# Regression

# **Descriptive Statistics**

	Mean	Std. Deviation	N
waste_tons	380140.00	361453.016	40
Industrial land (acres)	561.93	1600.441	40
fabricated metals (acres)	148.88	371.798	40
trucking and wholesale trade (acres)	312.30	708.806	40
retail trade (acres)	120.70	184.541	40
restaurants and hotels (acres)	23.00	29.323	40

# Correlations

		waste_tons	Industrial land (acres)	fabricated metals (acres)
<b>Pearson Correlation</b>	waste_tons	1.000	.186	.483
	Industrial land (acres)	.186	1.000	.393
	fabricated metals (acres)	.483	.393	1.000
	trucking and wholesale trade (acres)	.643	.424	.893
	retail trade (acres)	.768	.138	.282
	restaurants and hotels (acres)	.823	.233	.199
Sig. (1-tailed)	waste_tons		.126	.001
	Industrial land (acres)	.126		.006
	fabricated metals (acres)	.001	.006	•
	trucking and wholesale trade (acres)	.000	.003	.000
	retail trade (acres)	.000	.198	.039
	restaurants and hotels (acres)	.000	.074	.109
N	waste_tons	40	40	40
	Industrial land (acres)	40	40	40

# Correlations

		trucking and wholesale trade (acres)	retail trade (acres)	restaurants and hotels (acres)
Pearson Correlation	waste_tons	.643	.768	.823
	Industrial land (acres)	.424	.138	.233
	fabricated metals (acres)	.893	.282	.199
	trucking and wholesale trade (acres)	1.000	.467	.384
	retail trade (acres)	.467	1.000	.920
	restaurants and hotels (acres)	.384	.920	1.000
Sig. (1-tailed)	waste_tons	.000	.000	.000
	Industrial land (acres)	.003	.198	.074
	fabricated metals (acres)	.000	.039	.109
	trucking and wholesale trade (acres)		.001	.007
	retail trade (acres)	.001		.000
	restaurants and hotels (acres)	.007	.000	
N	waste_tons	40	40	40
	Industrial land (acres)	40	40	40

# Correlations

	waste_tons	Industrial land (acres)	fabricated metals (acres)
fabricated metals (acres)	40	40	40
trucking and wholesale trade (acres)	40	40	40
retail trade (acres)	40	40	40
restaurants and hotels (acres)	40	40	40

### Correlations

	trucking and wholesale trade (acres)	retail trade (acres)	restaurants and hotels (acres)
fabricated metals (acres)	40	40	40
trucking and wholesale trade (acres)	40	40	40
retail trade (acres)	40	40	40
restaurants and hotels (acres)	40	40	40

# Variables Entered/Removed<sup>a</sup>

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)	•	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 <sup>a</sup>	.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**<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.326E+12	5	8.651E+11	38.214	.000 <sup>b</sup>
	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<sup>a</sup>

		Unstandardiz	ed Coefficients	Standardized Coefficients	
Model		В	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<sup>a</sup>

			95.0% Confidence Interval for B		Correlations	
Model		Sig.	Lower Bound	Upper Bound	Zero-order	Partial
1	(Constant)	.001	57201.391	185968.239		
	Industrial land (acres)	.006	-88.889	-16.082	.186	449
	fabricated metals (acres)	.779	-268.907	355.811	.483	.048
	trucking and wholesale trade (acres)	.008	70.363	430.285	.643	.436
	retail trade (acres)	.029	-1624.584	-94.829	.768	365
	restaurants and hotels (acres)	.000	8718.028	17992.370	.823	.708

# **Coefficients**<sup>a</sup>

		Correlation s
Model		Part
1	(Constant)	
	Industrial land (acres)	195
	fabricated metals (acres)	.019
	trucking and wholesale trade (acres)	.188
	retail trade (acres)	152
	restaurants and hotels (acres)	.390

a. Dependent Variable: waste\_tons

# Residuals Statistics<sup>a</sup>

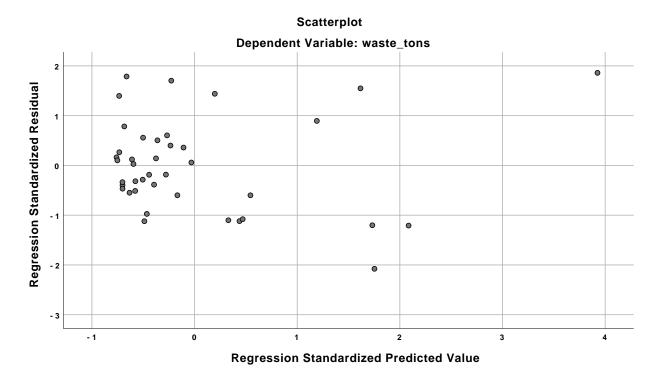
	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	126823.16	1687402.25	380140.00	333034.679	40
Residual	-312596.63	279897.750	.000	140485.534	40
Std. Predicted Value	761	3.925	.000	1.000	40
Std. Residual	-2.078	1.860	.000	.934	40

a. Dependent Variable: waste\_tons

# **Charts**

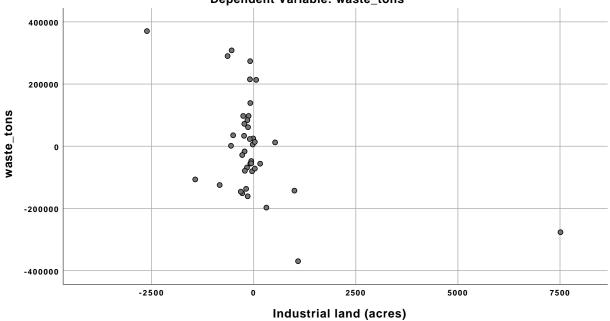
# Histogram Dependent Variable: waste\_tons Mean = 1.84E-16 Std. Dev. = 0.934 N = 40

**Regression Standardized Residual** 



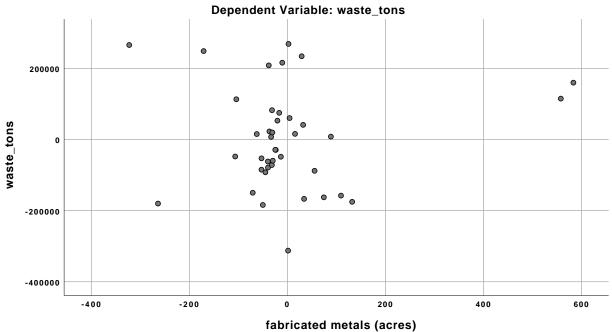
### **Partial Regression Plot**

### Dependent Variable: waste\_tons



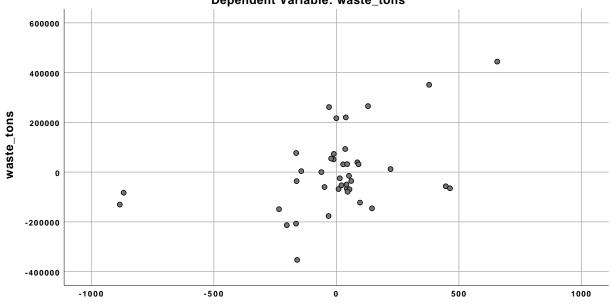
### **Partial Regression Plot**

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### **Partial Regression Plot**

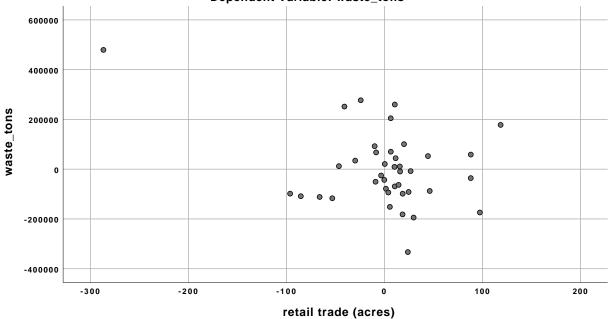
### Dependent Variable: waste\_tons



# trucking and wholesale trade (acres)

### **Partial Regression Plot**

### Dependent Variable: waste\_tons



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# **Partial Regression Plot**

