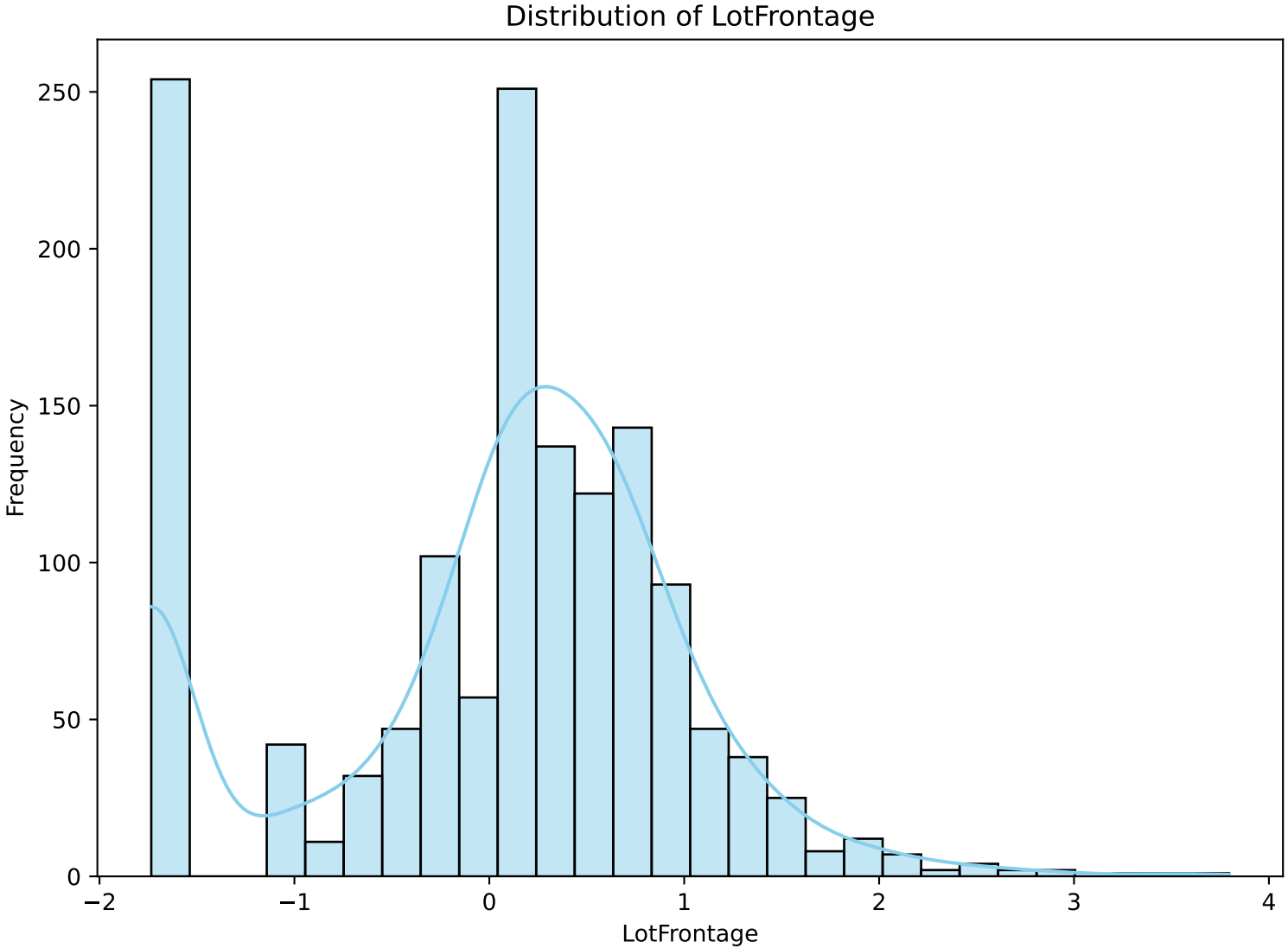
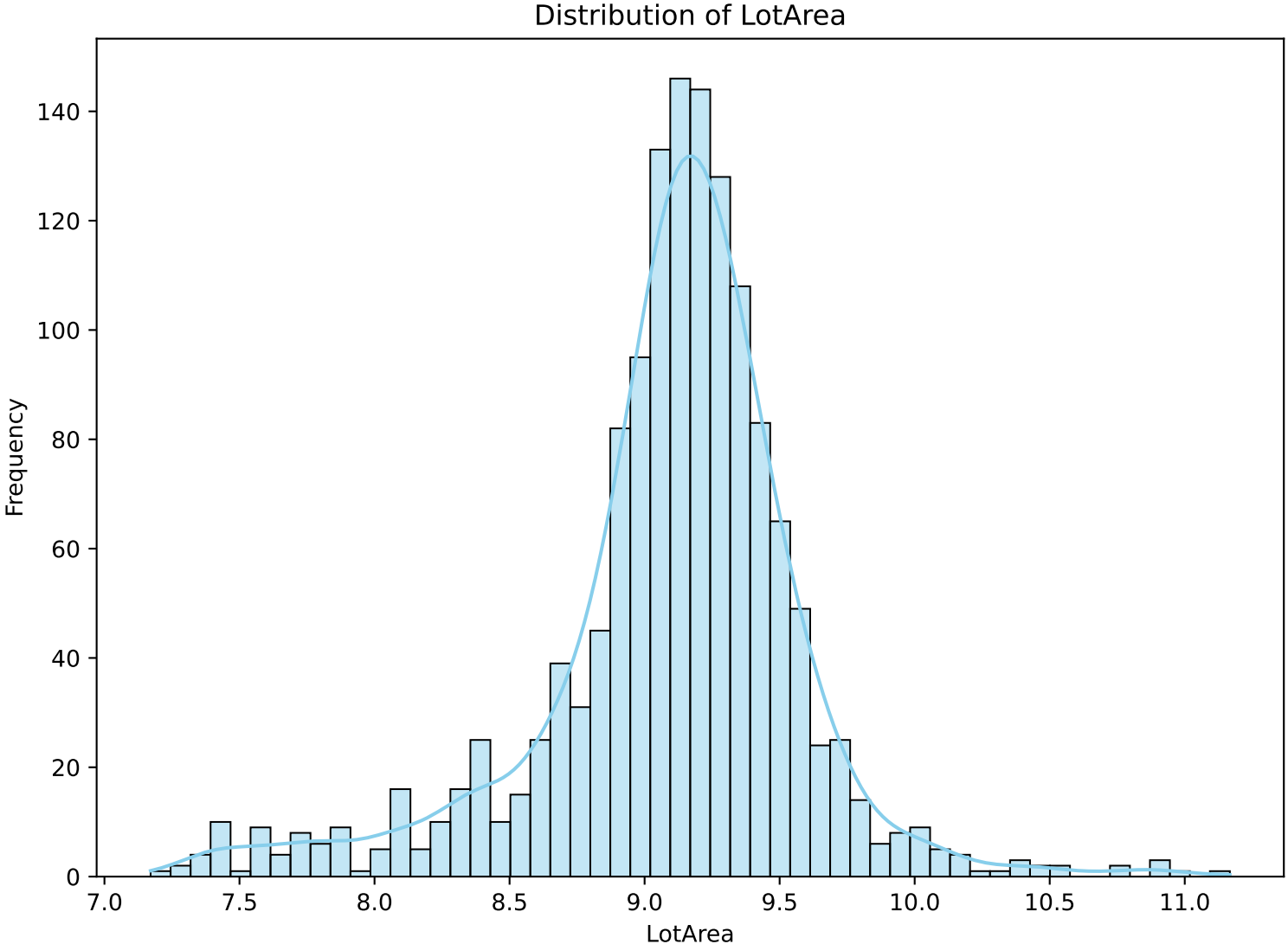
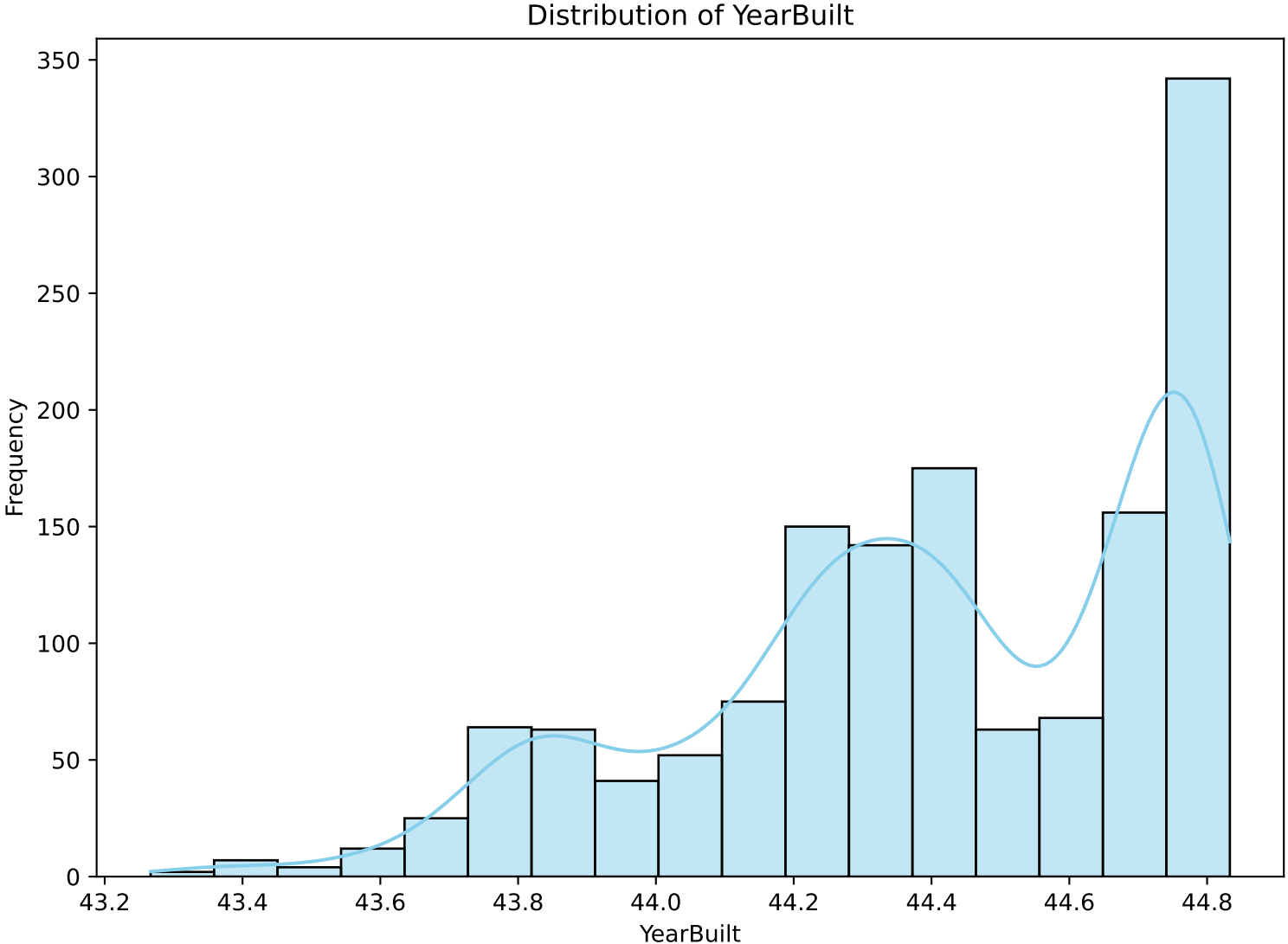
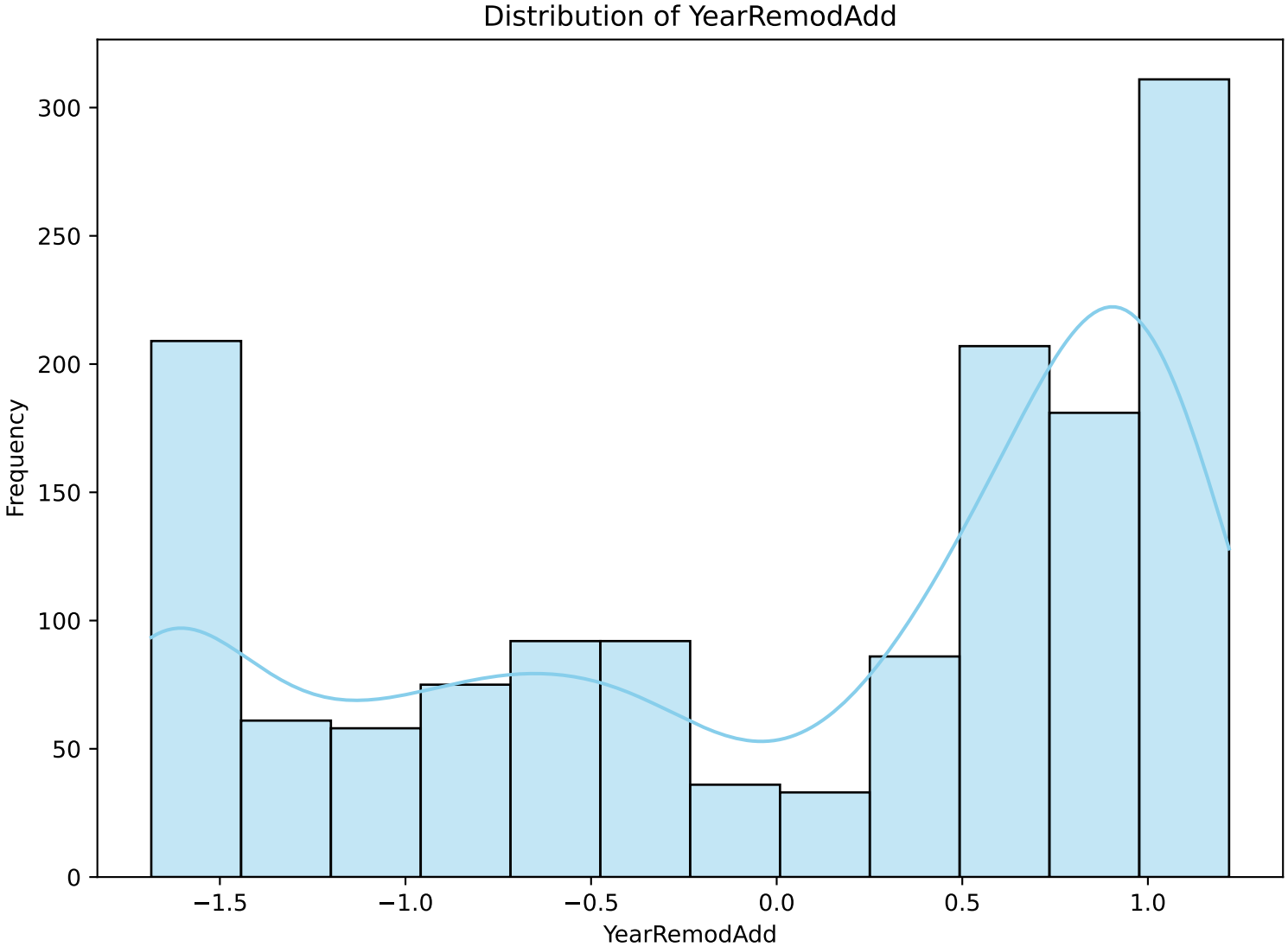
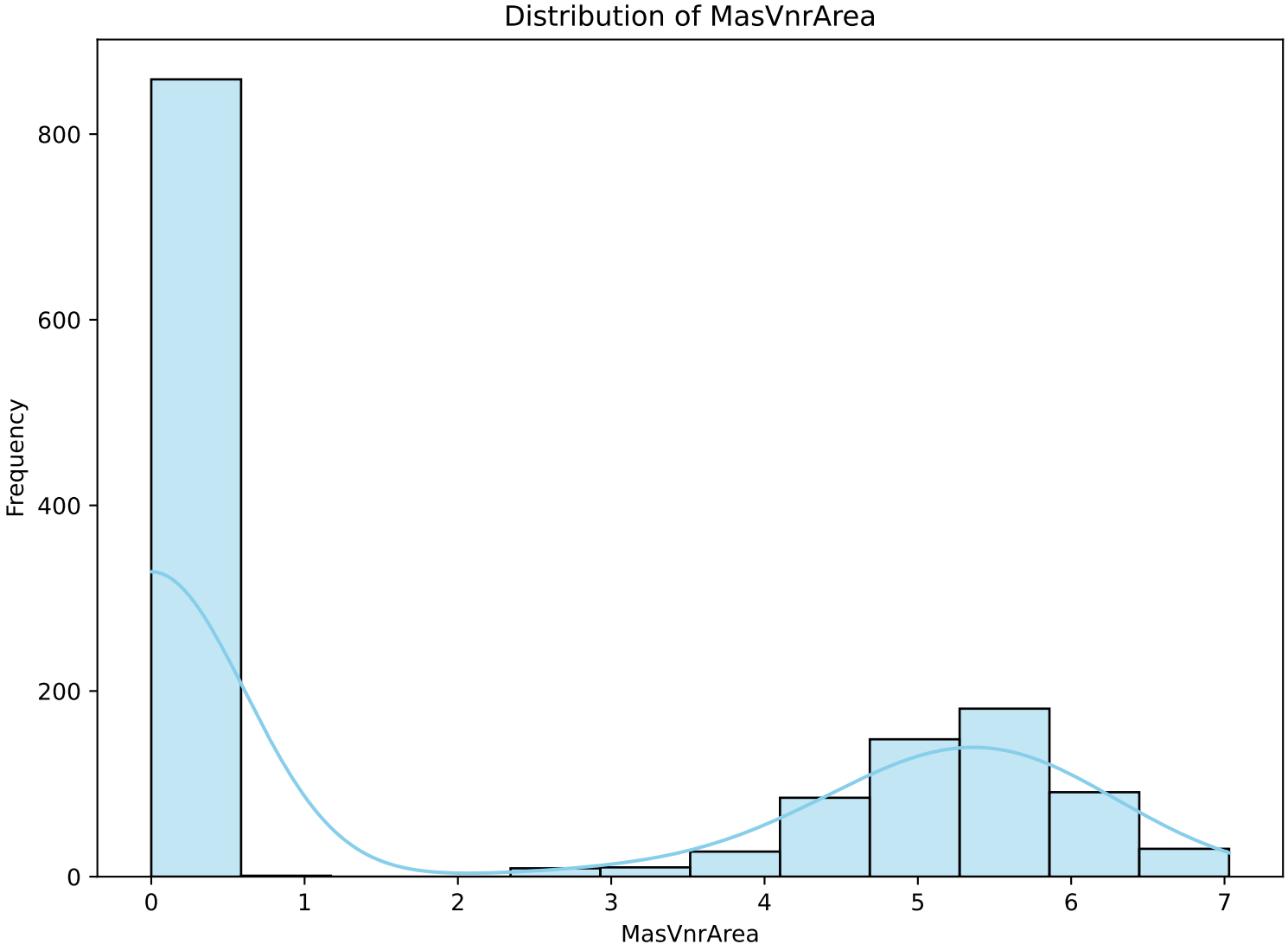
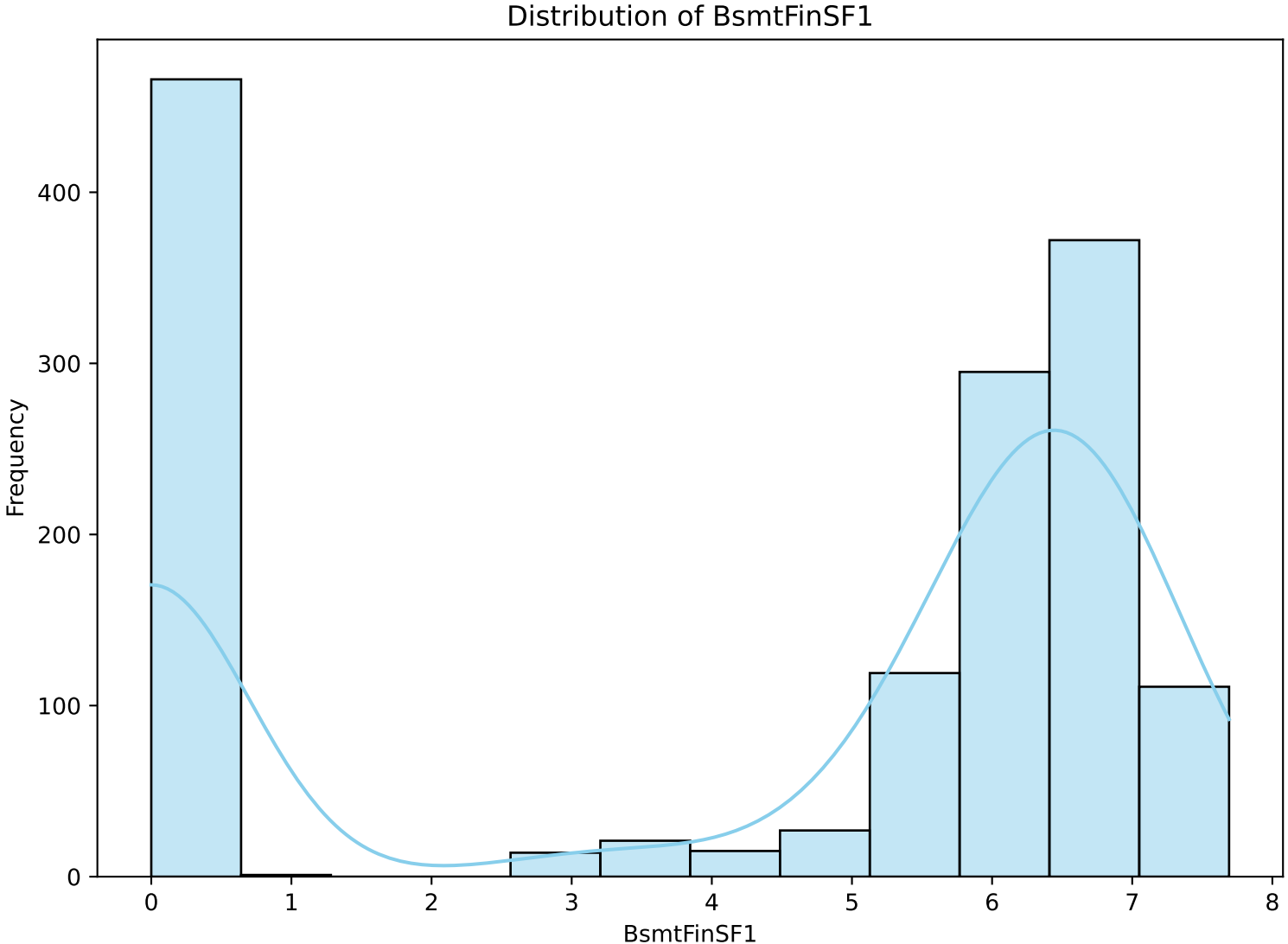

Distribution of LotFrontage
Frequency
LotFrontage
0
50
100
150
200
250
−2
−1
0
1
2
3
4

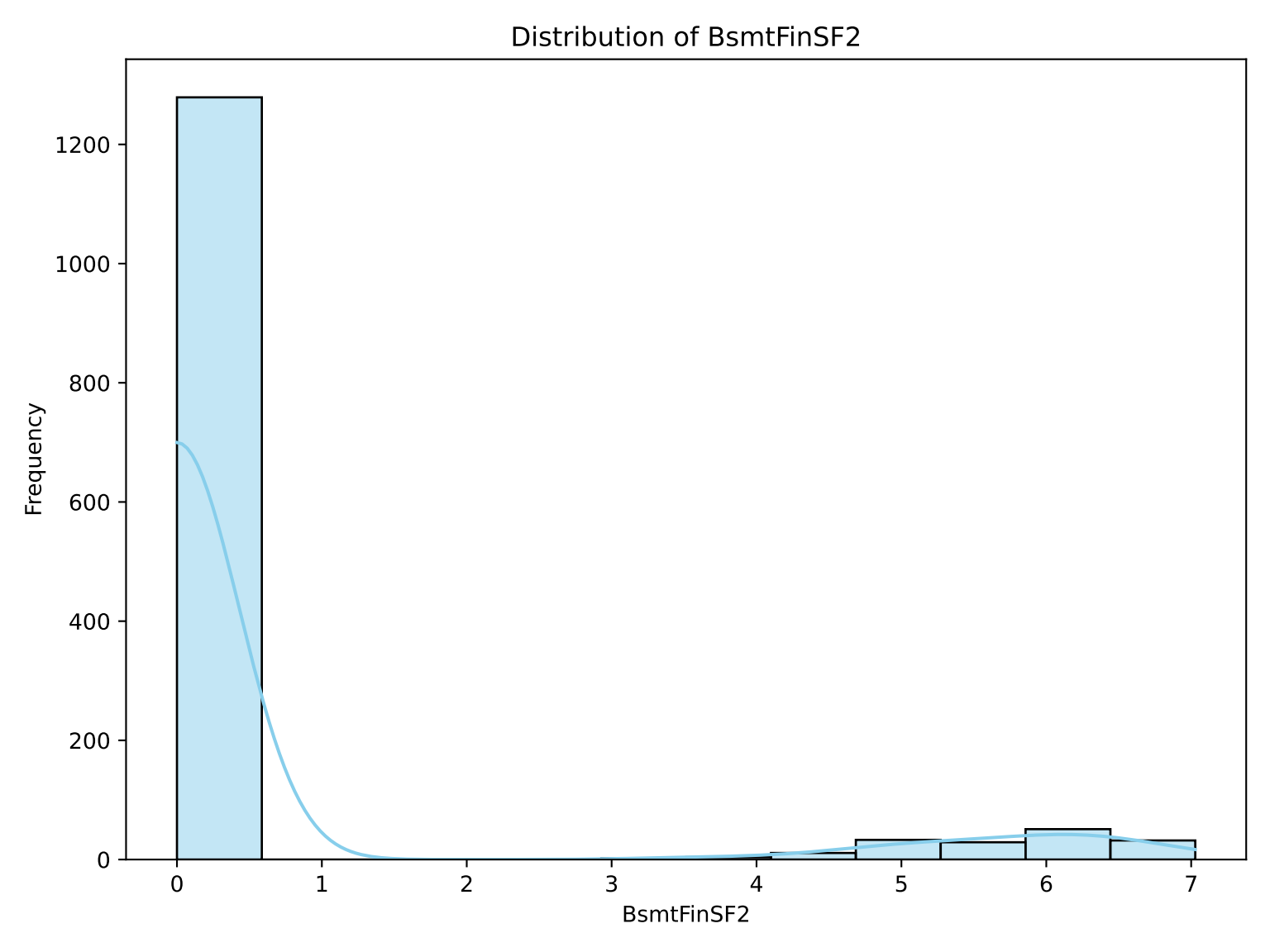

Distribution of LotArea
Frequency
LotArea
0
20
40
60
80
100
120
140
7.0
7.5
8.0
8.5
9.0
9.5
10.0
10.5
11.0

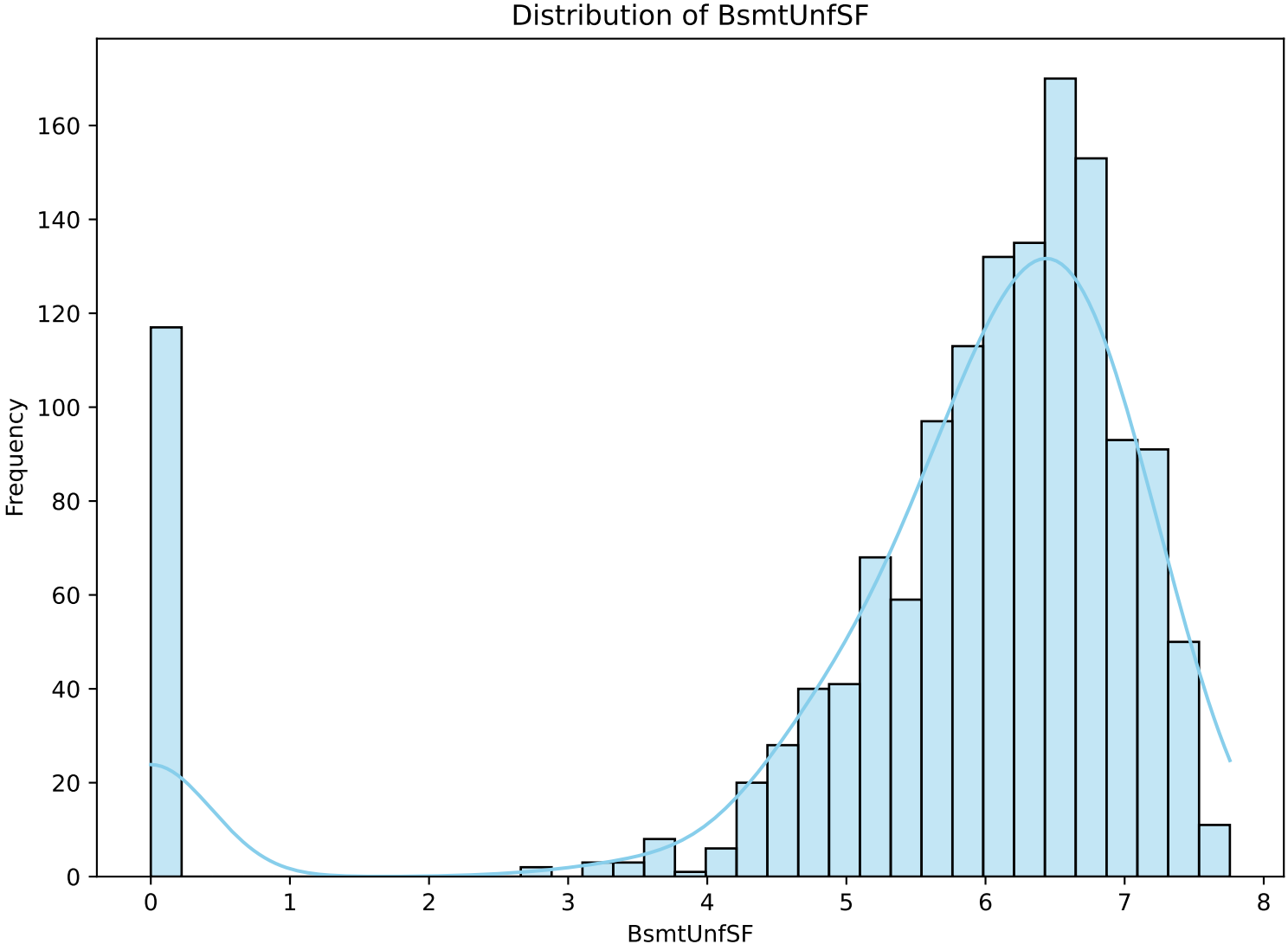

Distribution of YearBuilt
Frequency
YearBuilt
0
50
100
150
200
250
300
350
43.2
43.4
43.6
43.8
44.0
44.2
44.4
44.6
44.8

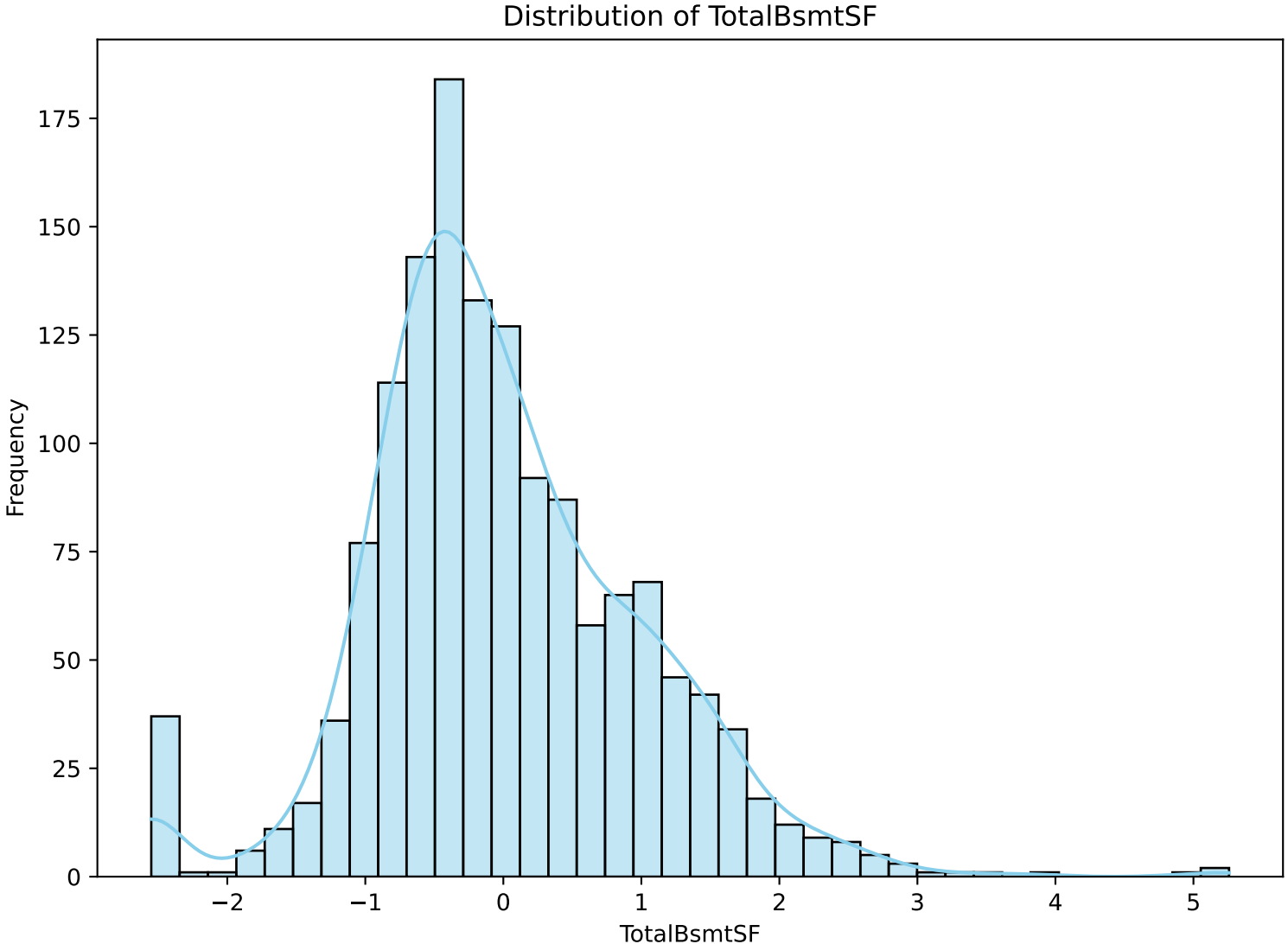

Distribution of YearRemodAdd
Frequency
YearRemodAdd
0
50
100
150
200
250
300
−1.5
−1.0
−0.5
0.0
0.5
1.0

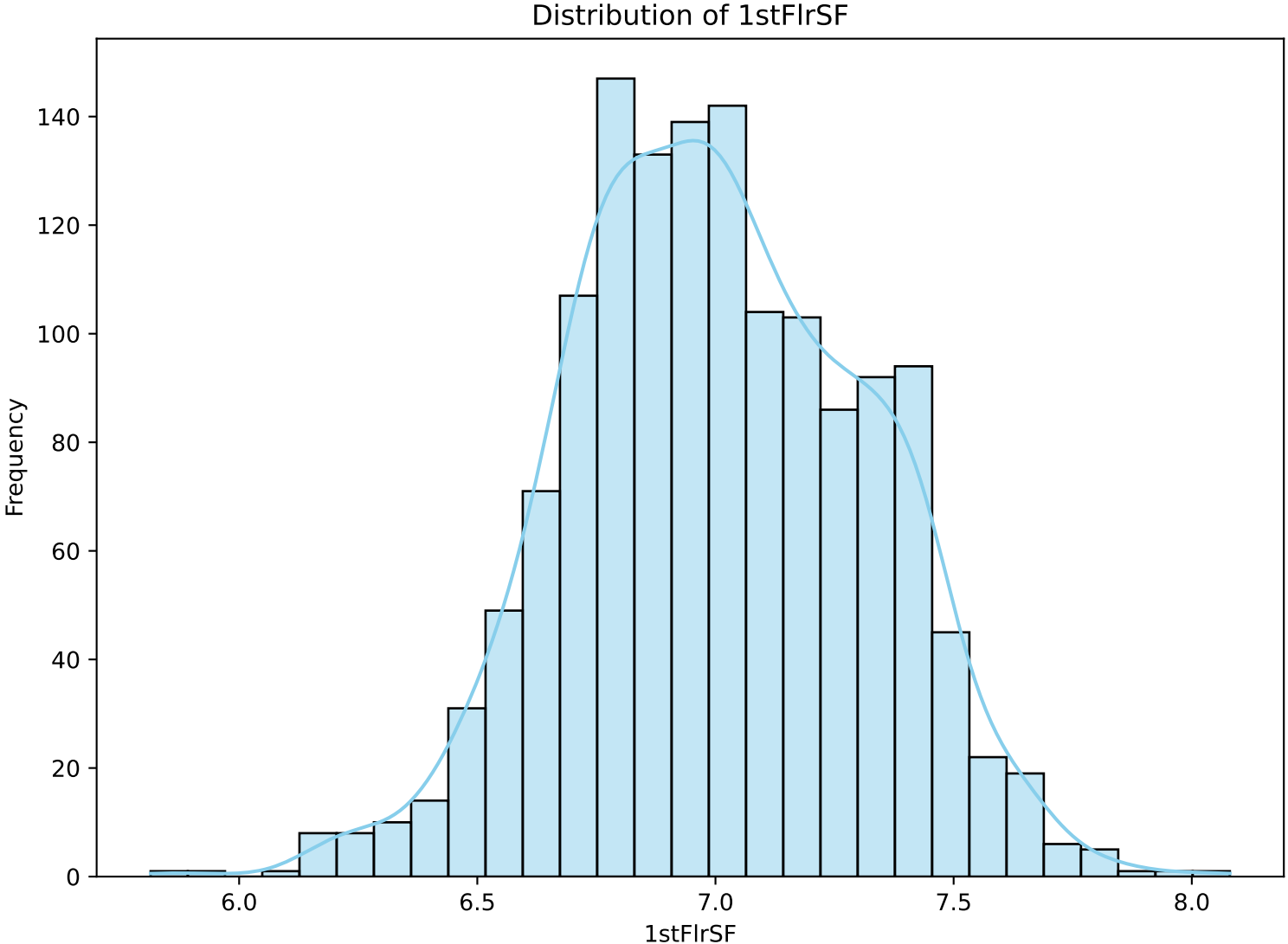

Distribution of MasVnrArea
Frequency
MasVnrArea
0
200
400
600
800
0
1
2
3
4
5
6
7

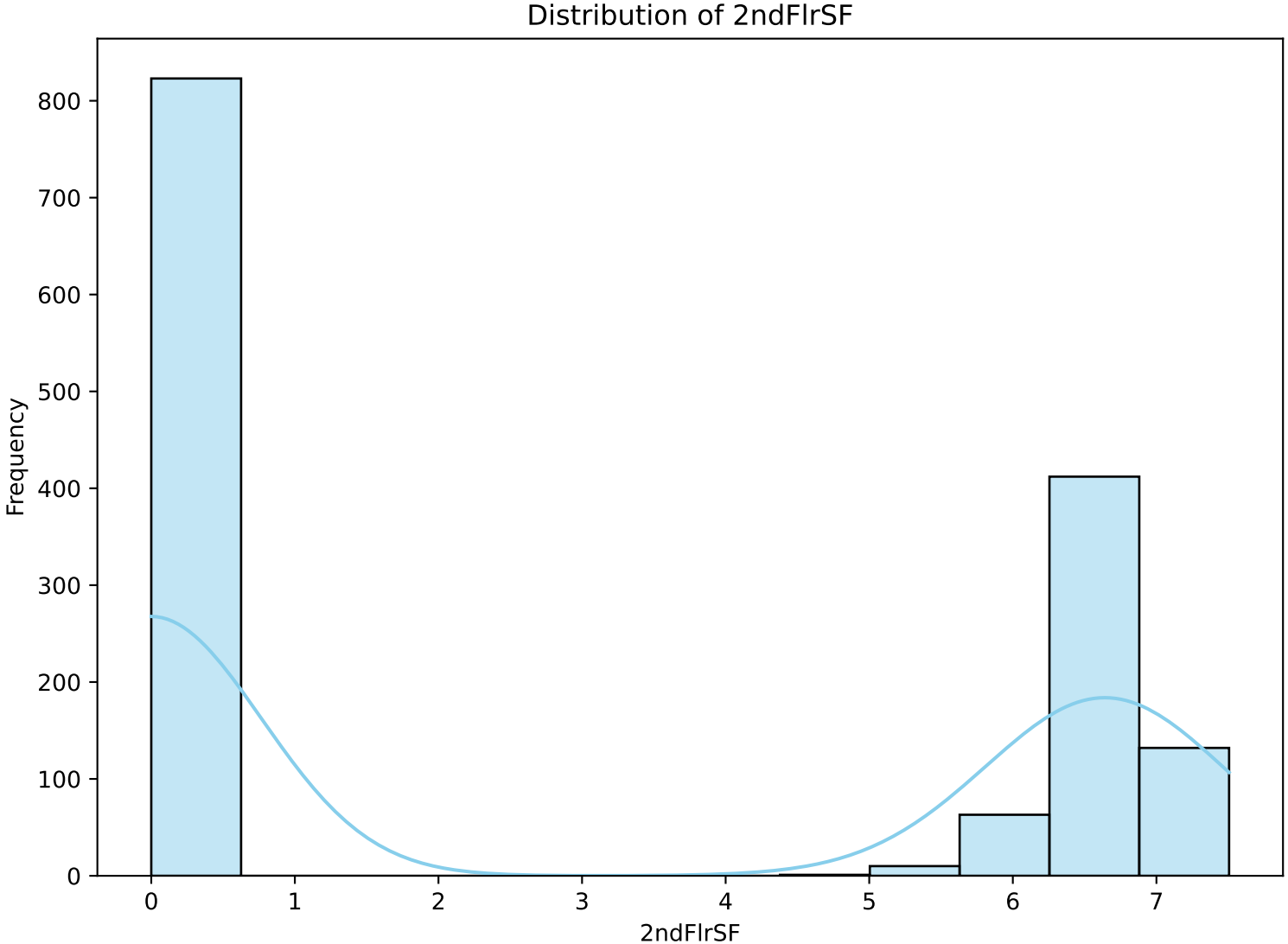

Distribution of BsmtFinSF1
Frequency
BsmtFinSF1
0
100
200
300
400
0
1
2
3
4
5
6
7
8

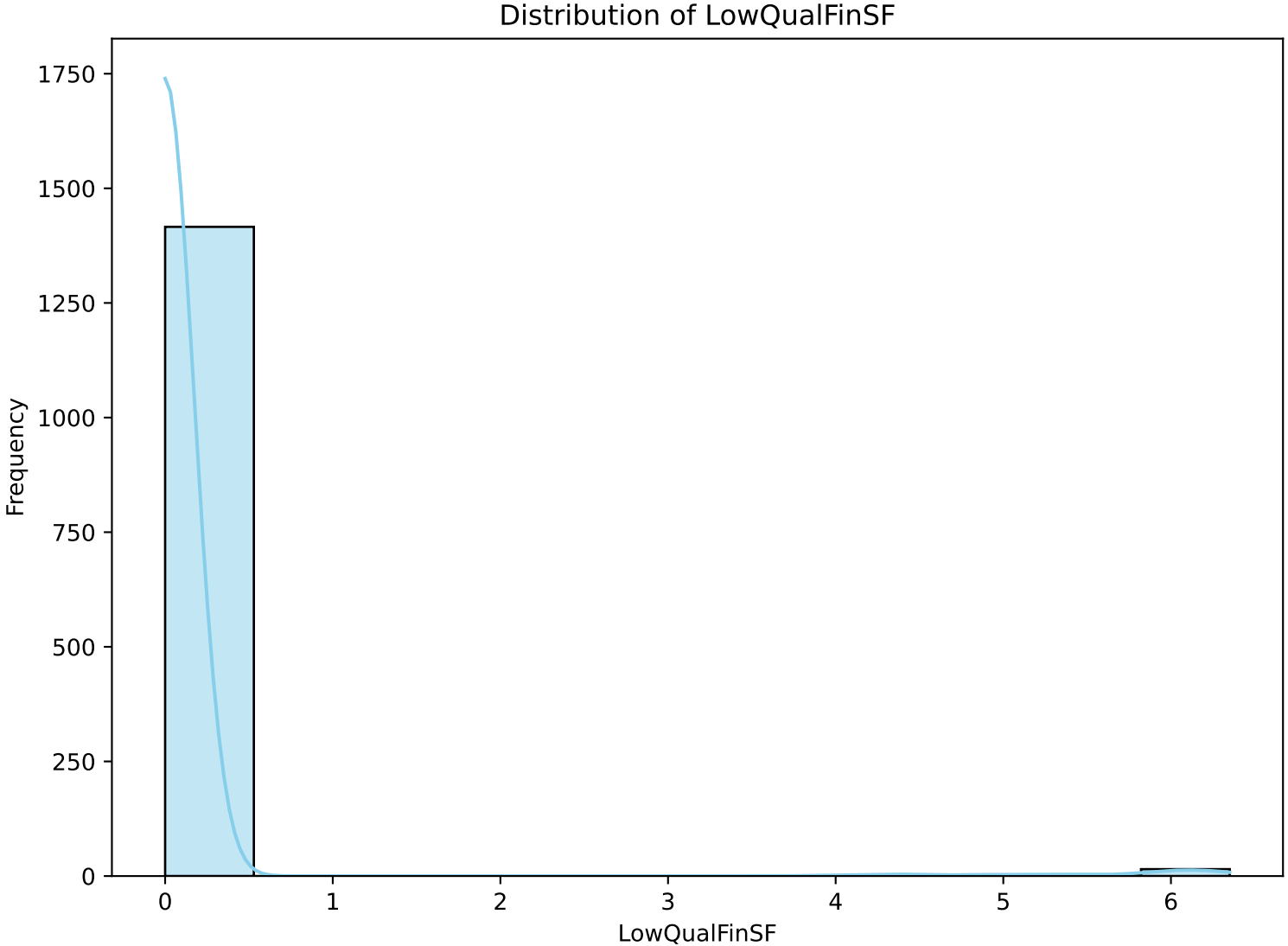

Distribution of BsmtFinSF2
Frequency
BsmtFinSF2
0
200
400
600
800
1000
1200
0
1
2
3
4
5
6
7

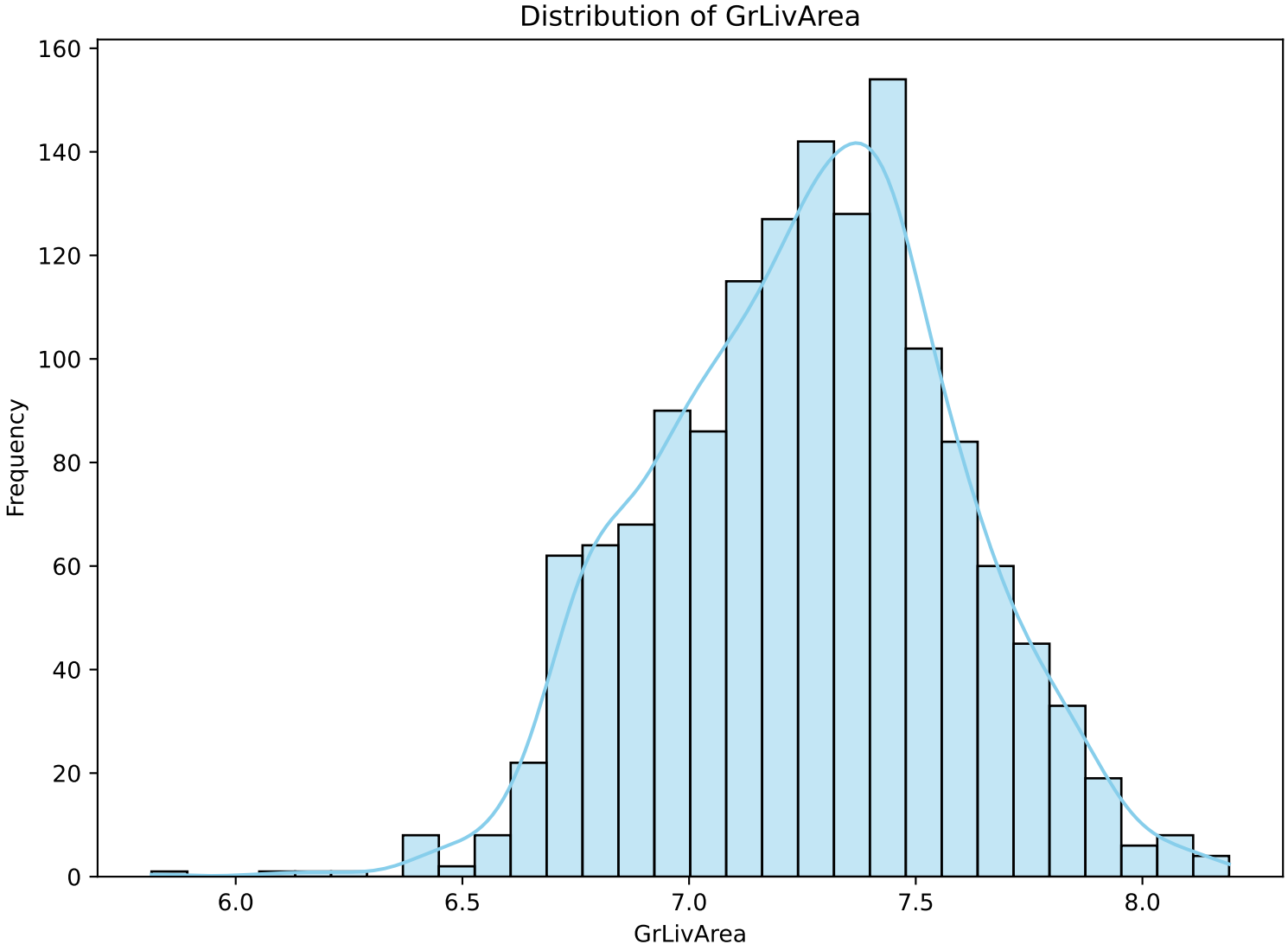

Distribution of BsmtUnfSF
Frequency
BsmtUnfSF
0
20
40
60
80
100
120
140
160
0
1
2
3
4
5
6
7
8

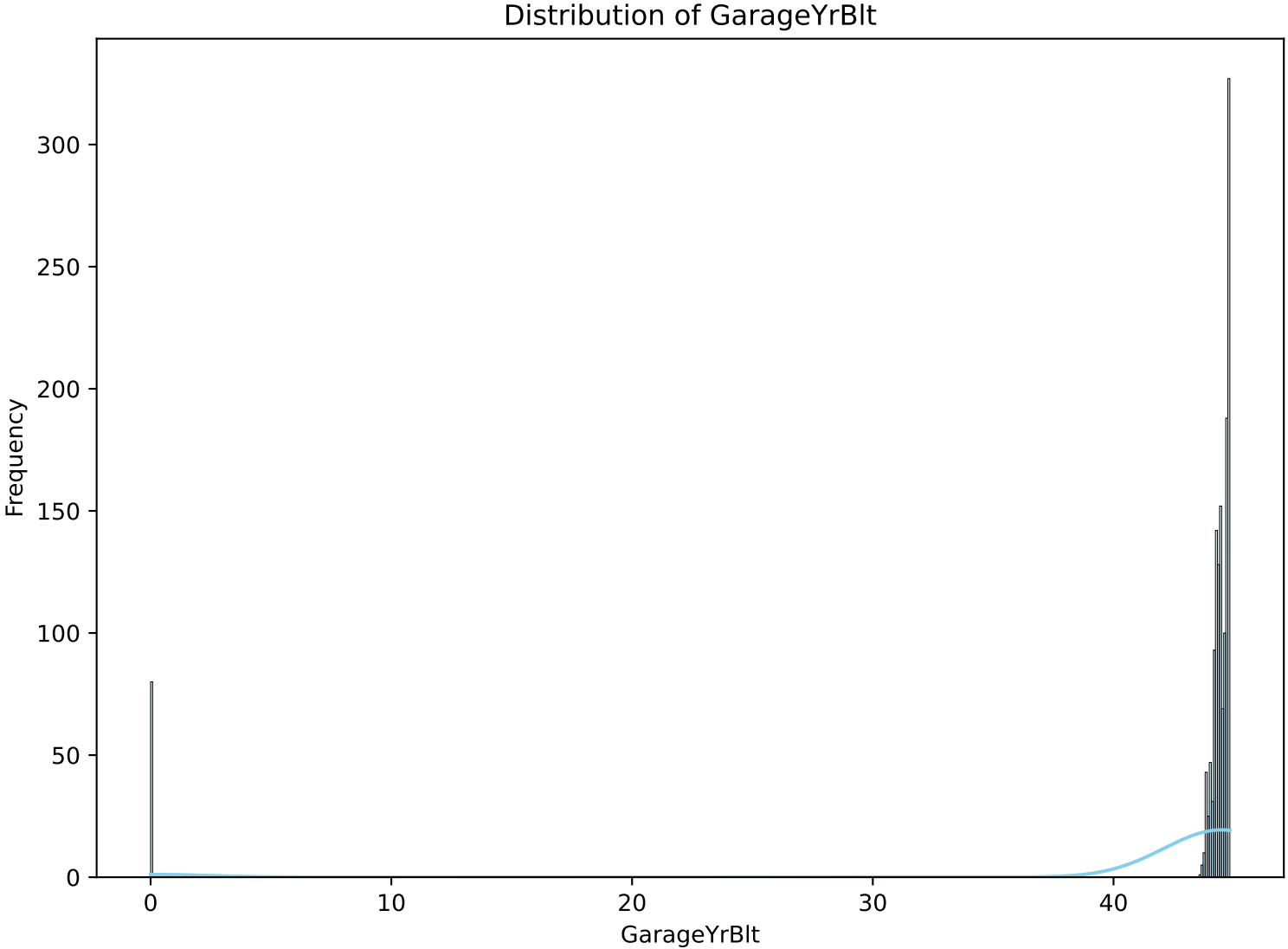

Distribution of TotalBsmtSF
Frequency
TotalBsmtSF
0
25
50
75
100
125
150
175
−2
−1
0
1
2
3
4
5

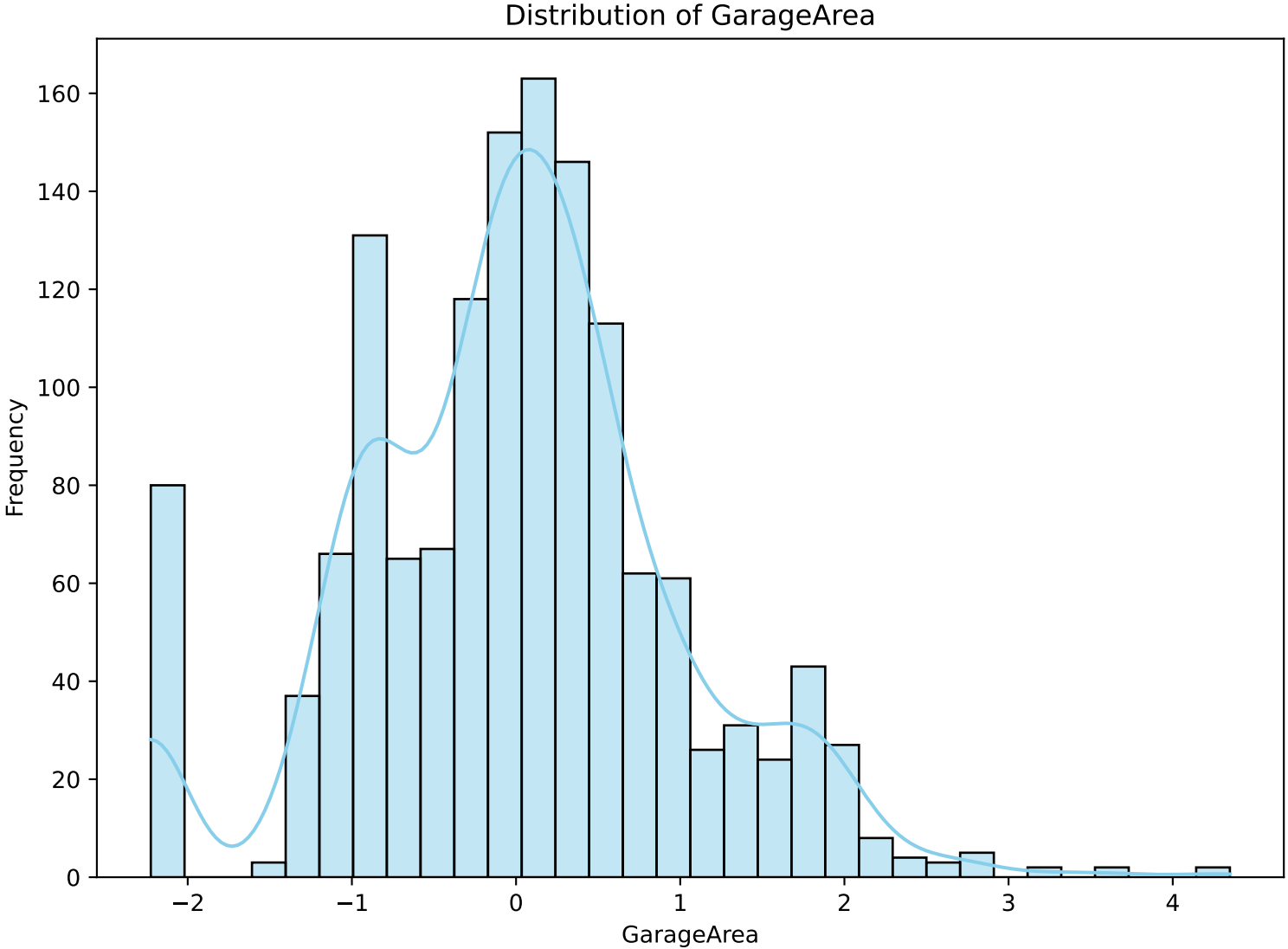

Distribution of 1stFlrSF
Frequency
0
20
40
60
80
100
120
140
6.0
6.5
7.0
7.5
8.0
1stFlrSF

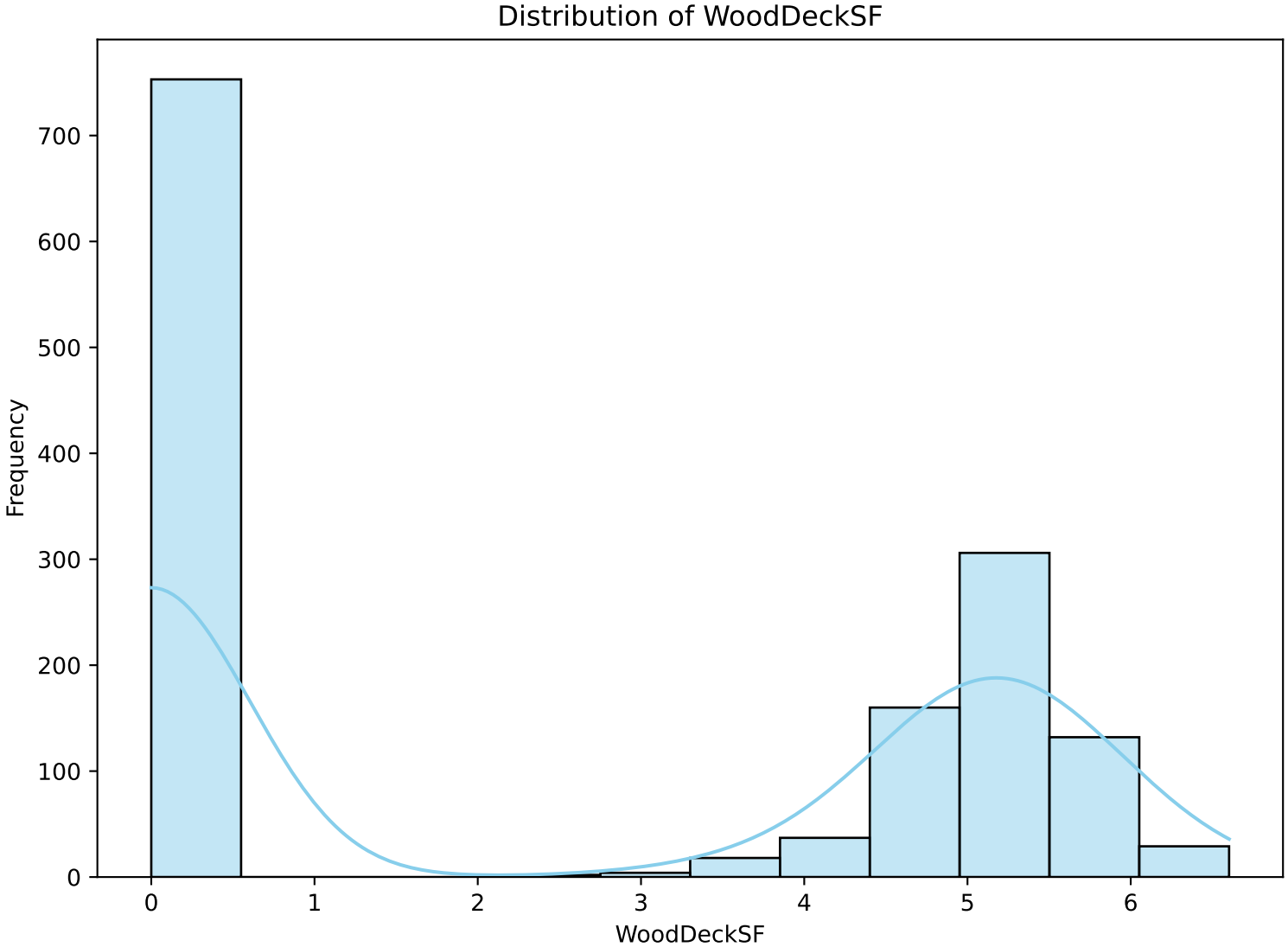

Distribution of 2ndFlrSF
Frequency
2ndFlrSF
0
100
200
300
400
500
600
700
800
0
1
2
3
4
5
6
7

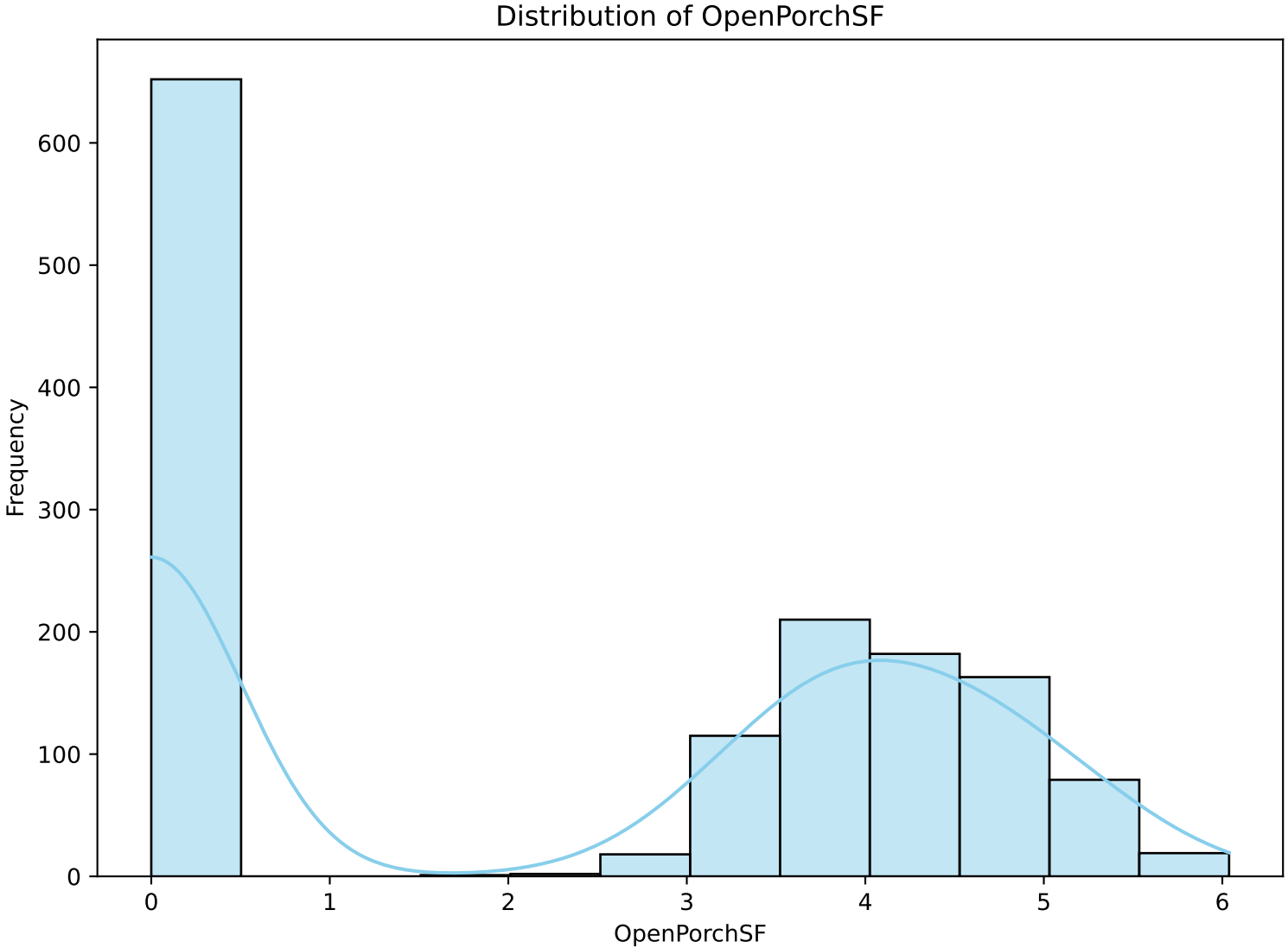

Distribution of LowQualFinSF
Frequency
LowQualFinSF
0
250
500
750
1000
1250
1500
1750
0
1
2
3
4
5
6

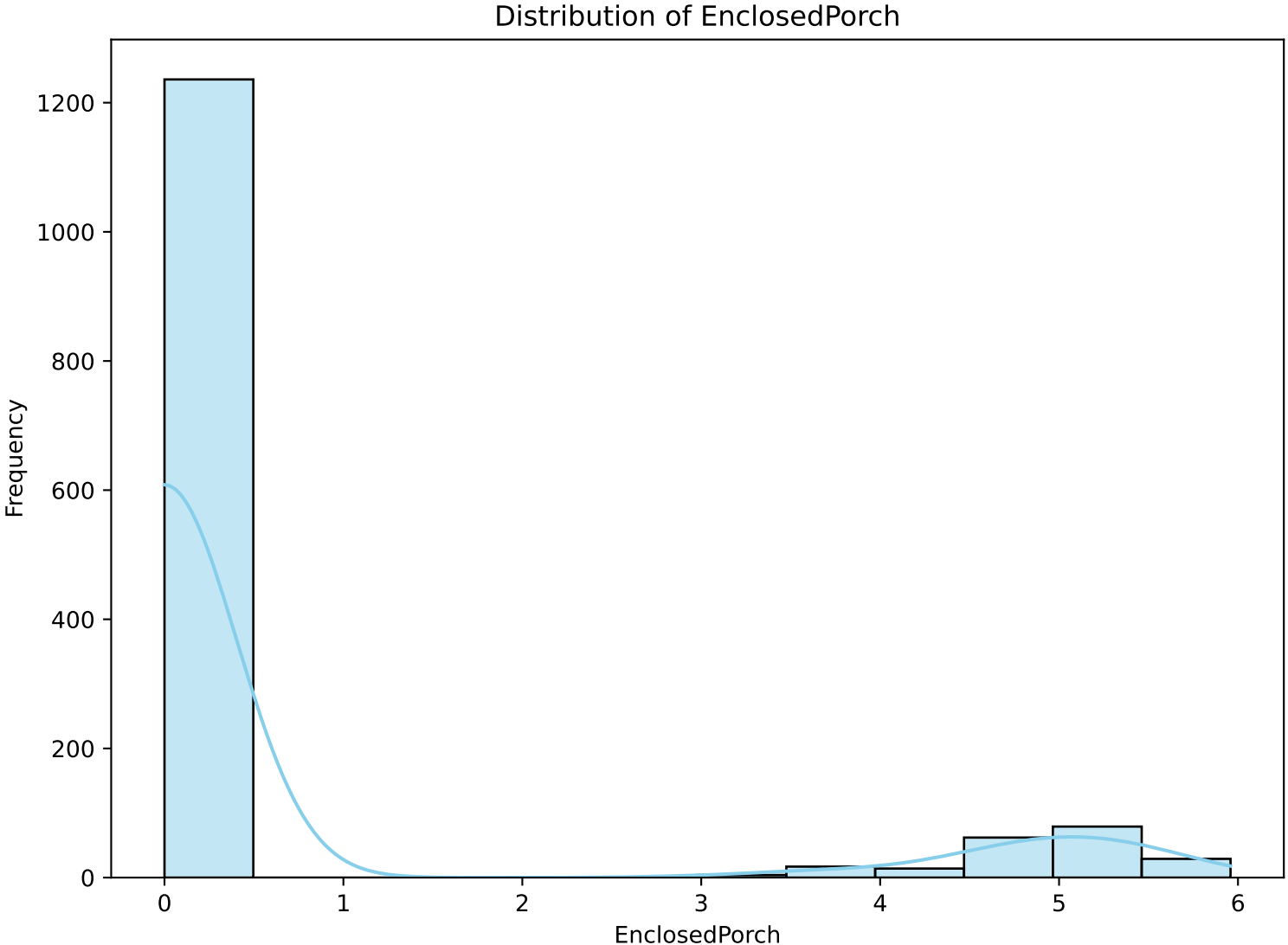

Distribution of GrLivArea
Frequency
GrLivArea
0
20
40
60
80
100
120
140
160
6.0
6.5
7.0
7.5
8.0

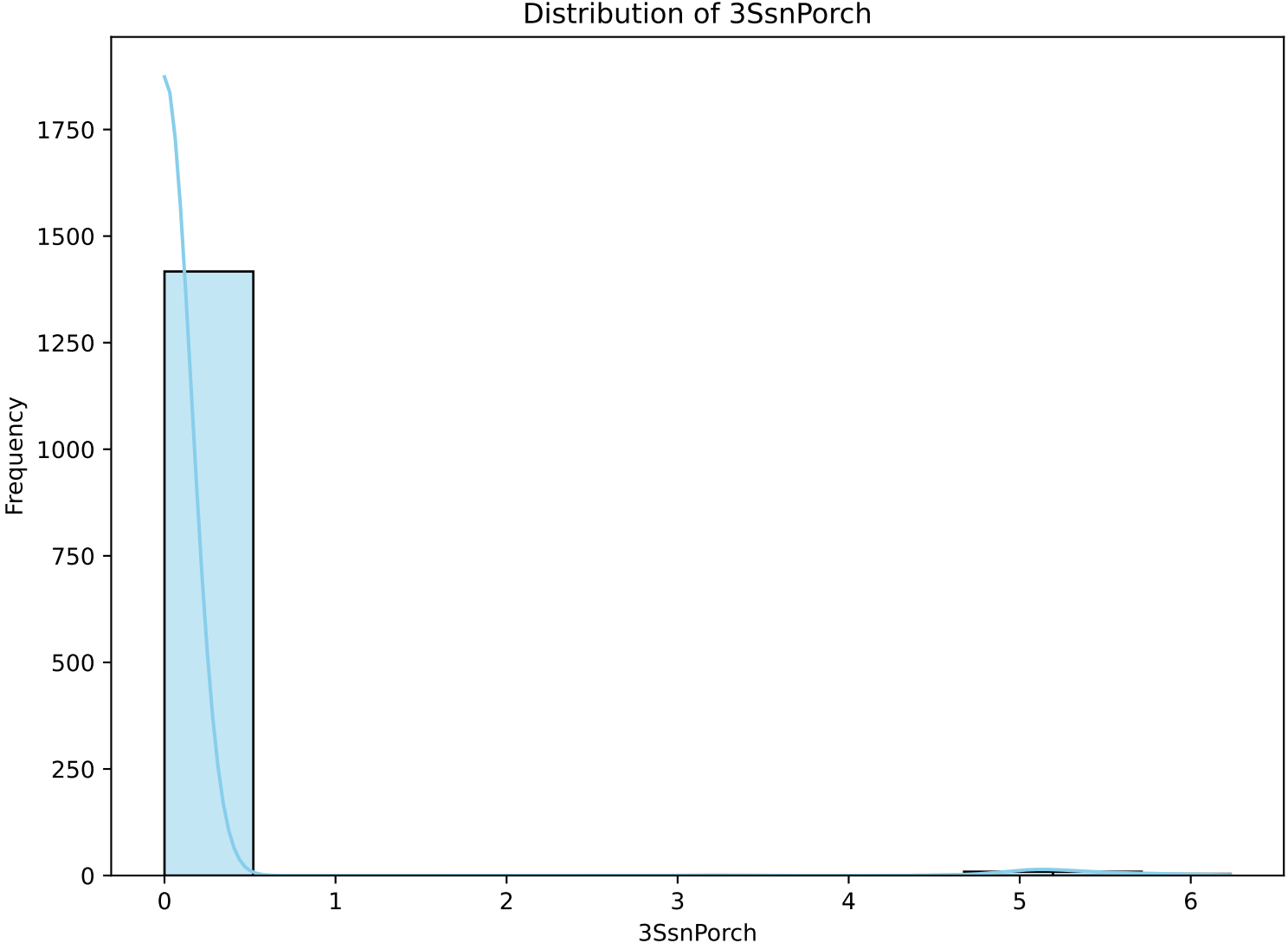

Distribution of GarageYrBlt
Frequency
GarageYrBlt
0
50
100
150
200
250
300
0
10
20
30
40

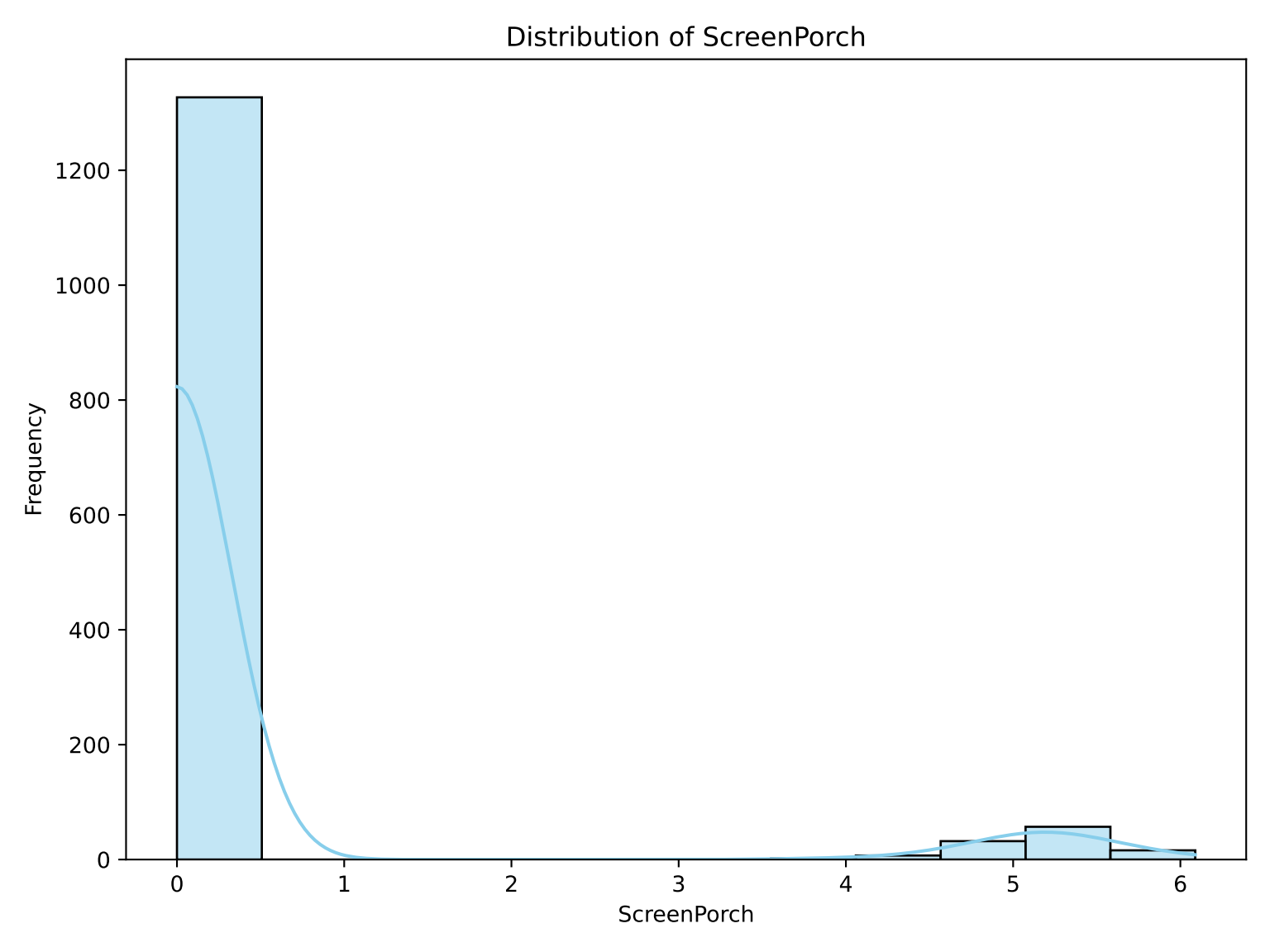

Distribution of GarageArea
Frequency
GarageArea
0
20
40
60
80
100
120
140
160
−2
−1
0
1
2
3
4

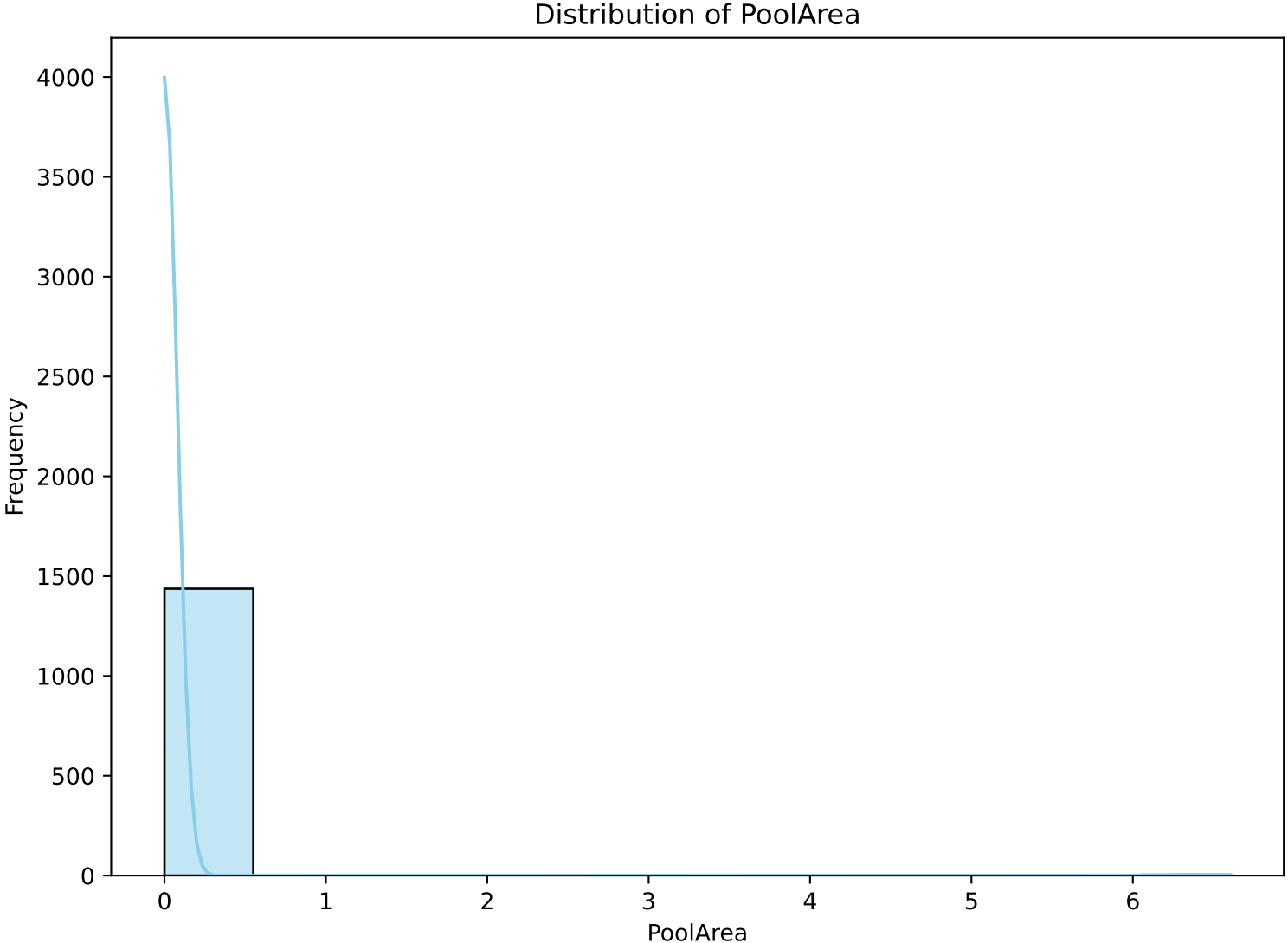

Distribution of WoodDeckSF
Frequency
WoodDeckSF
0
100
200
300
400
500
600
700
0
1
2
3
4
5
6

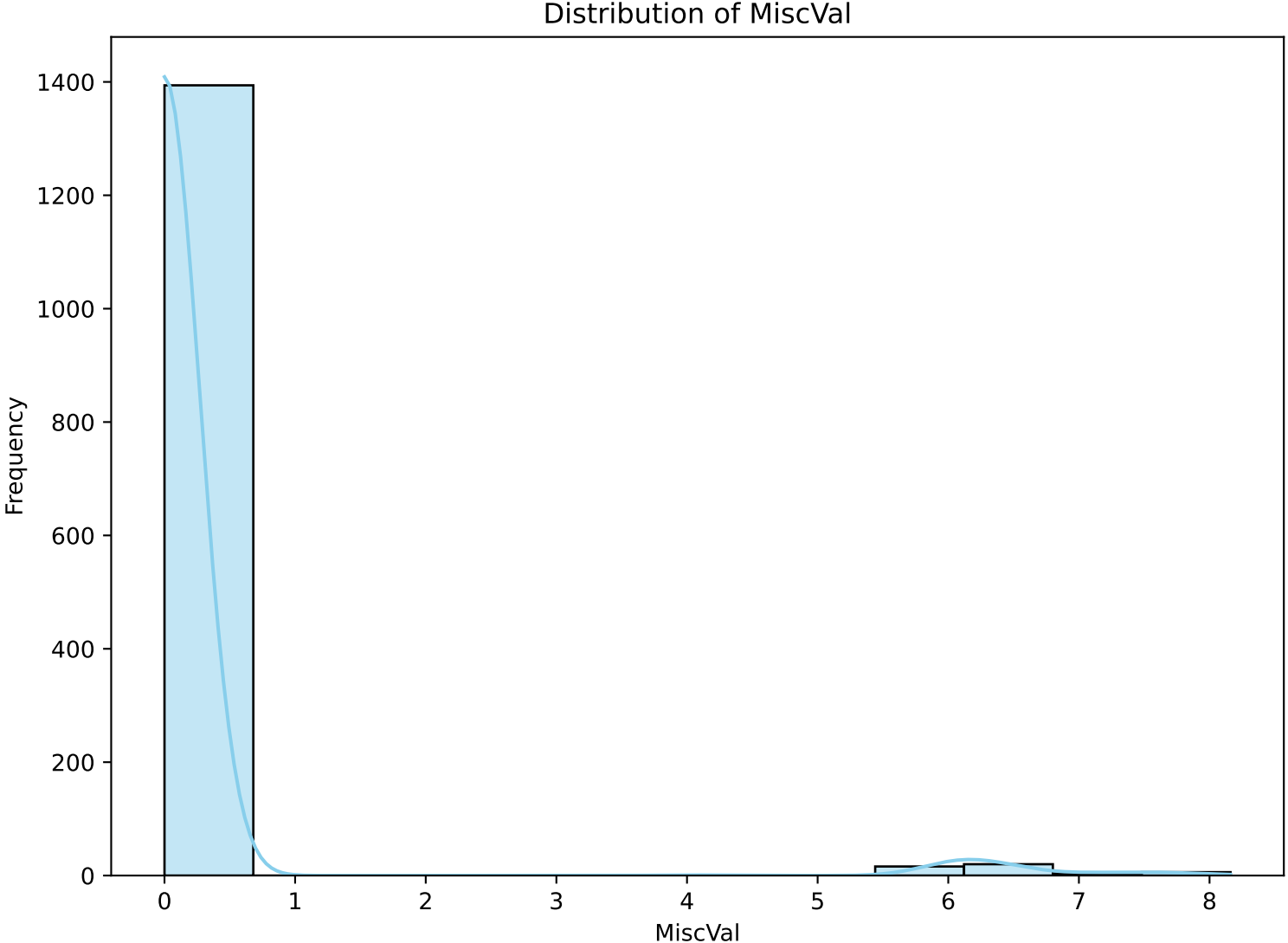

Distribution of OpenPorchSF
Frequency
0
100
200
300
400
500
600
0
1
2
3
4
5
6
OpenPorchSF

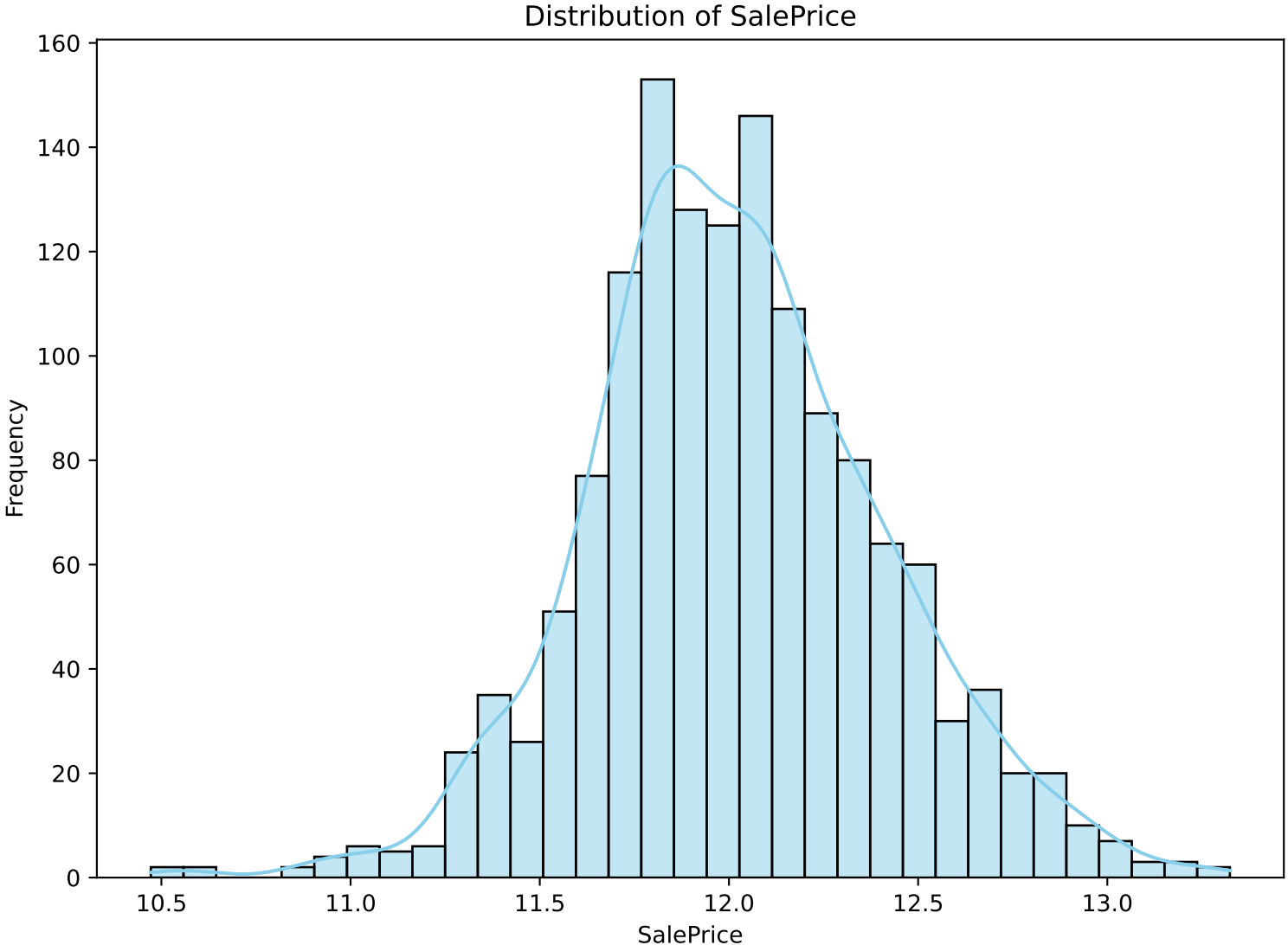

Distribution of EnclosedPorch
Frequency
EnclosedPorch
0
200
400
600
800
1000
1200
0
1
2
3
4
5
6

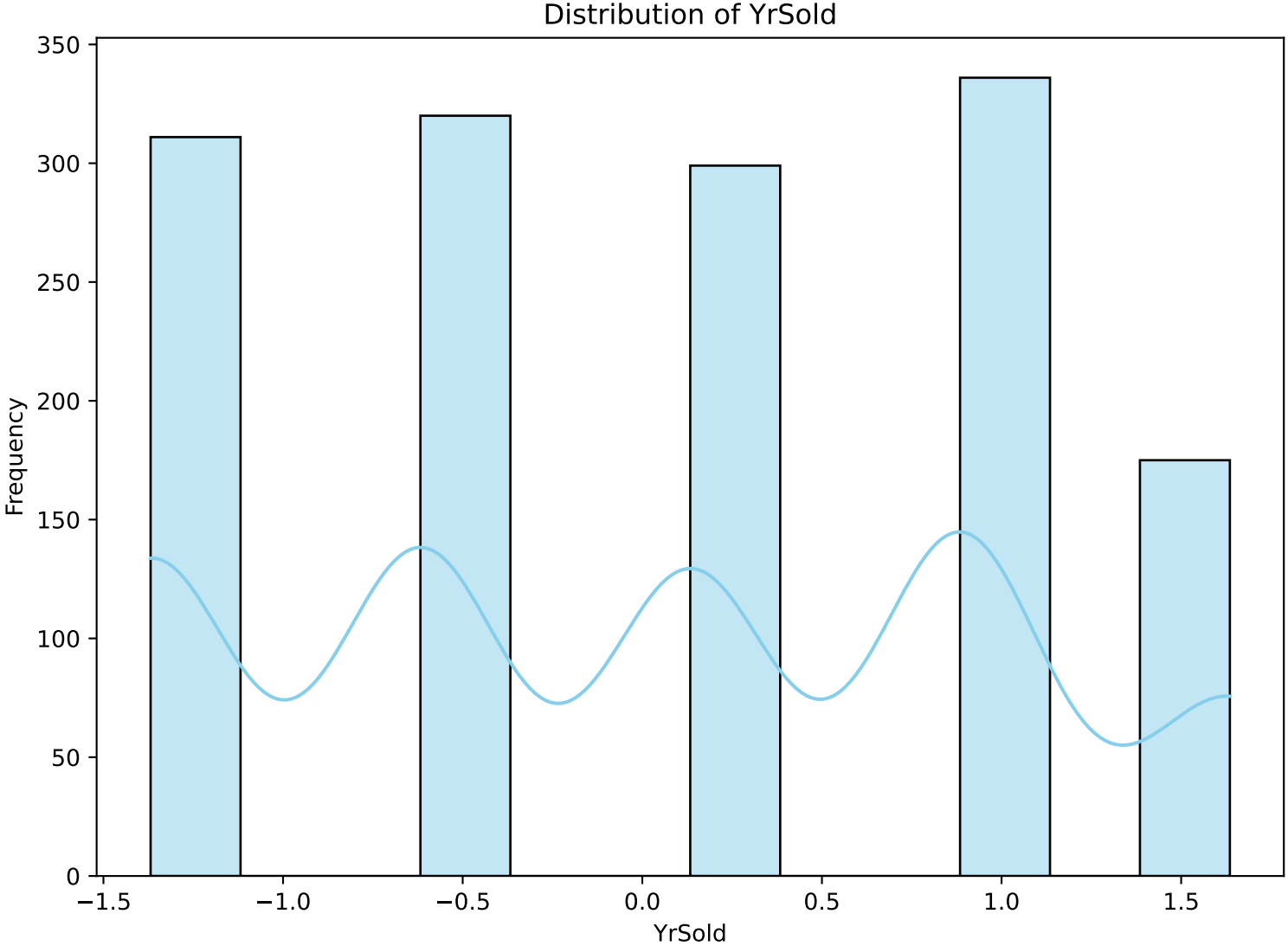

Distribution of 3SsnPorch
Frequency
1750
1500
1250
1000
750
500
250
0
0
1
2
3
4
5
6
3SsnPorch

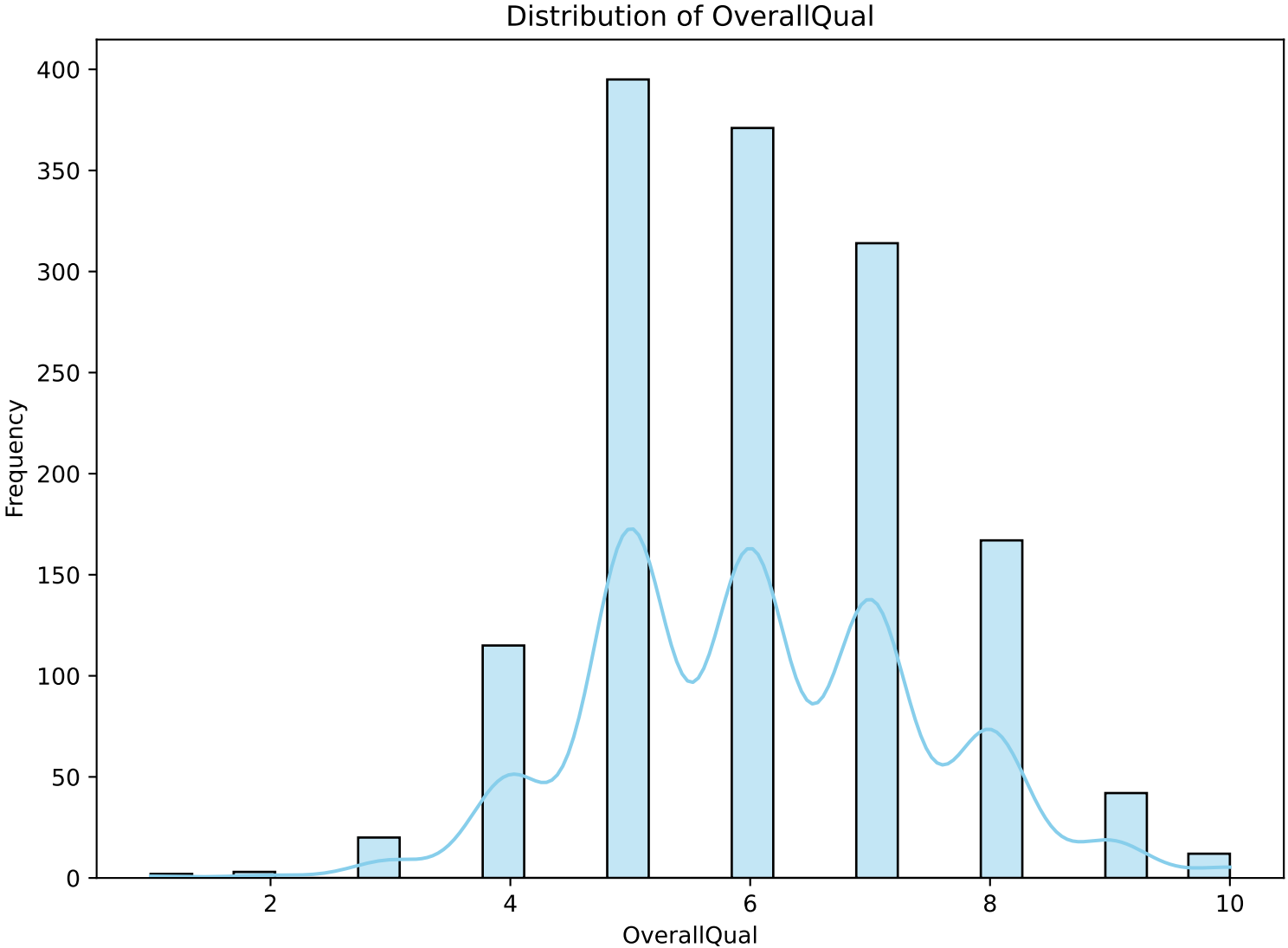

Distribution of ScreenPorch
Frequency
ScreenPorch
0
200
400
600
800
1000
1200
0
1
2
3
4
5
6

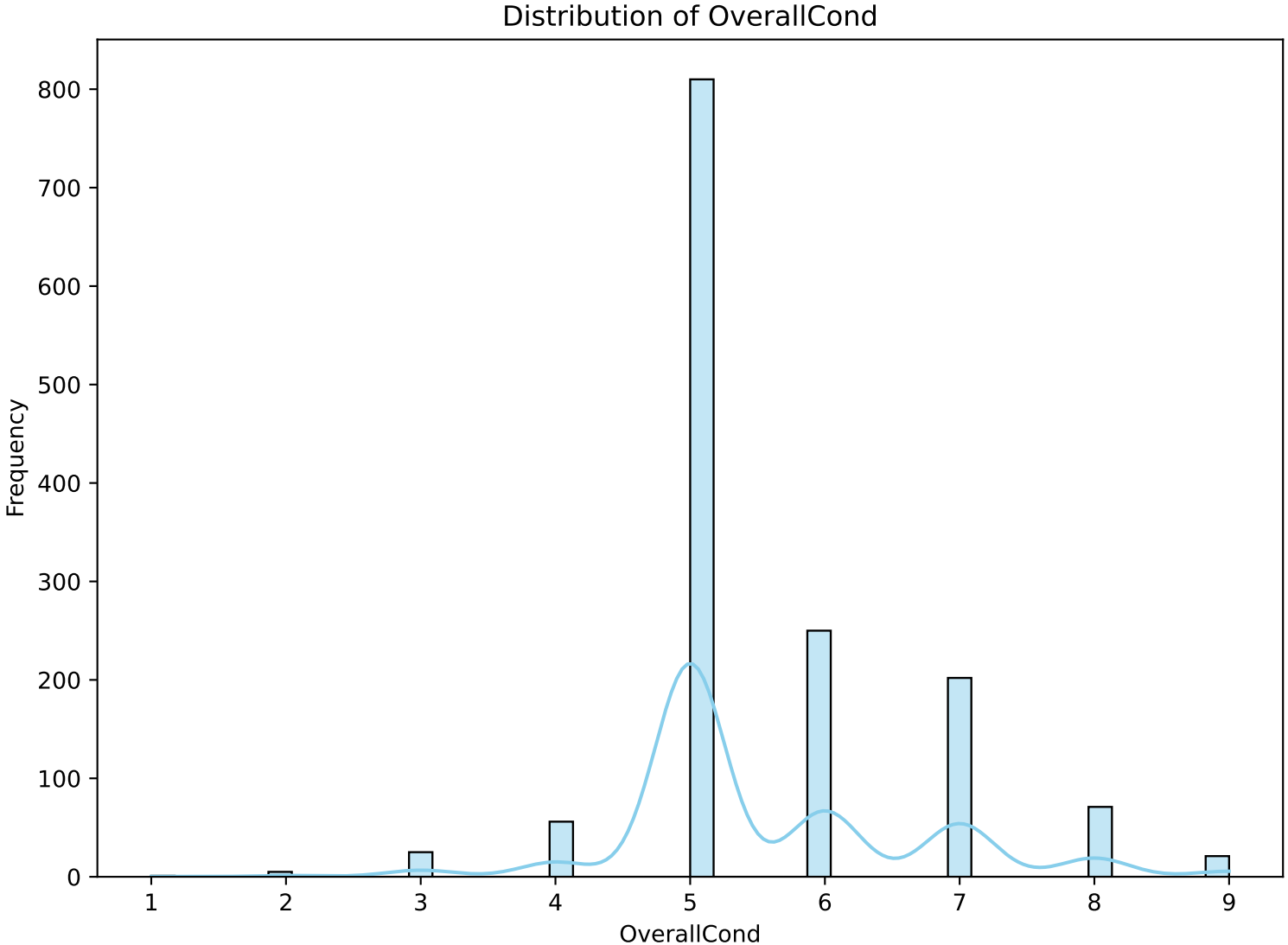

Distribution of PoolArea
Frequency
4000
3500
3000
2500
2000
1500
1000
500
0
0
1
2
3
4
5
6
PoolArea

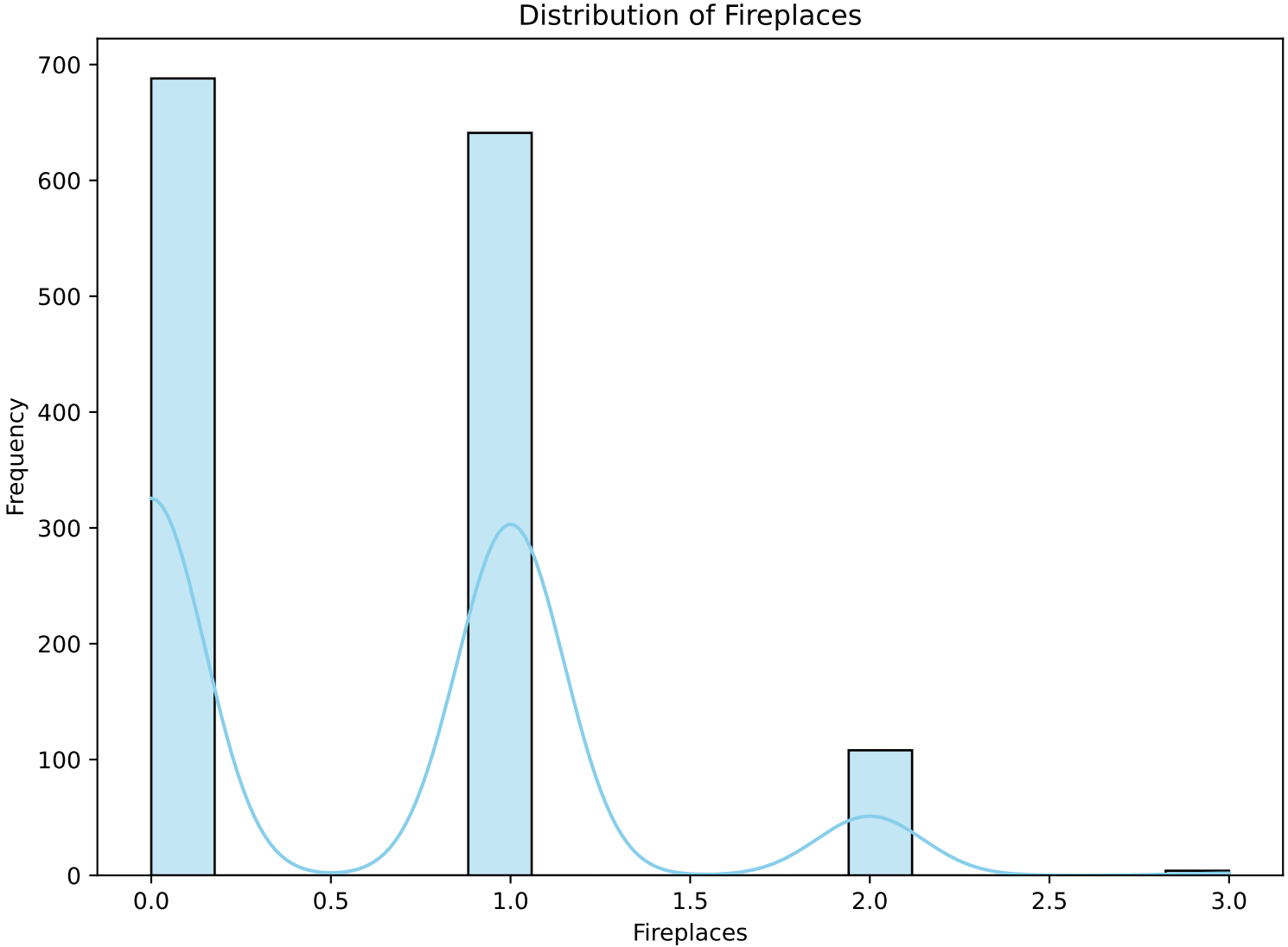

Distribution of MiscVal
Frequency
MiscVal
0
200
400
600
800
1000
1200
1400
0
1
2
3
4
5
6
7
8

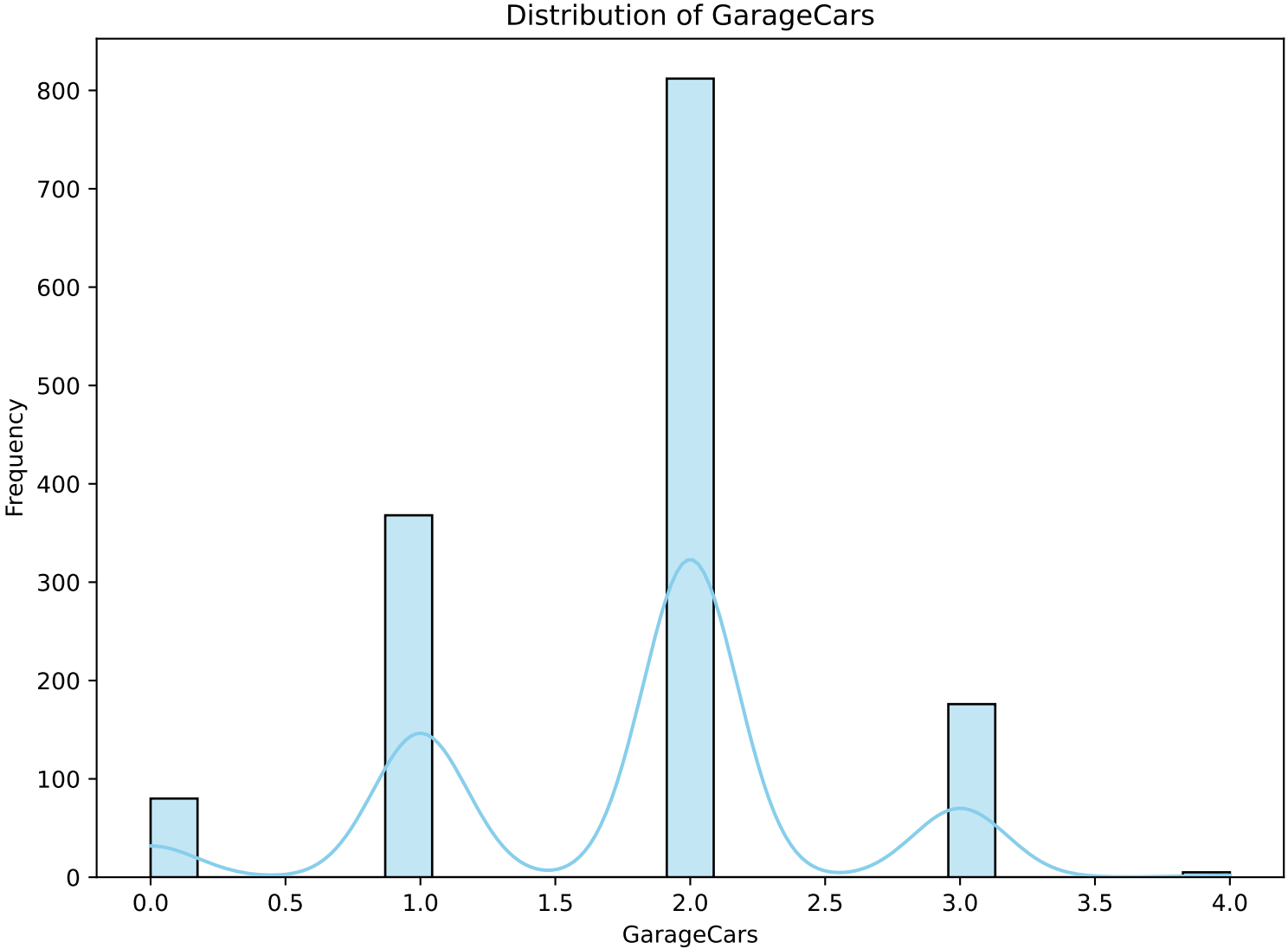

Distribution of SalePrice
Frequency
SalePrice
0
20
40
60
80
100
120
140
160
10.5
11.0
11.5
12.0
12.5
13.0

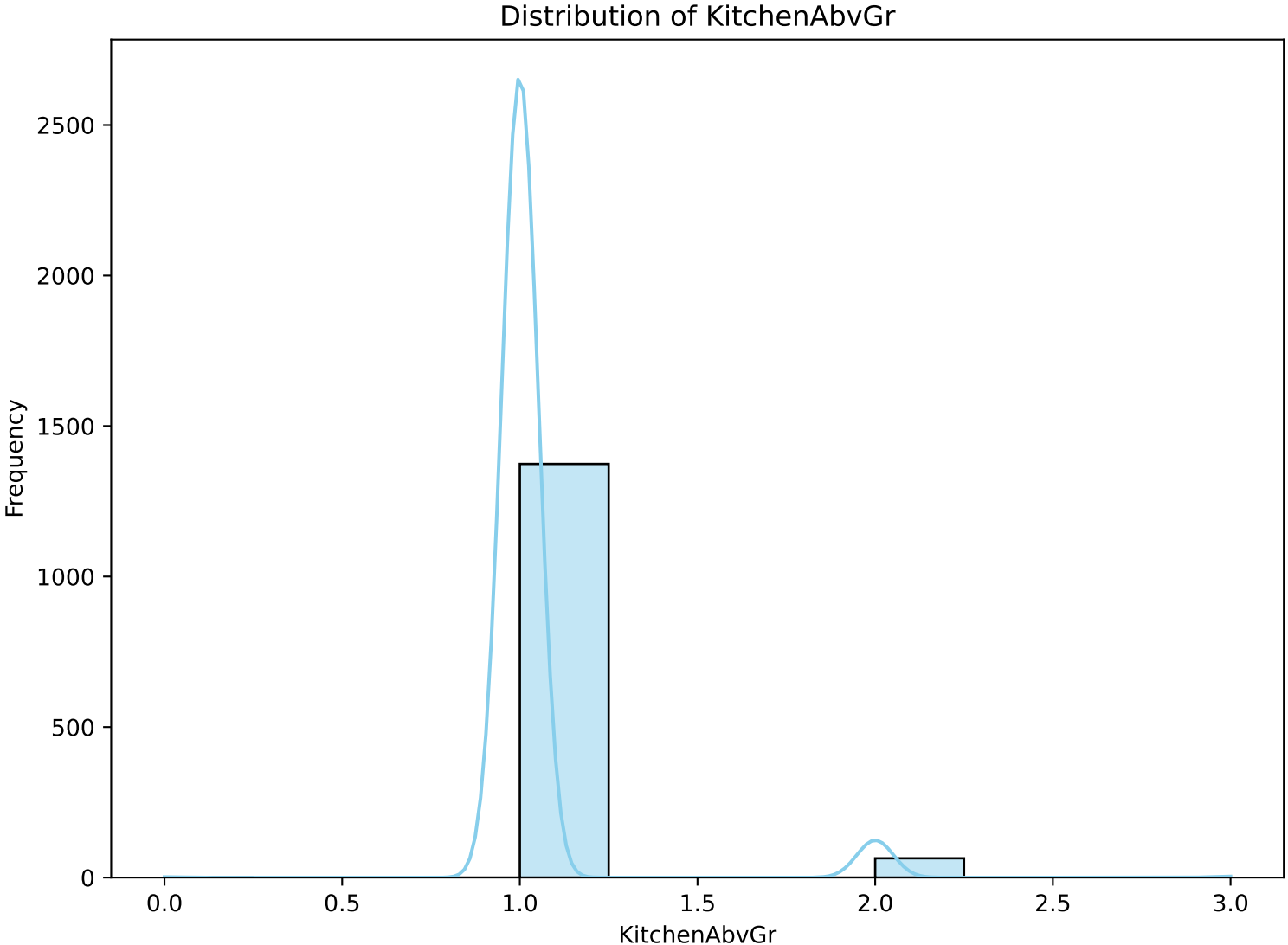

Distribution of YrSold
Frequency
YrSold
350
300
250
200
150
100
50
0
−1.5
−1.0
−0.5
0.0
0.5
1.0
1.5

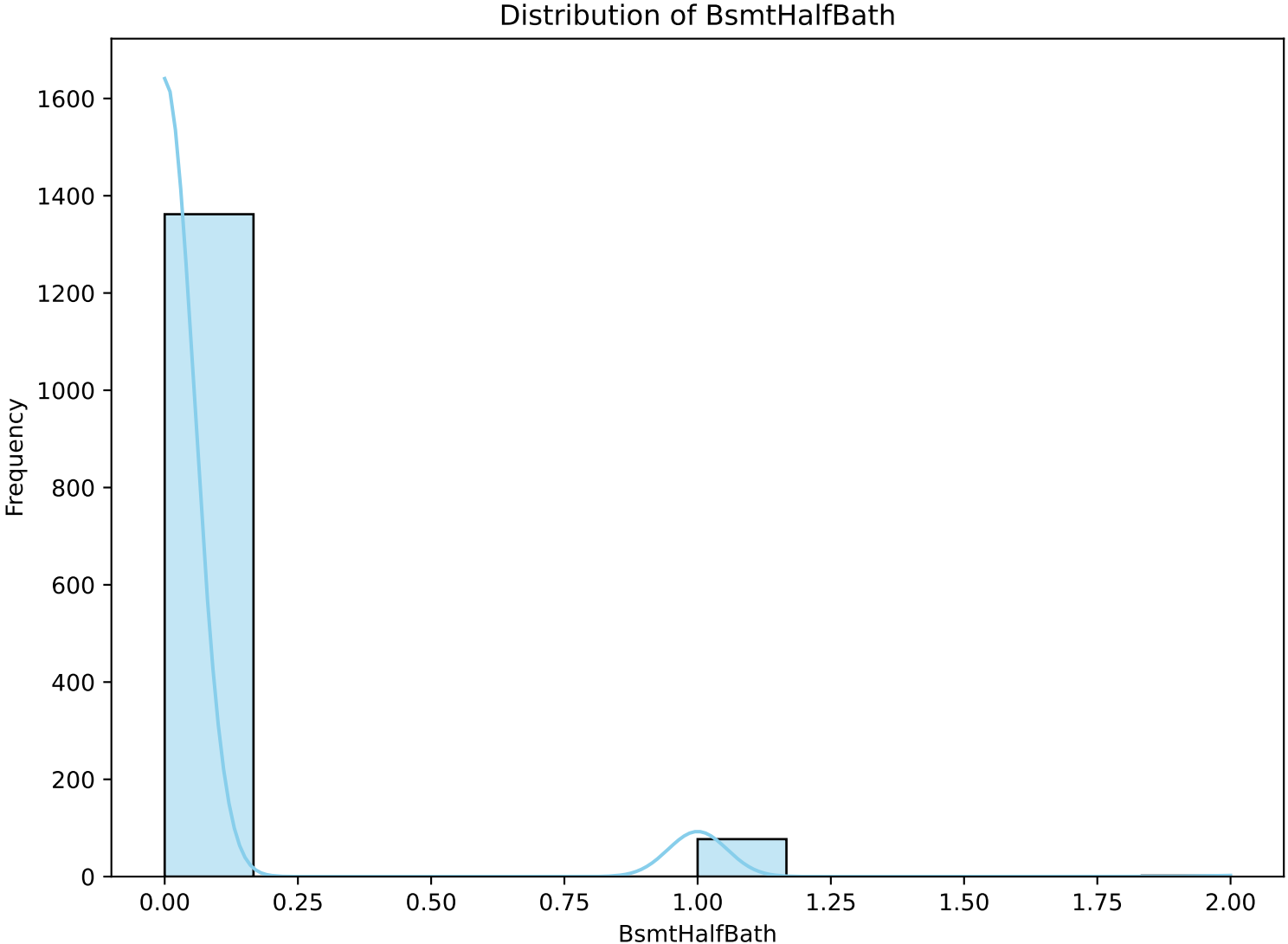

Distribution of OverallQual
Frequency
OverallQual
0
50
100
150
200
250
300
350
400
2
4
6
8
10

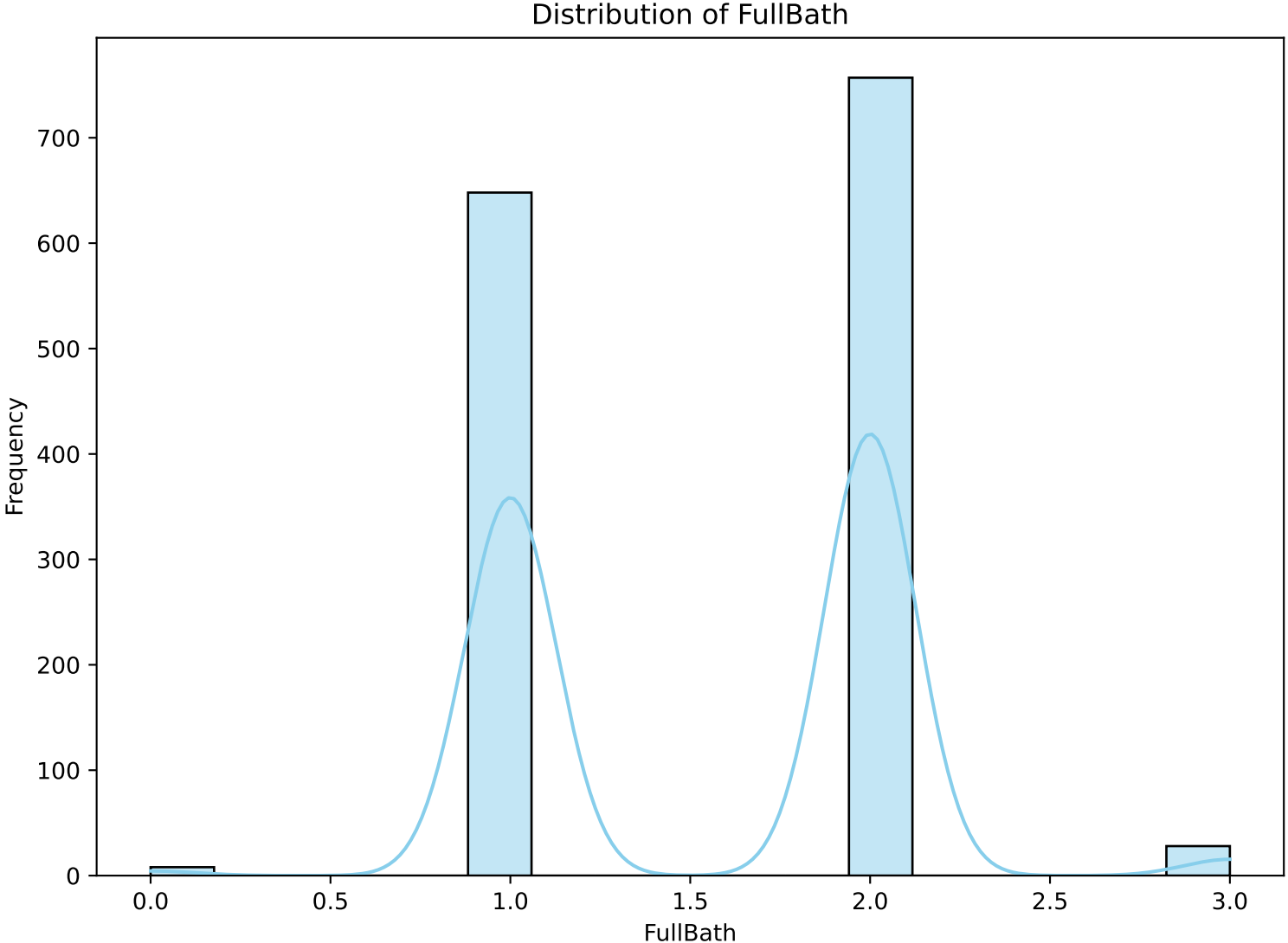

Distribution of OverallCond
Frequency
0
100
200
300
400
500
600
700
800
1
2
3
4
5
6
7
8
9
OverallCond

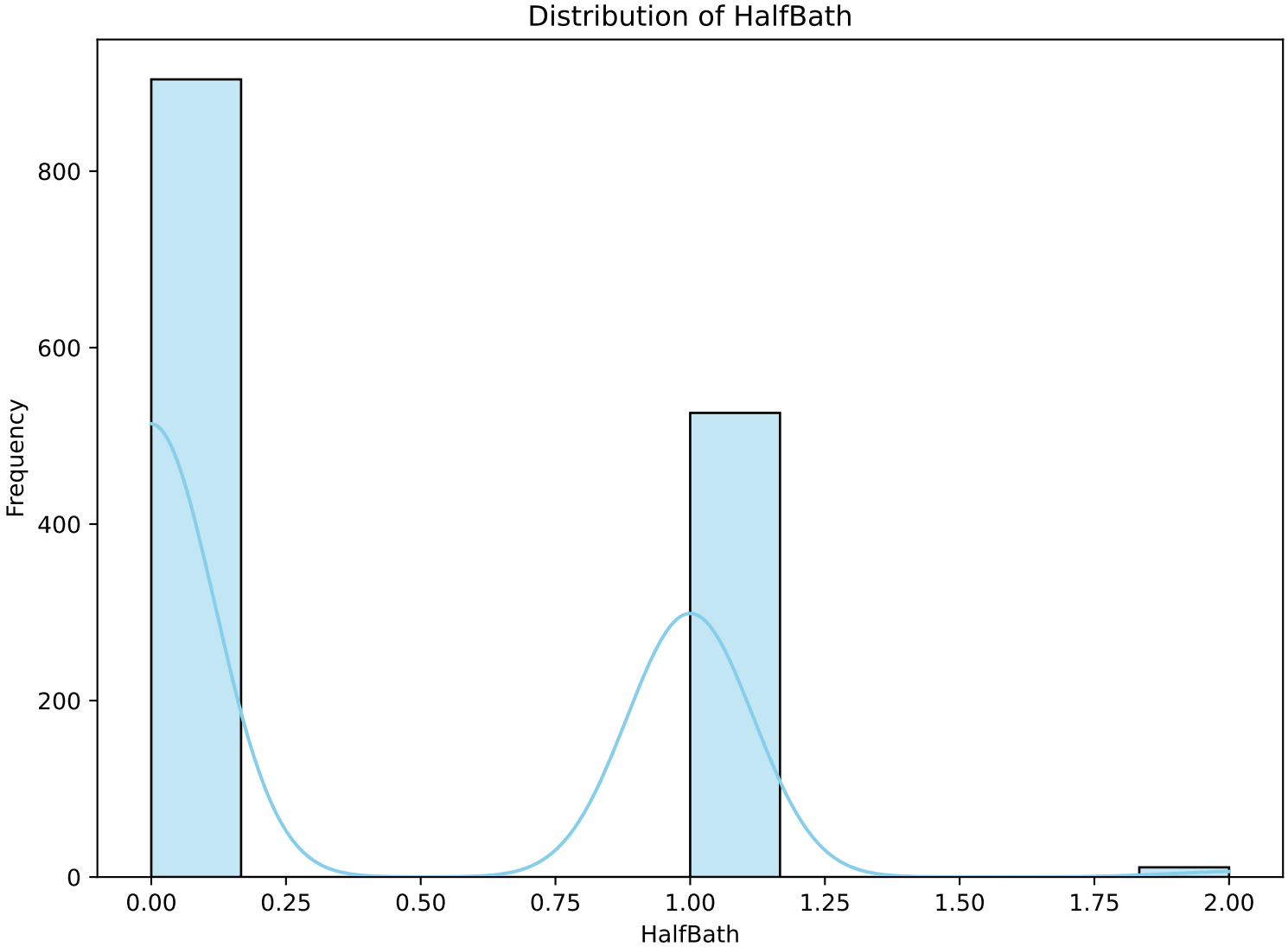

Distribution of Fireplaces
Frequency
Fireplaces
0
100
200
300
400
500
600
700
0.0
0.5
1.0
1.5
2.0
2.5
3.0

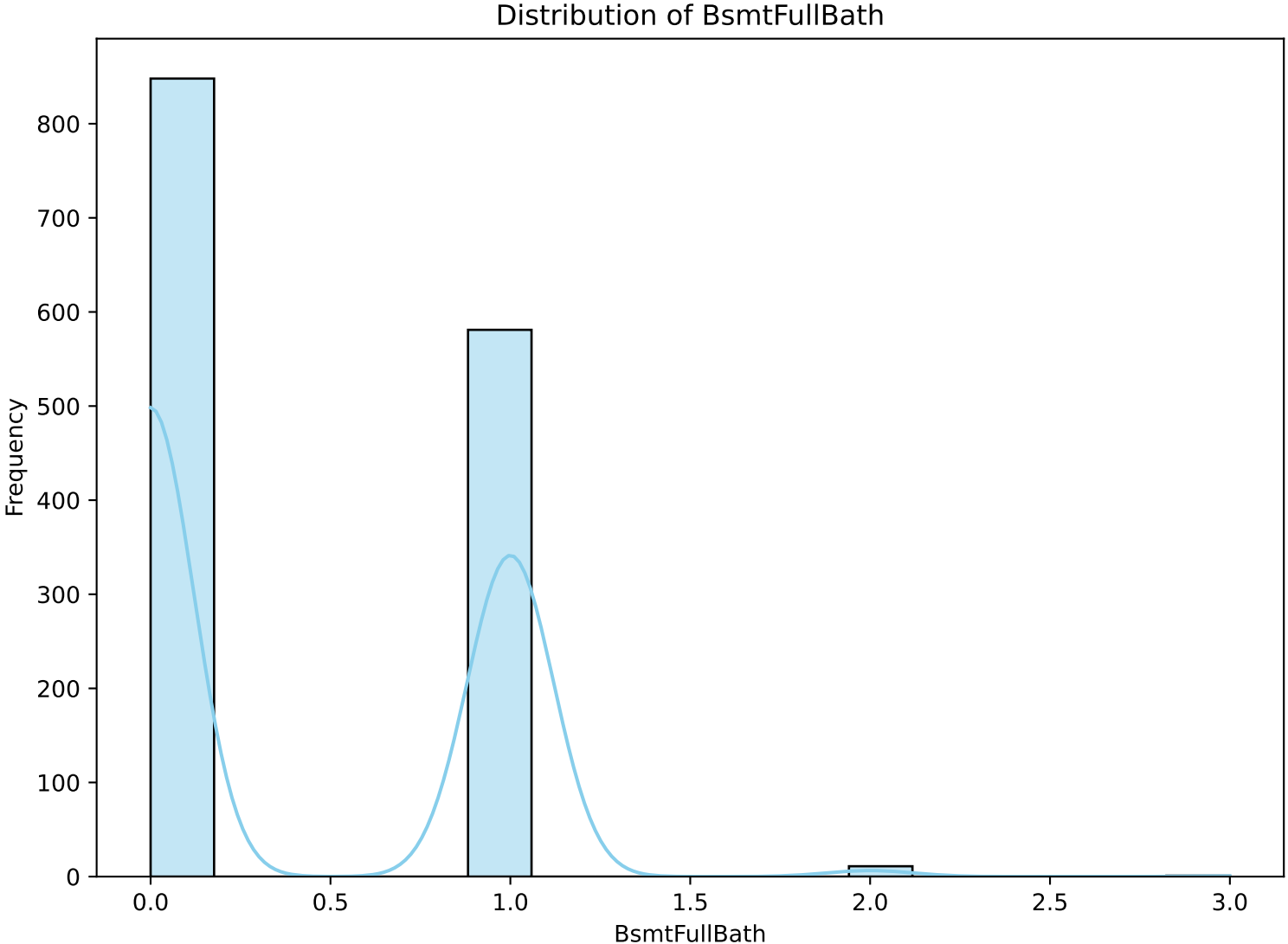

Distribution of GarageCars
Frequency
GarageCars
0
100
200
300
400
500
600
700
800
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0

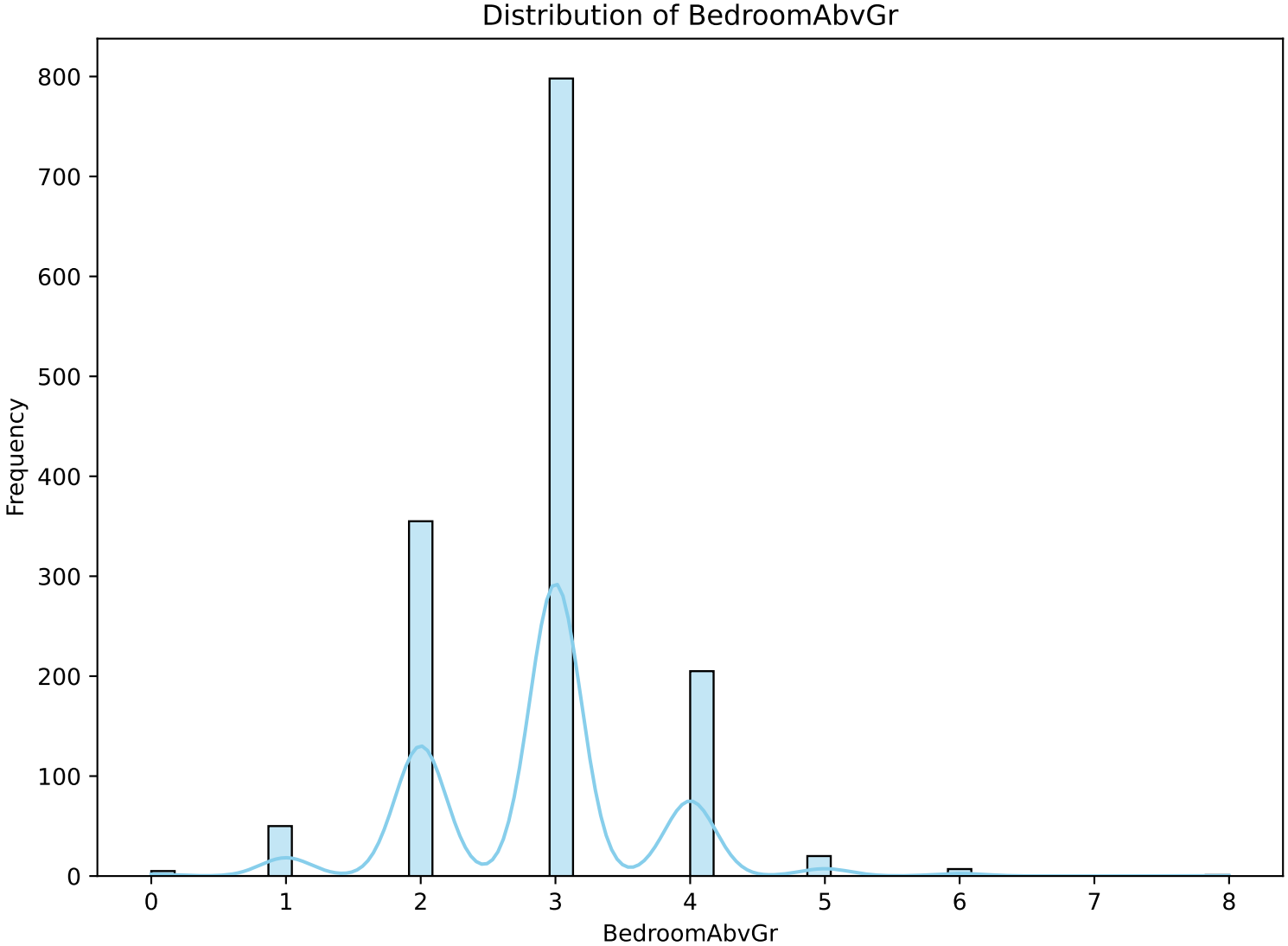

Distribution of KitchenAbvGr
Frequency
2500
2000
1500
1000
500
0
0.0
0.5
1.0
1.5
2.0
2.5
3.0
KitchenAbvGr

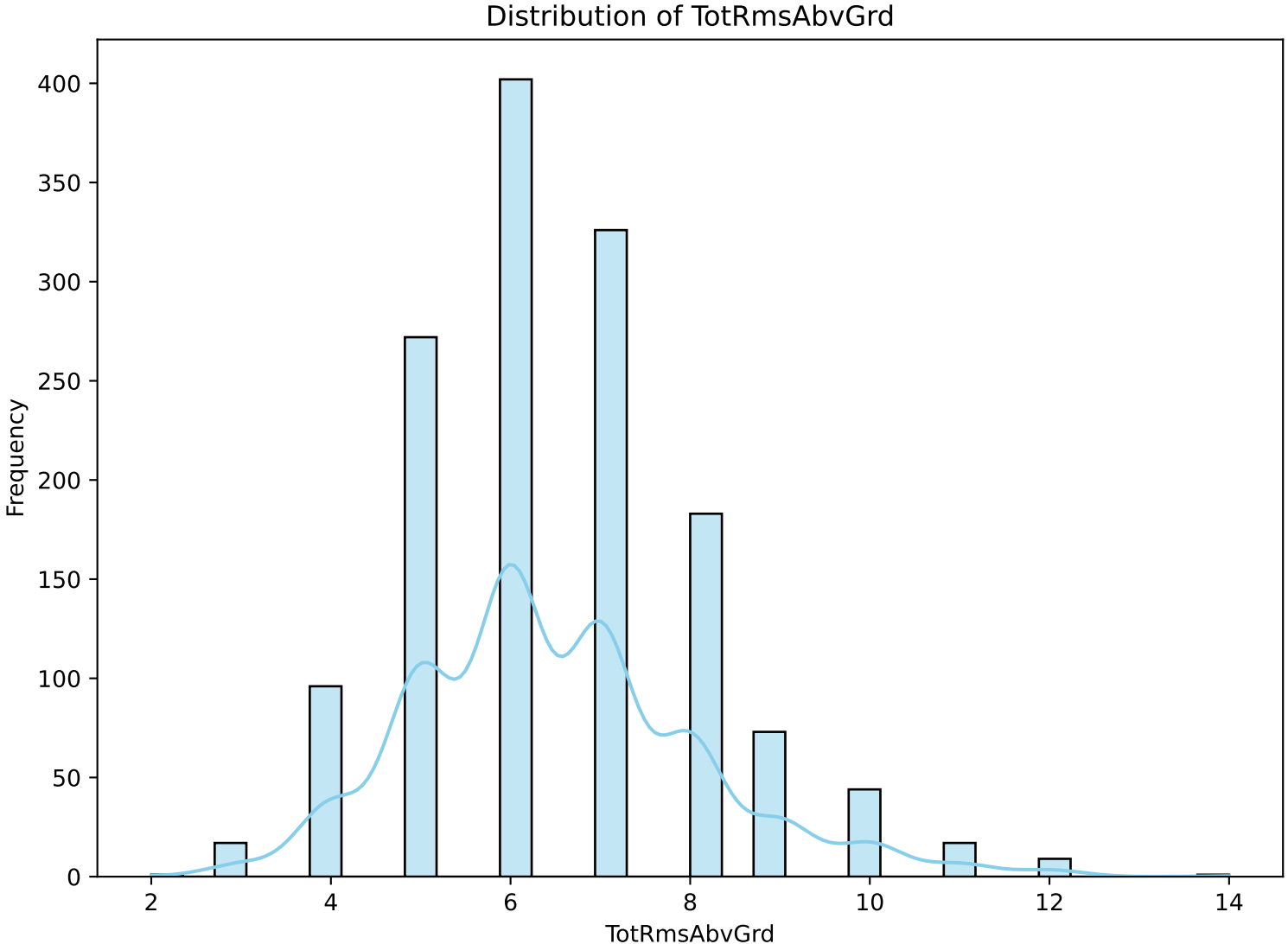

Distribution of BsmtHalfBath
Frequency
BsmtHalfBath
0
200
400
600
800
1000
1200
1400
1600
0.00
0.25
0.50
0.75
1.00
1.25
1.50
1.75
2.00

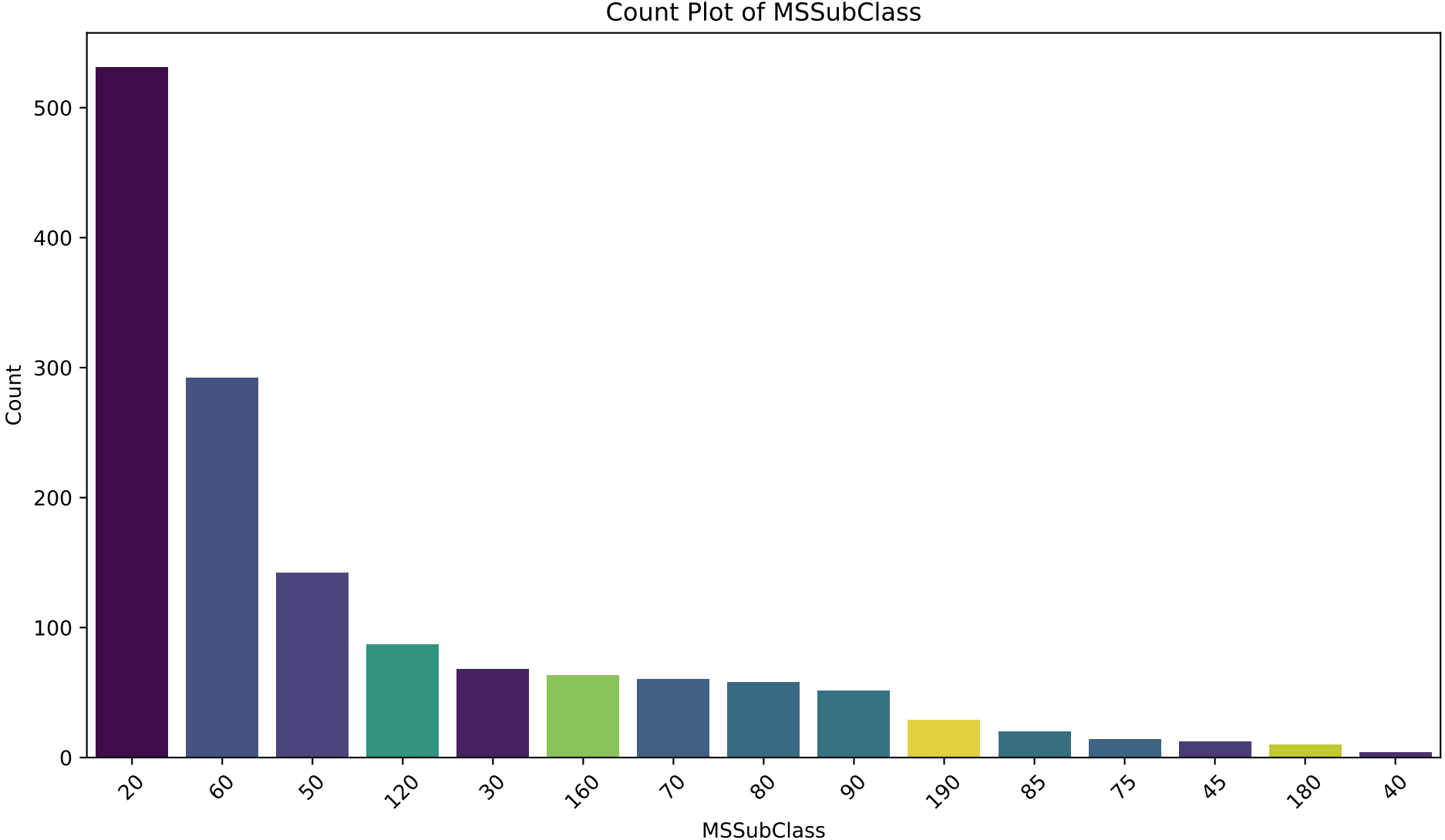

Distribution of FullBath
Frequency
FullBath
0
100
200
300
400
500
600
700
0.0
0.5
1.0
1.5
2.0
2.5
3.0

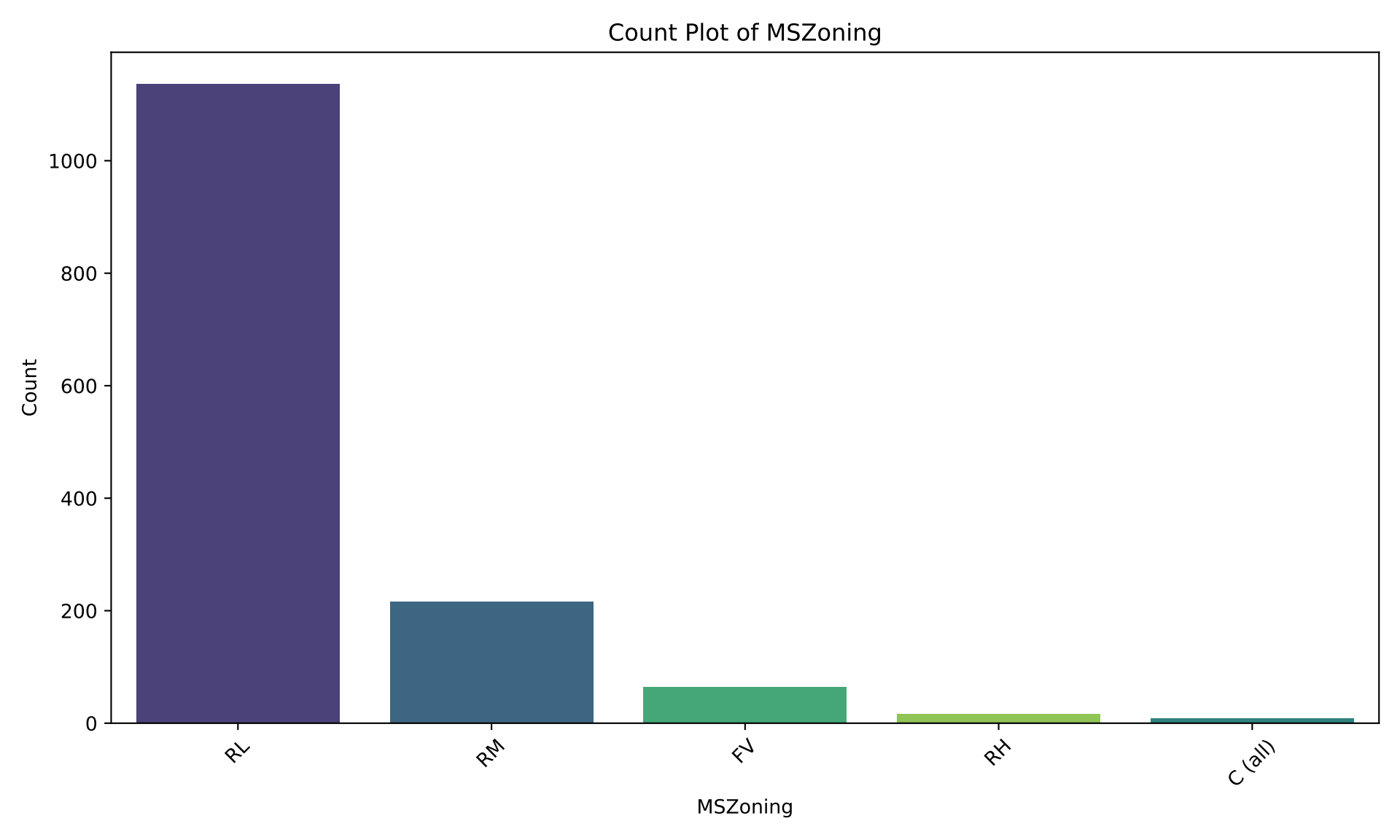

Distribution of HalfBath
Frequency
0
200
400
600
800
0.00
0.25
0.50
0.75
1.00
1.25
1.50
1.75
2.00
HalfBath

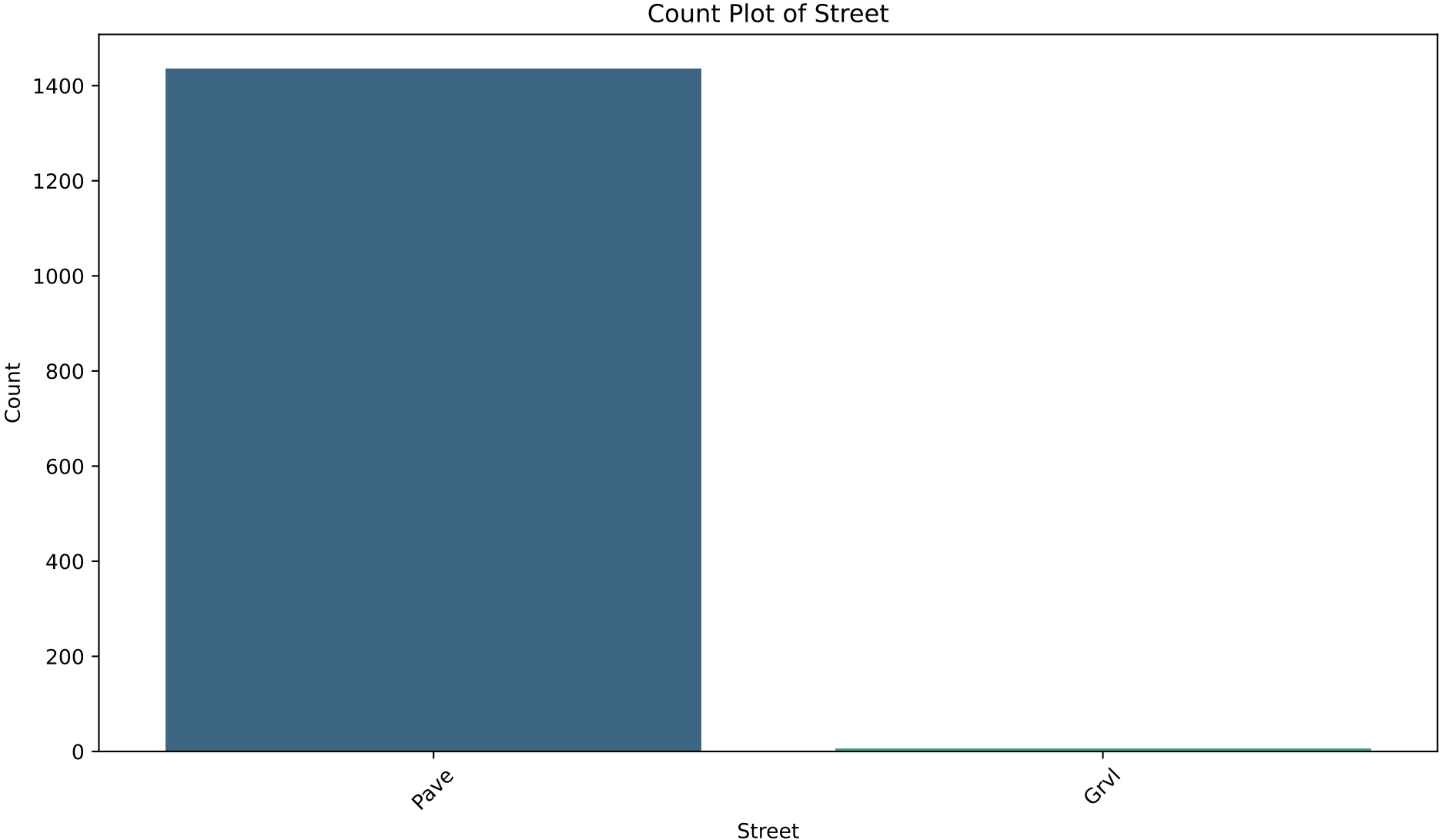

Distribution of BsmtFullBath
Frequency
BsmtFullBath
0
100
200
300
400
500
600
700
800
0.0
0.5
1.0
1.5
2.0
2.5
3.0

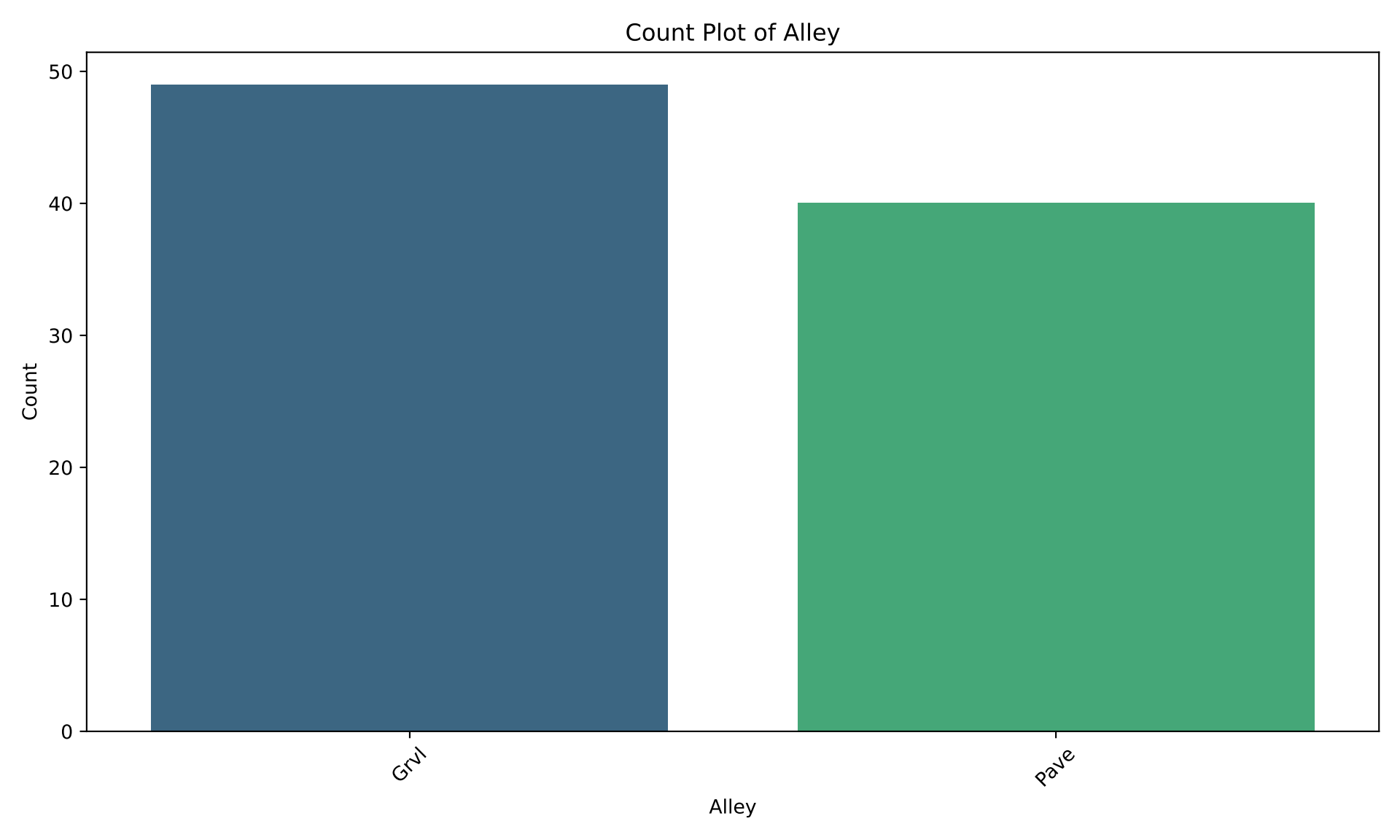

Distribution of BedroomAbvGr
Frequency
BedroomAbvGr
0
100
200
300
400
500
600
700
800
0
1
2
3
4
5
6
7
8

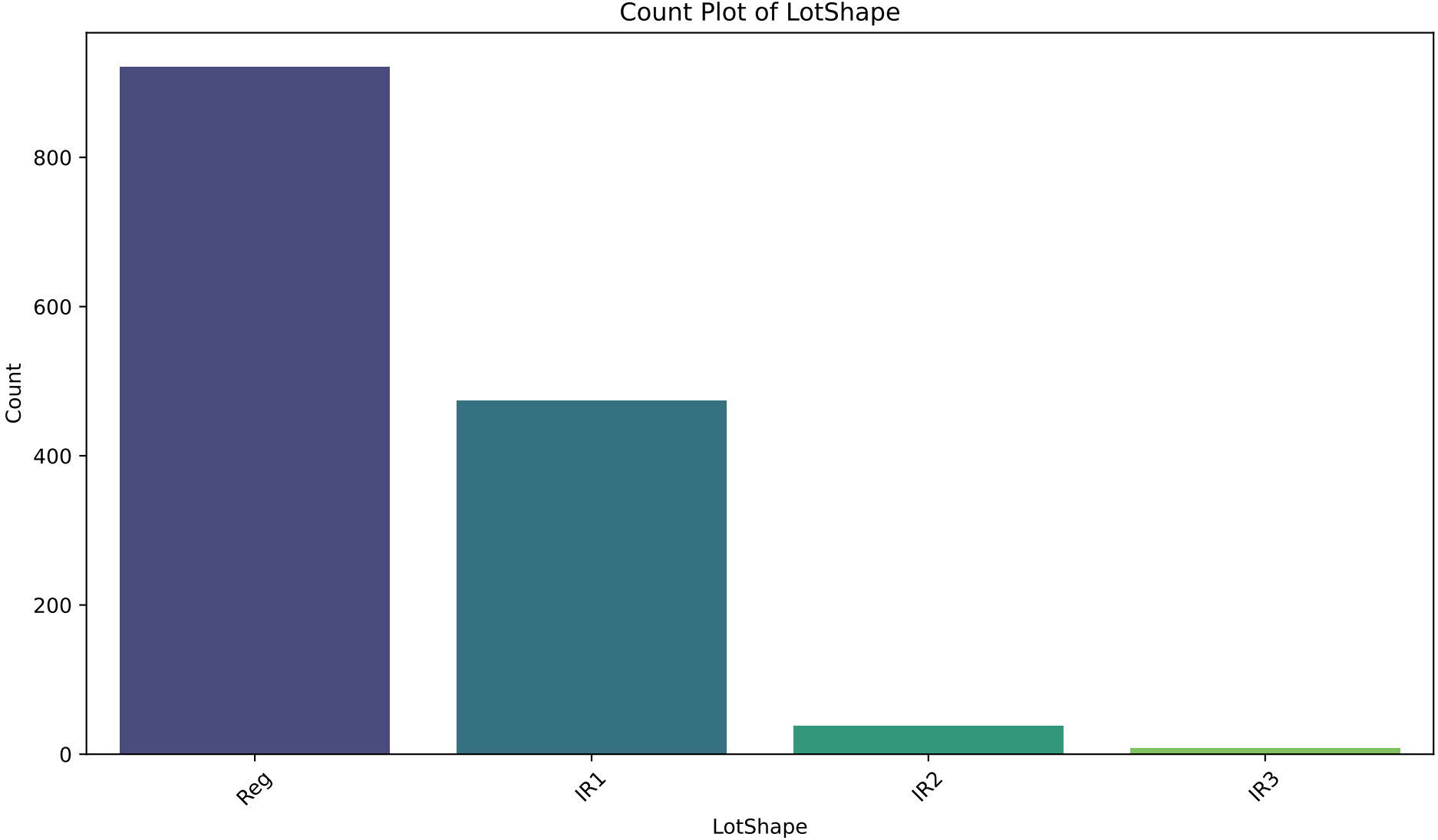

Distribution of TotRmsAbvGrd
Frequency
TotRmsAbvGrd
0
50
100
150
200
250
300
350
400
2
4
6
8
10
12
14

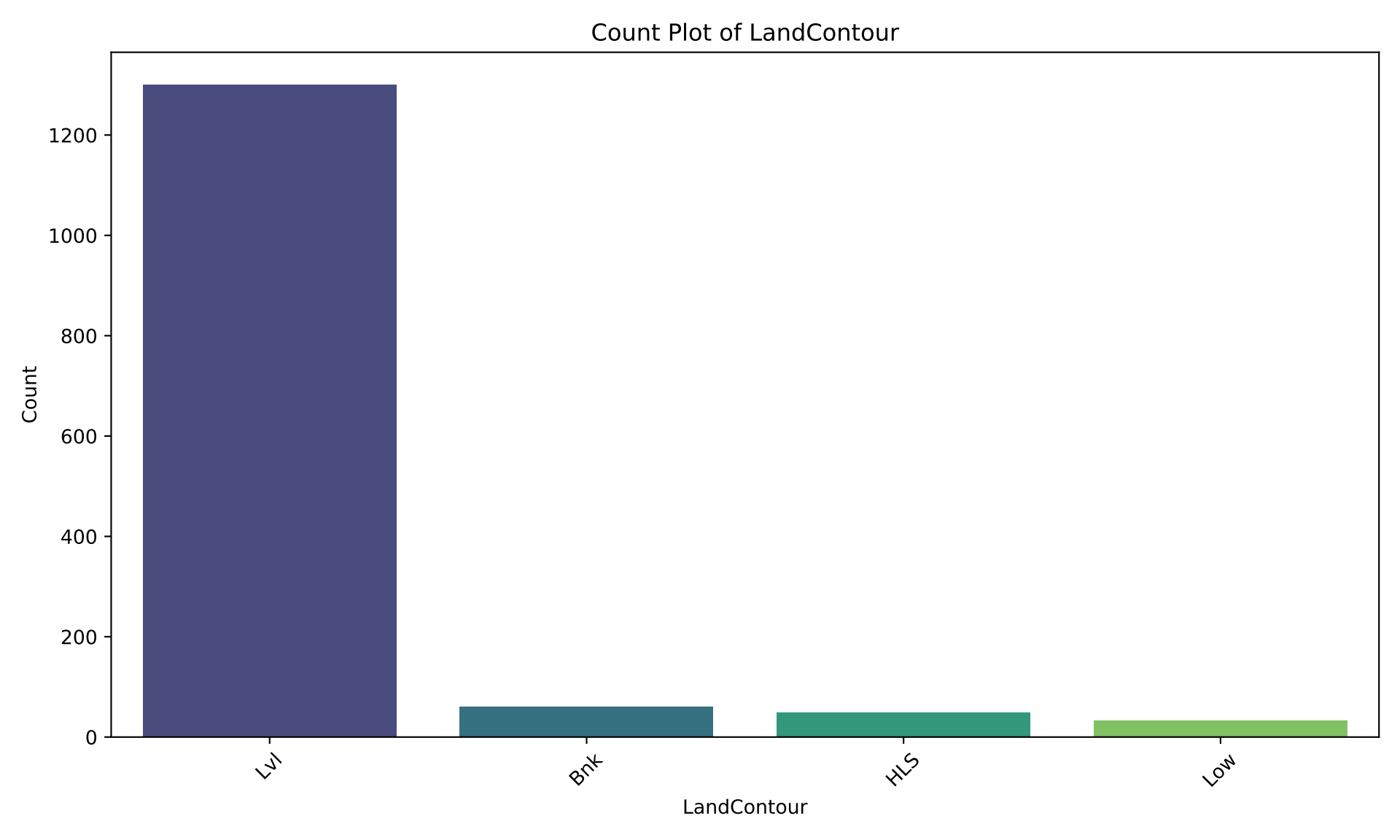

Count Plot of MSSubClass
Count
0
100
200
300
400
500
20
60
50
120
30
160
70
80
90
190
85
75
45
180
40
MSSubClass

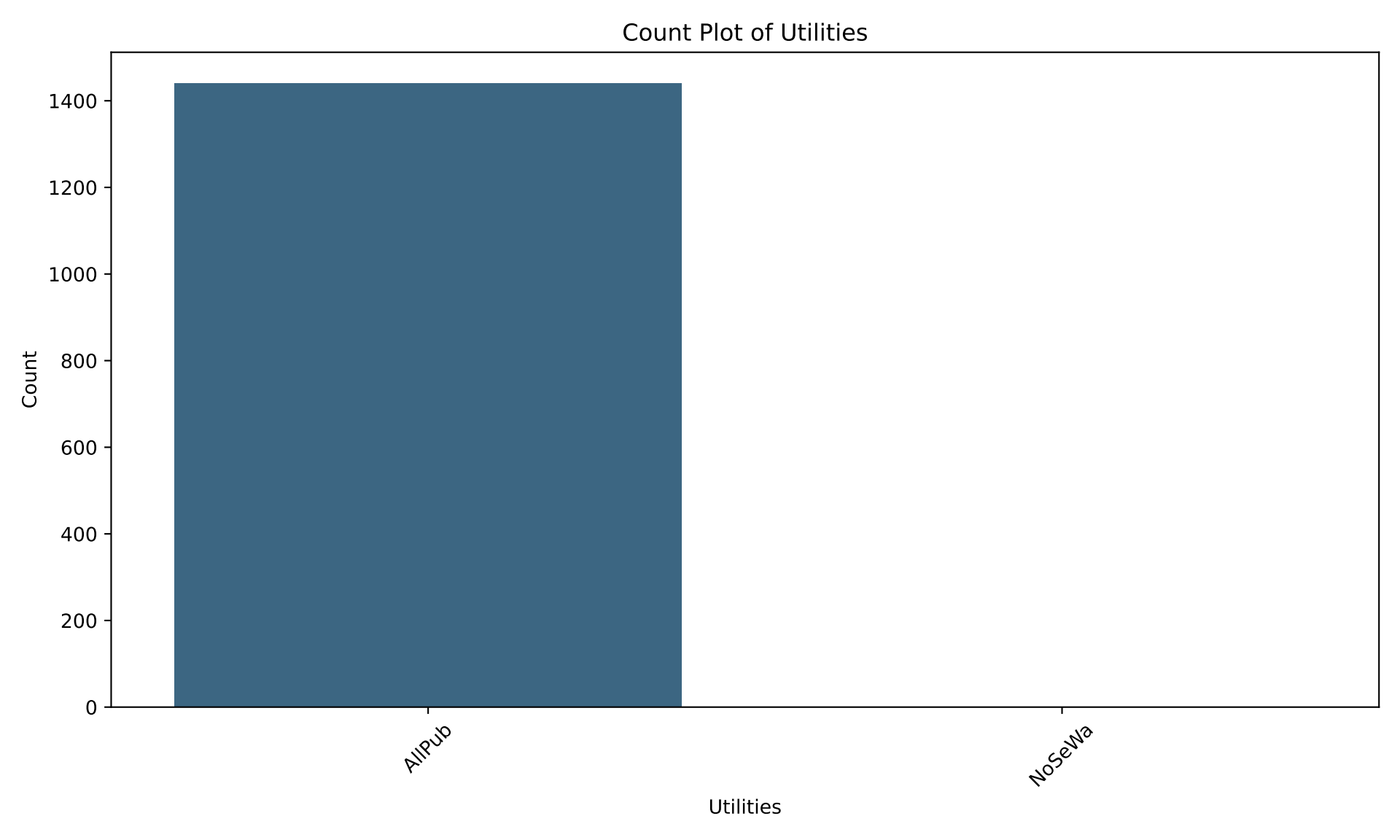

Count Plot of MSZoning
Count
0
200
400
600
800
1000
RL
RM
FV
RH
C (all)
MSZoning

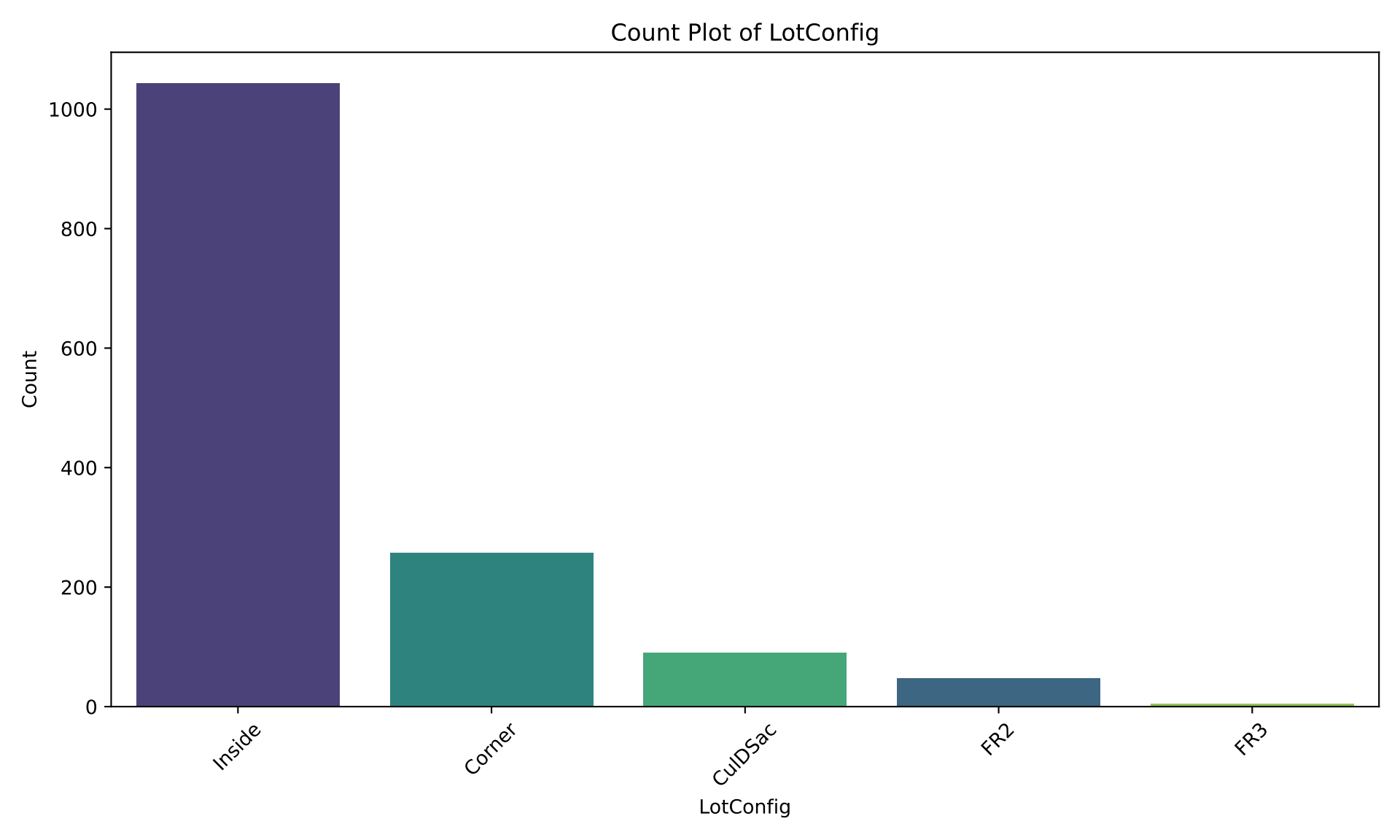

Count Plot of Street
1400
1200
1000
800
600
400
200
0
Count
Pave
Grvl
Street

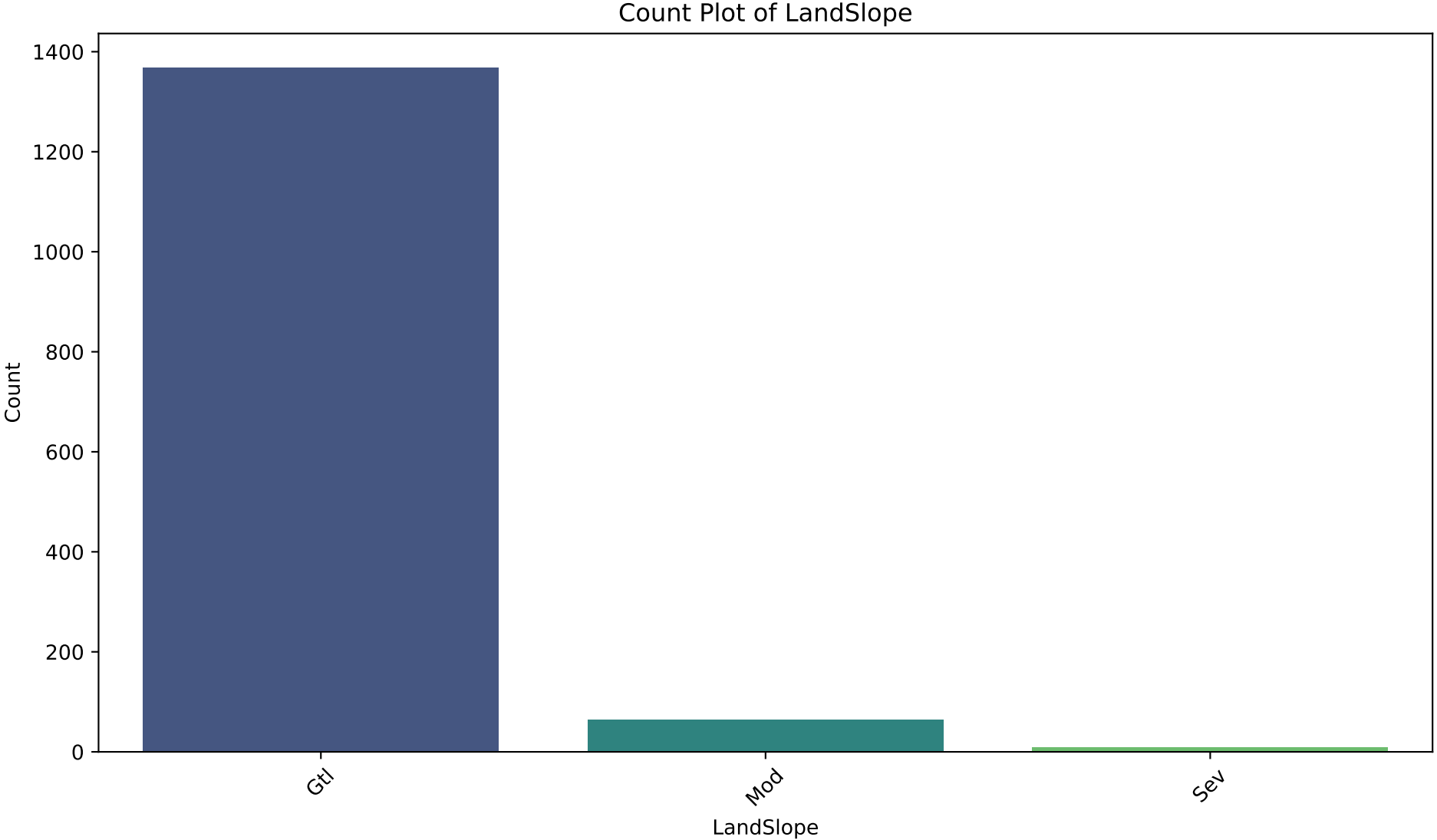

Count Plot of Alley
Count
0
10
20
30
40
50
Grvl
Pave
Alley

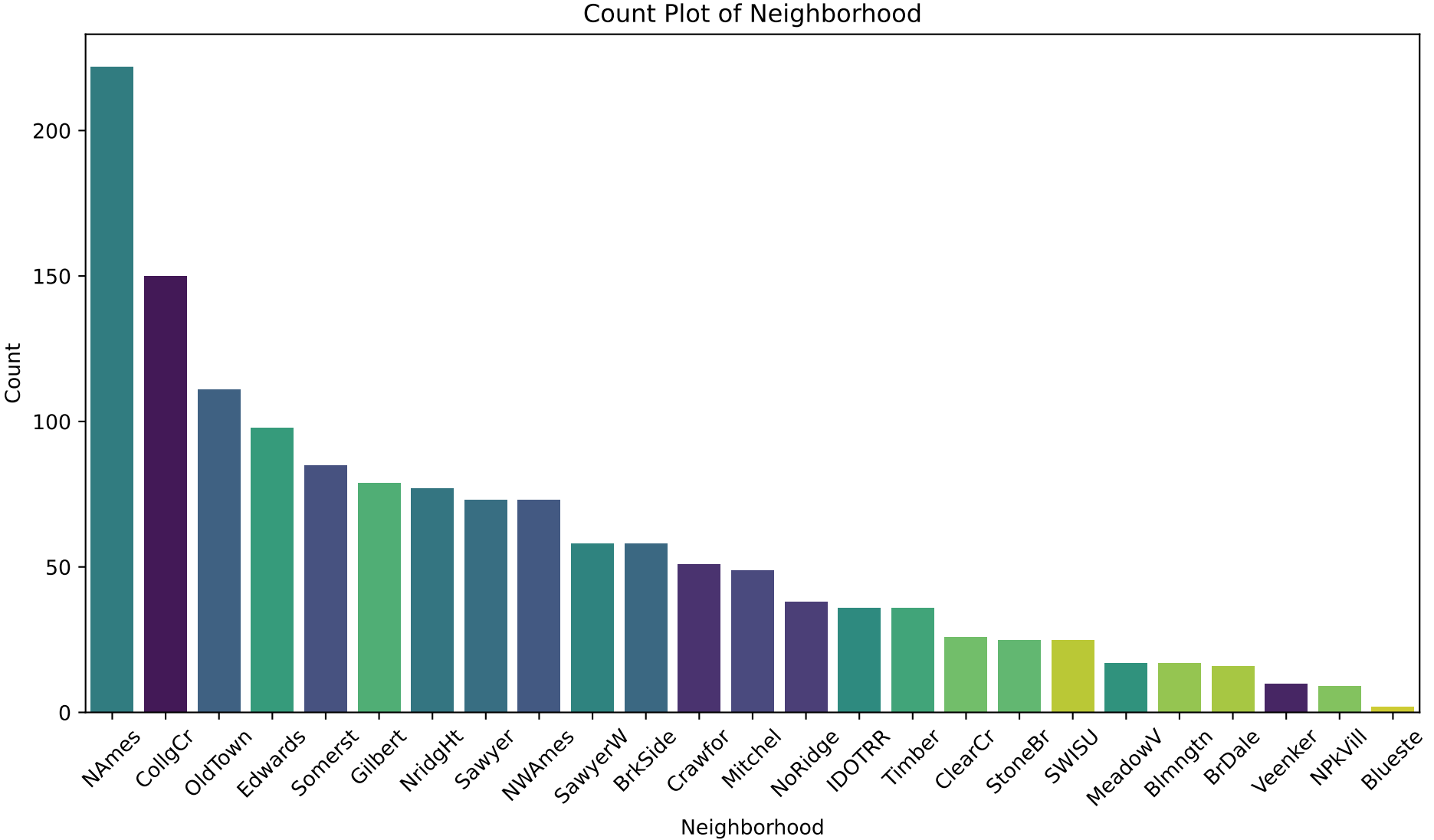

Count Plot of LotShape
Count
0
200
400
600
800
Reg
IR1
IR2
IR3
LotShape

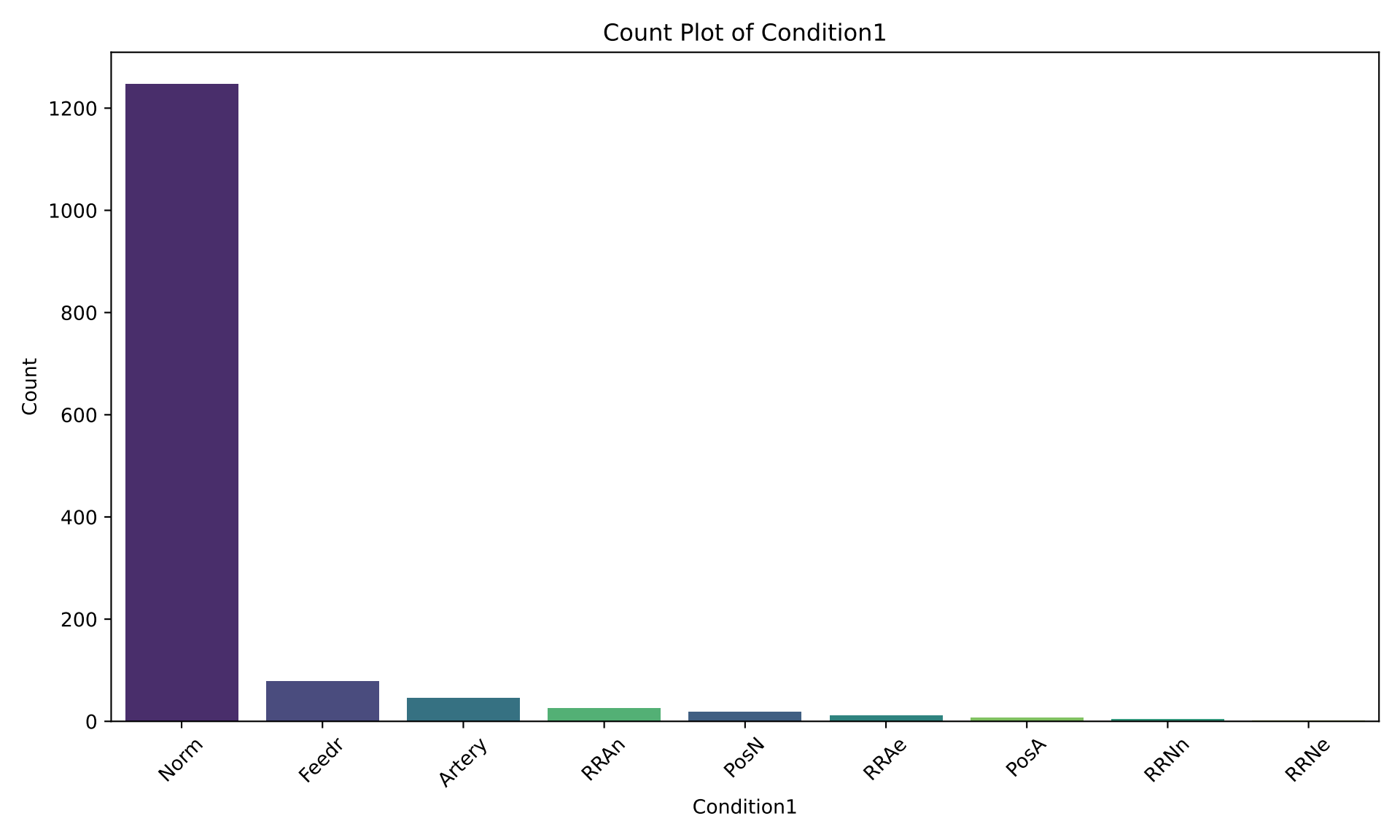

Count Plot of LandContour
Count
0
200
400
600
800
1000
1200
Lvl
Bnk
HLS
Low
LandContour

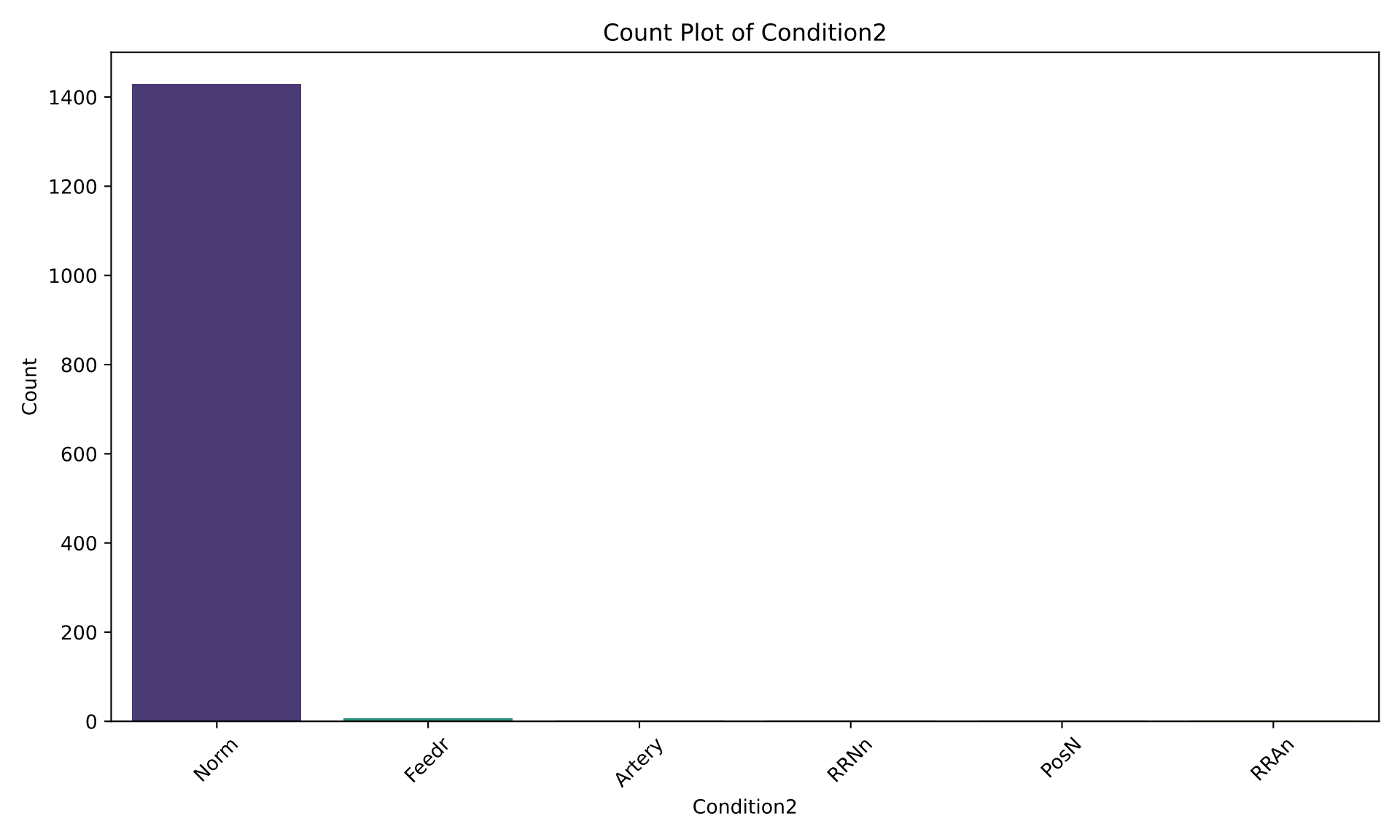

Count Plot of Utilities
Count
0
200
400
600
800
1000
1200
1400
AllPub
NoSeWa
Utilities

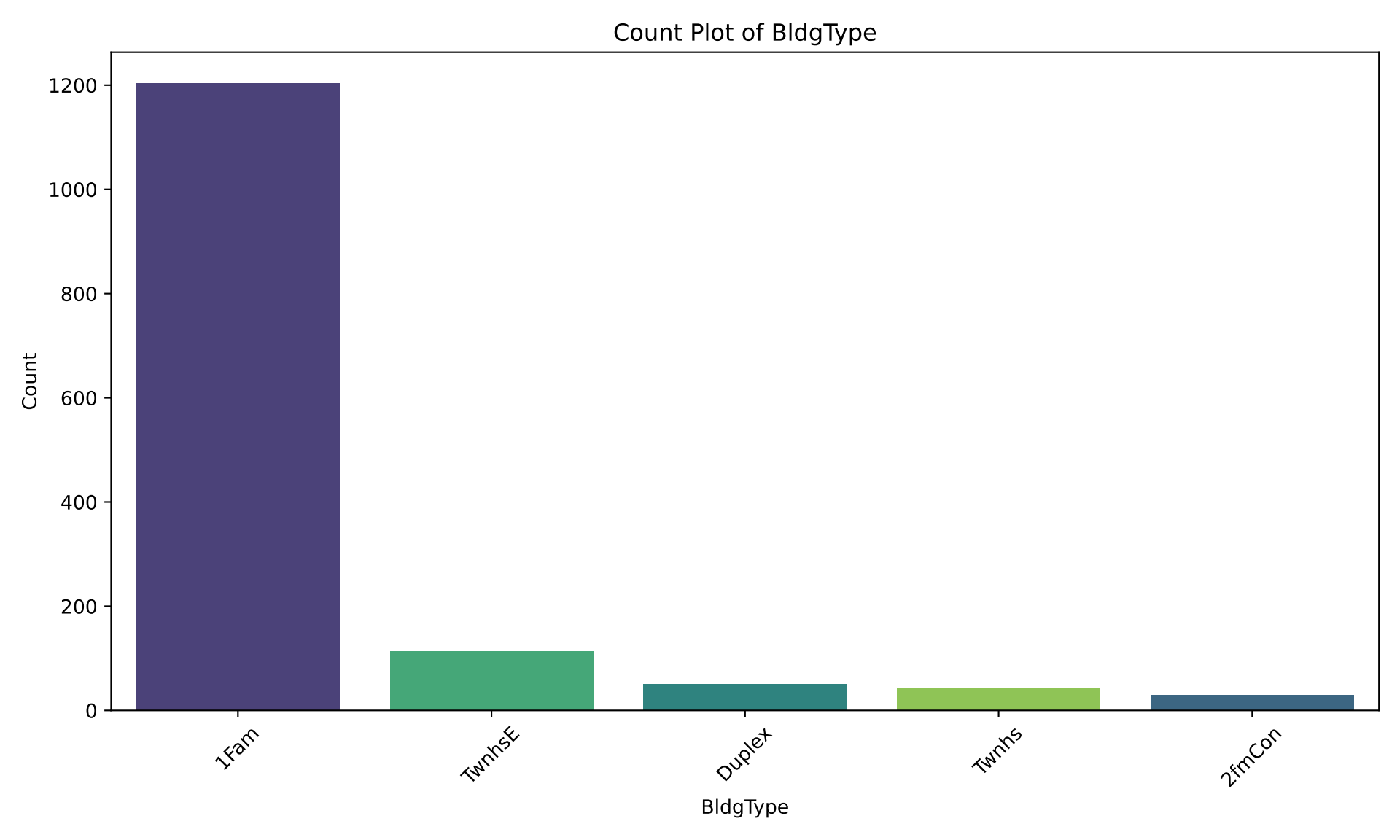

Count Plot of LotConfig
Count
1000
800
600
400
200
0
Inside
Corner
CulDSac
FR2
FR3
LotConfig

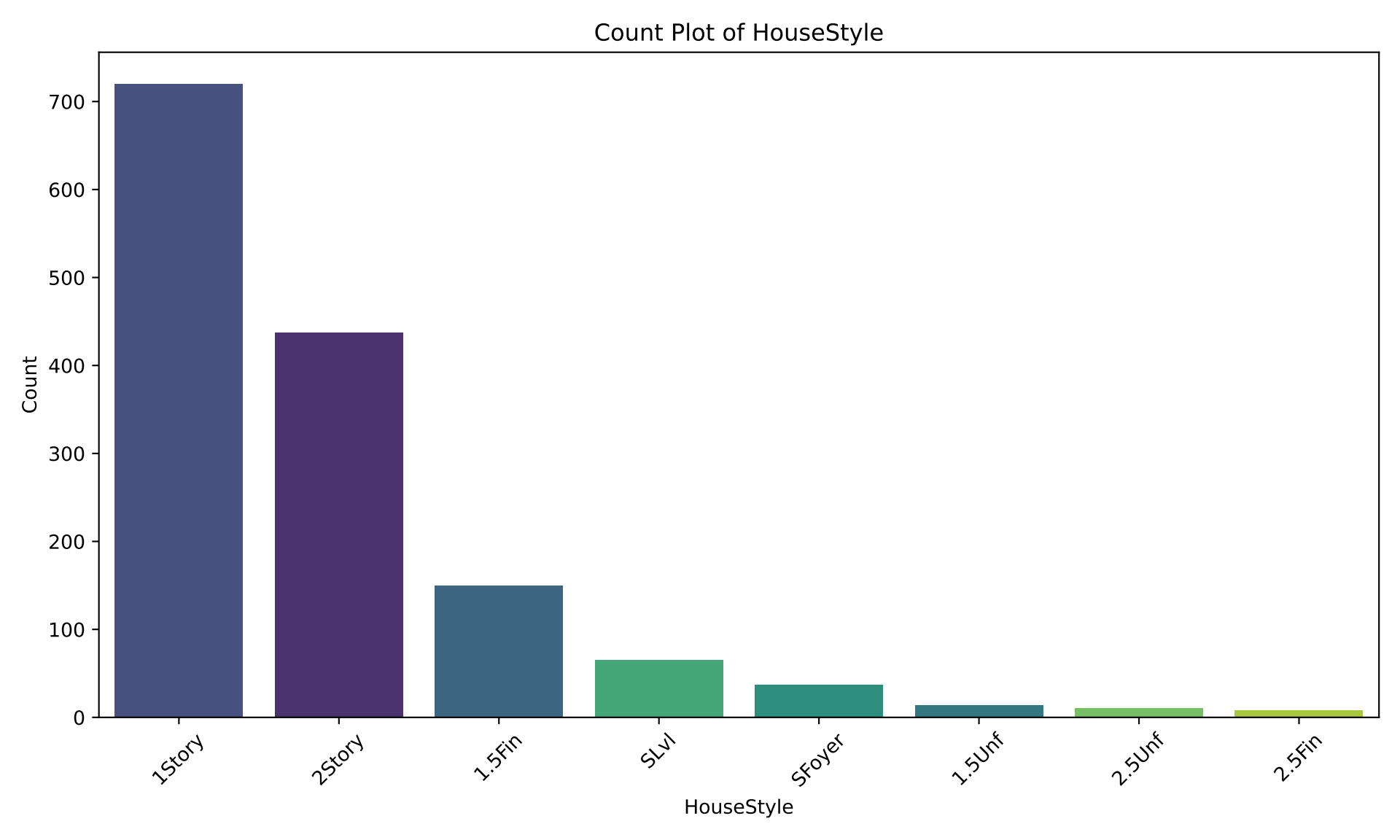

Count Plot of LandSlope
1400
1200
1000
800
600
400
200
0
Count
Gtl
Mod
Sev
LandSlope

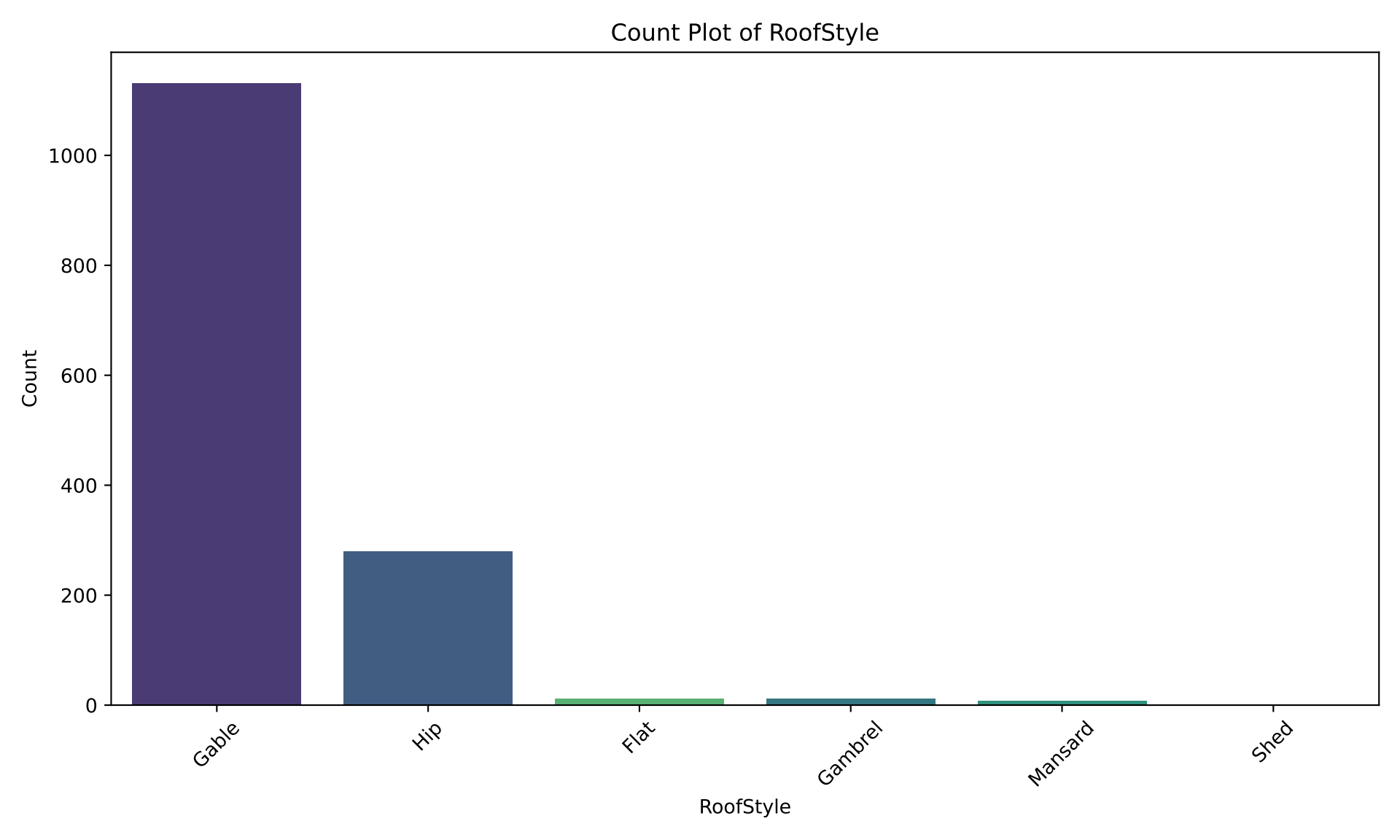

Count Plot of Neighborhood
Count
0
50
100
150
200
NAmes
CollgCr
OldTown
Edwards
Somerst
Gilbert
NridgHt
Sawyer
NWAmes
SawyerW
BrkSide
Crawfor
Mitchel
NoRidge
IDOTRR
Timber
ClearCr
StoneBr
SWISU
MeadowV
Blmngtn
BrDale
Veenker
NPkVill
Blueste
Neighborhood

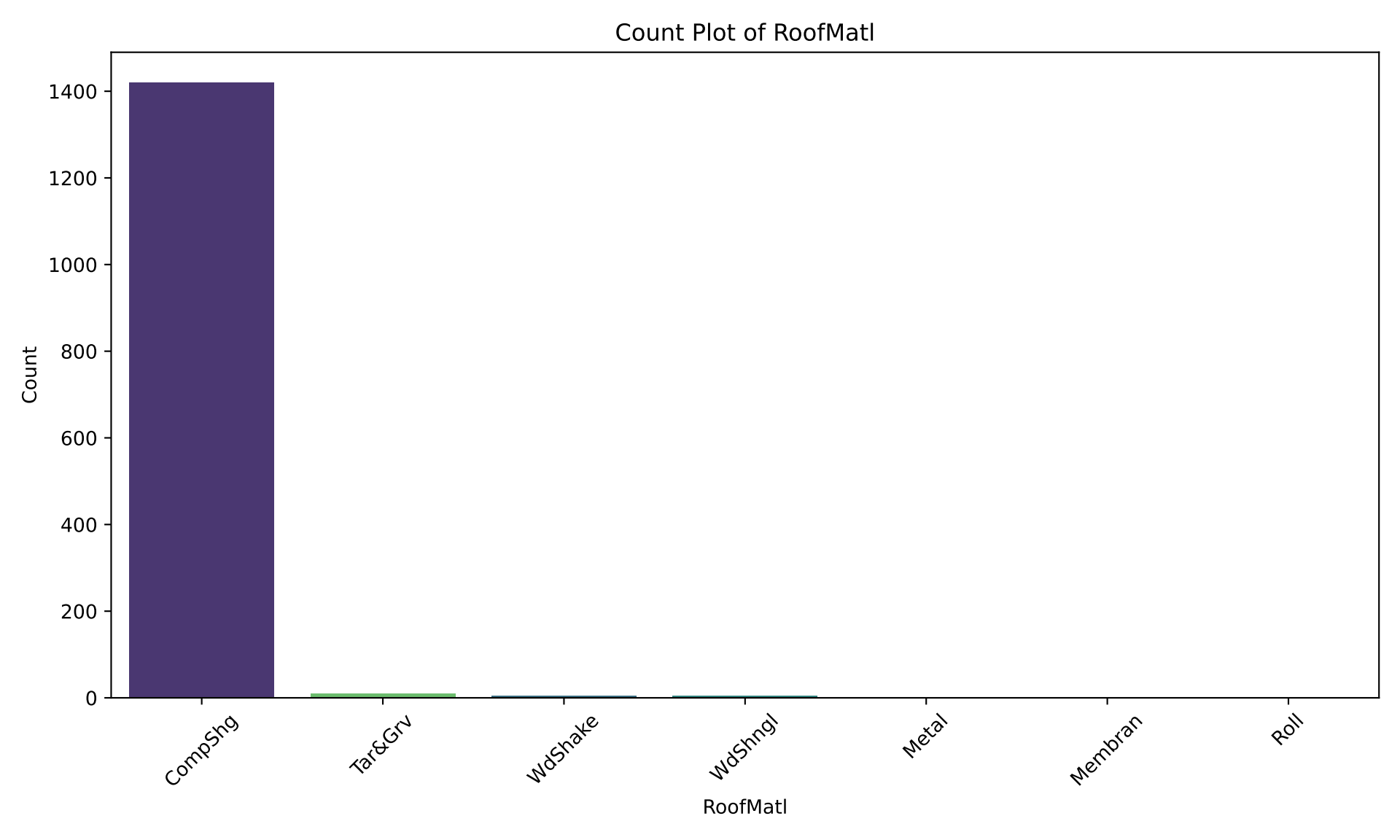

Count Plot of Condition1
Count
0
200
400
600
800
1000
1200
Norm
Feedr
Artery
RRAn
PosN
RRAe
PosA
RRNn
RRNe
Condition1

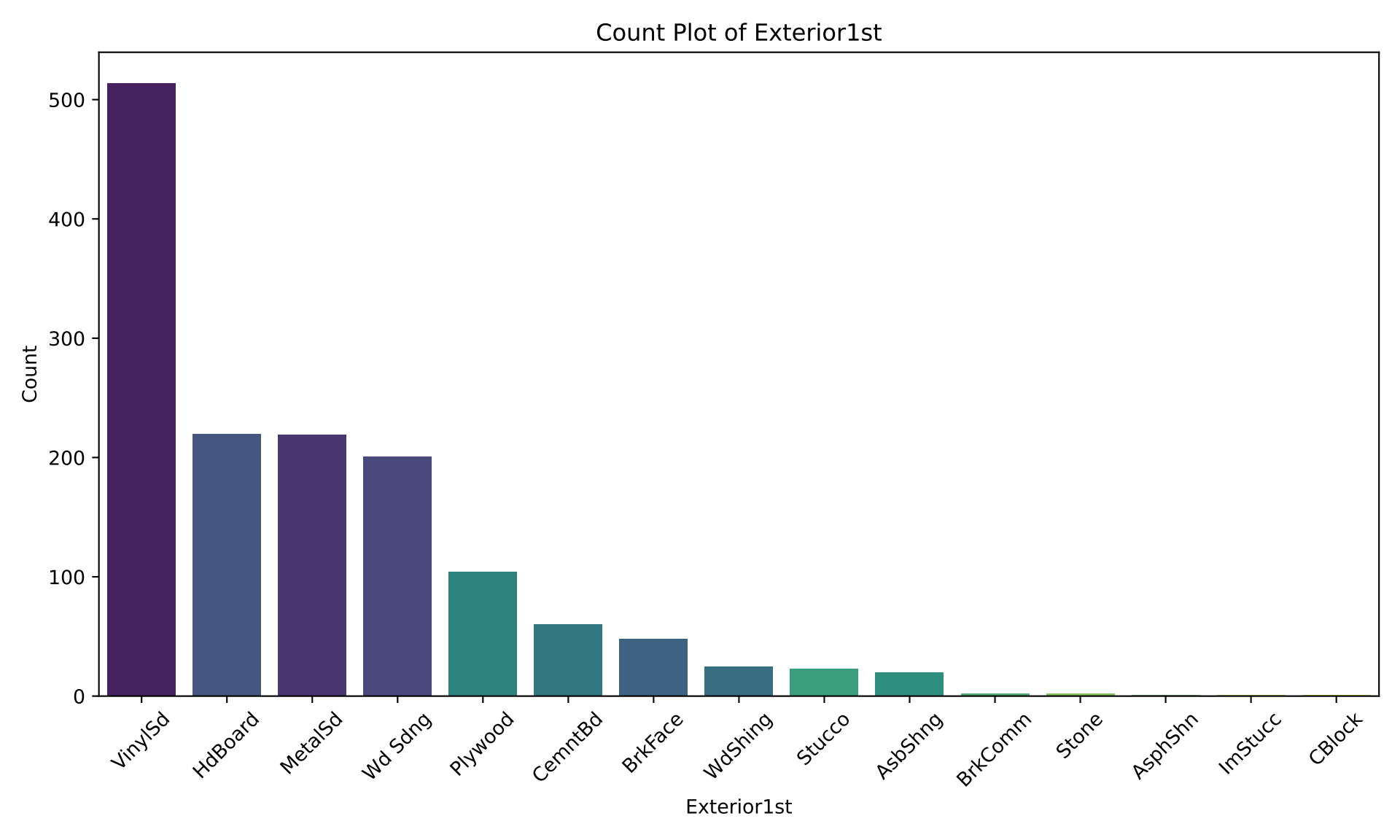

Count Plot of Condition2
Count
1400
1200
1000
800
600
400
200
0
Norm
Feedr
Artery
RRNn
PosN
RRAn
Condition2

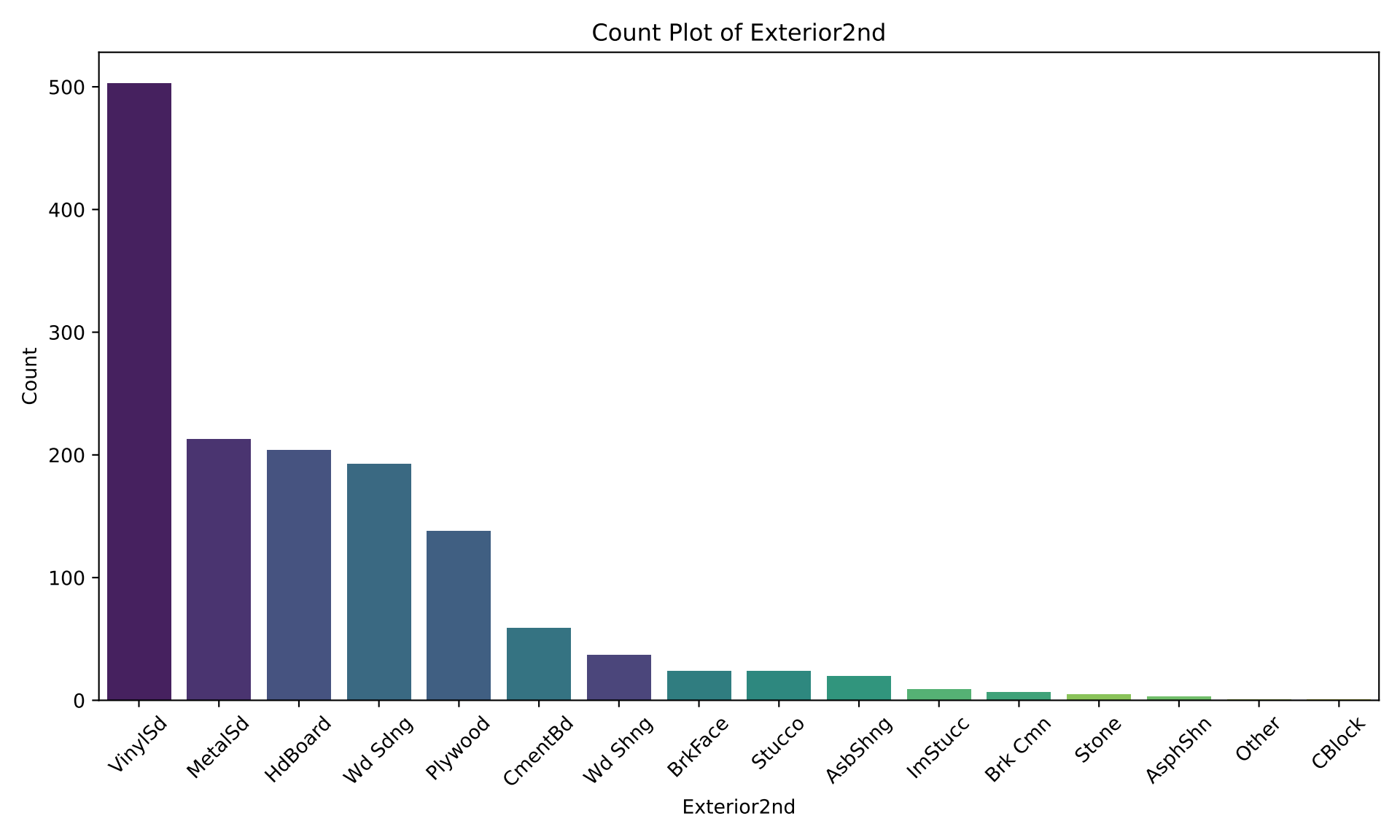

Count Plot of BldgType
Count
0
200
400
600
800
1000
1200
1Fam
TwnhsE
Duplex
Twnhs
2fmCon
BldgType

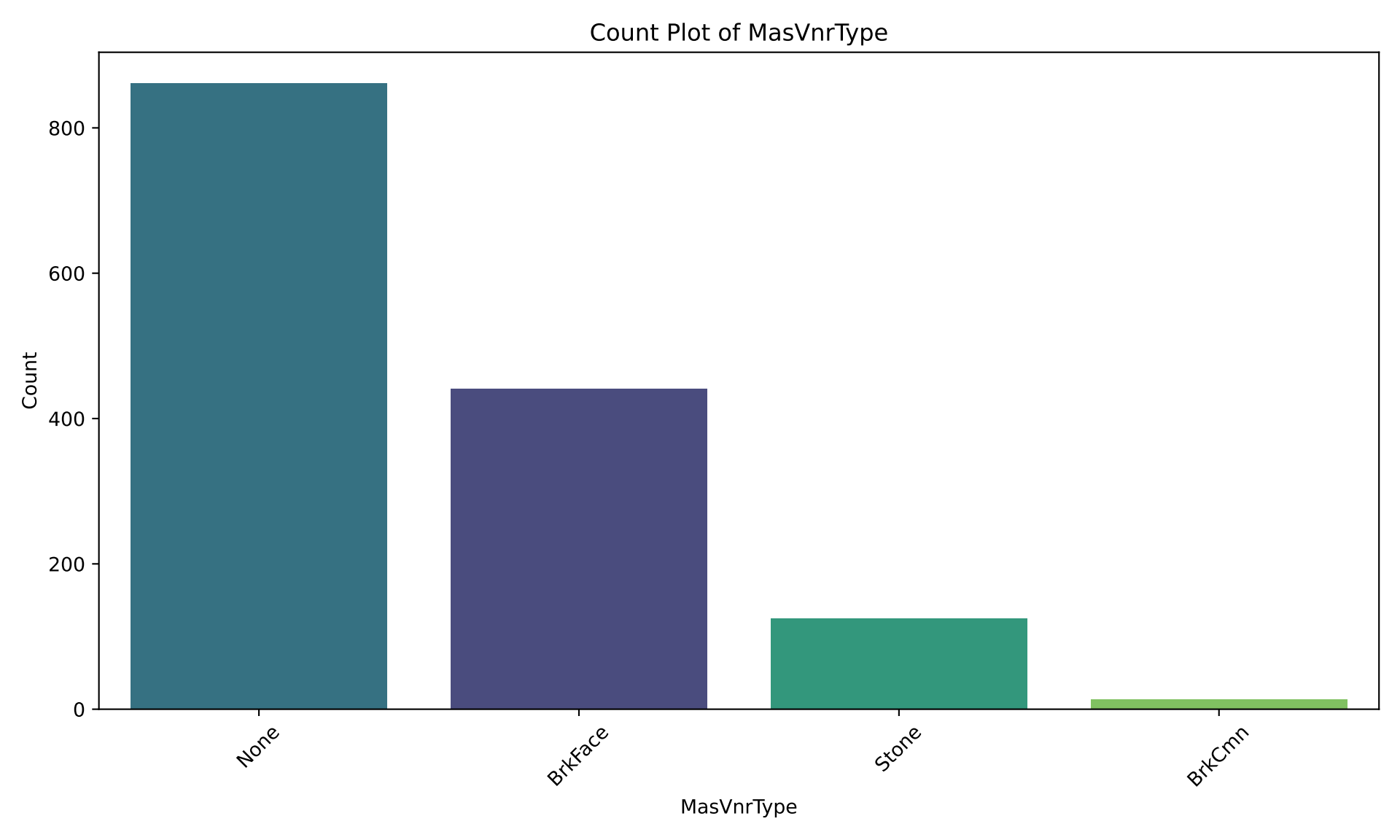

Count Plot of HouseStyle
Count
0
100
200
300
400
500
600
700
1Story
2Story
1.5Fin
SLvl
SFoyer
1.5Unf
2.5Unf
2.5Fin
HouseStyle

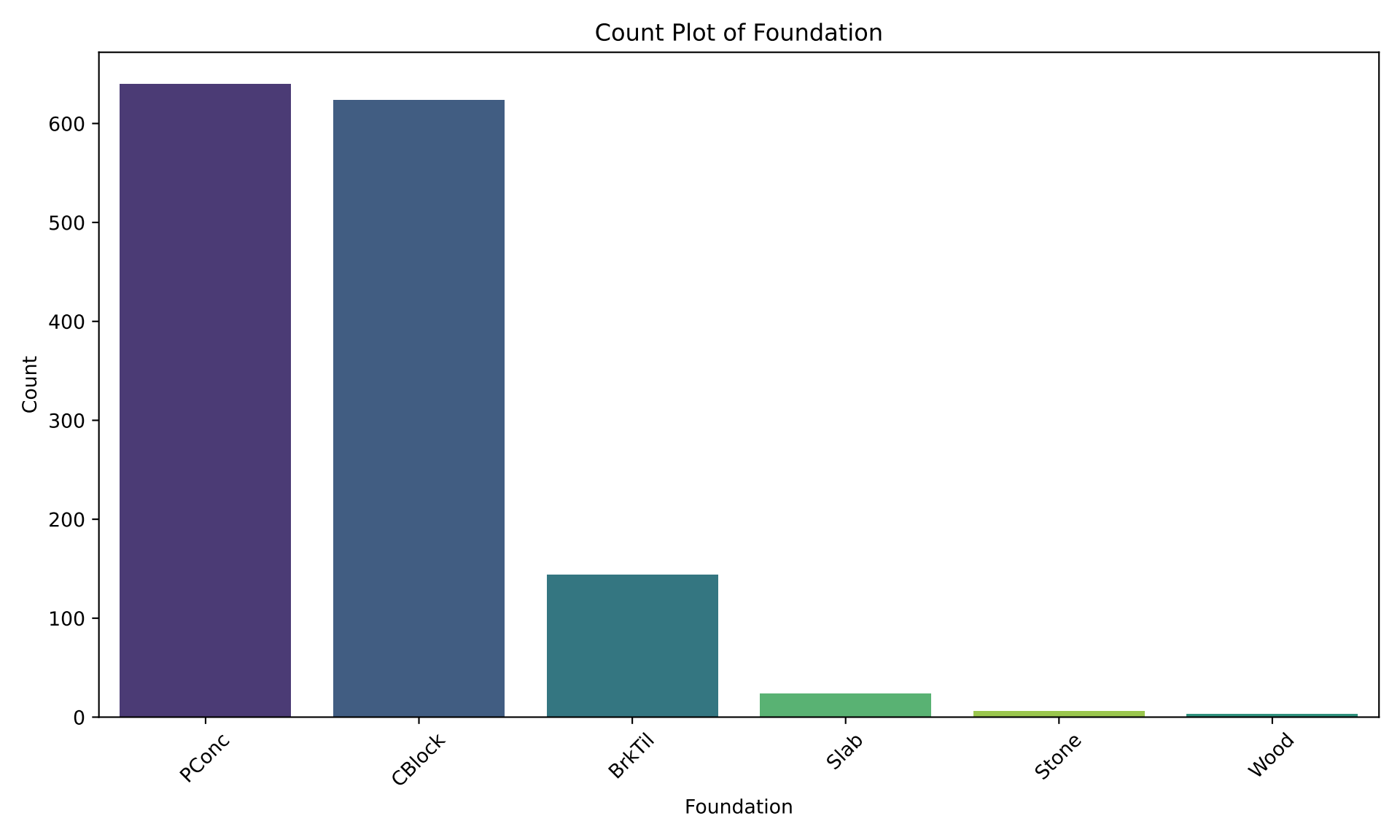

Count Plot of RoofStyle
Count
0
200
400
600
800
1000
Gable
Hip
Flat
Gambrel
Mansard
Shed
RoofStyle

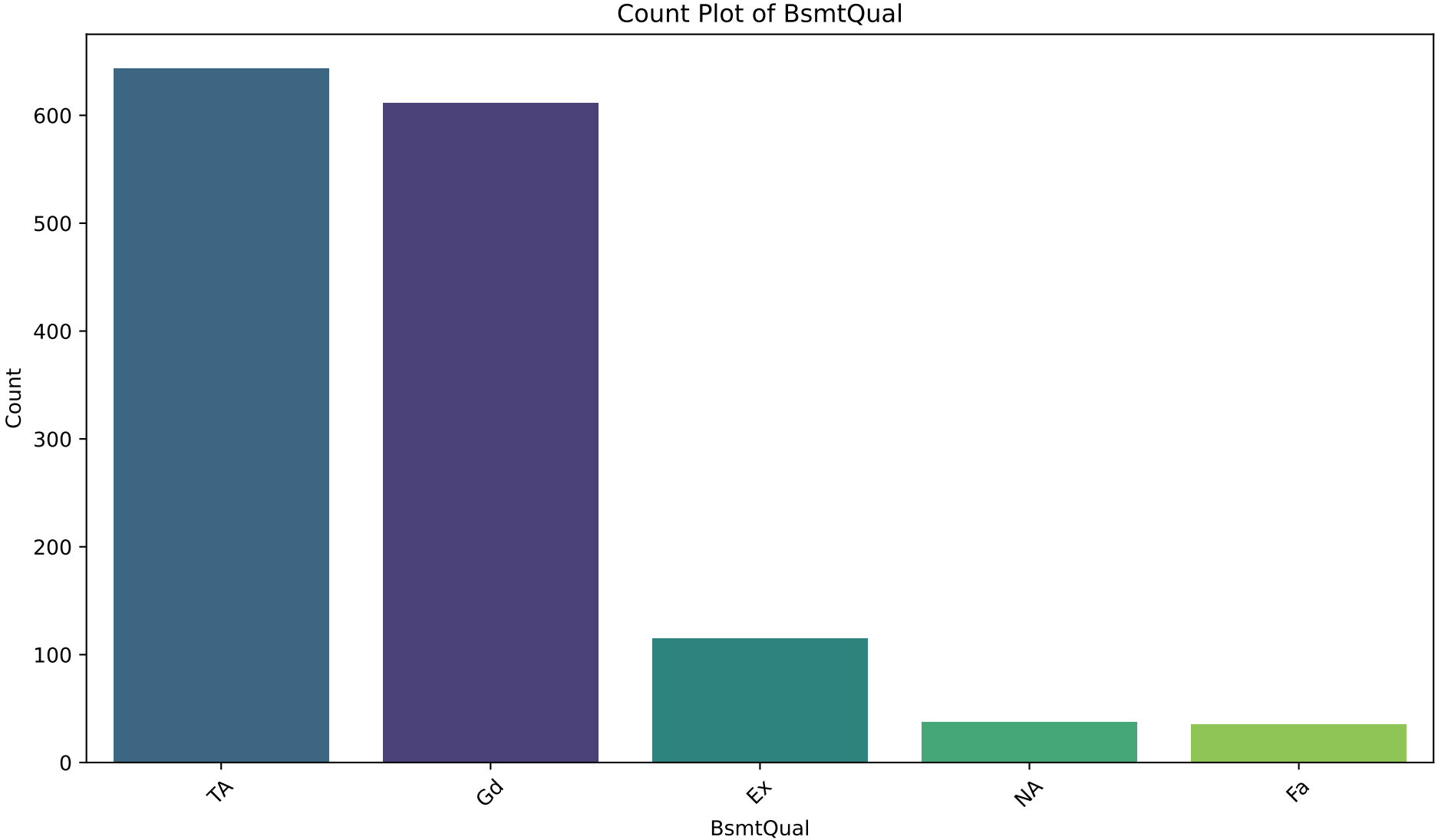

Count Plot of RoofMatl
Count
1400
1200
1000
800
600
400
200
0
CompShg
Tar&Grv
WdShake
WdShngl
Metal
Membran
Roll
RoofMatl

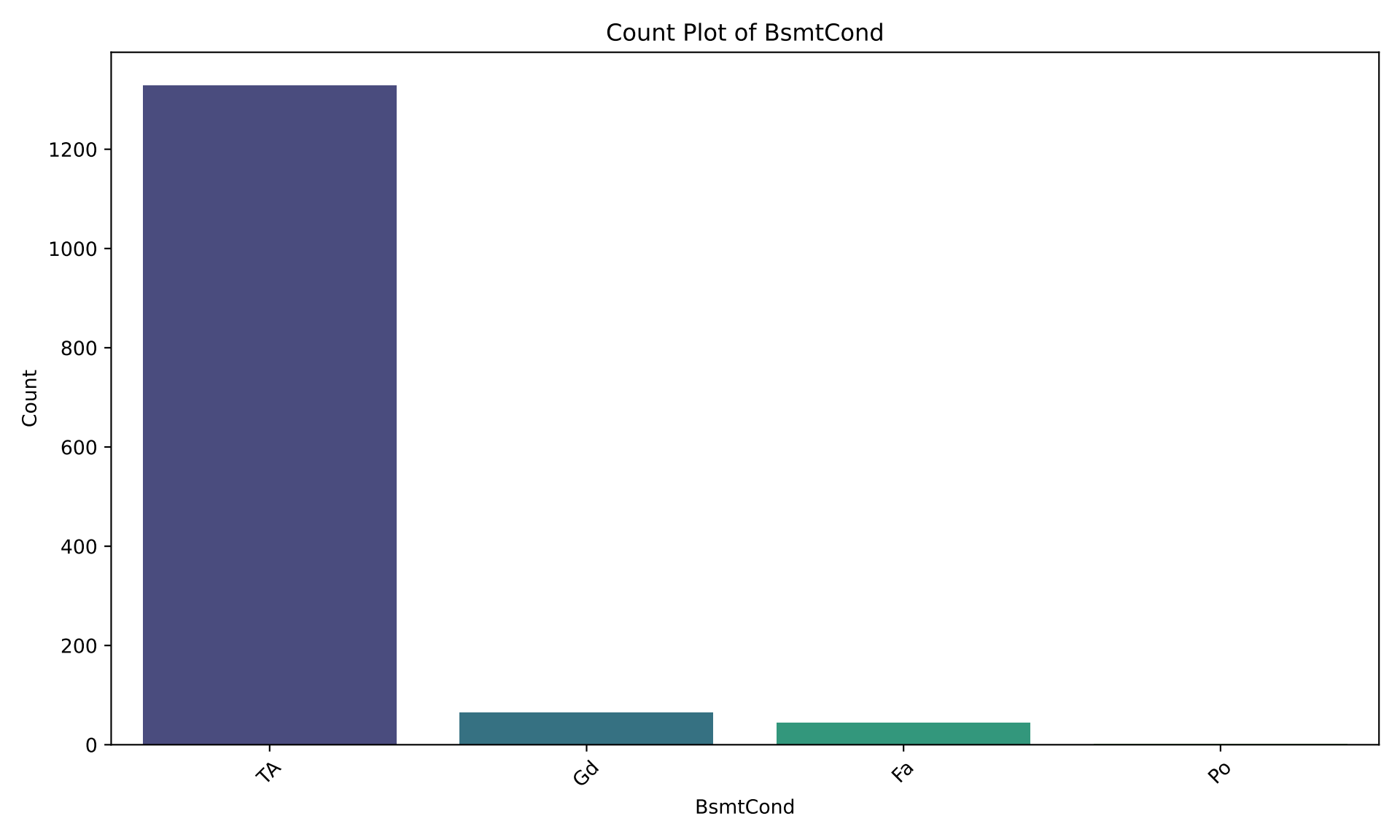

Count Plot of Exterior1st
Count
0
100
200
300
400
500
VinylSd
HdBoard
MetalSd
Wd Sdng
Plywood
CemntBd
BrkFace
WdShing
Stucco
AsbShng
BrkComm
Stone
AsphShn
ImStucc
CBlock
Exterior1st

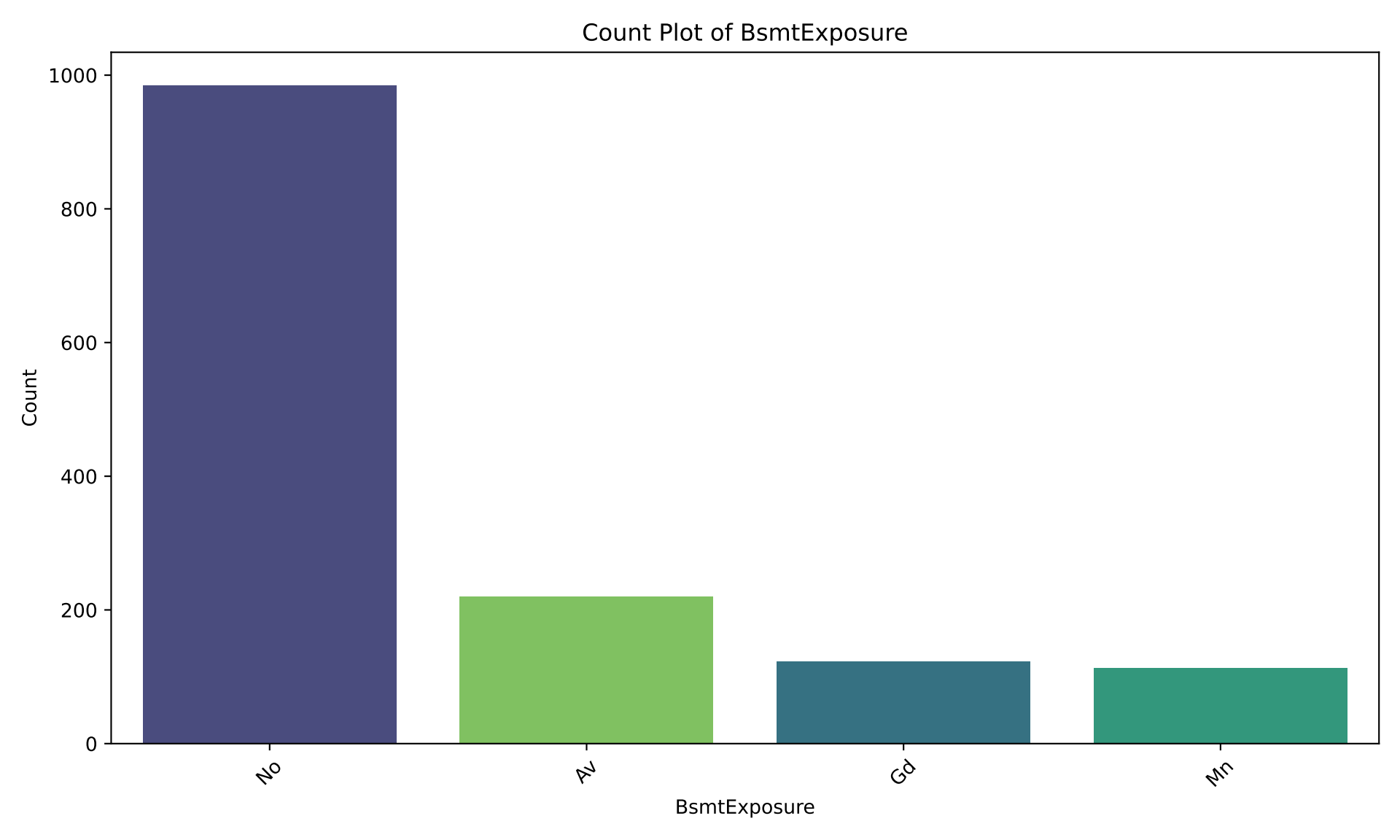

Count Plot of Exterior2nd
Count
0
100
200
300
400
500
VinylSd
MetalSd
HdBoard
Wd Sdng
Plywood
CmentBd
Wd Shng
BrkFace
Stucco
AsbShng
ImStucc
Brk Cmn
Stone
AsphShn
Other
CBlock
Exterior2nd

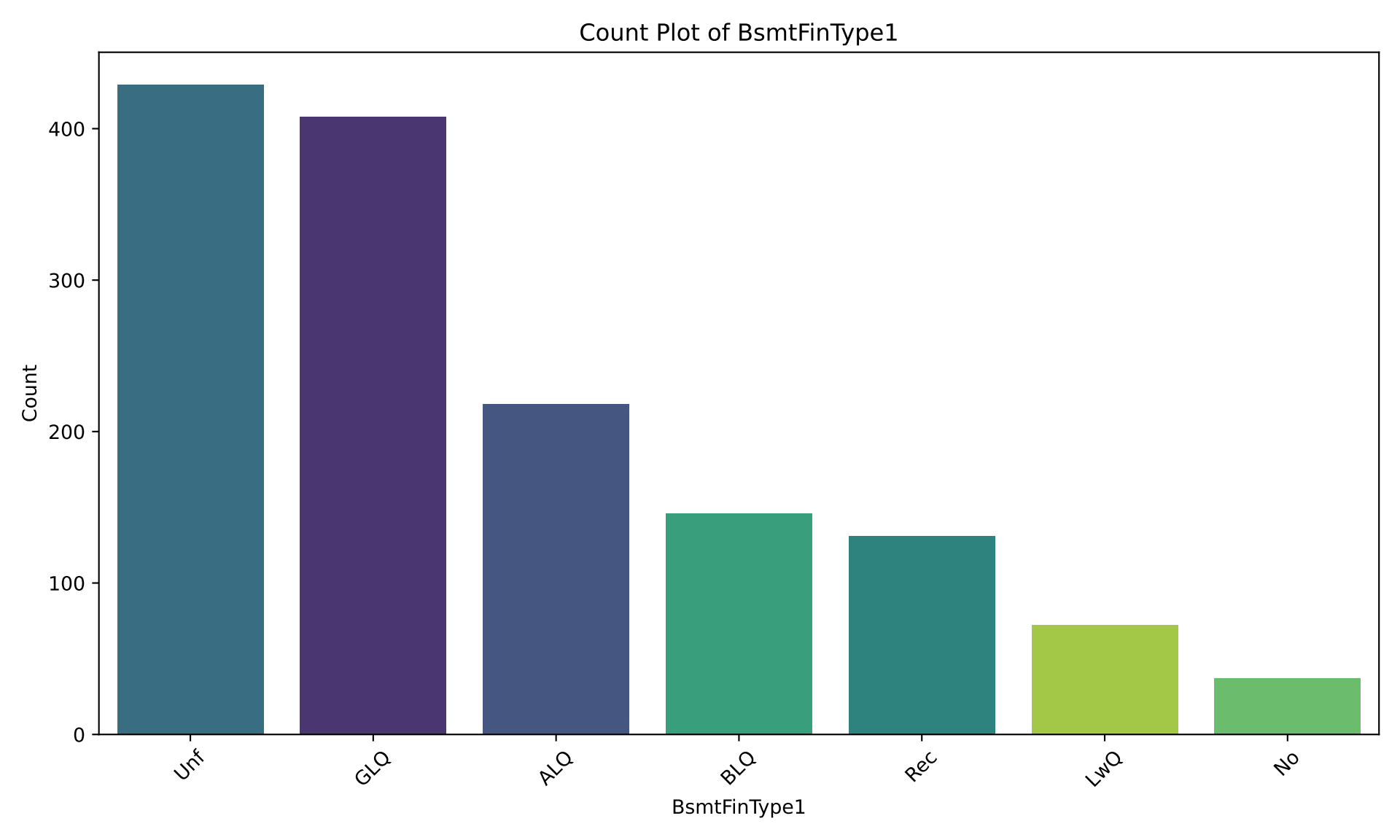

Count Plot of MasVnrType
Count
0
200
400
600
800
None
BrkFace
Stone
BrkCmn
MasVnrType

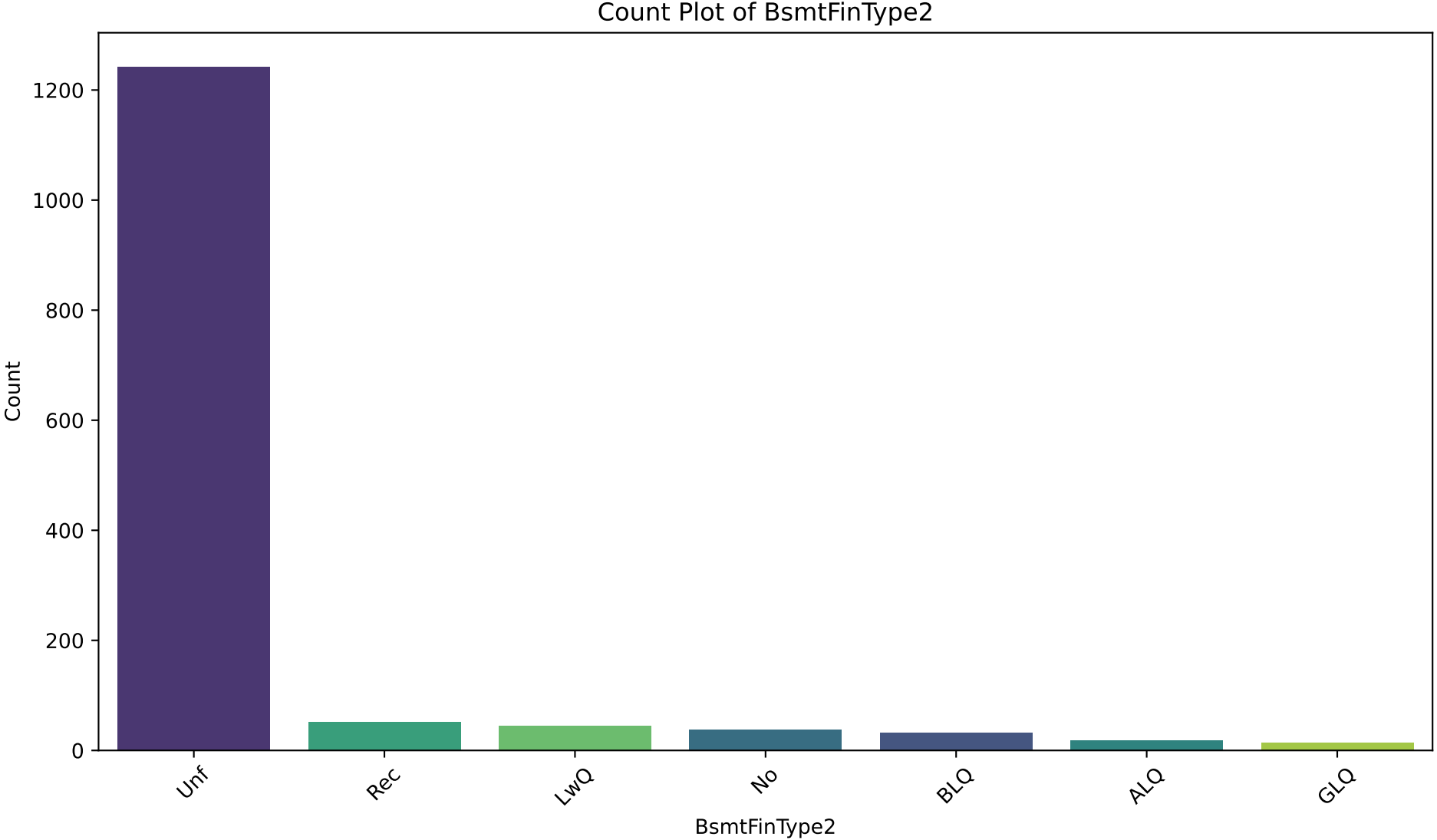

Count Plot of Foundation
Count
0
100
200
300
400
500
600
PConc
CBlock
BrkTil
Slab
Stone
Wood
Foundation

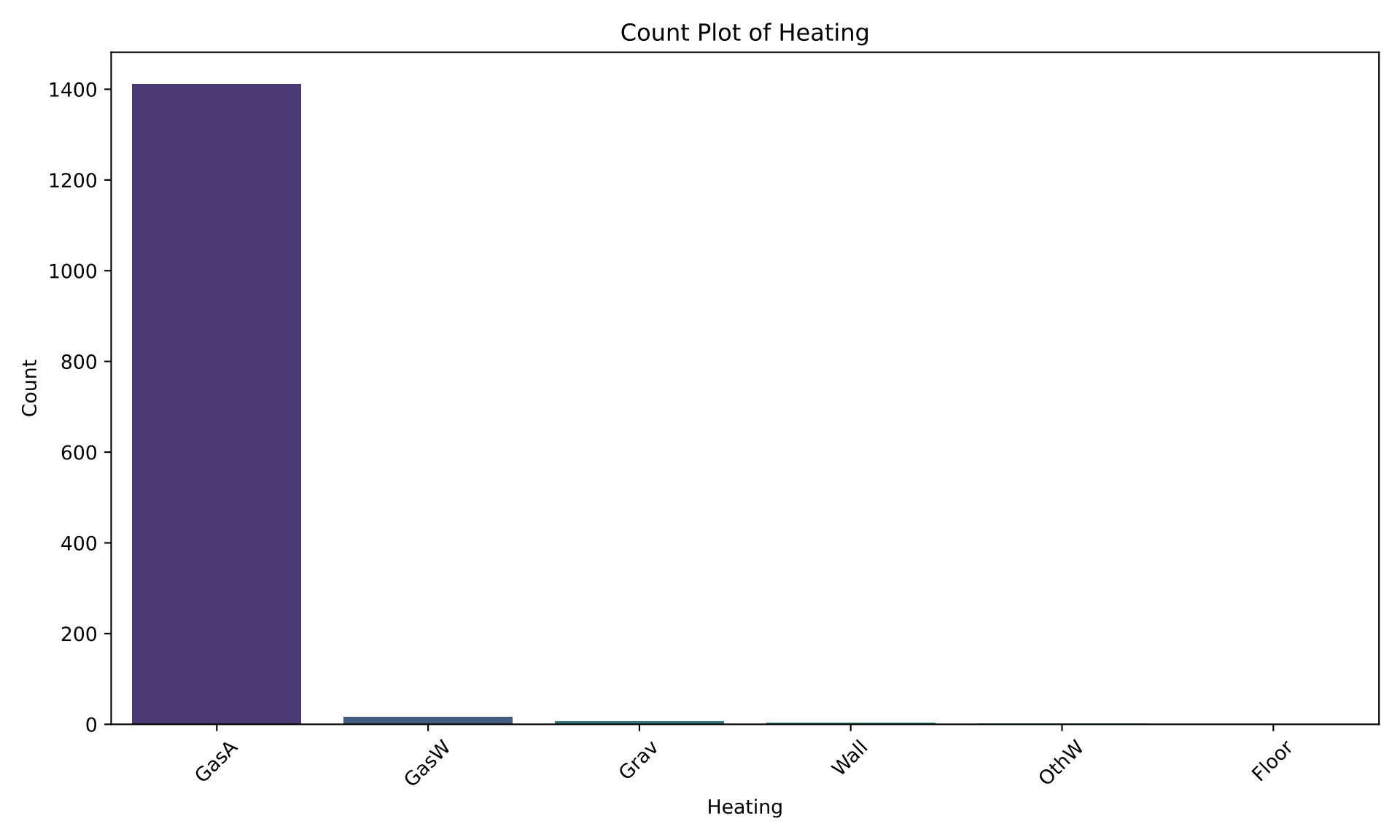

Count Plot of BsmtQual
Count
0
100
200
300
400
500
600
TA
Gd
Ex
NA
Fa
BsmtQual

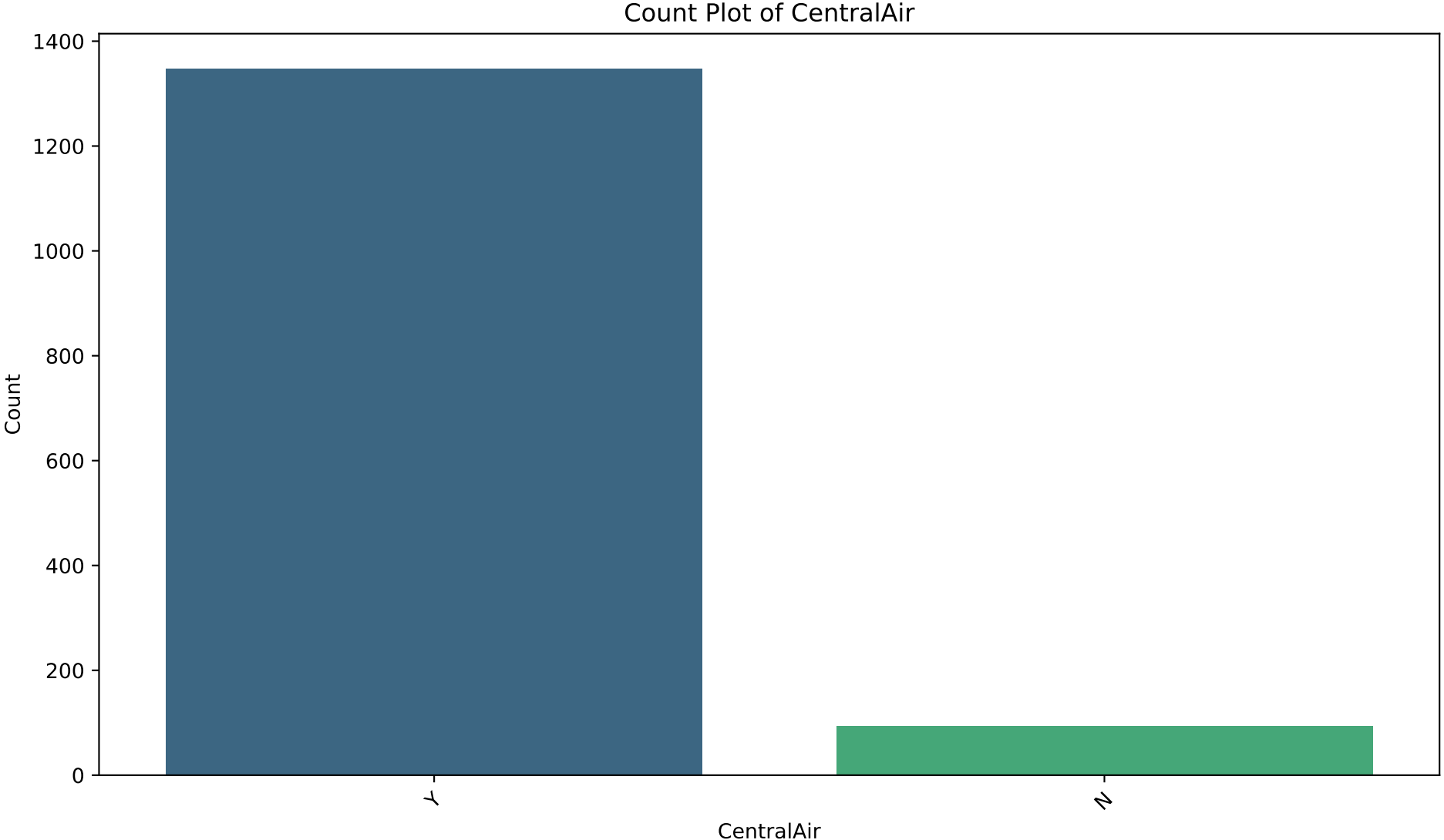

Count Plot of BsmtCond
Count
0
200
400
600
800
1000
1200
TA
Gd
Fa
Po
BsmtCond

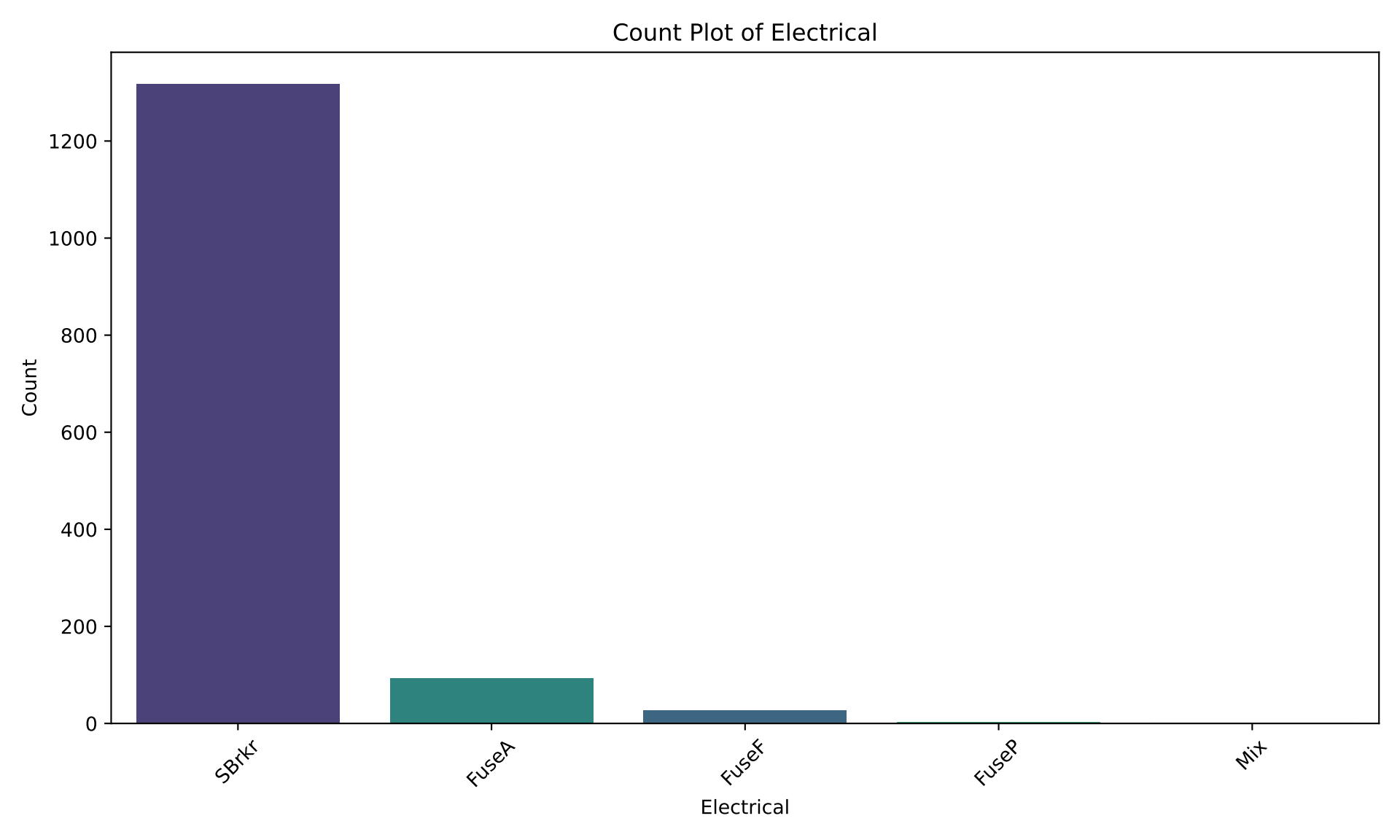

Count Plot of BsmtExposure
Count
1000
800
600
400
200
0
No
Av
Gd
Mn
BsmtExposure

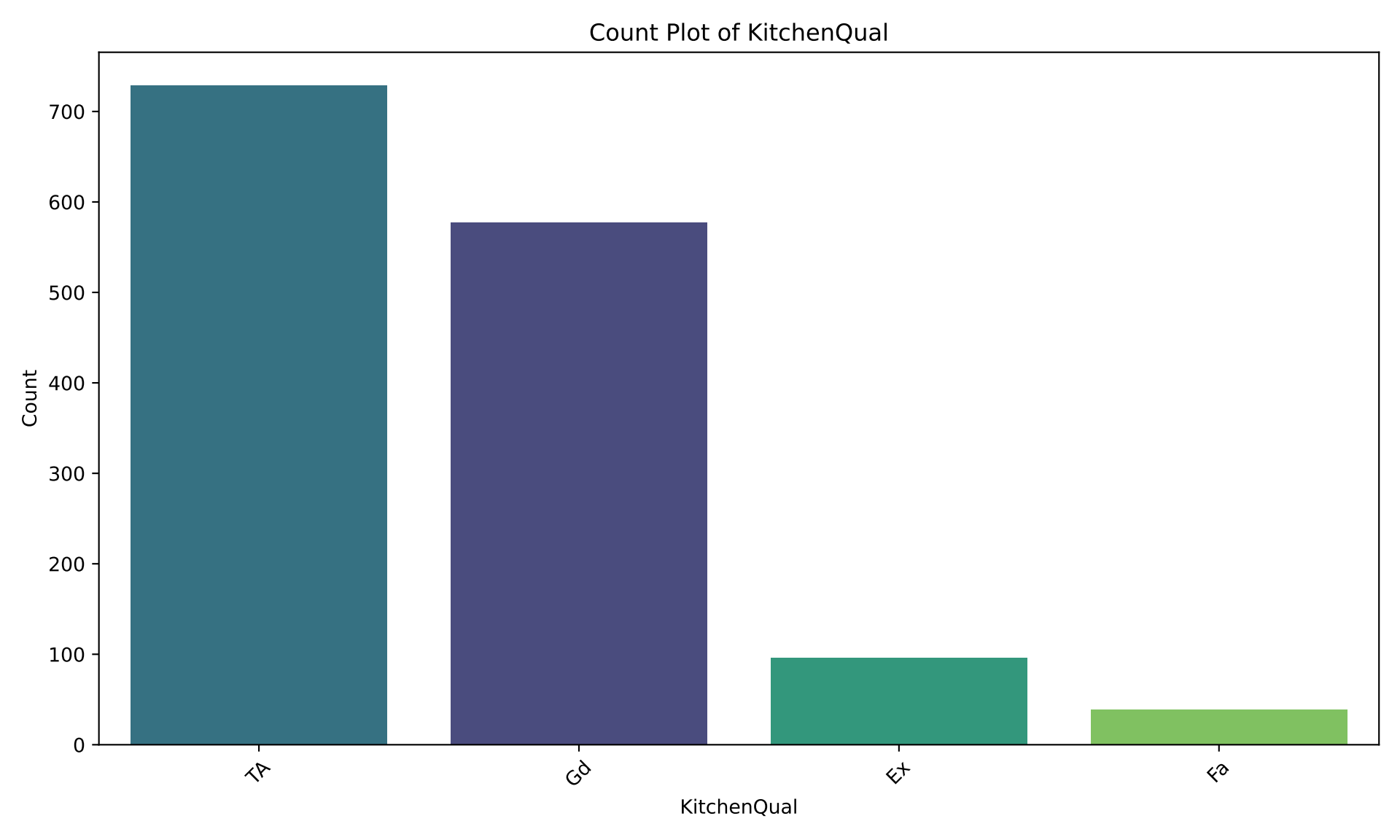

Count Plot of BsmtFinType1
Count
0
100
200
300
400
Unf
GLQ
ALQ
BLQ
Rec
LwQ
No
BsmtFinType1

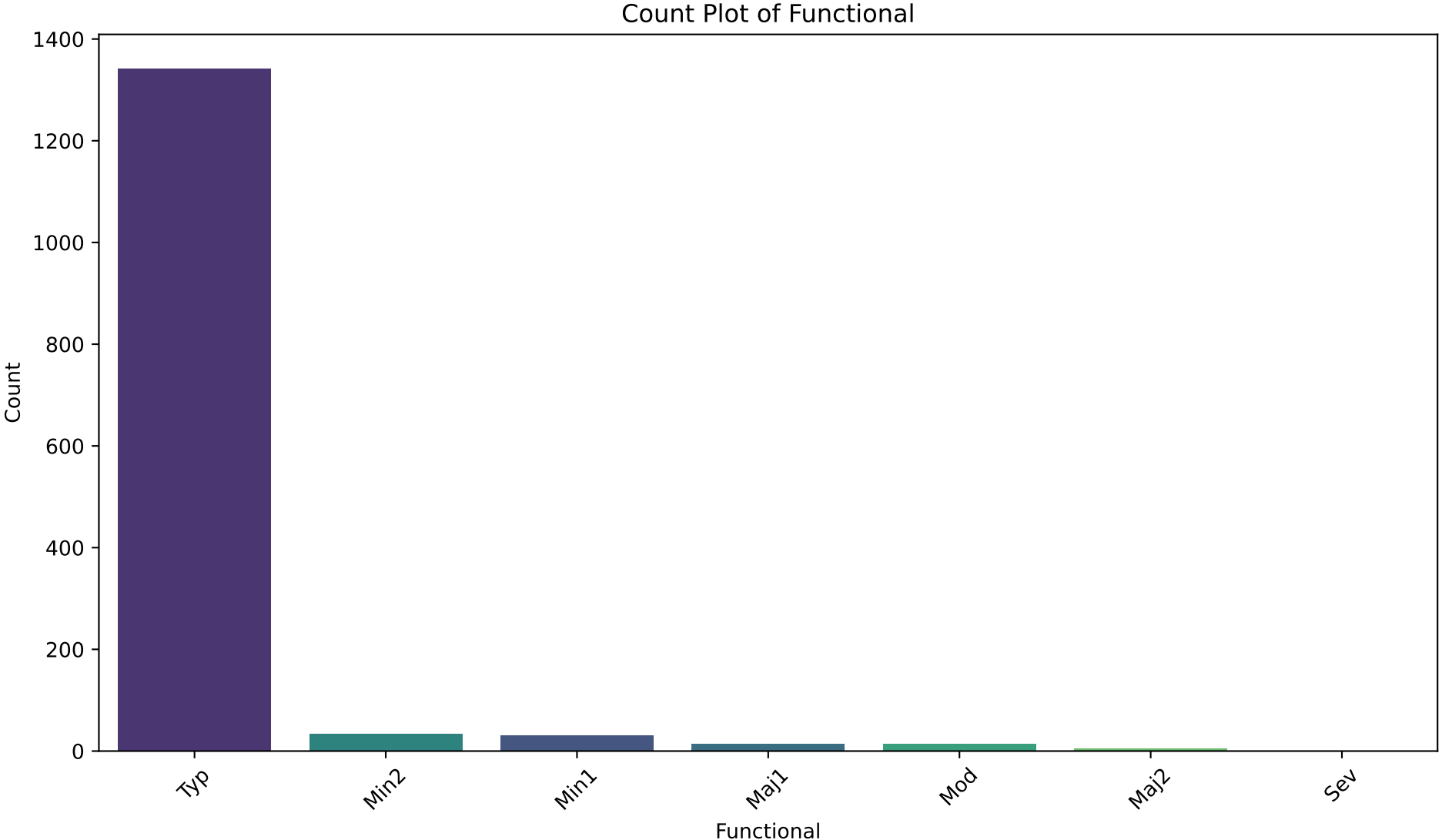

Count Plot of BsmtFinType2
Count
0
200
400
600
800
1000
1200
Unf
Rec
LwQ
No
BLQ
ALQ
GLQ
BsmtFinType2

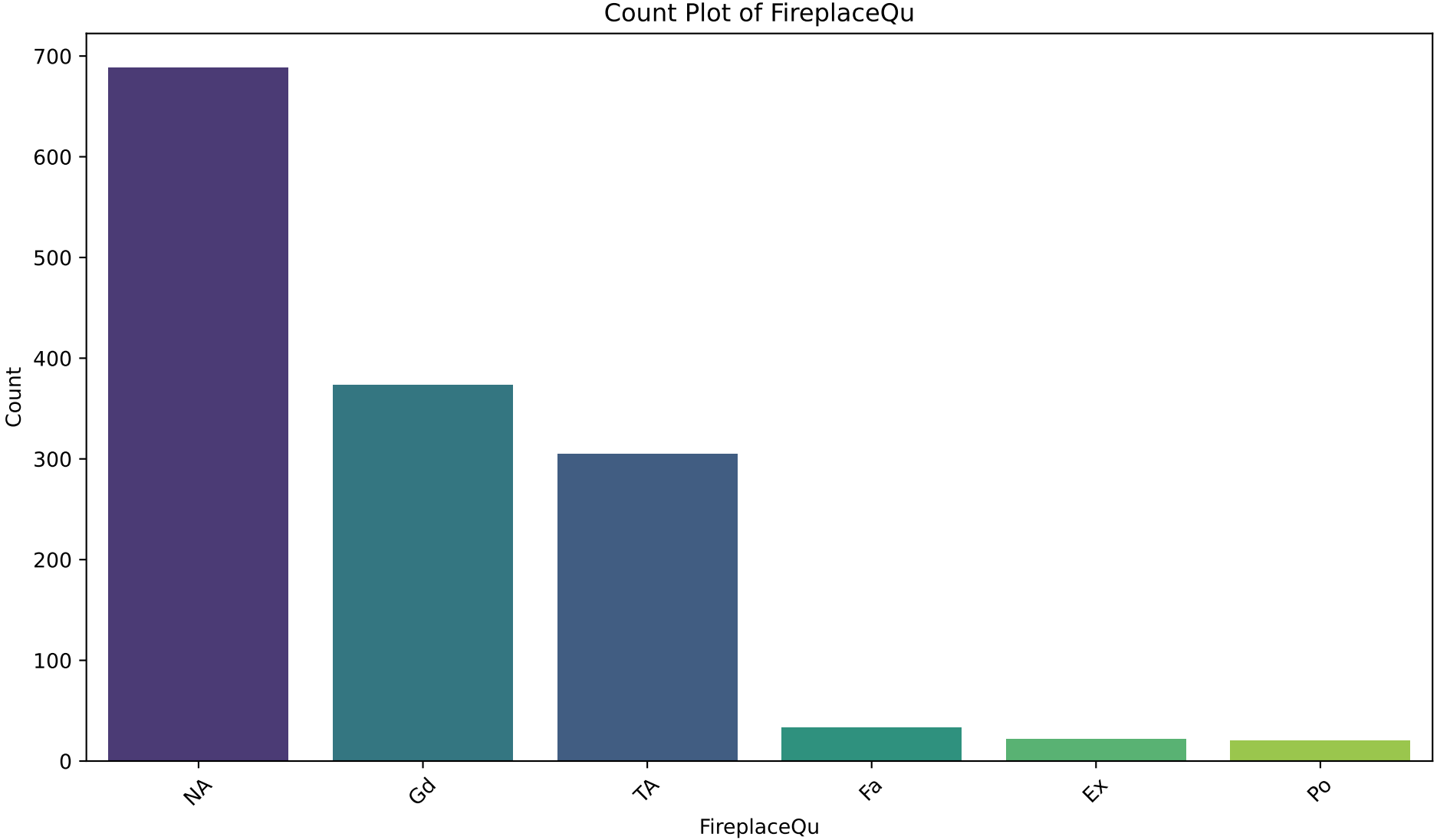

Count Plot of Heating
Count
0
200
400
600
800
1000
1200
1400
GasA
GasW
Grav
Wall
OthW
Floor
Heating

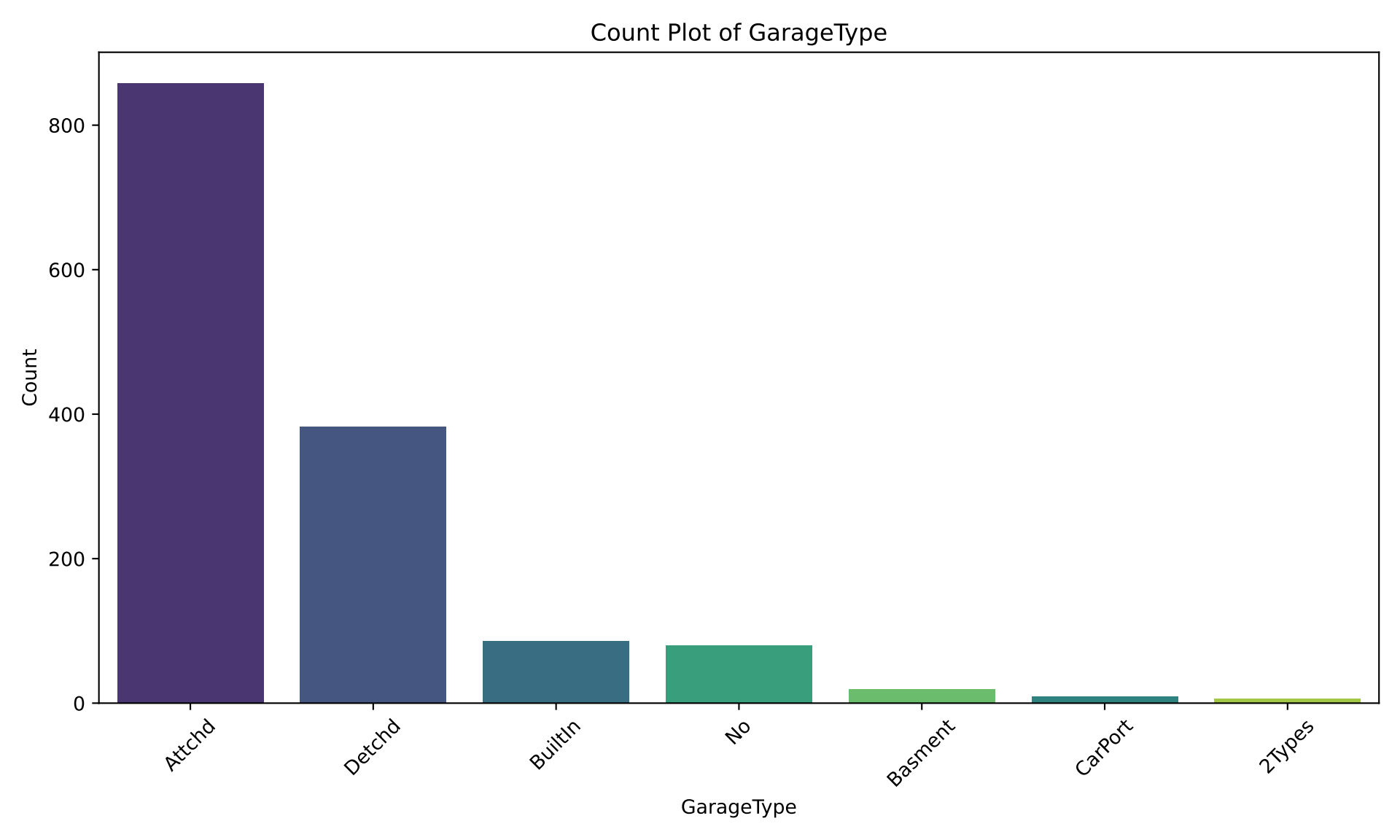

Count Plot of CentralAir
1400
1200
1000
800
600
400
200
0
Count
Y
N
CentralAir

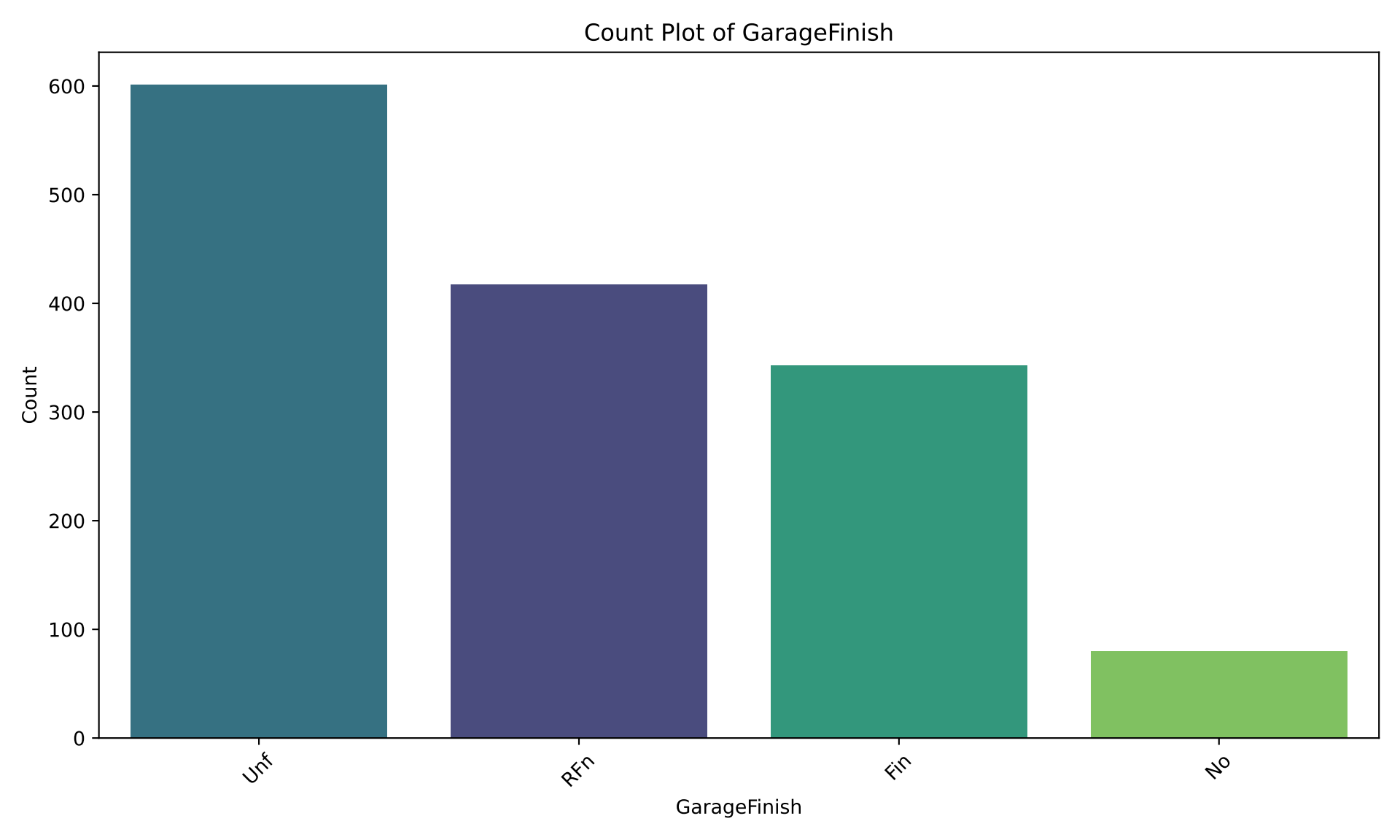

Count Plot of Electrical
Count
0
200
400
600
800
1000
1200
SBrkr
FuseA
FuseF
FuseP
Mix
Electrical

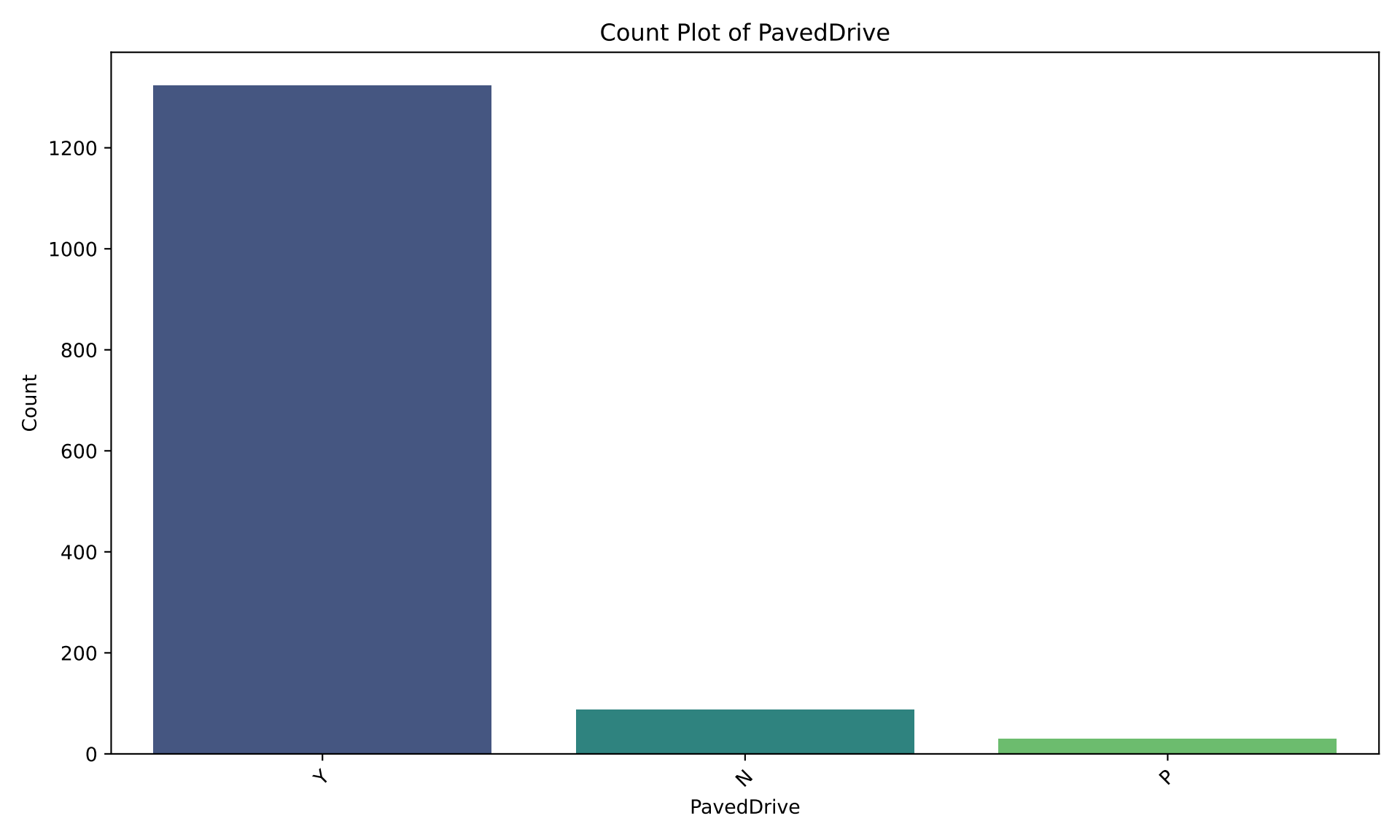

Count Plot of KitchenQual
Count
0
100
200
300
400
500
600
700
TA
Gd
Ex
Fa
KitchenQual

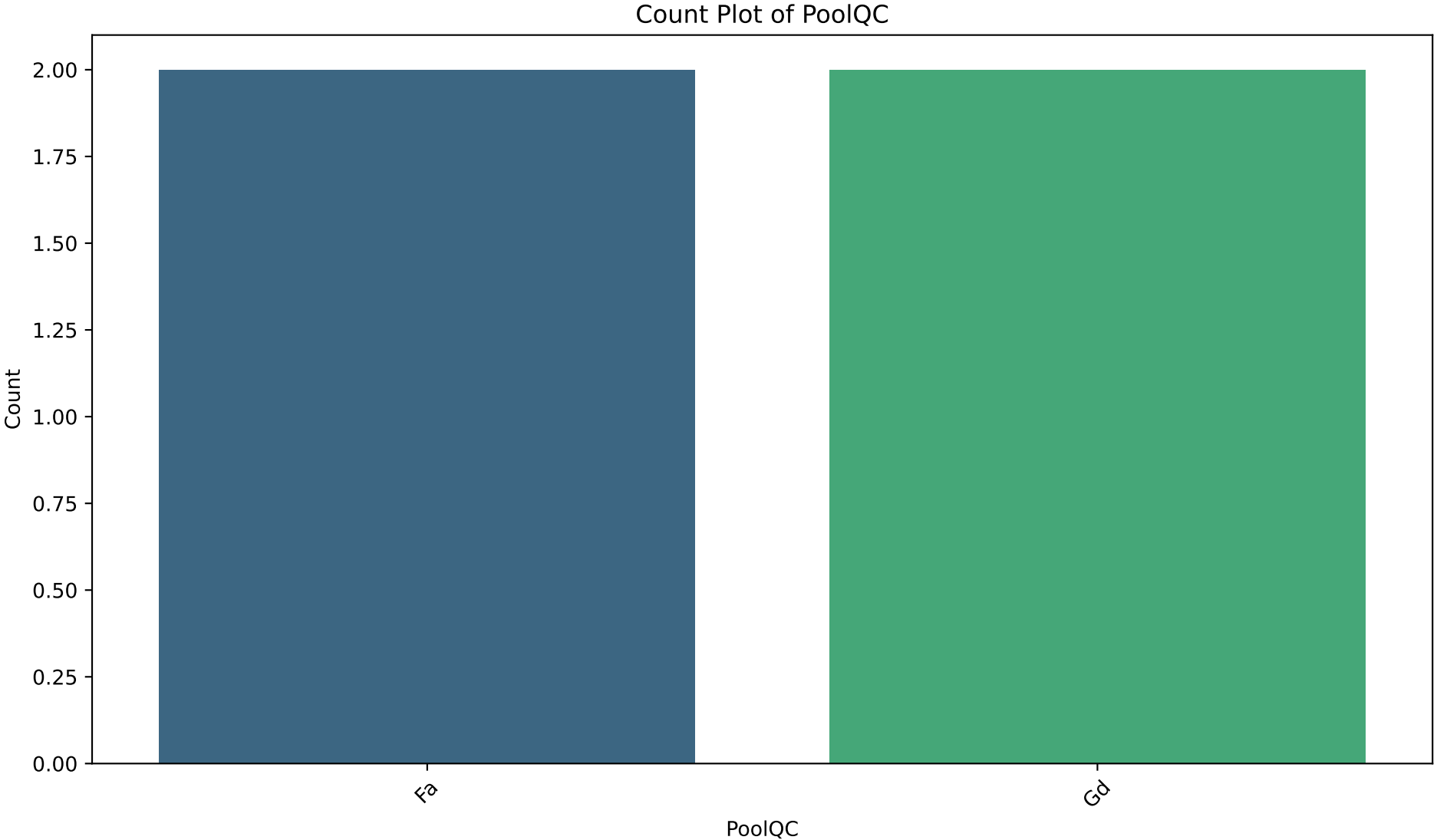

Count Plot of Functional
1400
1200
1000
800
600
400
200
0
Count
Typ
Min2
Min1
Maj1
Mod
Maj2
Sev
Functional

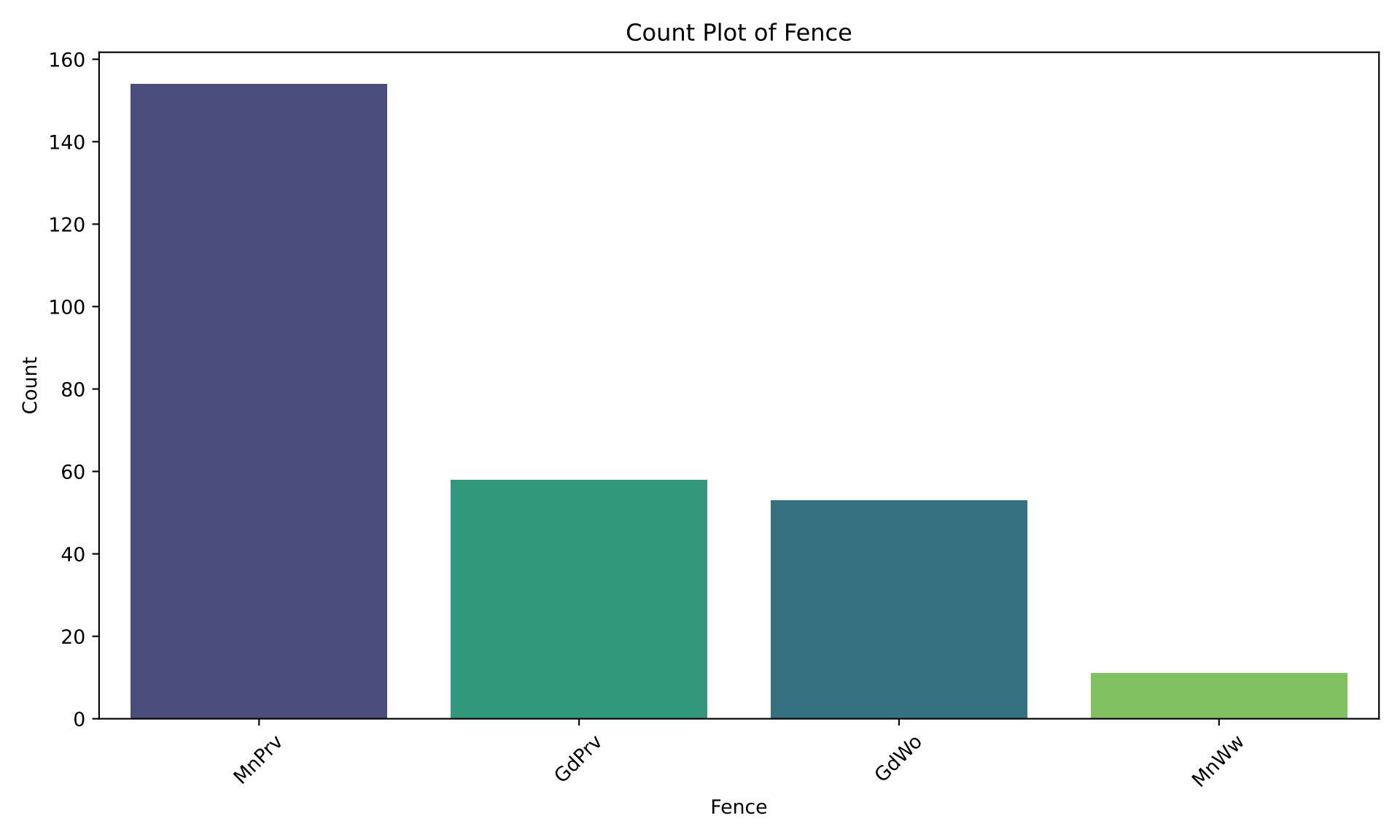

Count Plot of FireplaceQu
Count
FireplaceQu
0
100
200
300
400
500
600
700
NA
Gd
TA
Fa
Ex
Po

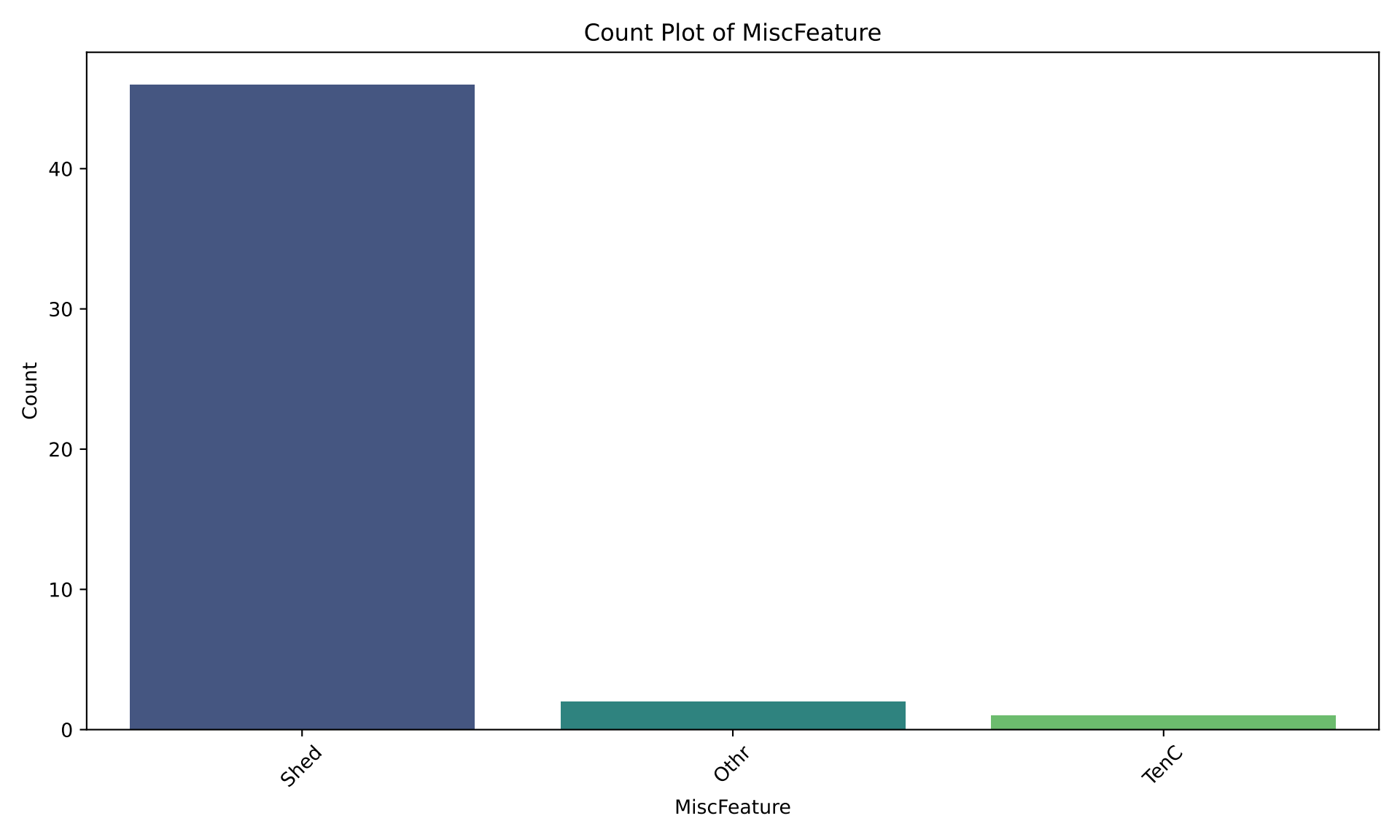

Count Plot of GarageType
Count
0
200
400
600
800
Attchd
Detchd
BuiltIn
No
Basment
CarPort
2Types
GarageType

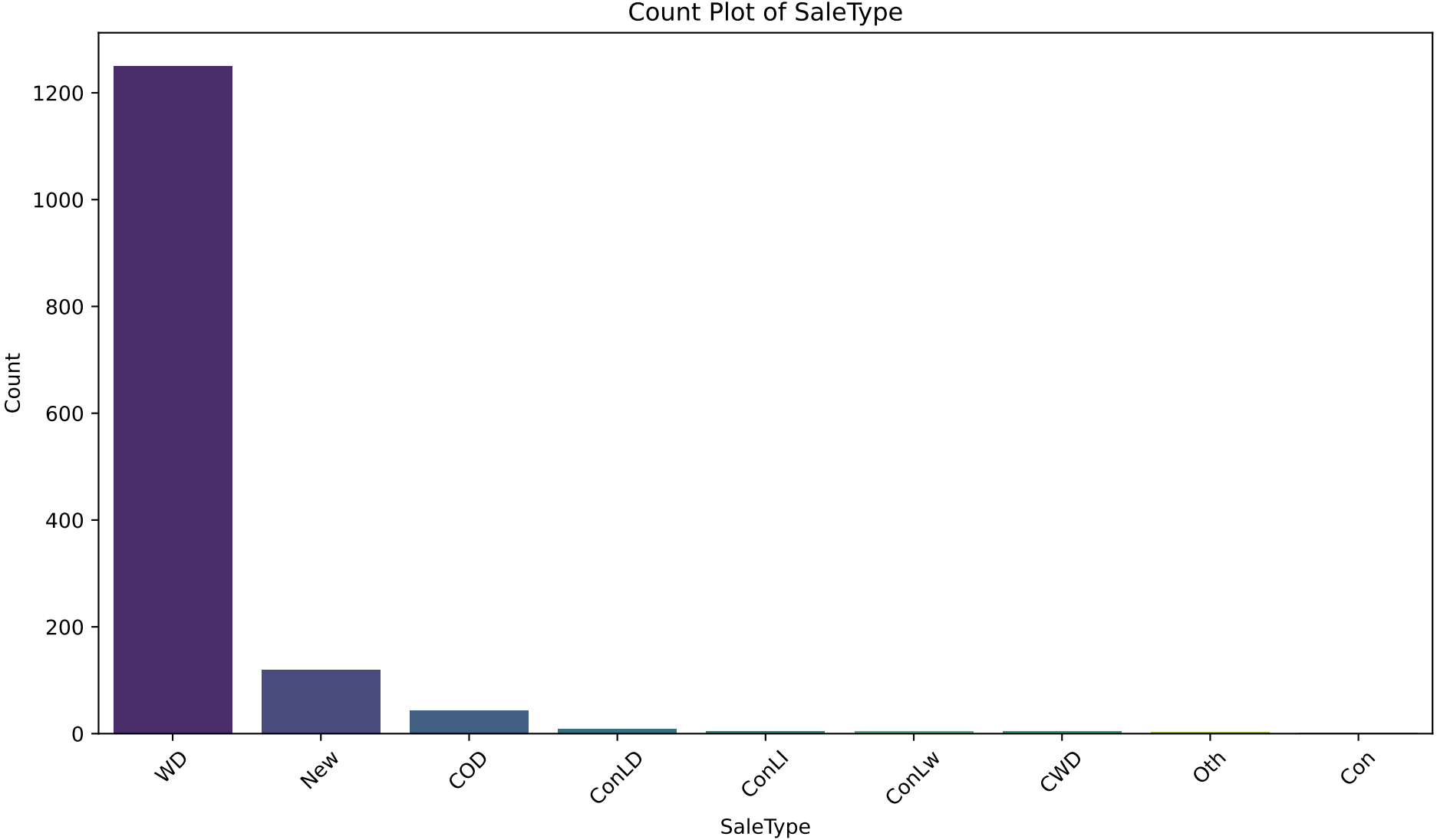

Count Plot of GarageFinish
Count
0
100
200
300
400
500
600
Unf
RFn
Fin
No
GarageFinish

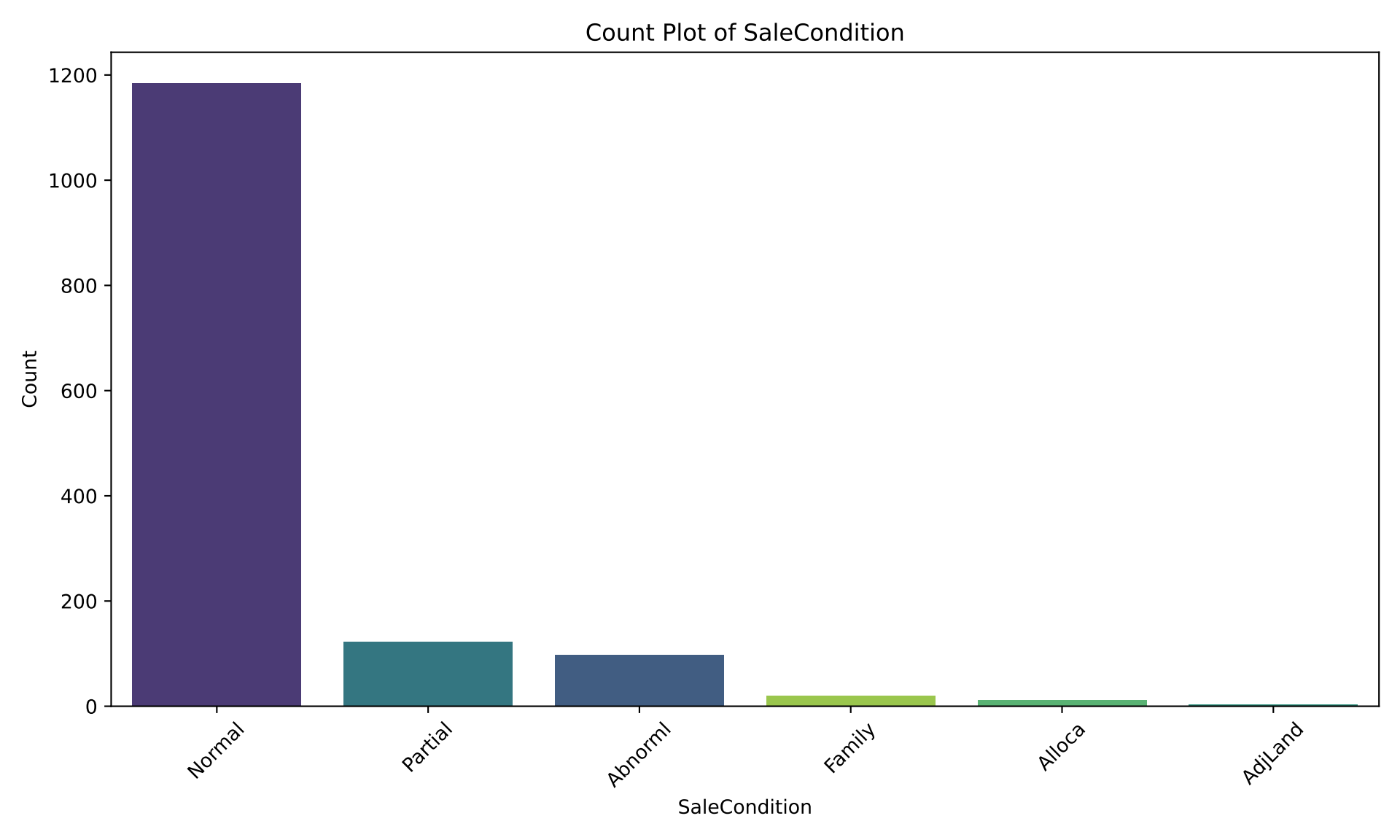

Count Plot of PavedDrive
Count
0
200
400
600
800
1000
1200
Y
N
P
PavedDrive

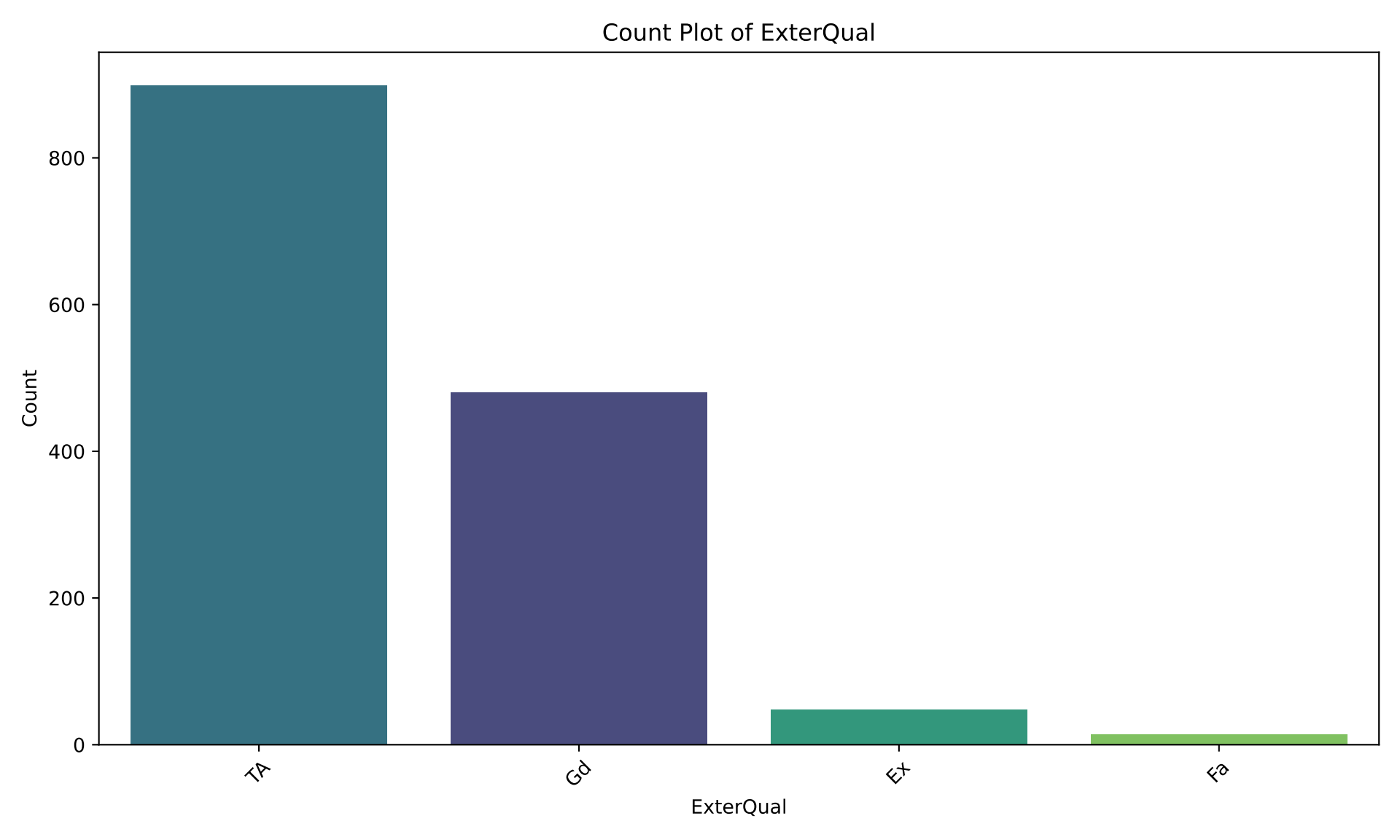

Count Plot of PoolQC
Count
2.00
1.75
1.50
1.25
1.00
0.75
0.50
0.25
0.00
Fa
Gd
PoolQC

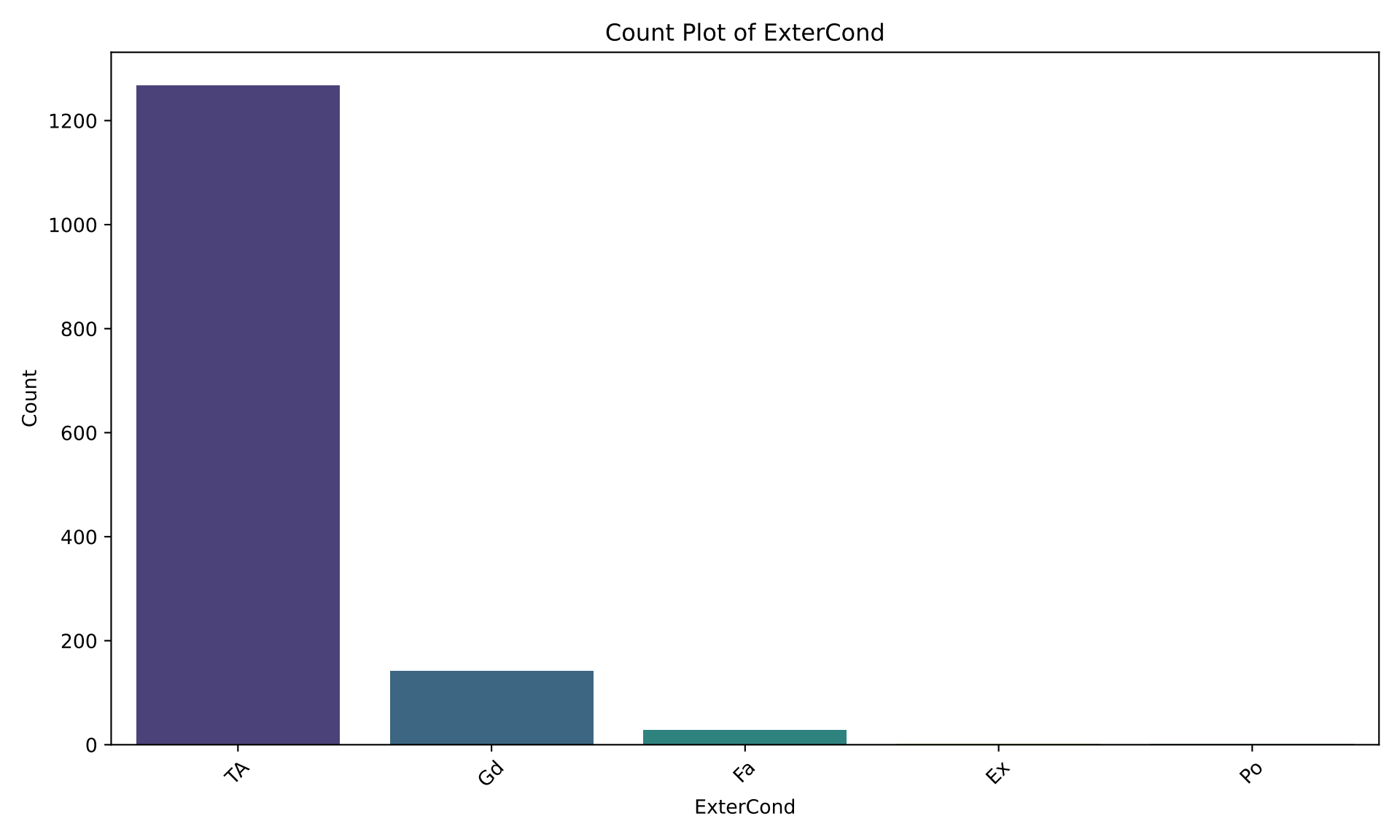

Count Plot of Fence
Count
Fence
0
20
40
60
80
100
120
140
160
MnPrv
GdPrv
GdWo
MnWw

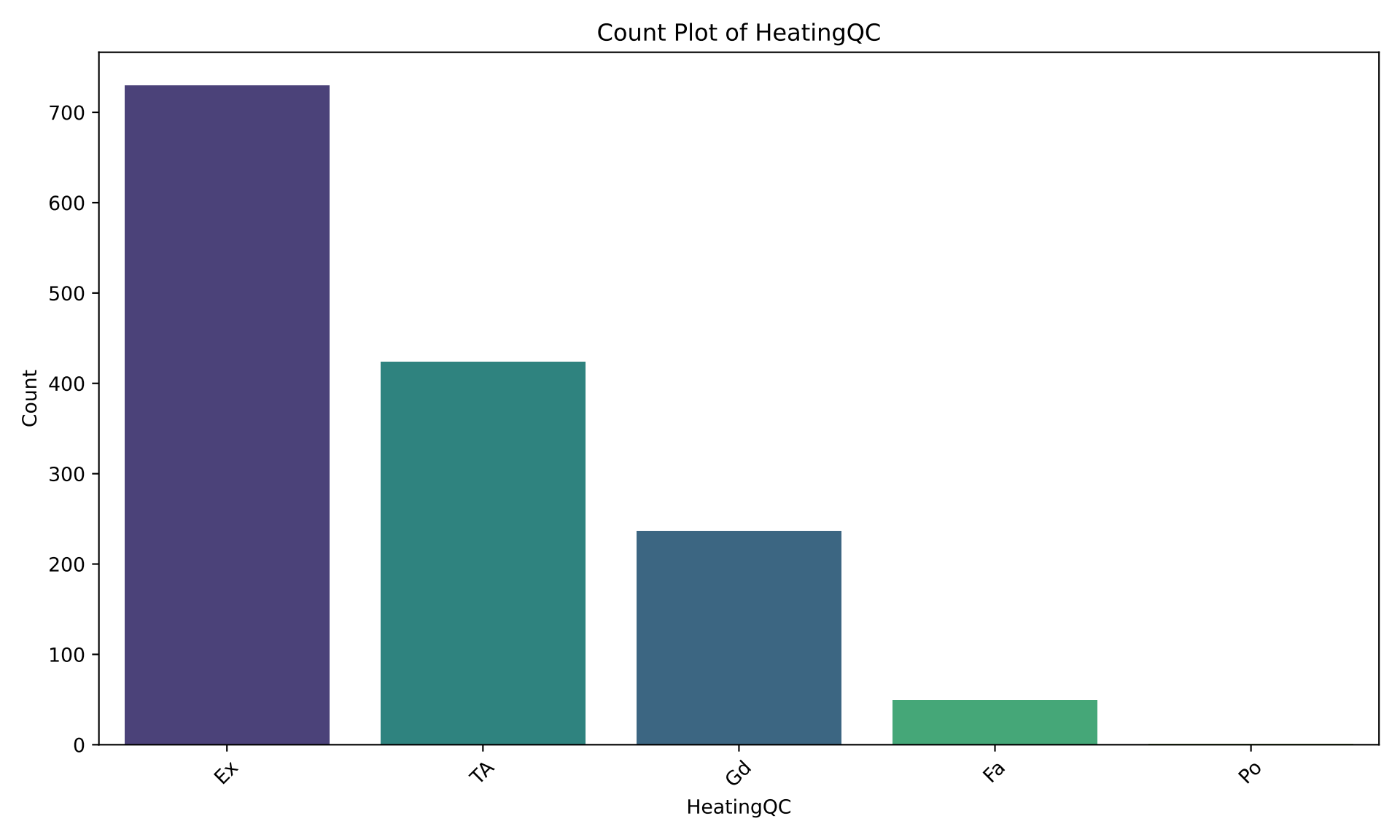

Count Plot of MiscFeature
Count
0
10
20
30
40
Shed
Othr
TenC
MiscFeature

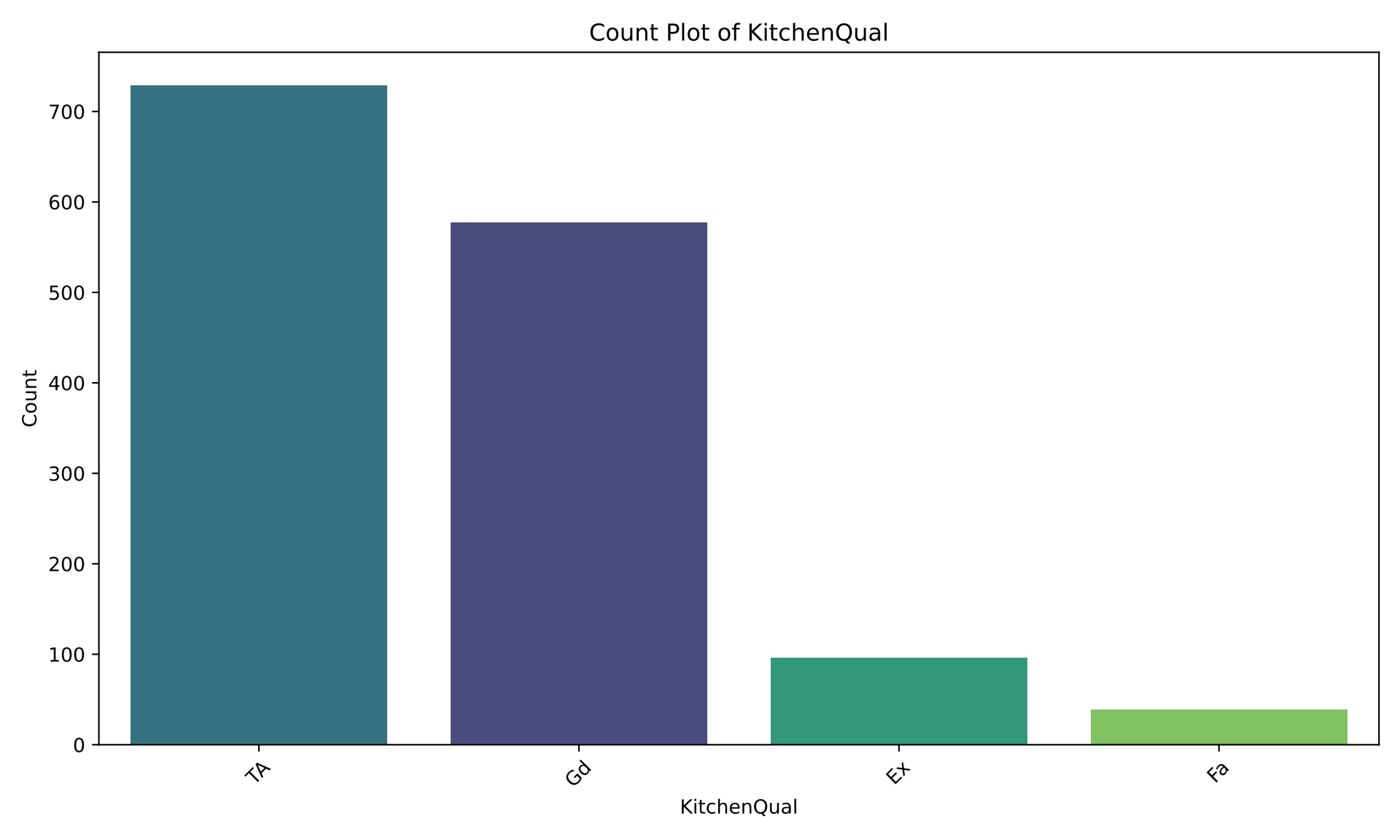

Count Plot of SaleType
Count
0
200
400
600
800
1000
1200
WD
New
COD
ConLD
ConLI
ConLw
CWD
Oth
Con
SaleType

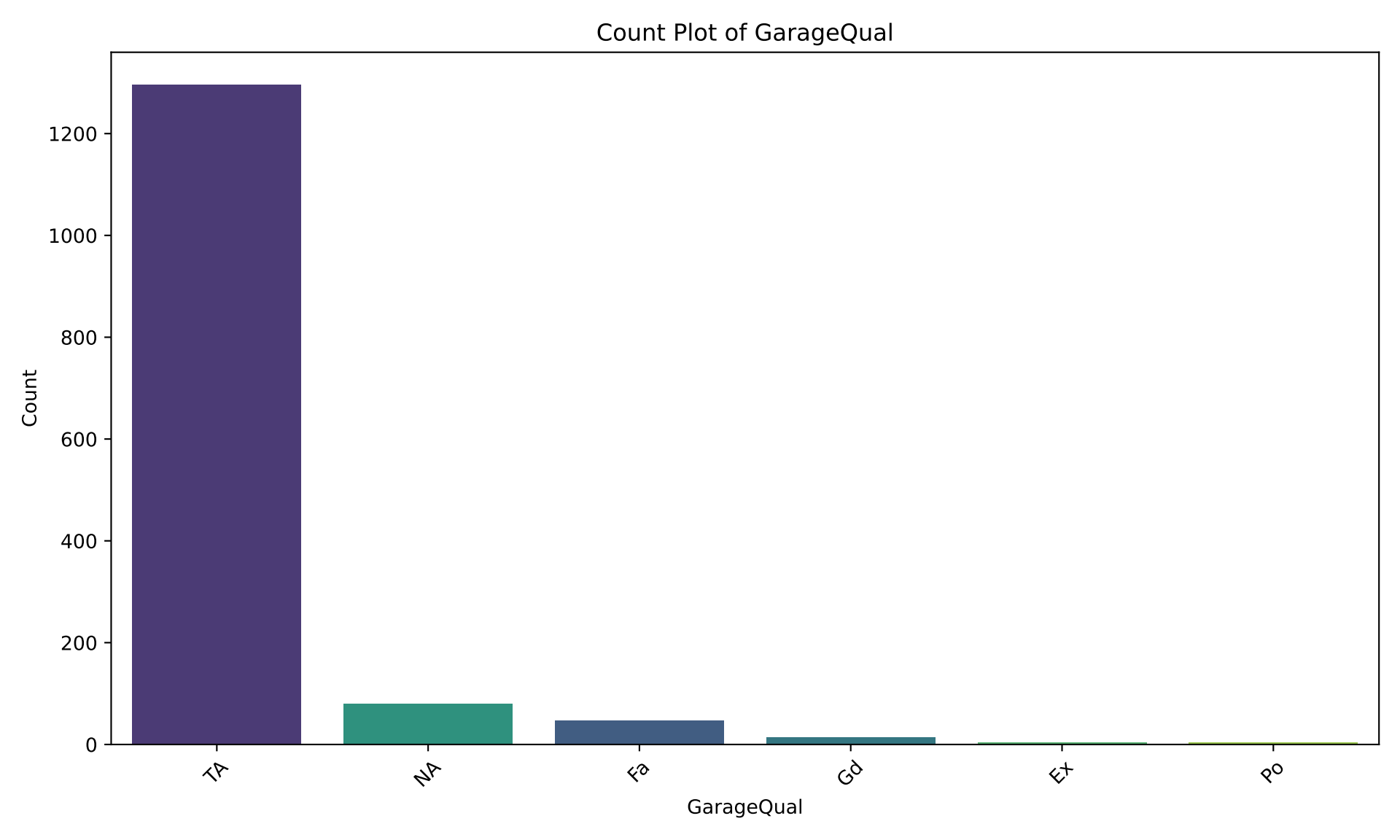

Count Plot of SaleCondition
Count
1200
1000
800
600
400
200
0
Normal
Partial
Abnorml
Family
Alloca
AdjLand
SaleCondition

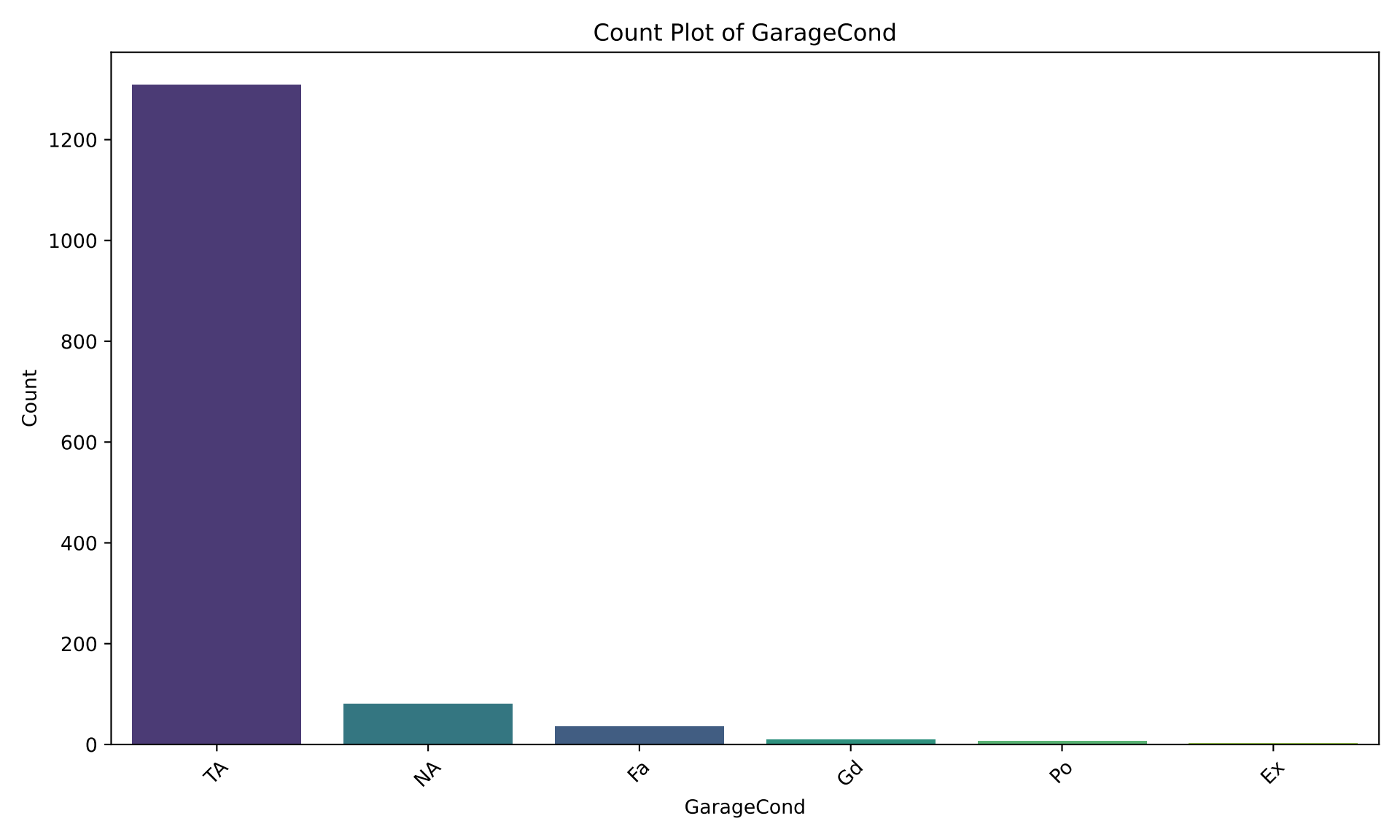

Count Plot of ExterQual
Count
0
200
400
600
800
TA
Gd
Ex
Fa
ExterQual


Count Plot of ExterCond
Count
1200
1000
800
600
400
200
0
TA
Gd
Fa
Ex
Po
ExterCond


Count Plot of HeatingQC
Count
0
100
200
300
400
500
600
700
Ex
TA
Gd
Fa
Po
HeatingQC


Count Plot of KitchenQual
Count
0
100
200
300
400
500
600
700
TA
Gd
Ex
Fa
KitchenQual


Count Plot of GarageQual
Count
0
200
400
600
800
1000
1200
TA
NA
Fa
Gd
Ex
Po
GarageQual


Count Plot of GarageCond
Count
0
200
400
600
800
1000
1200
TA
NA
Fa
Gd
Po
Ex
GarageCond