Regression

[DataSet1] /Users/keithmccormick/Desktop/Resources/Case Study Data/Waste.sav

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	restaurants and hotels (acres), fabricated metals (acres), Industrial land (acres), trucking and wholesale trade (acres), retail trade (acres) [b]	.	Enter

a. Dependent Variable: waste_tons

b. All requested variables entered.

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.921[a]	.849	.827	150461.176

a. Predictors: (Constant), restaurants and hotels (acres), fabricated metals (acres), Industrial land (acres), trucking and wholesale trade (acres), retail trade (acres)

b. Dependent Variable: waste_tons

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.326E+12	5	8.651E+11	38.214	.000[b]
	Residual	7.697E+11	34	2.264E+10		
	Total	5.095E+12	39			

a. Dependent Variable: waste_tons

b. Predictors: (Constant), restaurants and hotels (acres), fabricated metals (acres), Industrial land (acres), trucking and wholesale trade (acres), retail trade (acres)

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	
		B	Std. Error	Beta	t
1	(Constant)	121584.815	31680.944		3.838
	Industrial land (acres)	-52.486	17.913	-.232	-2.930
	fabricated metals (acres)	43.452	153.701	.045	.283
	trucking and wholesale trade (acres)	250.324	88.553	.491	2.827
	retail trade (acres)	-859.706	376.371	-.439	-2.284
	restaurants and hotels (acres)	13355.199	2281.798	1.083	5.853

Coefficients[a]

Model		Sig.
1	(Constant)	.001
	Industrial land (acres)	.006
	fabricated metals (acres)	.779
	trucking and wholesale trade (acres)	.008
	retail trade (acres)	.029
	restaurants and hotels (acres)	.000

a. Dependent Variable: waste_tons

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	126823.16	1687402.25	380140.00	333034.679	40
Std. Predicted Value	-.761	3.925	.000	1.000	40
Standard Error of Predicted Value	25427.293	144319.234	47873.792	33648.025	40
Adjusted Predicted Value	-1203168.4	2400484.00	354752.74	479879.154	40
Residual	-312596.63	279897.750	.000	140485.534	40
Std. Residual	-2.078	1.860	.000	.934	40
Stud. Residual	-3.604	3.562	.054	1.332	40
Deleted Residual	-1624584.0	1473068.38	25387.257	423173.801	40
Stud. Deleted Residual	-4.516	4.433	.066	1.504	40
Mahal. Distance	.139	34.906	4.875	9.212	40
Cook's Distance	.000	17.266	1.001	3.611	40
Centered Leverage Value	.004	.895	.125	.236	40

a. Dependent Variable: waste_tons

Regression

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	restaurants and hotels (acres), fabricated metals (acres), Industrial land (acres), trucking and wholesale trade (acres), retail trade (acres) [b]	.	Enter

a. Dependent Variable: waste_tons

b. All requested variables entered.

Model Summary [b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.940[a]	.883	.865	134408.972

a. Predictors: (Constant), restaurants and hotels (acres), fabricated metals (acres), Industrial land (acres), trucking and wholesale trade (acres), retail trade (acres)

b. Dependent Variable: waste_tons

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.487E+12	5	8.973E+11	49.670	.000[b]
	Residual	5.962E+11	33	1.807E+10		
	Total	5.083E+12	38			

a. Dependent Variable: waste_tons

b. Predictors: (Constant), restaurants and hotels (acres), fabricated metals (acres), Industrial land (acres), trucking and wholesale trade (acres), retail trade (acres)

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	
		B	Std. Error	Beta	t
1	(Constant)	116955.396	28340.398		4.127
	Industrial land (acres)	-209.312	53.069	-.484	-3.944
	fabricated metals (acres)	203.602	146.705	.209	1.388
	trucking and wholesale trade (acres)	334.026	83.588	.656	3.996
	retail trade (acres)	-1044.633	341.470	-.534	-3.059
	restaurants and hotels (acres)	14584.127	2076.568	1.181	7.023

Coefficients[a]

Model		Sig.
1	(Constant)	.000
	Industrial land (acres)	.000
	fabricated metals (acres)	.174
	trucking and wholesale trade (acres)	.000
	retail trade (acres)	.004
	restaurants and hotels (acres)	.000

a. Dependent Variable: waste_tons

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	116593.07	1812181.63	382966.67	343612.698	39
Std. Predicted Value	-.775	4.159	.000	1.000	39
Standard Error of Predicted Value	22773.570	131932.750	43538.276	30116.856	39
Adjusted Predicted Value	111155.77	2610377.25	405636.89	447522.441	39
Residual	-252061.91	321197.656	.000	125254.527	39
Std. Residual	-1.875	2.390	.000	.932	39
Stud. Residual	-2.608	2.698	-.002	1.166	39
Deleted Residual	-1834477.4	847555.000	-22670.226	361226.641	39
Stud. Deleted Residual	-2.882	3.009	.008	1.238	39
Mahal. Distance	.117	35.638	4.872	8.920	39
Cook's Distance	.000	29.913	.957	4.840	39
Centered Leverage Value	.003	.938	.128	.235	39

a. Dependent Variable: waste_tons