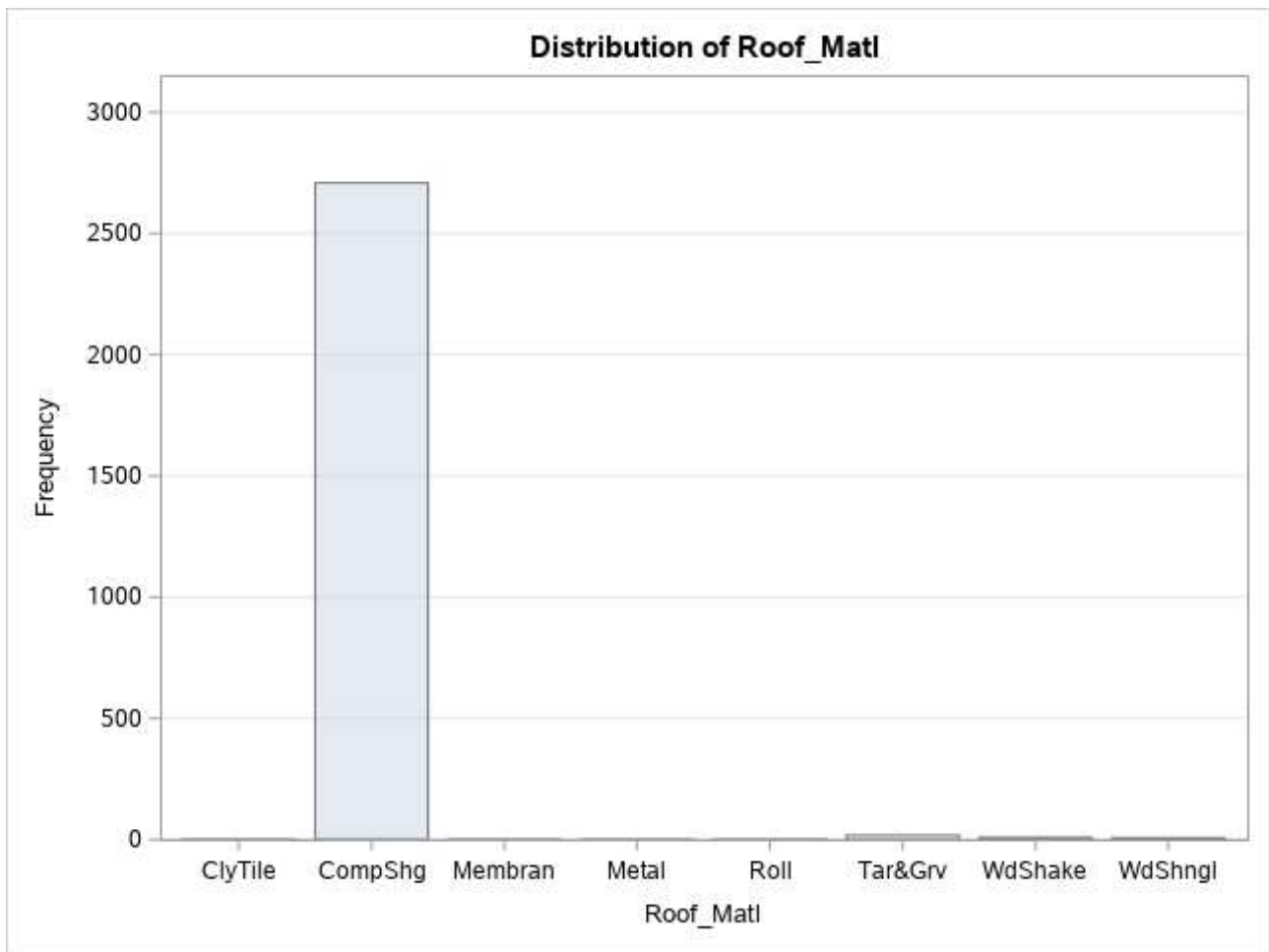
House_Style				
House_Style	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1.5Fin	284	10.34	284	10.34
1.5Unf	15	0.55	299	10.88
1Story	1394	50.75	1693	61.63
2.5Fin	6	0.22	1699	61.85
2.5Unf	21	0.76	1720	62.61
2Story	830	30.21	2550	92.83
SFoyer	70	2.55	2620	95.38
SLvl	127	4.62	2747	100.00



Roof_Style				
Roof_Style	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Flat	16	0.58	16	0.58
Gable	2166	78.85	2182	79.43
Gambrel	20	0.73	2202	80.16
Hip	531	19.33	2733	99.49
Mansard	9	0.33	2742	99.82
Shed	5	0.18	2747	100.00

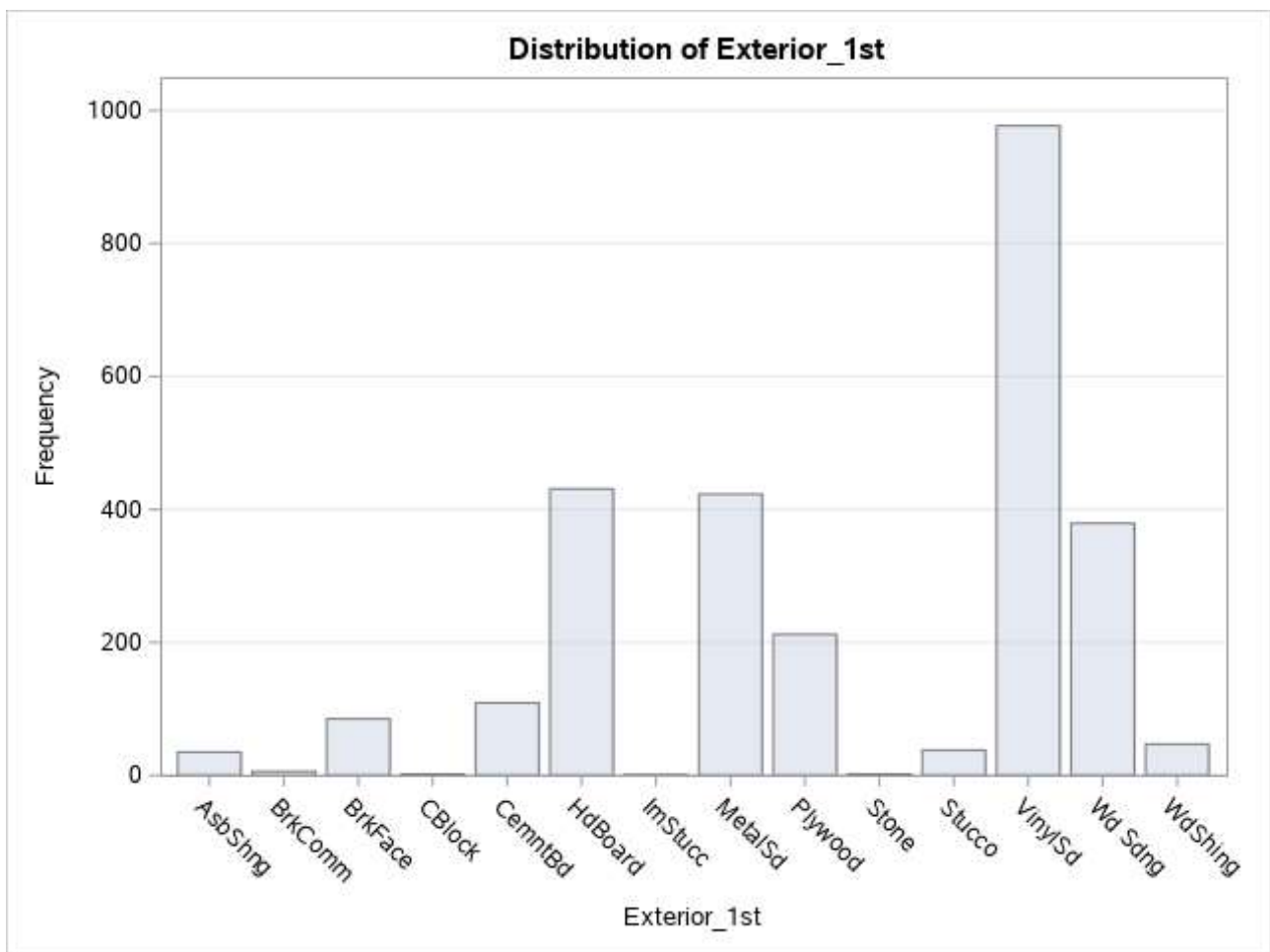


Roof_Matl				
Roof_Matl	Frequency	Percent	Cumulative Frequency	Cumulative Percent
ClyTile	1	0.04	1	0.04
CompShg	2709	98.62	2710	98.65
Membran	1	0.04	2711	98.69
Metal	1	0.04	2712	98.73
Roll	1	0.04	2713	98.76
Tar&Grv	18	0.66	2731	99.42
WdShake	9	0.33	2740	99.75
WdShngl	7	0.25	2747	100.00

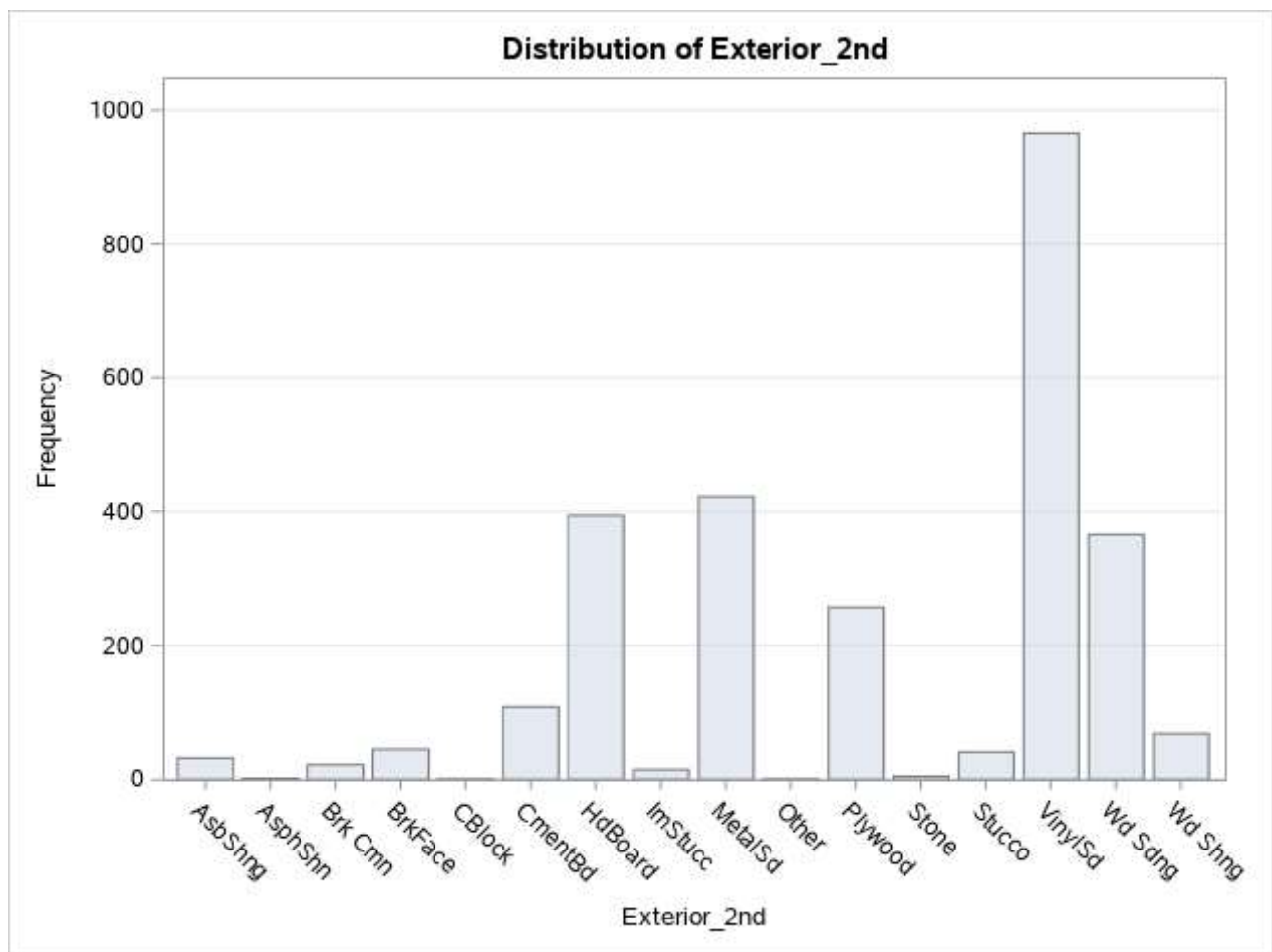


Exterior_1st				
Exterior_1st	Frequency	Percent	Cumulative Frequency	Cumulative Percent
AsbShng	35	1.27	35	1.27
BrkComm	6	0.22	41	1.49
BrkFace	85	3.09	126	4.59
CBlock	2	0.07	128	4.66
CemntBd	109	3.97	237	8.63
HdBoard	431	15.69	668	24.32
ImStucc	1	0.04	669	24.35
MetalSd	423	15.40	1092	39.75
Plywood	212	7.72	1304	47.47
Stone	2	0.07	1306	47.54
Stucco	38	1.38	1344	48.93
VinylSd	977	35.57	2321	84.49
Wd Sdng	379	13.80	2700	98.29
WdShing	47	1.71	2747	100.00

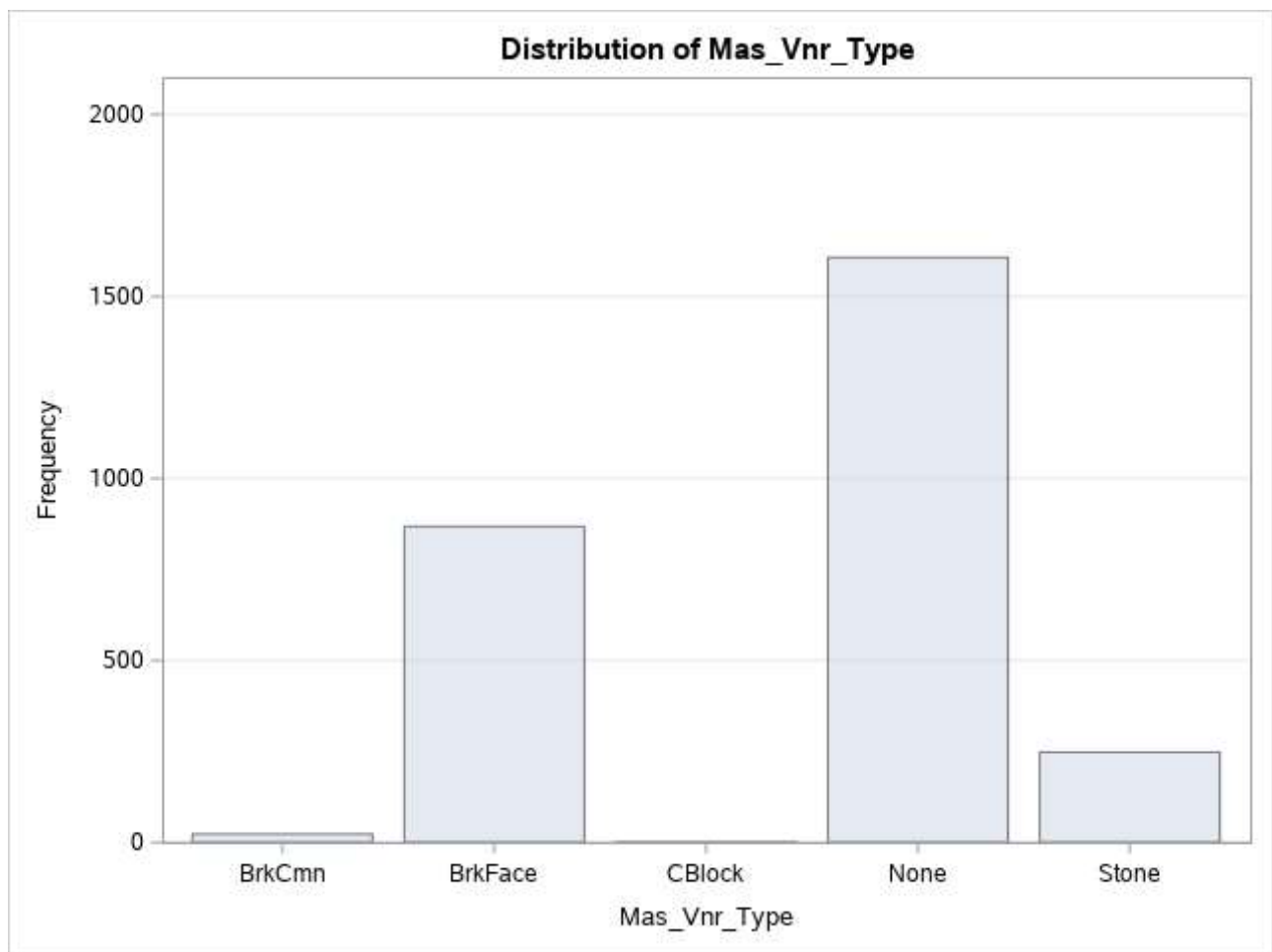




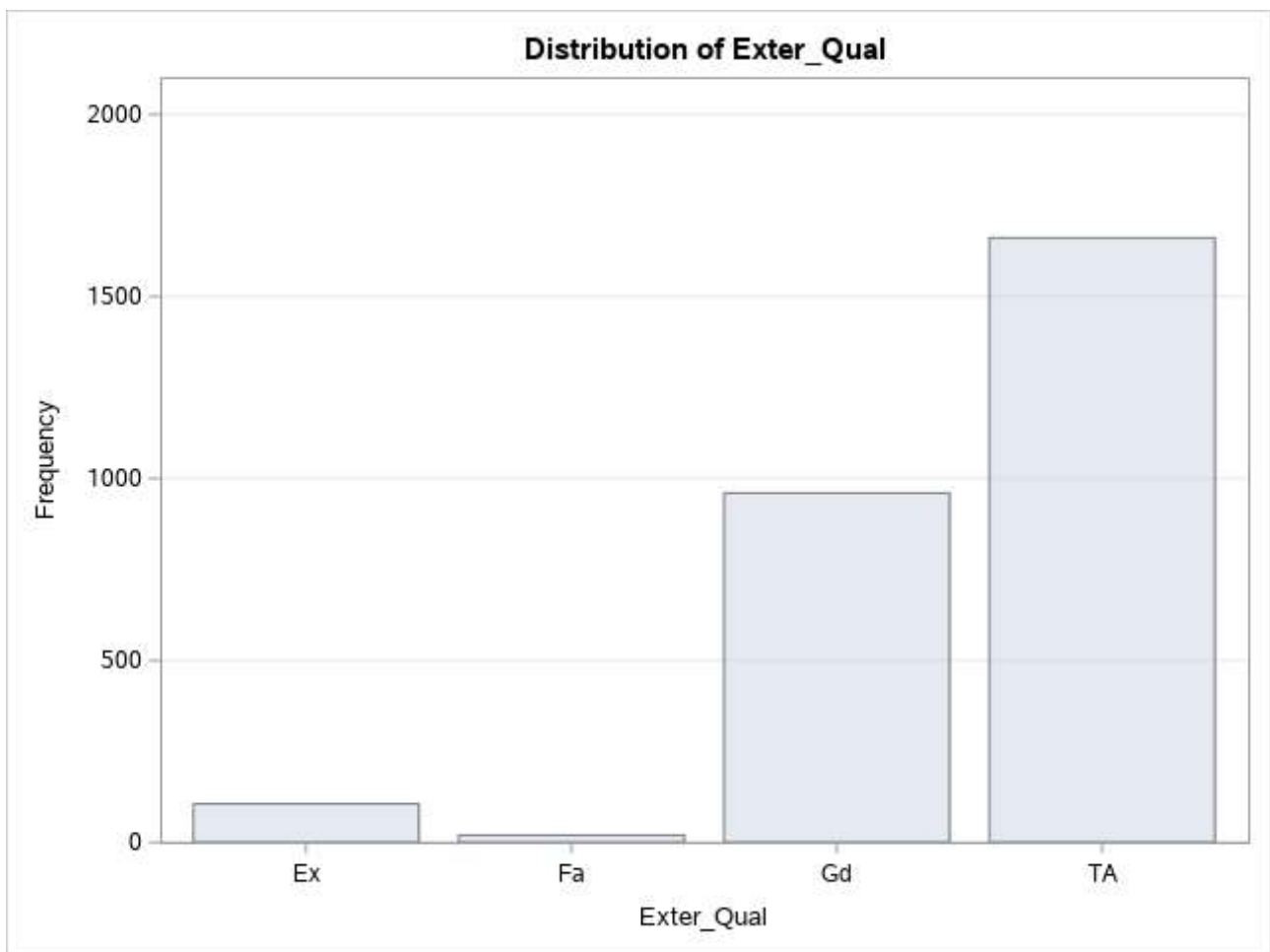
Exterior_2nd				
Exterior_2nd	Frequency	Percent	Cumulative Frequency	Cumulative Percent
AsbShng	32	1.16	32	1.16
AsphShn	2	0.07	34	1.24
Brk Cmn	22	0.80	56	2.04
BrkFace	45	1.64	101	3.68
CBlock	1	0.04	102	3.71
CmentBd	109	3.97	211	7.68
HdBoard	394	14.34	605	22.02
ImStucc	15	0.55	620	22.57
MetalSd	423	15.40	1043	37.97
Other	1	0.04	1044	38.01
Plywood	257	9.36	1301	47.36
Stone	5	0.18	1306	47.54
Stucco	41	1.49	1347	49.04
VinylSd	966	35.17	2313	84.20
Wd Sdng	366	13.32	2679	97.52
Wd Shng	68	2.48	2747	100.00



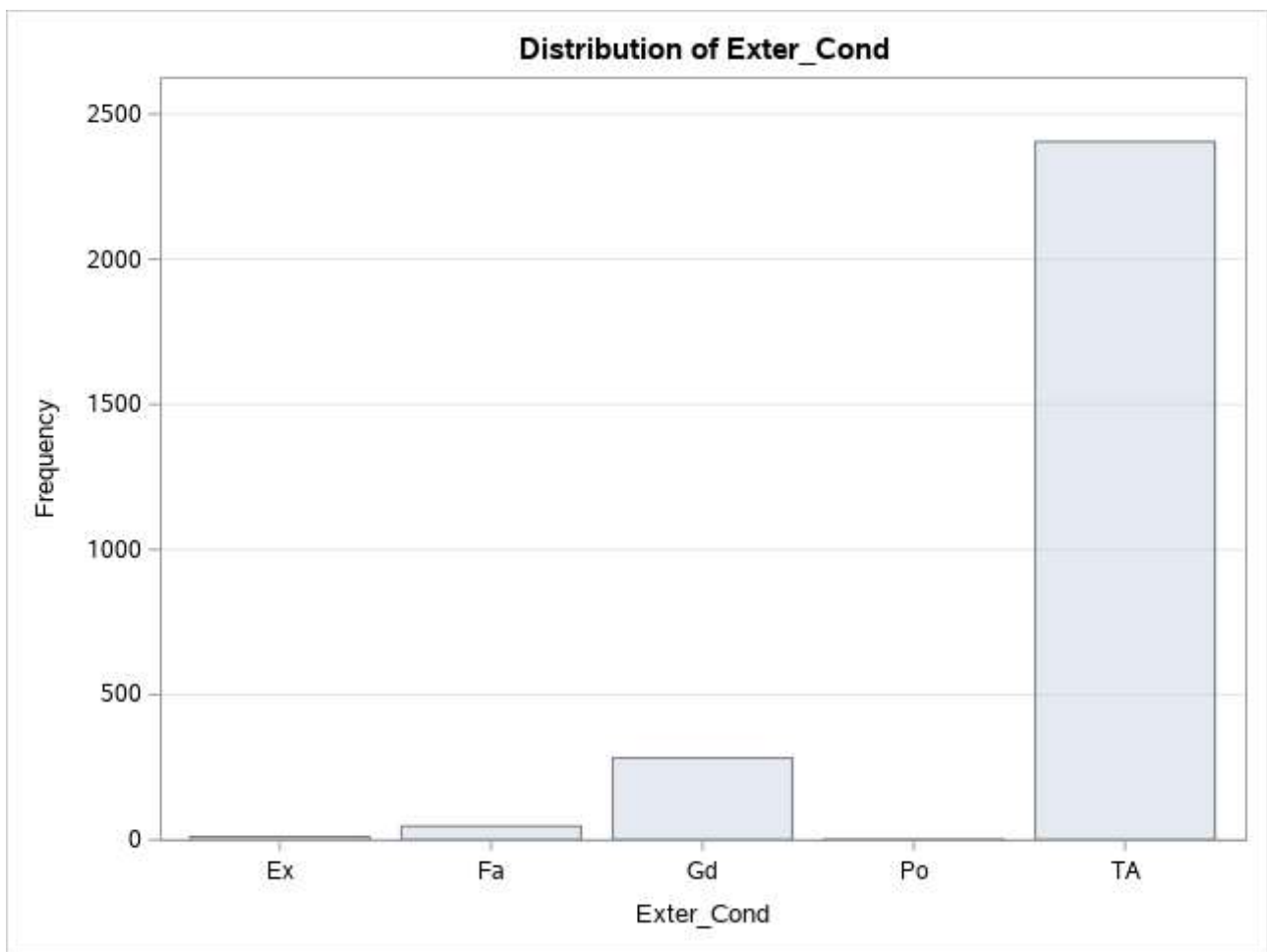
Mas_Vnr_Type				
Mas_Vnr_Type	Frequency	Percent	Cumulative Frequency	Cumulative Percent
BrkCmn	23	0.84	23	0.84
BrkFace	868	31.60	891	32.44
CBlock	1	0.04	892	32.47
None	1607	58.50	2499	90.97
Stone	248	9.03	2747	100.00



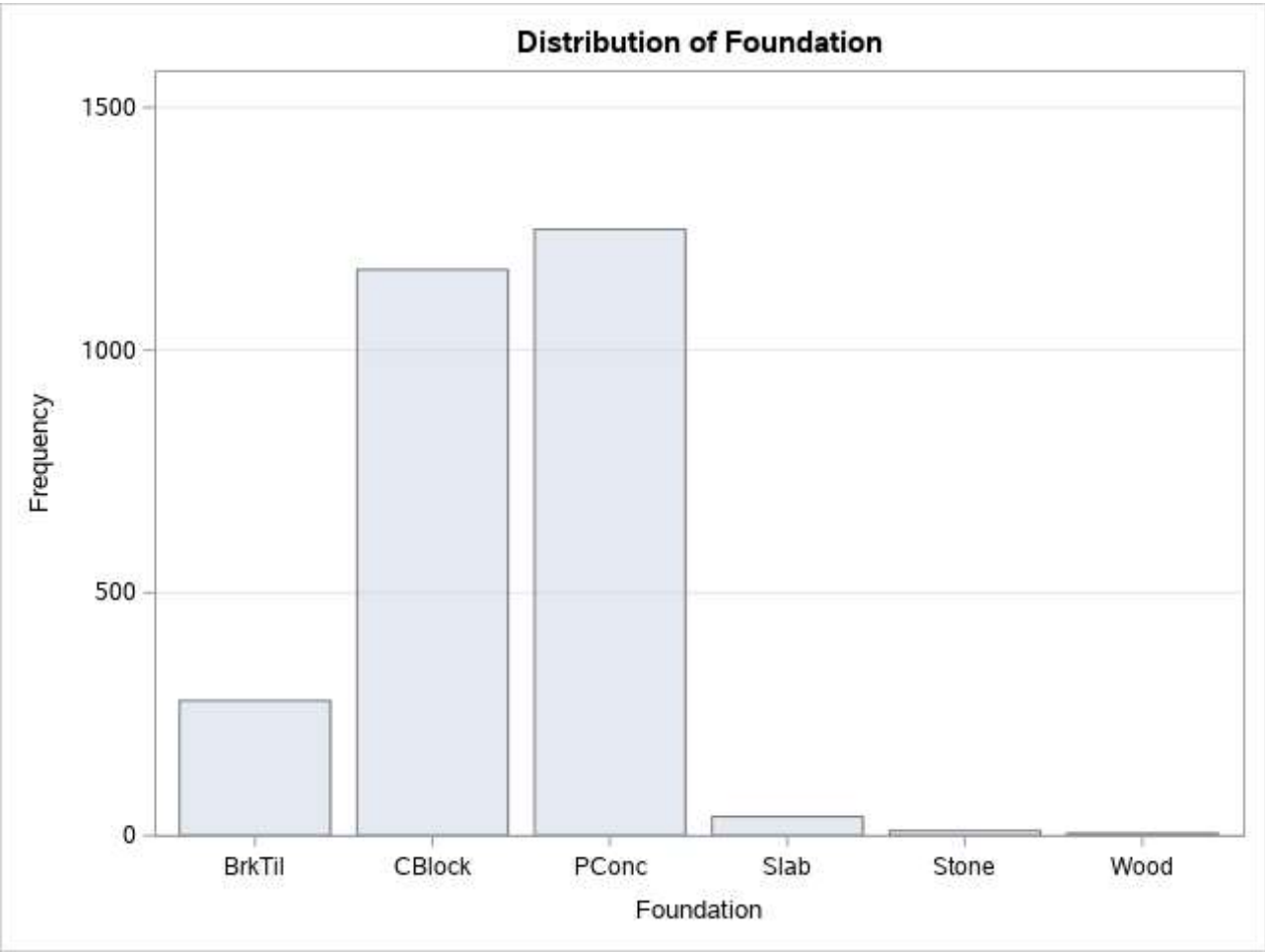
Exter_Qual				
Exter_Qual	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Ex	106	3.86	106	3.86
Fa	20	0.73	126	4.59
Gd	960	34.95	1086	39.53
TA	1661	60.47	2747	100.00



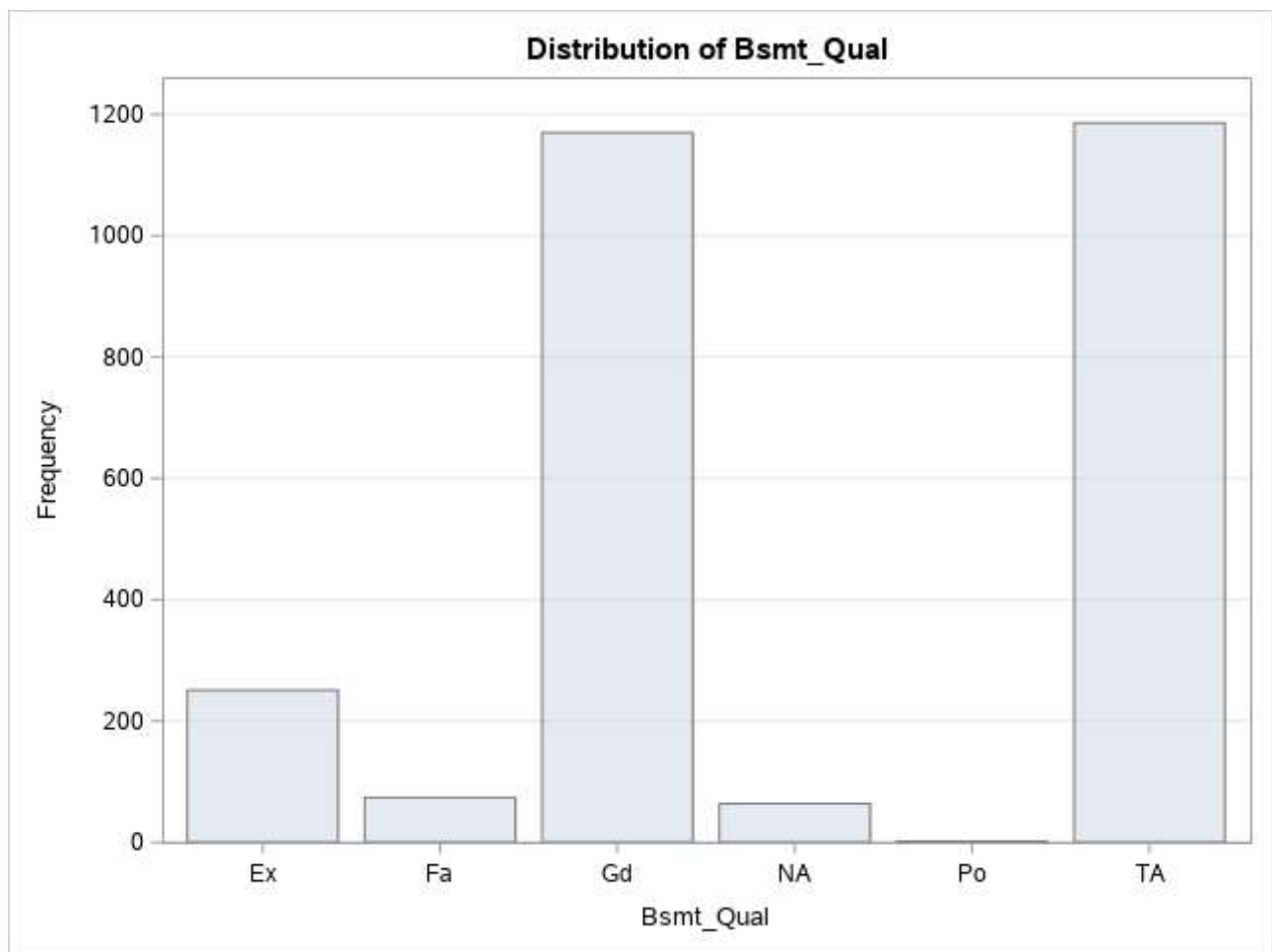
Exter_Cond				
Exter_Cond	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Ex	11	0.40	11	0.40
Fa	47	1.71	58	2.11
Gd	282	10.27	340	12.38
Po	2	0.07	342	12.45
TA	2405	87.55	2747	100.00



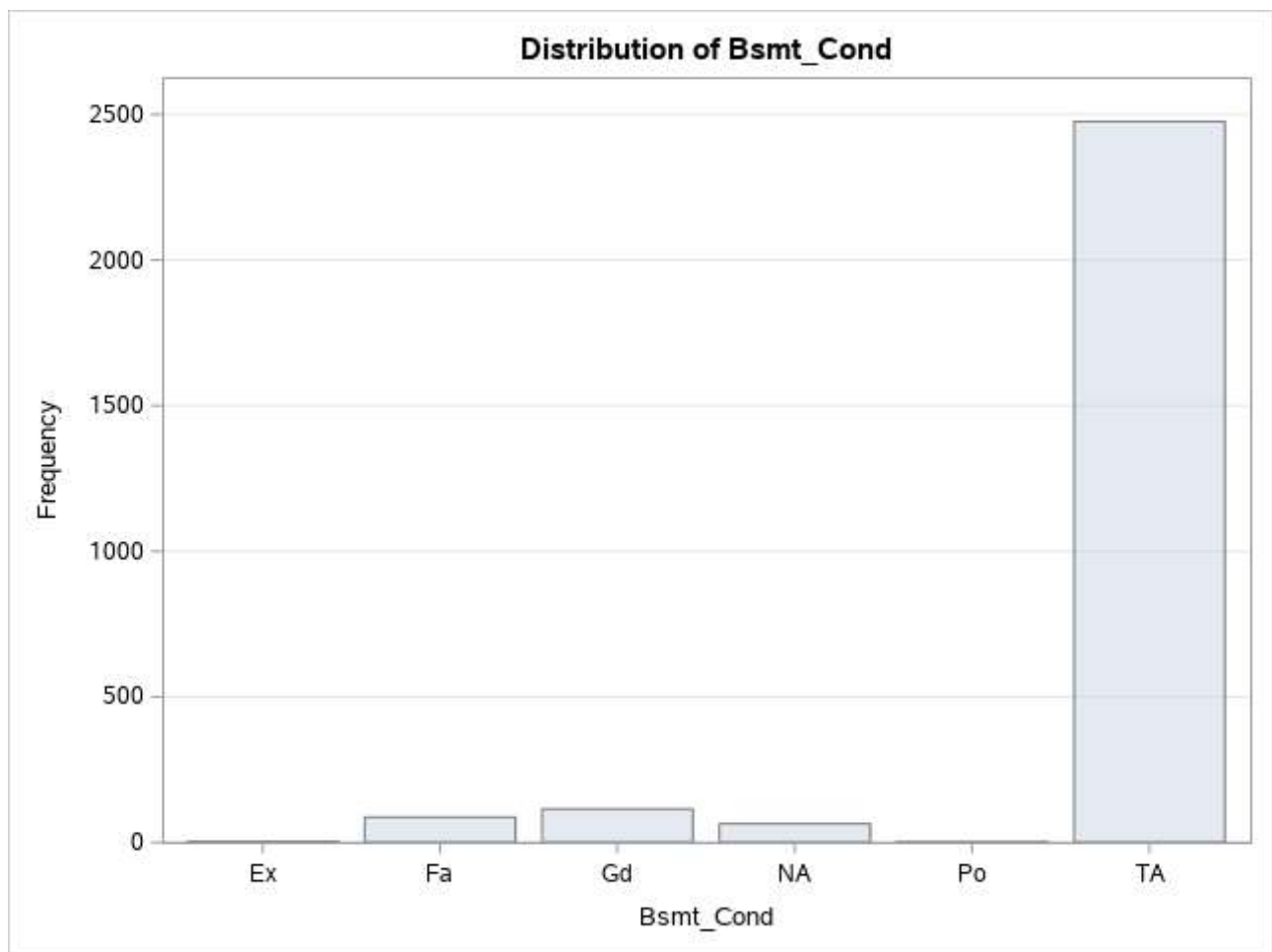
Foundation				
Foundation	Frequency	Percent	Cumulative Frequency	Cumulative Percent
BrkTil	278	10.12	278	10.12
CBlock	1166	42.45	1444	52.57
PConc	1249	45.47	2693	98.03
Slab	39	1.42	2732	99.45
Stone	10	0.36	2742	99.82
Wood	5	0.18	2747	100.00



Bsmt_Qual				
Bsmt_Qual	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Ex	251	9.14	251	9.14
Fa	74	2.69	325	11.83
Gd	1170	42.59	1495	54.42
NA	64	2.33	1559	56.75
Po	2	0.07	1561	56.83
TA	1186	43.17	2747	100.00

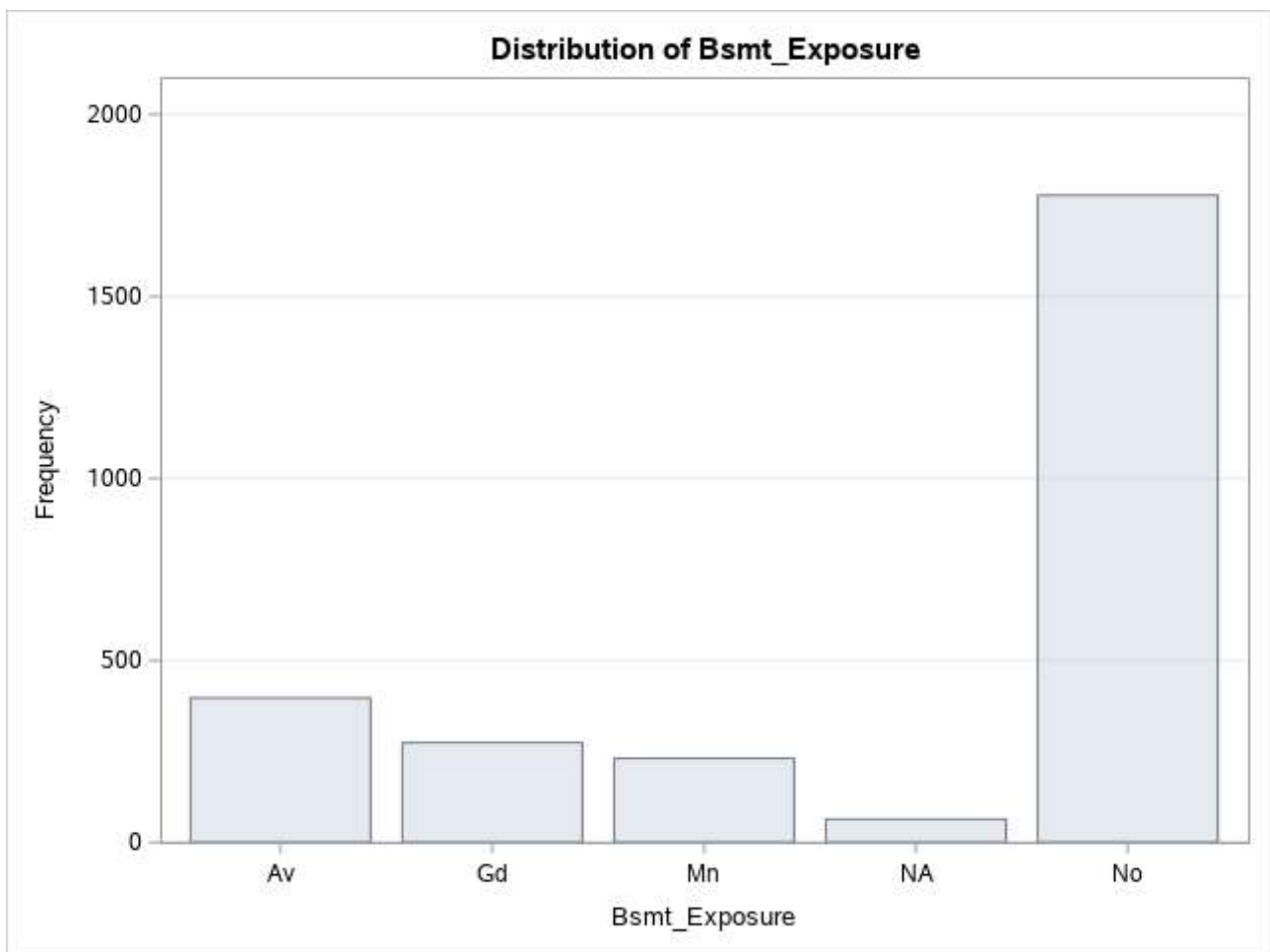


Bsmt_Cond				
Bsmt_Cond	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Ex	3	0.11	3	0.11
Fa	87	3.17	90	3.28
Gd	115	4.19	205	7.46
NA	64	2.33	269	9.79
Po	2	0.07	271	9.87
TA	2476	90.13	2747	100.00

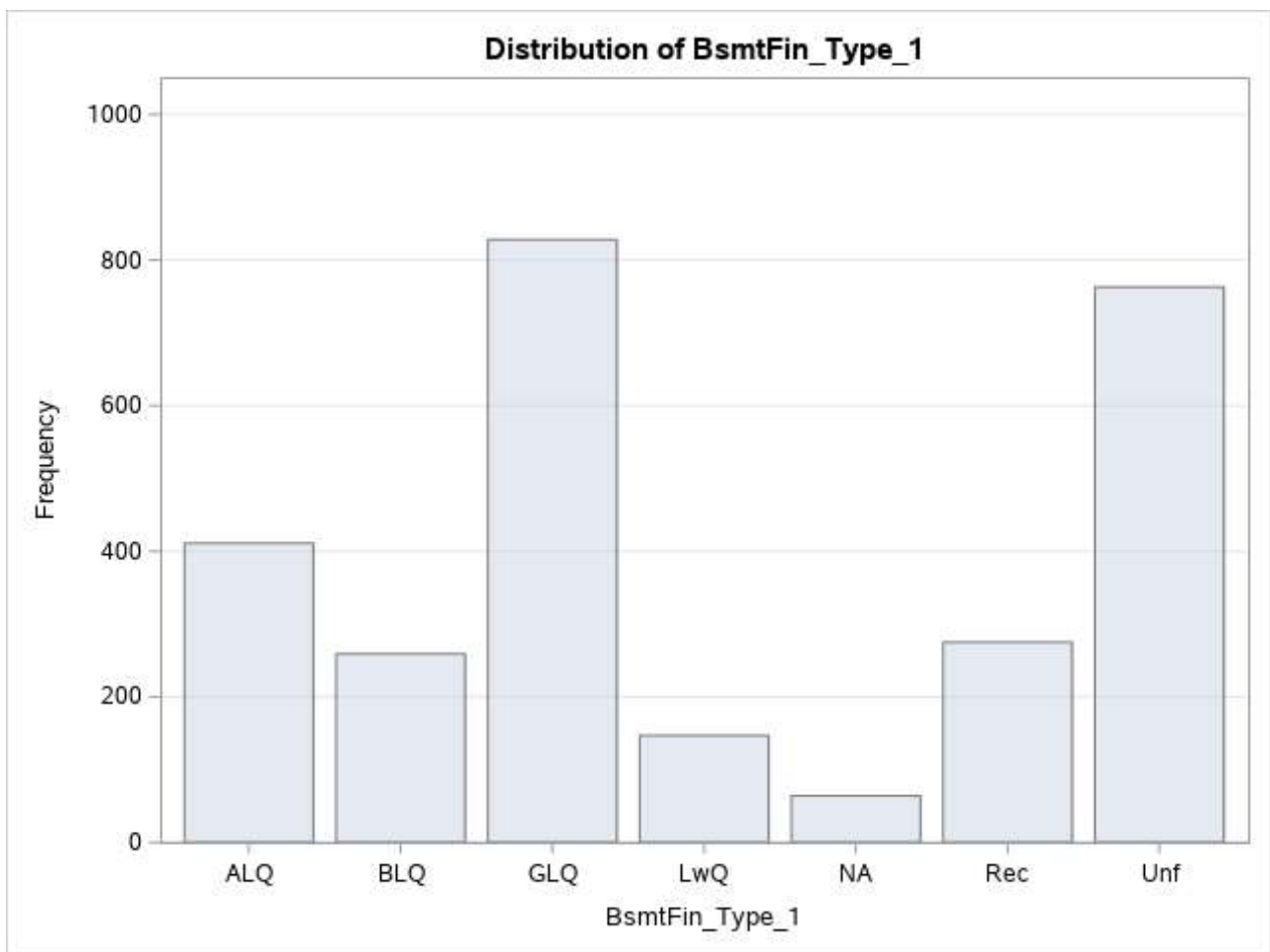


Bsmt_Exposure				
Bsmt_Exposure	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Av	397	14.47	397	14.47
Gd	274	9.99	671	24.45
Mn	231	8.42	902	32.87
NA	64	2.33	966	35.20
No	1778	64.80	2744	100.00
Frequency Missing = 3				

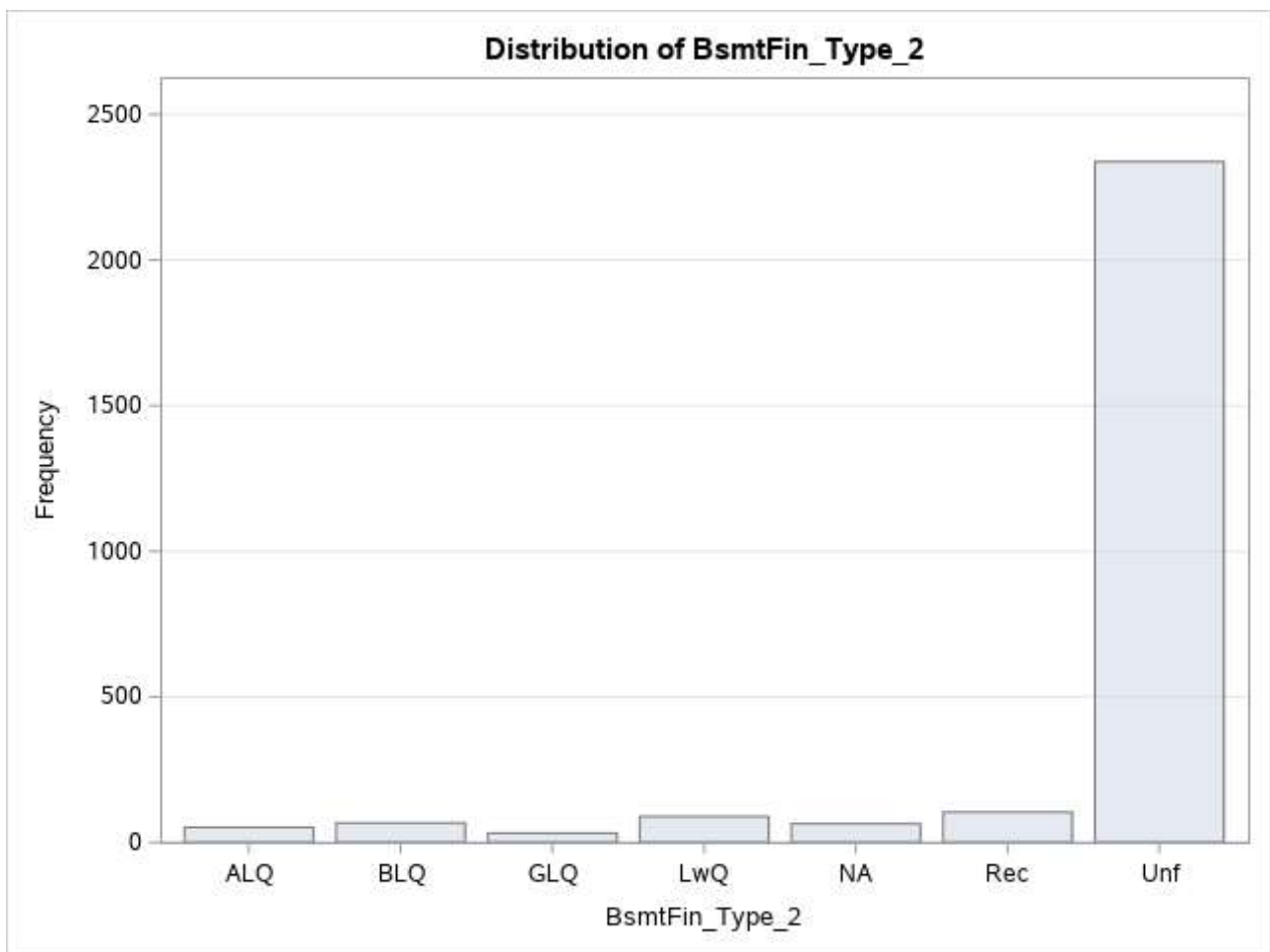




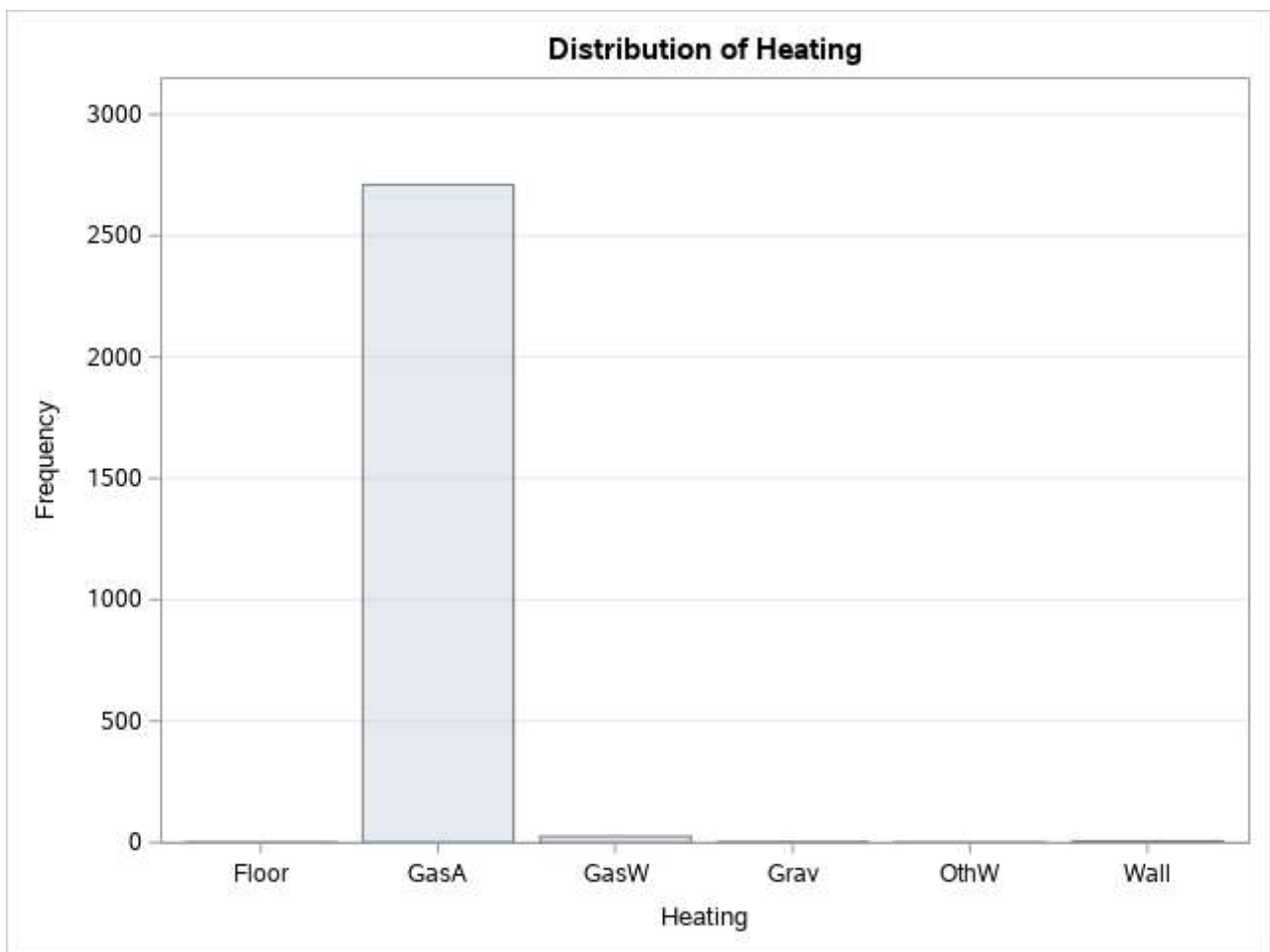
BsmtFin_Type_1				
BsmtFin_Type_1	Frequency	Percent	Cumulative Frequency	Cumulative Percent
ALQ	411	14.96	411	14.96
BLQ	259	9.43	670	24.39
GLQ	828	30.14	1498	54.53
LwQ	147	5.35	1645	59.88
NA	64	2.33	1709	62.21
Rec	275	10.01	1984	72.22
Unf	763	27.78	2747	100.00



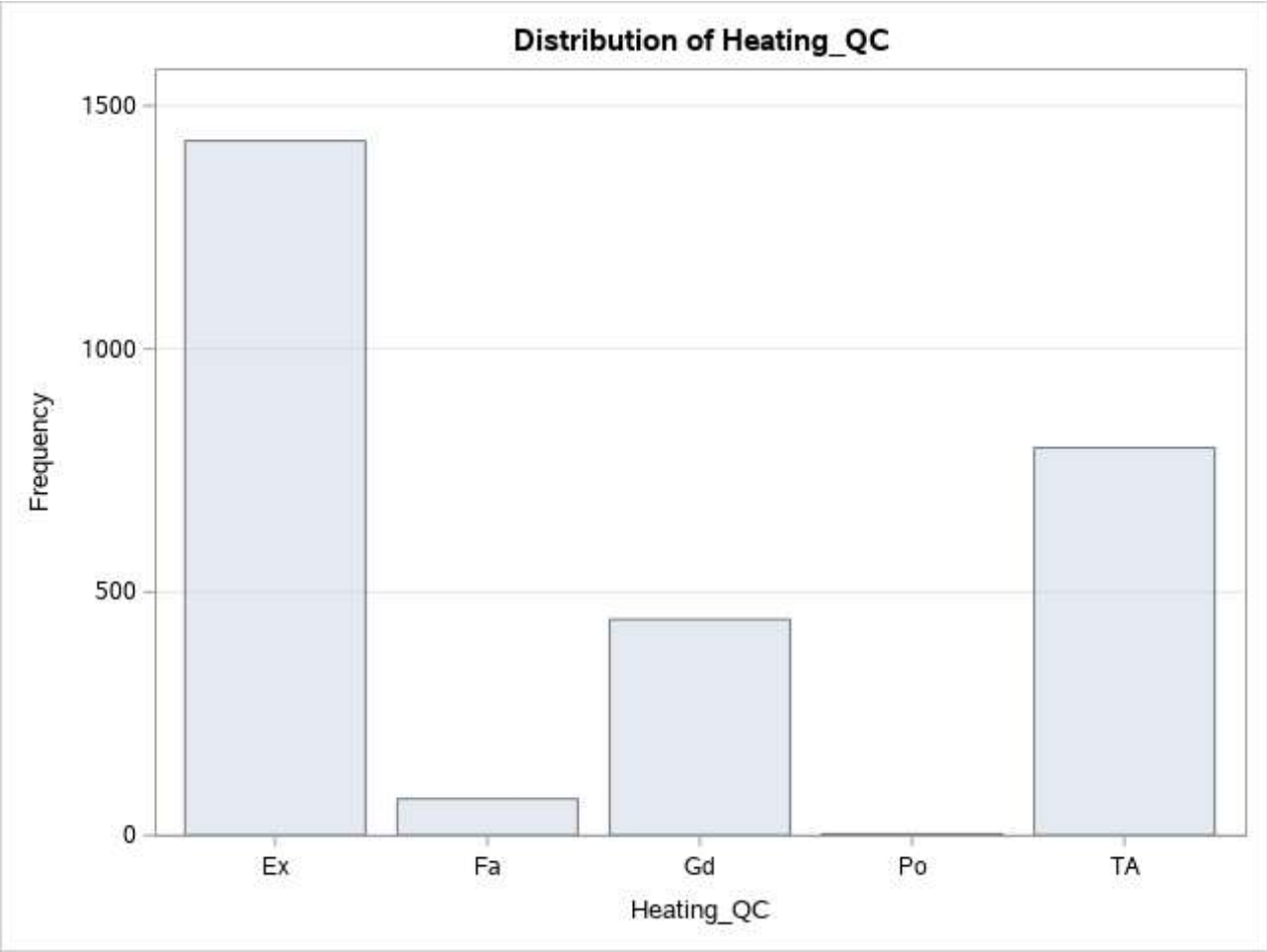
BsmtFin_Type_2				
BsmtFin_Type_2	Frequency	Percent	Cumulative Frequency	Cumulative Percent
ALQ	52	1.89	52	1.89
BLQ	67	2.44	119	4.33
GLQ	32	1.17	151	5.50
LwQ	89	3.24	240	8.74
NA	64	2.33	304	11.07
Rec	104	3.79	408	14.86
Unf	2338	85.14	2746	100.00
Frequency Missing = 1				



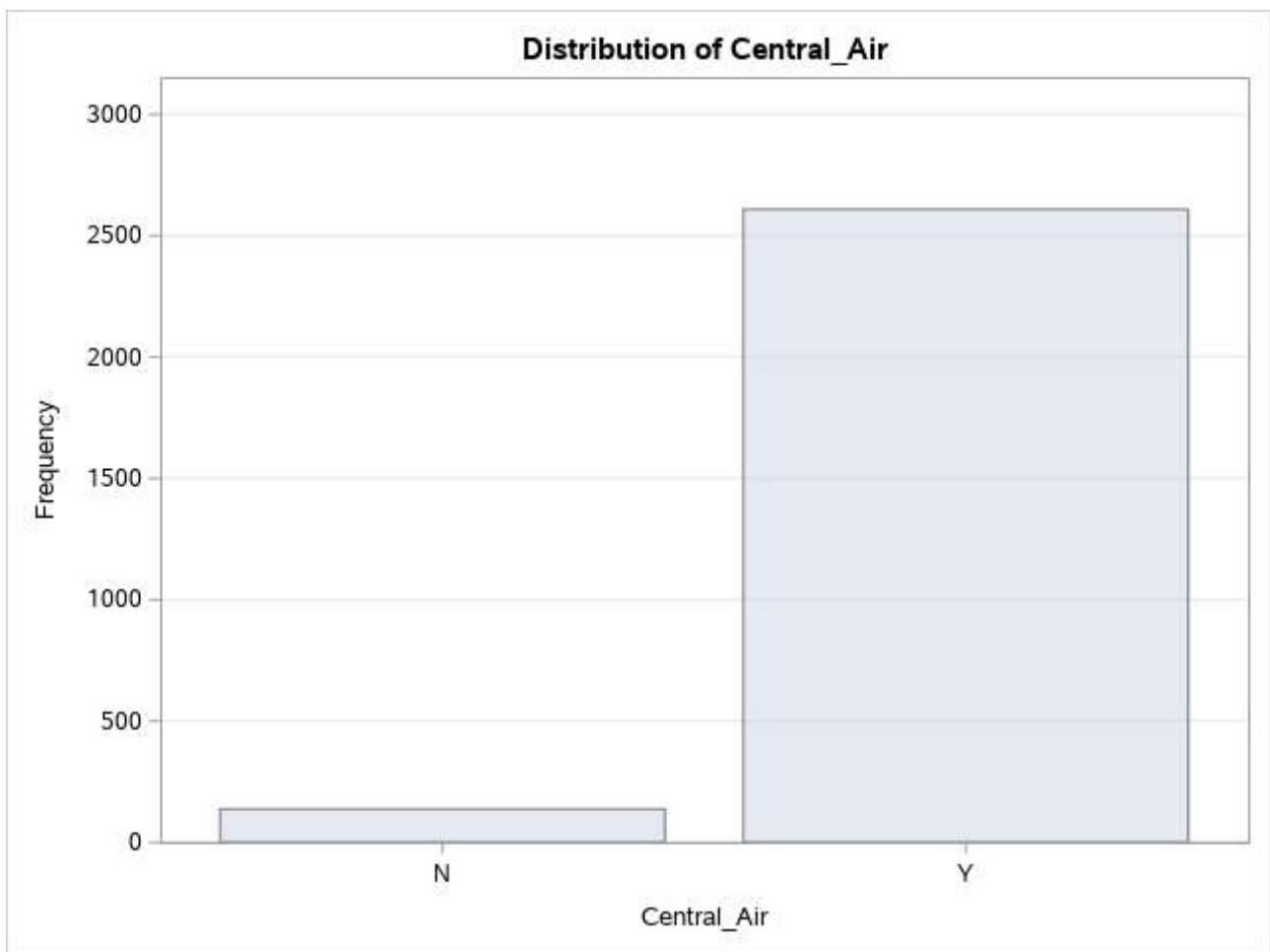
Heating				
Heating	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Floor	1	0.04	1	0.04
GasA	2711	98.69	2712	98.73
GasW	25	0.91	2737	99.64
Grav	3	0.11	2740	99.75
OthW	1	0.04	2741	99.78
Wall	6	0.22	2747	100.00



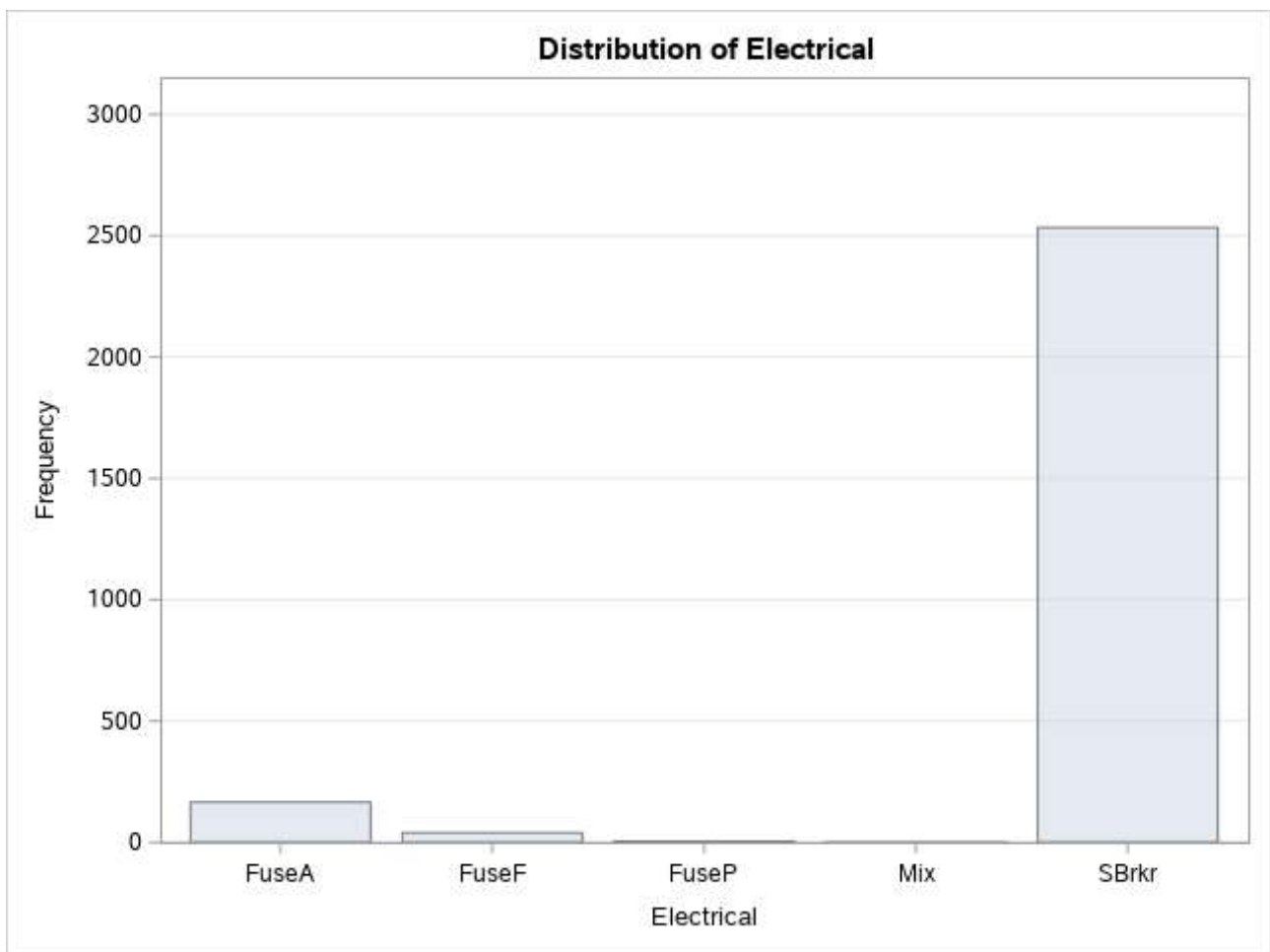
Heating_QC				
Heating_QC	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Ex	1428	51.98	1428	51.98
Fa	75	2.73	1503	54.71
Gd	444	16.16	1947	70.88
Po	3	0.11	1950	70.99
TA	797	29.01	2747	100.00



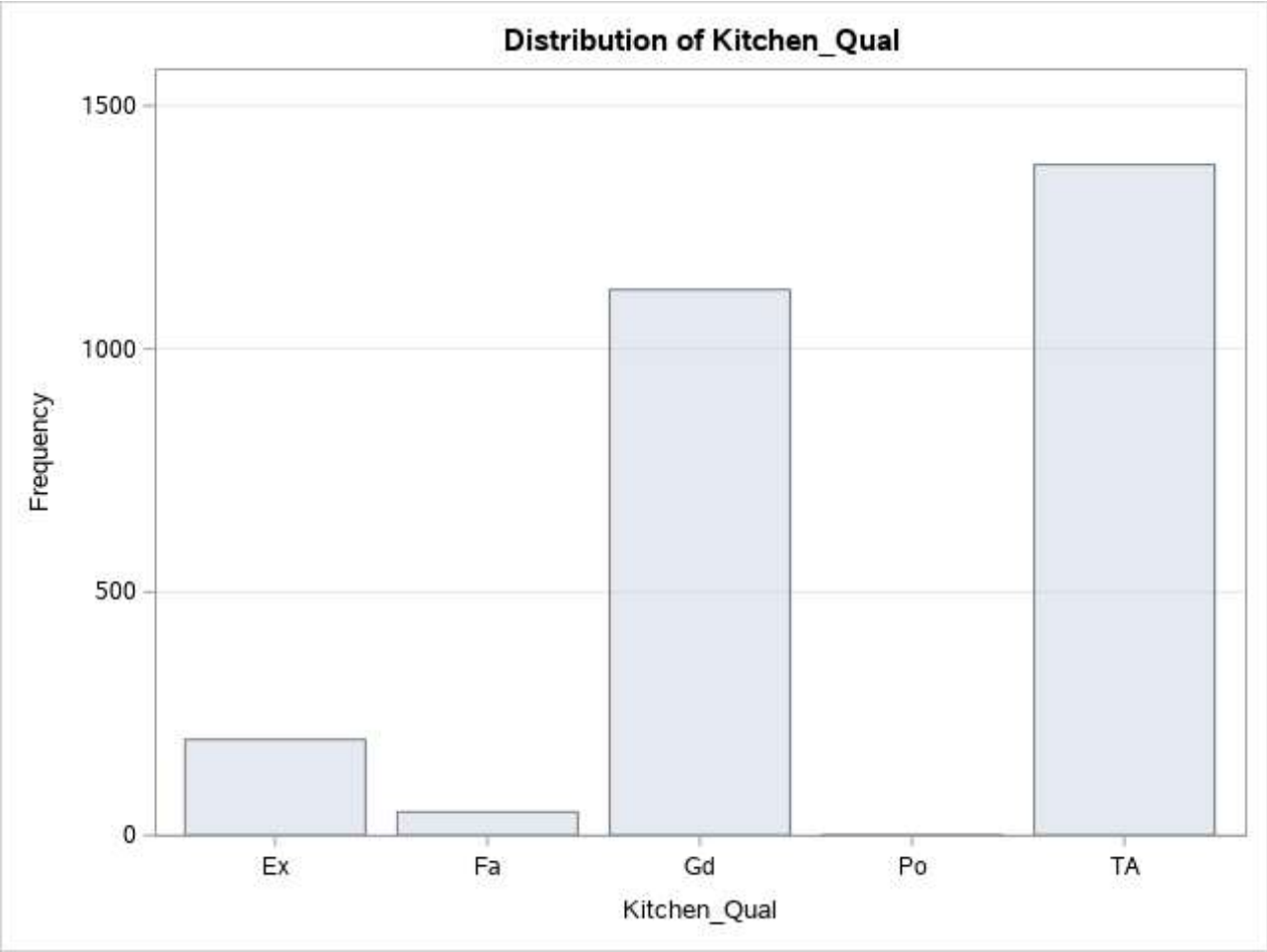
Central_Air				
Central_Air	Frequency	Percent	Cumulative Frequency	Cumulative Percent
N	138	5.02	138	5.02
Y	2609	94.98	2747	100.00



Electrical				
Electrical	Frequency	Percent	Cumulative Frequency	Cumulative Percent
FuseA	166	6.05	166	6.05
FuseF	40	1.46	206	7.50
FuseP	5	0.18	211	7.68
Mix	1	0.04	212	7.72
SBrkr	2534	92.28	2746	100.00
Frequency Missing = 1				

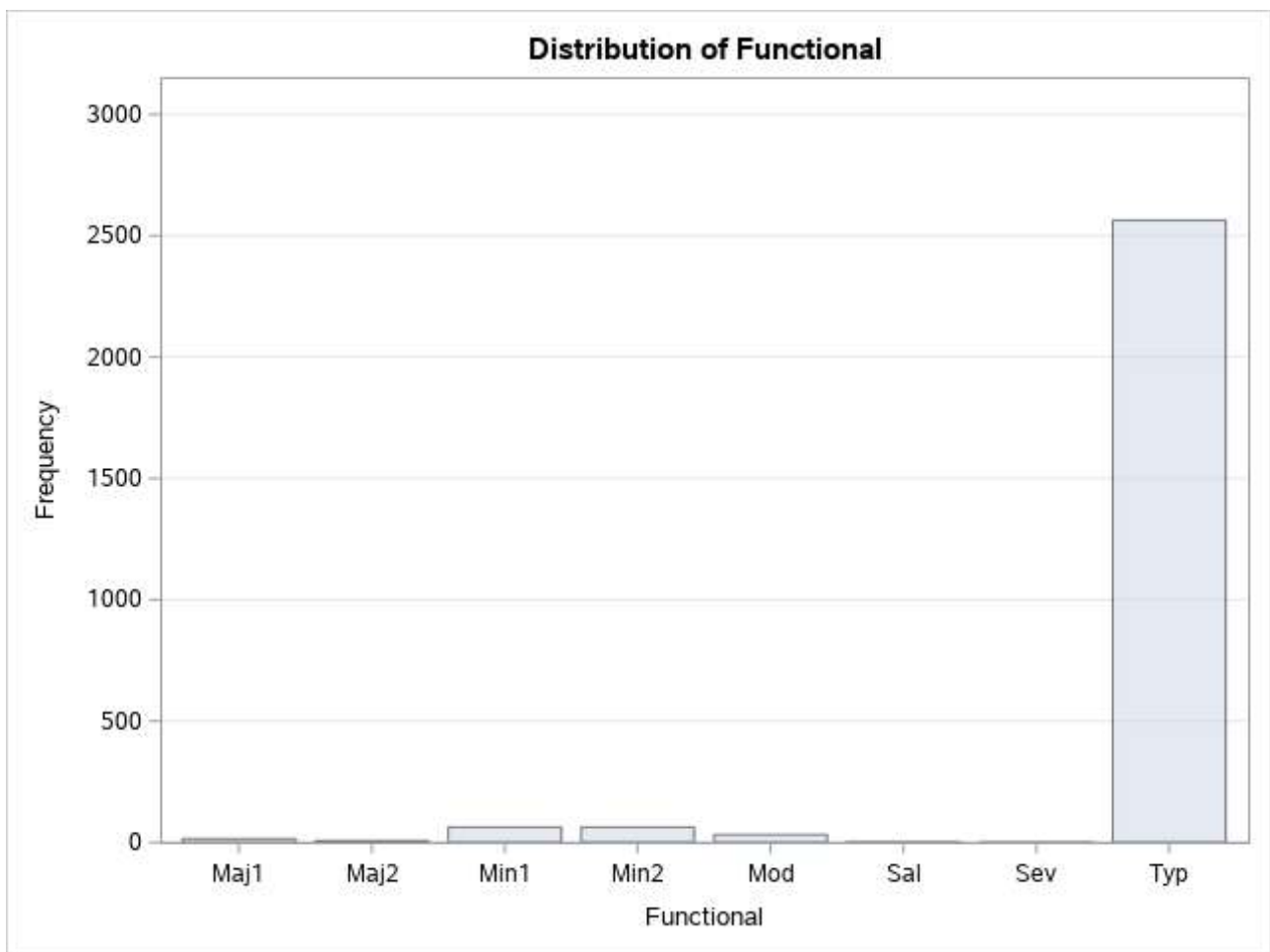


Kitchen_Qual				
Kitchen_Qual	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Ex	197	7.17	197	7.17
Fa	48	1.75	245	8.92
Gd	1122	40.84	1367	49.76
Po	1	0.04	1368	49.80
TA	1379	50.20	2747	100.00

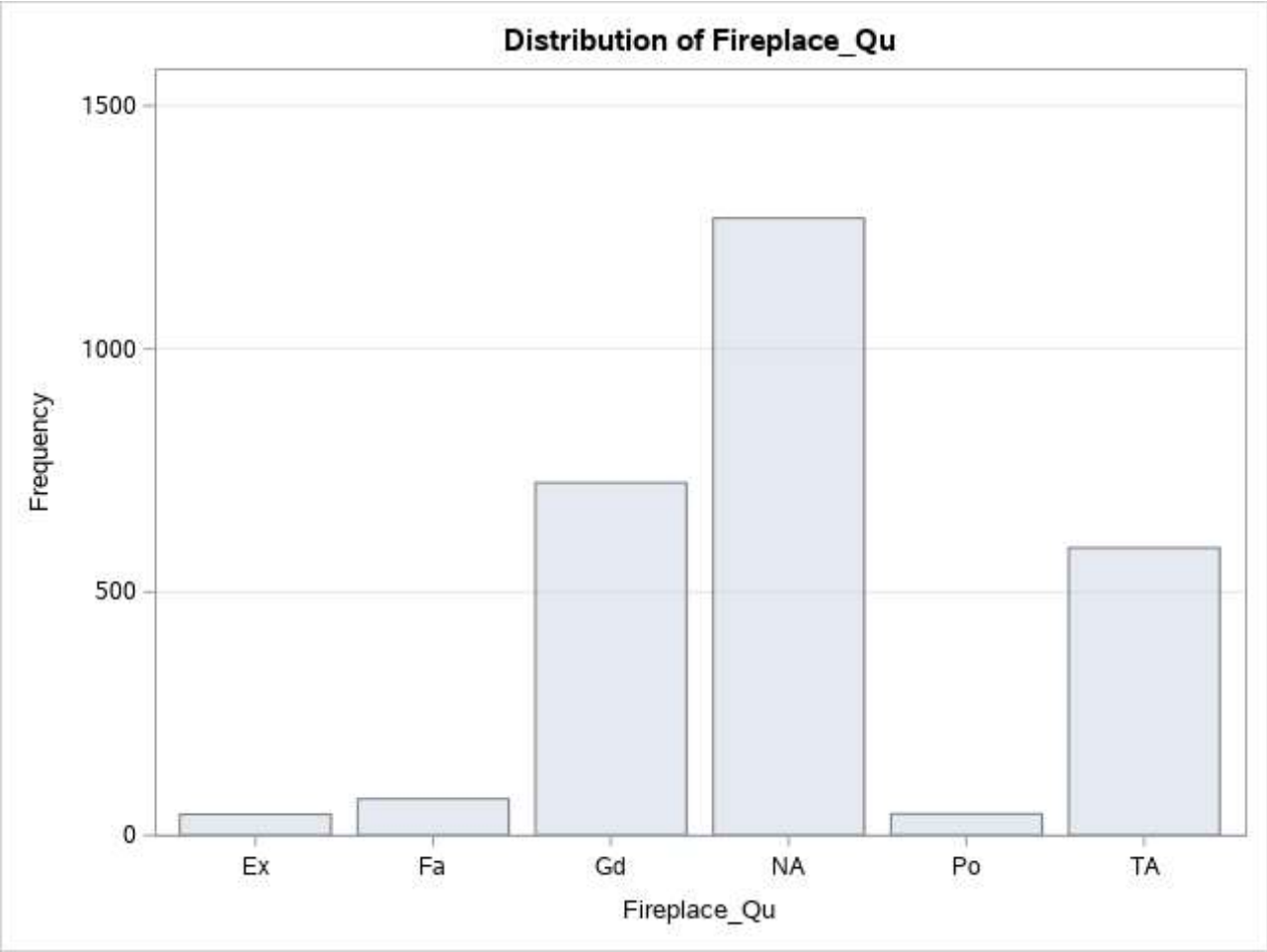


Functional				
Functional	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Maj1	15	0.55	15	0.55
Maj2	7	0.25	22	0.80
Min1	63	2.29	85	3.09
Min2	63	2.29	148	5.39
Mod	32	1.16	180	6.55
Sal	2	0.07	182	6.63
Sev	1	0.04	183	6.66
Typ	2564	93.34	2747	100.00

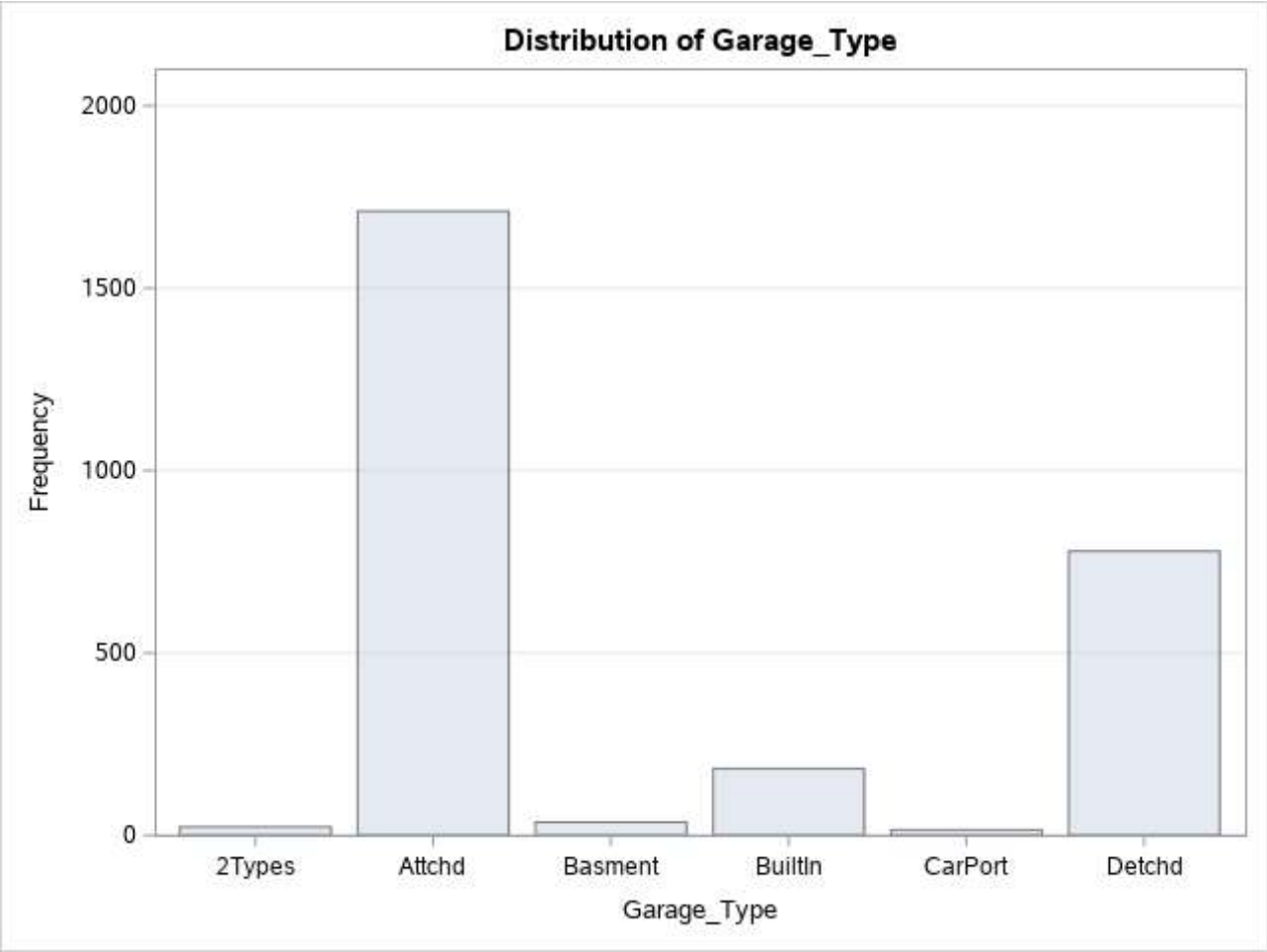




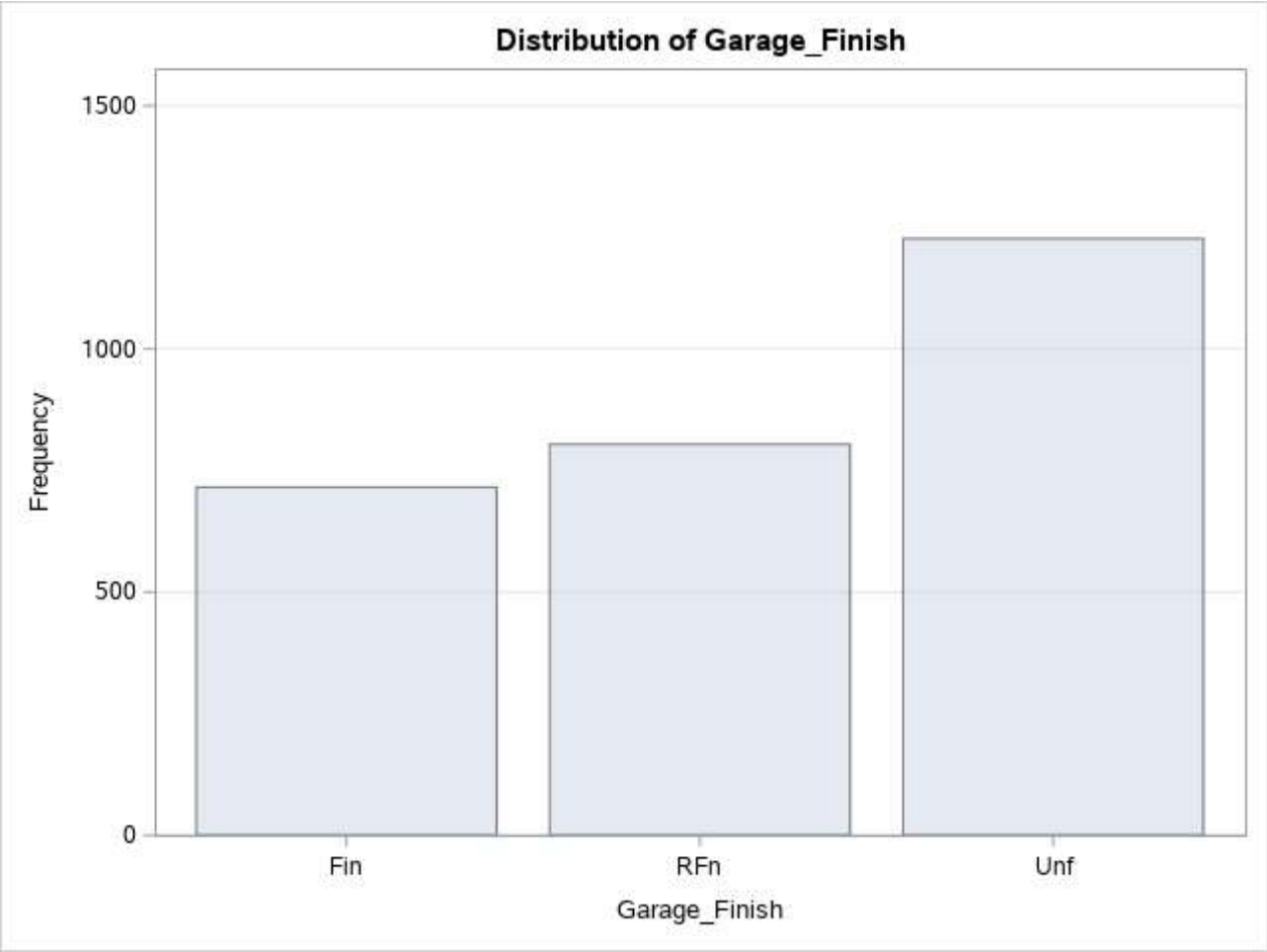
Fireplace_Qu				
Fireplace_Qu	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Ex	43	1.57	43	1.57
Fa	75	2.73	118	4.30
Gd	725	26.39	843	30.69
NA	1269	46.20	2112	76.88
Po	44	1.60	2156	78.49
TA	591	21.51	2747	100.00



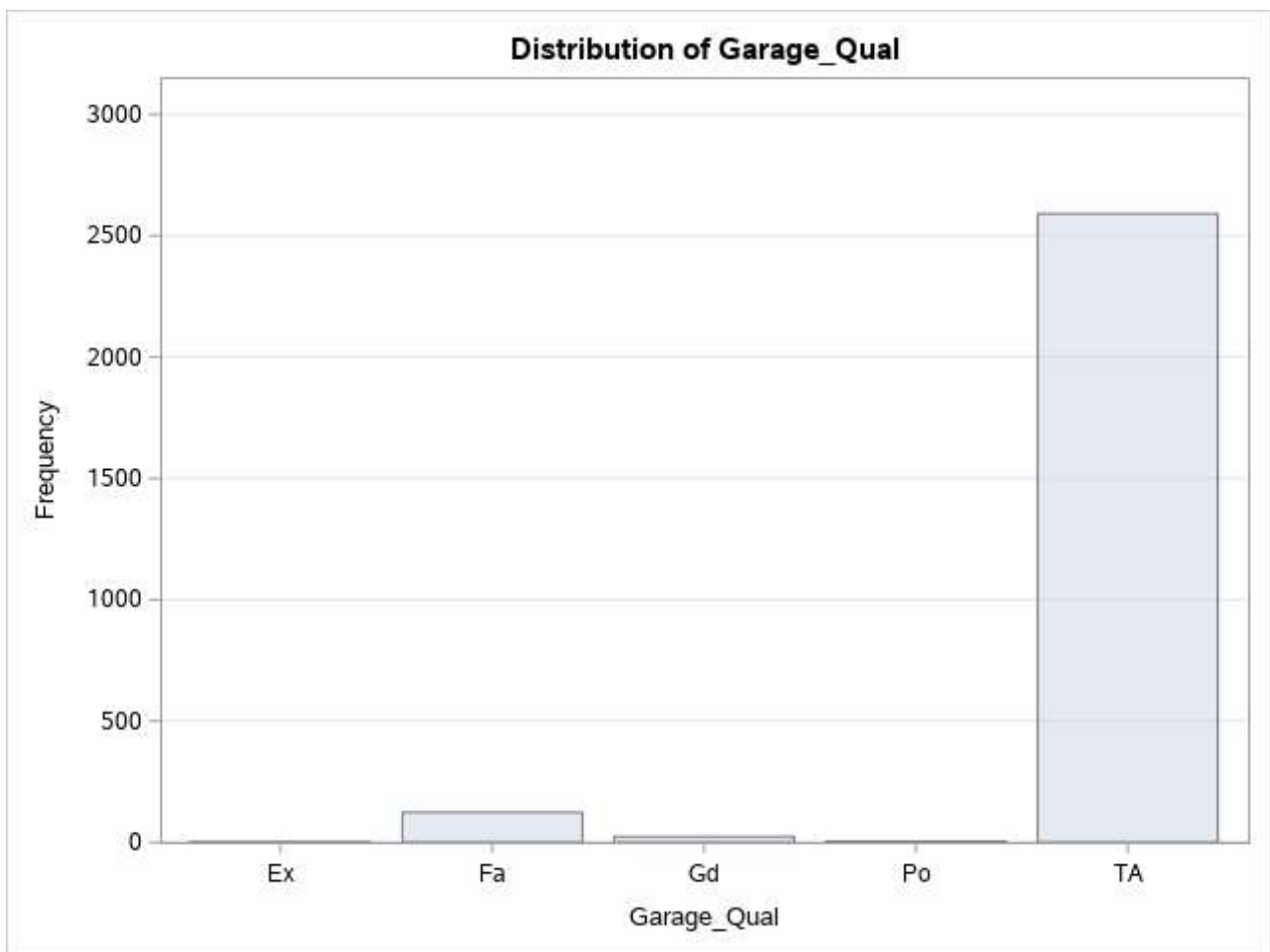
Garage_Type				
Garage_Type	Frequency	Percent	Cumulative Frequency	Cumulative Percent
2Types	23	0.84	23	0.84
Attchd	1711	62.29	1734	63.12
Basment	36	1.31	1770	64.43
BuiltIn	183	6.66	1953	71.10
CarPort	15	0.55	1968	71.64
Detchd	779	28.36	2747	100.00



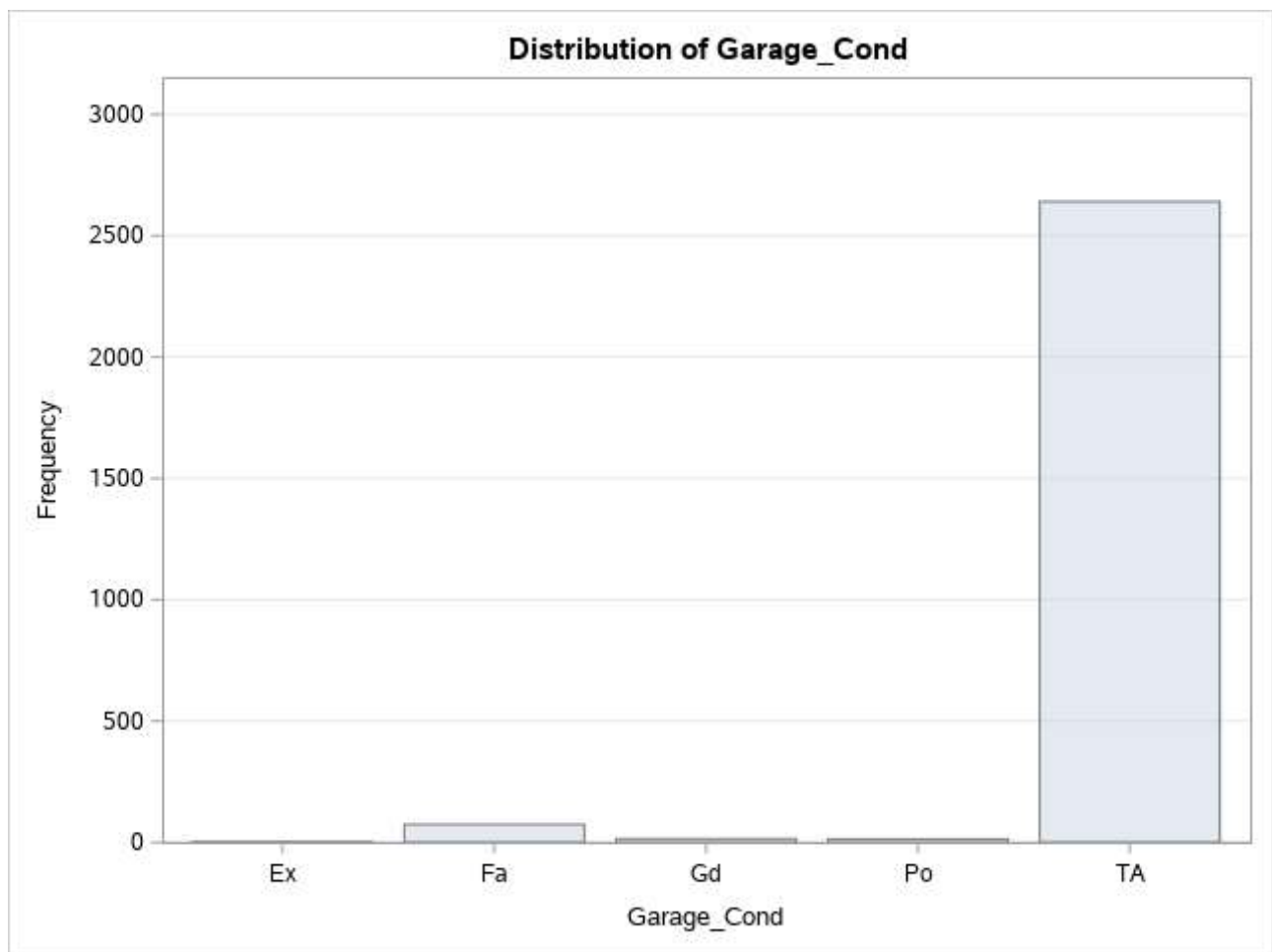
Garage_Finish				
Garage_Finish	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Fin	716	26.06	716	26.06
RFn	804	29.27	1520	55.33
Unf	1227	44.67	2747	100.00



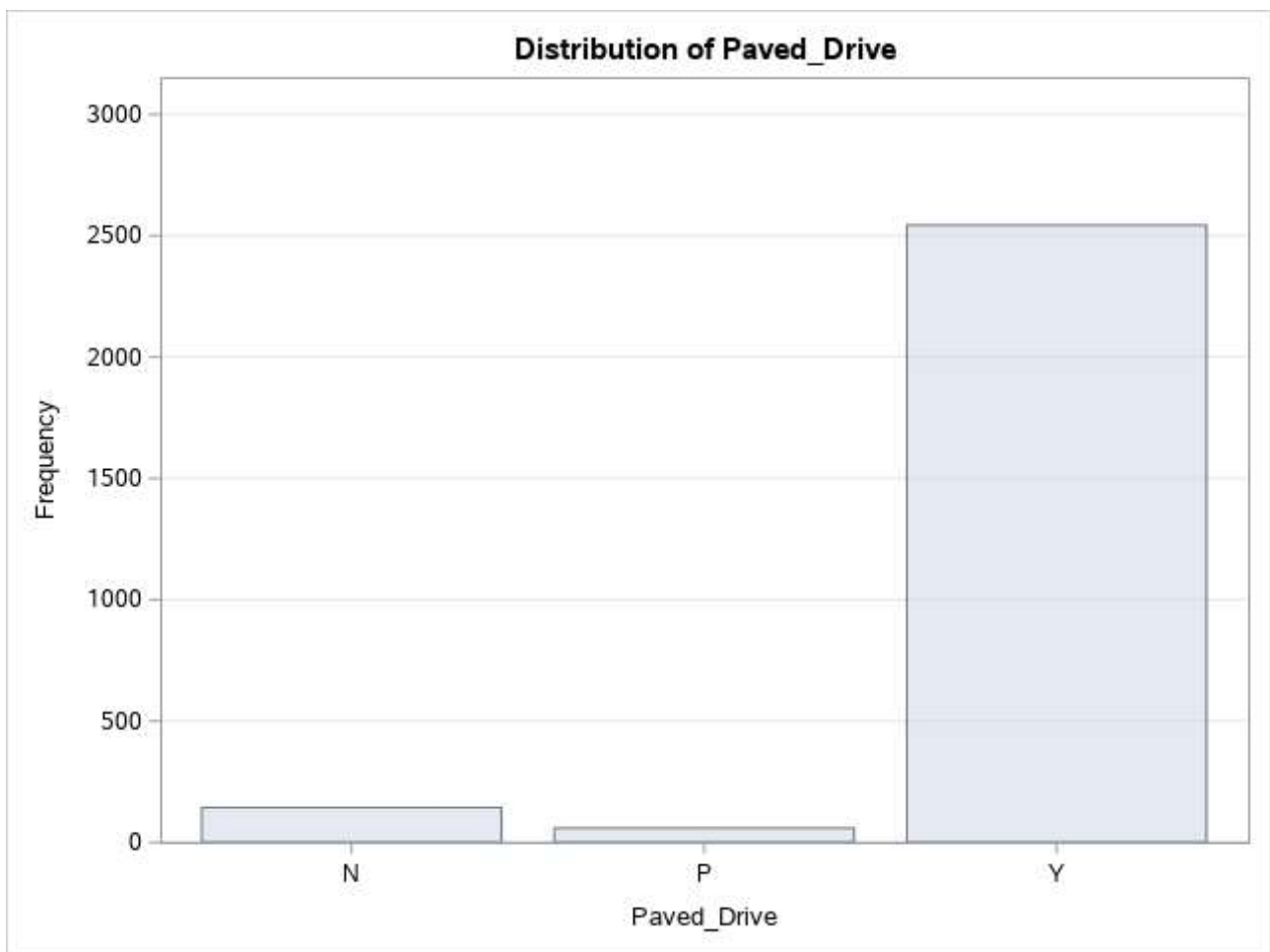
Garage_Qual				
Garage_Qual	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Ex	3	0.11	3	0.11
Fa	124	4.51	127	4.62
Gd	24	0.87	151	5.50
Po	5	0.18	156	5.68
TA	2591	94.32	2747	100.00



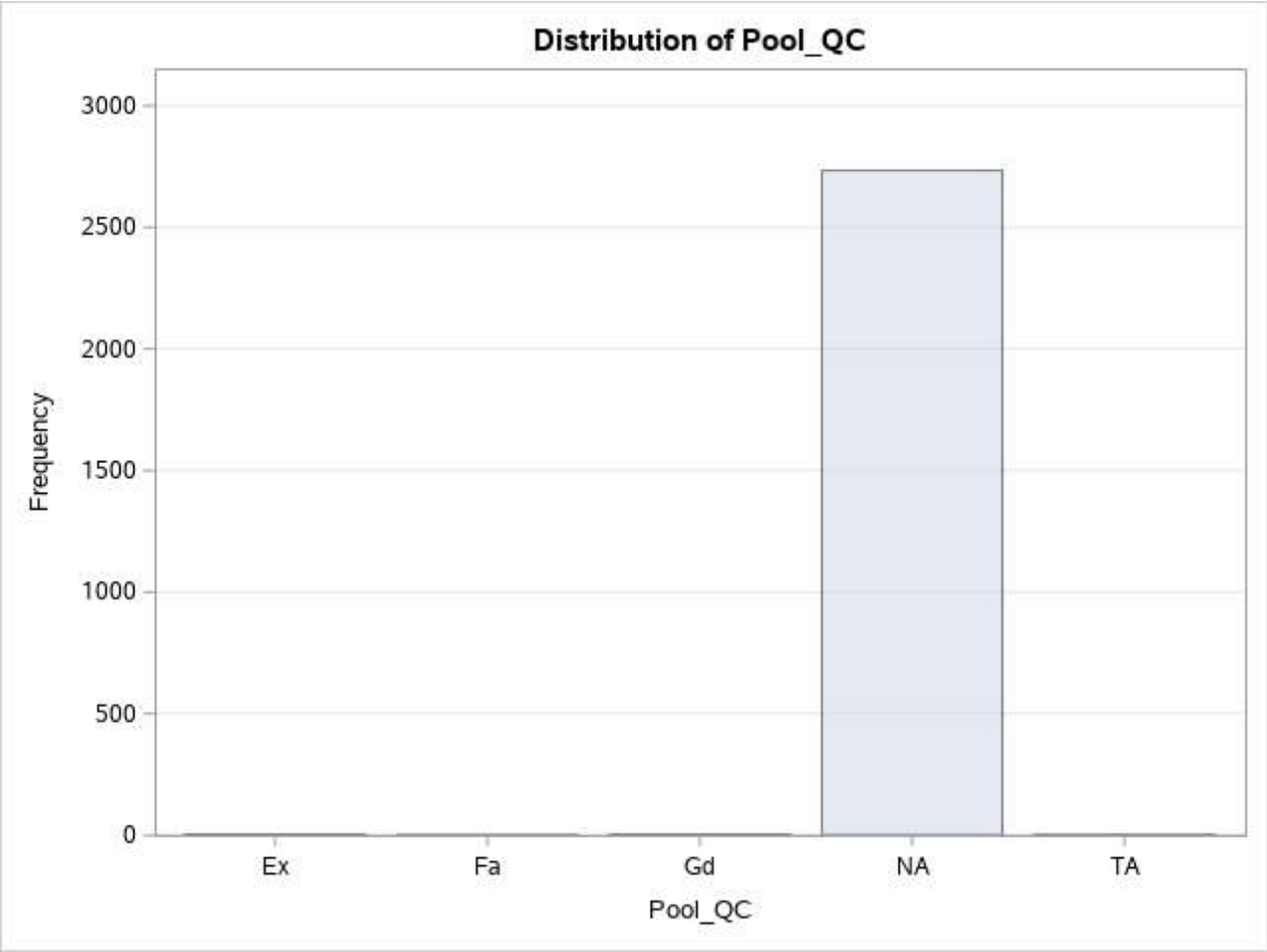
Garage_Cond				
Garage_Cond	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Ex	3	0.11	3	0.11
Fa	74	2.69	77	2.80
Gd	15	0.55	92	3.35
Po	14	0.51	106	3.86
TA	2641	96.14	2747	100.00



Paved_Drive				
Paved_Drive	Frequency	Percent	Cumulative Frequency	Cumulative Percent
N	144	5.24	144	5.24
P	59	2.15	203	7.39
Y	2544	92.61	2747	100.00

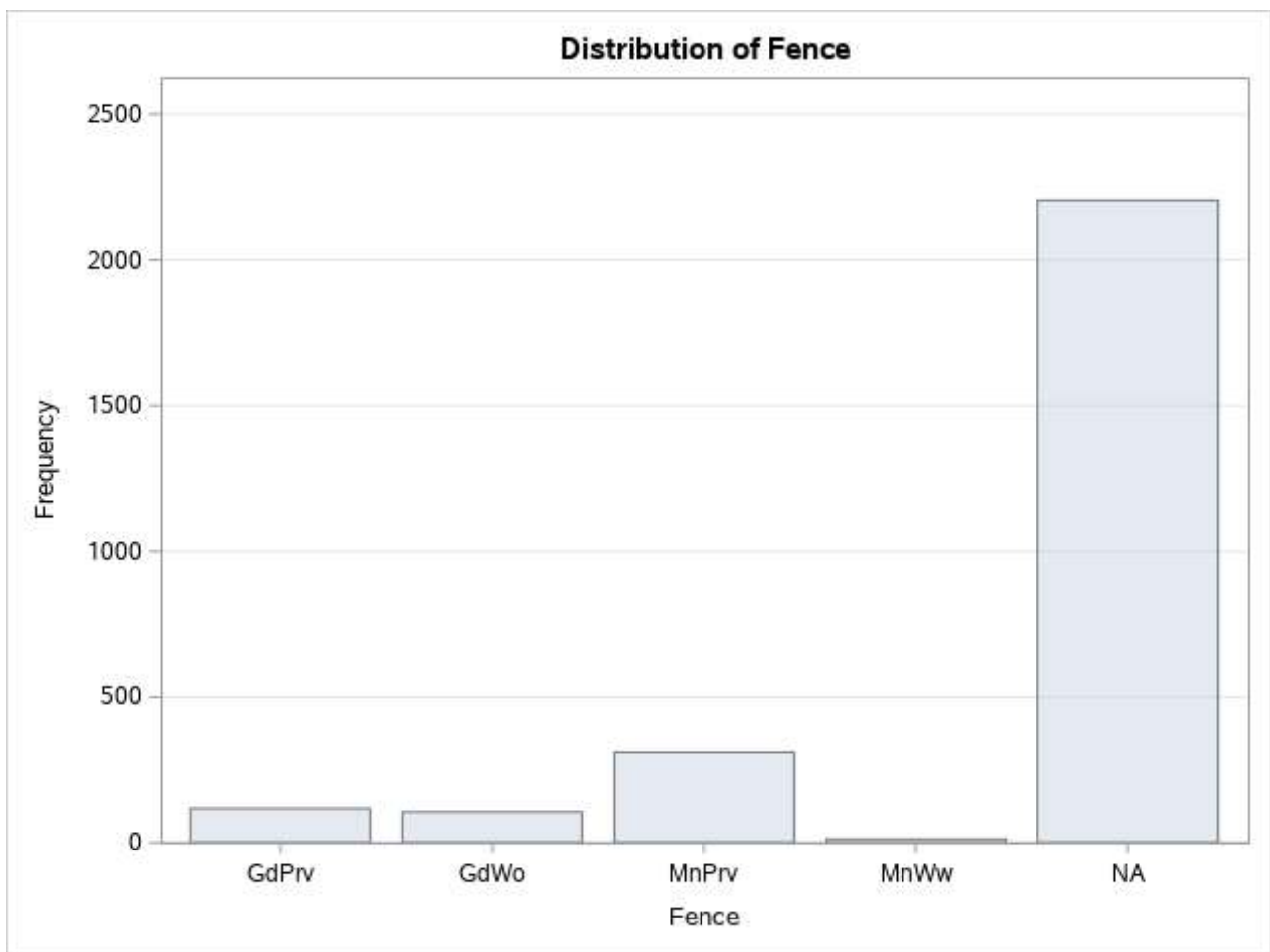


Pool_QC				
Pool_QC	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Ex	4	0.15	4	0.15
Fa	2	0.07	6	0.22
Gd	4	0.15	10	0.36
NA	2734	99.53	2744	99.89
TA	3	0.11	2747	100.00

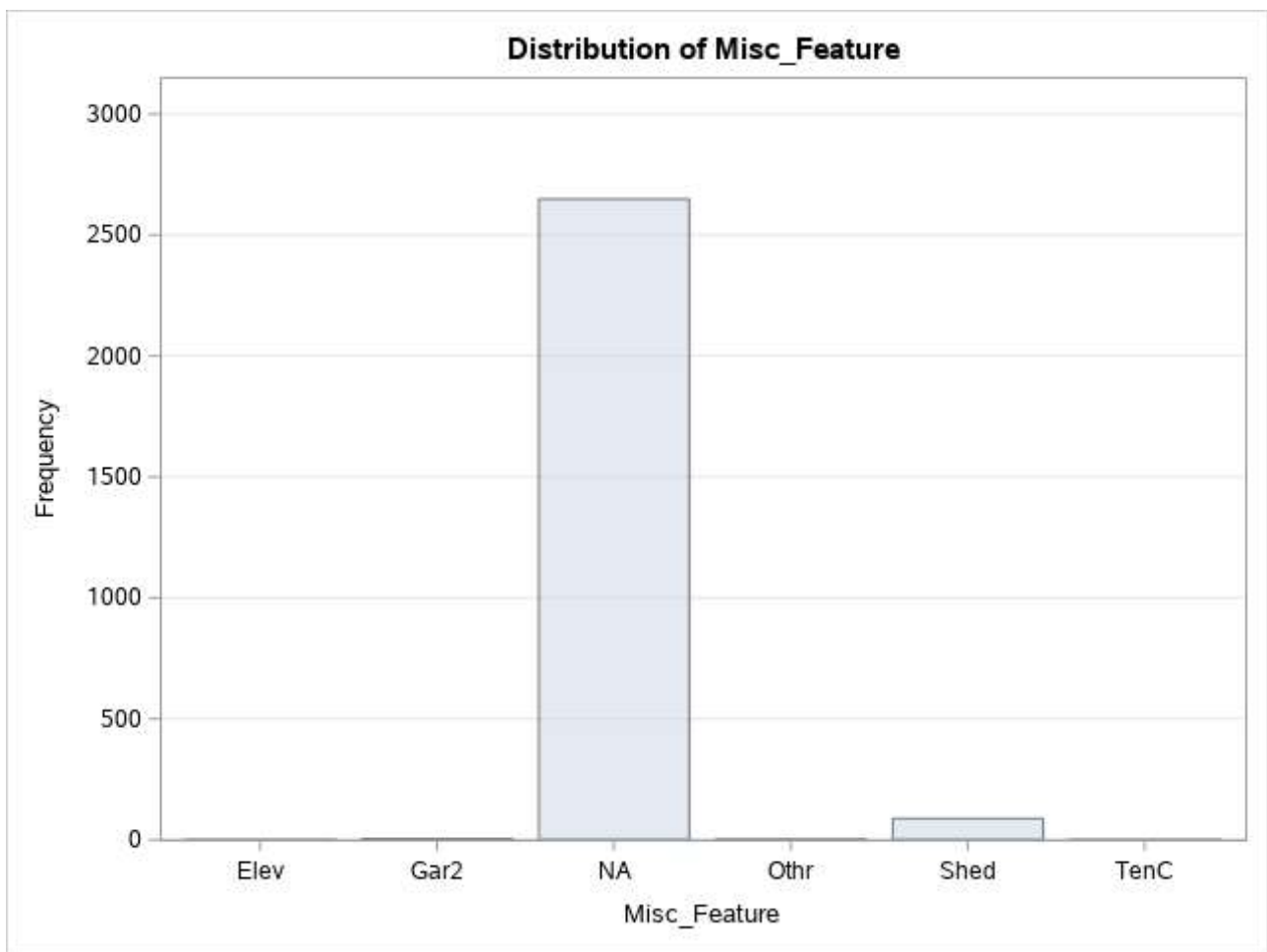


Fence				
Fence	Frequency	Percent	Cumulative Frequency	Cumulative Percent
GdPrv	116	4.22	116	4.22
GdWo	104	3.79	220	8.01
MnPrv	310	11.29	530	19.29
MnWw	12	0.44	542	19.73
NA	2205	80.27	2747	100.00

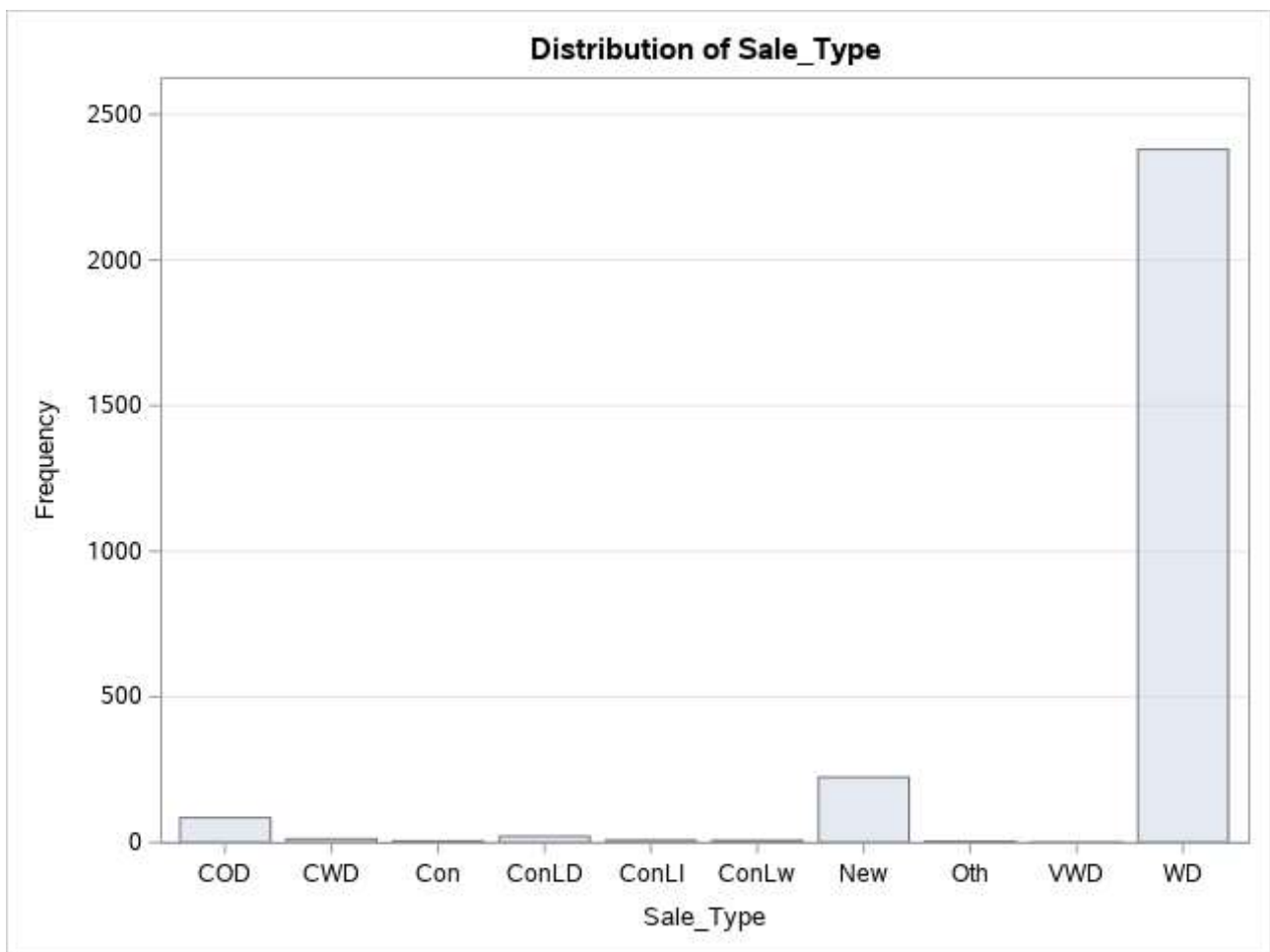




Misc_Feature				
Misc_Feature	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Elev	1	0.04	1	0.04
Gar2	5	0.18	6	0.22
NA	2649	96.43	2655	96.65
Othr	3	0.11	2658	96.76
Shed	88	3.20	2746	99.96
TenC	1	0.04	2747	100.00



Sale_Type				
Sale_Type	Frequency	Percent	Cumulative Frequency	Cumulative Percent
COD	85	3.09	85	3.09
CWD	12	0.44	97	3.53
Con	5	0.18	102	3.71
ConLD	21	0.76	123	4.48
ConLI	8	0.29	131	4.77
ConLw	7	0.25	138	5.02
New	224	8.15	362	13.18
Oth	4	0.15	366	13.32
VWD	1	0.04	367	13.36
WD	2380	86.64	2747	100.00



Sale_Condition				
Sale_Condition	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Abnorml	161	5.86	161	5.86
AdjLand	6	0.22	167	6.08
Alloca	20	0.73	187	6.81
Family	45	1.64	232	8.45
Normal	2285	83.18	2517	91.63
Partial	230	8.37	2747	100.00

