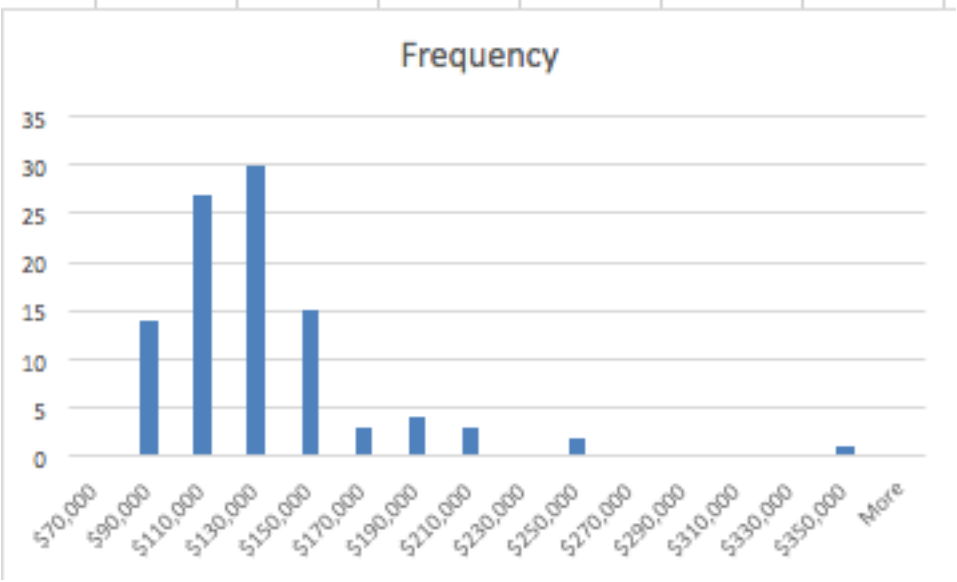
1. Yes, there are 3 houses with sale prices more than 3 standard deviations from the mean. Houses 40, 60, and 94 are 3.11, 3.11, and 5.52 standards deviations from the mean respectively, making them outliers.
2. Looking at the frequency data visually, it does not appear that the data is normally distributed.



3. According to the single variable regression analysis UFFI has a direct correlation, assuming you remove outliers, with a P-value of 0.039.

Anova: Single Factor

SUMMARY

Groups	*Count*	*Sum*	*Average*	*Variance*
Column 1	74	9083250	122746.6216	775404954.2
Column 2	22	2390250	108647.7273	767482970.8

ANOVA

Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Between Groups	3370957521	1	3370957521	4.357296231	0.039556353	3.942303338
Within Groups	72721704042	94	773635149.4			
Total	76092661563	95				

4. When taken into account with the rest of the variables present, UFFI is a significant predictor of home price, with a p-value of 0.003. However, with an R-square of 0.644 there isn't a terribly strong correlation, indicating this might not be as good of a predictor

as the P-value indicates:

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.802385731
R Square	0.643822861
Adjusted R Square	0.606548509
Standard Error	17752.32264
Observations	96

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	9	48990195071	5443355008	17.27254347	6.3135E-16
Residual	86	27102466491	315144959.2		
Total	95	76092661563			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	46019.42752	10677.74894	4.309843561	4.32804E-05	24792.76515	67246.08988	24792.76515	67246.08988
X Variable 1	-13375.83593	4495.429275	-2.97543018	0.003797718	-22312.45356	-4439.218308	-22312.45356	-4439.218308
X Variable 2	6796.852022	4035.870826	1.684110398	0.095786704	-1226.193644	14819.89769	-1226.193644	14819.89769
X Variable 3	44.63738325	5969.524864	0.007477544	0.994051157	-11822.38529	11911.66006	-11822.38529	11911.66006
X Variable 4	16.1756923	9.140354158	1.769700826	0.08032152	-1.994730384	34.34611499	-1.994730384	34.34611499
X Variable 5	2.336224121	1.14501895	2.040336644	0.044384348	0.060001784	4.612446457	0.060001784	4.612446457
X Variable 6	8271.242947	2929.002042	2.823911635	0.005894585	2448.579597	14093.9063	2448.579597	14093.9063
X Variable 7	60.51644106	7.188101172	8.418974582	7.48658E-13	46.22696887	74.80591326	46.22696887	74.80591326
X Variable 8	411.9849149	3940.342381	0.104555613	0.916971899	-7421.156489	8245.126319	-7421.156489	8245.126319
X Variable 9	14029.35418	13282.29637	1.056244628	0.293814617	-12374.97711	40433.68548	-12374.97711	40433.68548

5. The ideal model includes just 5 variables, UFFI, basement, lot area, enclosed parking spaces, and living area. Providing the below model. All P-values are below 0.05, which indicates that we're only taking into account variables that are statistically significant, but an adjusted R square of 0.607 indicates that the model is still not an excellent predictor of housing prices.

MODEL 5

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.792293171
R Square	0.627728469
Adjusted R Sc	0.607046717
Standard Erro	17741.07965
Observations	96

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	5	47765529933	9553105987	30.35180371	5.85781E-18
Residual	90	28327131629	314745907		
Total	95	76092661563			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	48322.97567	7171.34802	6.738339227	1.47669E-09	34075.84113	62570.1102	34075.84113	62570.1102
UFFI IN	-13972.0812	4452.726681	-3.13787085	0.002300772	-22818.19997	-5125.962503	-22818.19997	-5125.962503
Bsmnt Fin_SF	16.39638956	8.025301792	2.043086974	0.043968325	0.452726805	32.34005231	0.452726805	32.34005231
Lot Area	2.222656504	1.05794898	2.100910862	0.038444864	0.120856199	4.324456809	0.120856199	4.324456809
Enc Pk Space	7544.803843	2899.103501	2.602461016	0.010823235	1785.228727	13304.37896	1785.228727	13304.37896
Living Area_S	63.03323708	6.96434439	9.050850095	2.69777E-14	49.19735139	76.86912277	49.19735139	76.86912277

6. We expect the presence of UFFI to decrease the house price by about $14,000.
7. The following cells show the predicted price of the house.

With UFFI	167710	Without UFFI	181682
With Min	165467.1118	Without Min	179439.1118
With Max	169952.8882	Without Max	183924.8882

8. Based on the information given, the client potentially overpaid by up to $80,000 according to our confidence interval models. In terms of the client's reimbursement, it should come in the amount of $14,000. There's no way to value the market's speculation

or perceptions so the client should only be reimbursed for the calculated effect of UFFI, approximately $14,000.