SUPPLEMENT TO THE OAKLAND A's (A)

The following variables were constructed from the data in Exhibit 1 of the A case:

Variable Name	Definition
TIX	Number of Tickets Sold
OPP	Opposing Team (1 through 13)
POS	Position in the Division
GB	Games Behind
DOW	Day of Week (1 = Monday)
TEMP	Temperature (°F)
PREC	Precipitation: 1 if; 0 if not
TOG	Time of Game: 1 if day; 2 if night
TV	Television: 1 if televised locally; 0 if not
PROMO	Promotion: 1 if; 0 if not
NOBEL	1 if Nobel started; 0 if not
YANKS	1 if the opposing team was the Yankees; 0 if not
WKEND	1 if Fri., Sat., or Sun.; 0 if not
OD	Opening Day: 1 if, 0 if not
DH	Double Header: 1 if; 0 if not
O1	Opponent Number 1: 1 if; 0 if not
.	
.	
.	
O13	Opponent Number 13: 1 if; 0 if not

Exhibit 1 presents the average and standard deviations of these variables, **Exhibit 2** presents the correlation coefficients between several pairs of variables, and **Exhibit 3** presents the results of various regressive models to explain TIX as a function of various other variables.

Exhibit 1

SUPPLEMENT TO THE OAKLAND A's (A)

Averages and Standard Deviations

Variable	Average	Standard Deviation
TIX	11,244.25	9,729.86
OPP	7.05	3.83
POS	2.85	1.34
GB	8.76	6.06
DOW	4.24	2.06
TEMP	62.03	3.32
PREC	0.040	0.20
TOG	1.48	0.50
TV	0.120	0.33
PROMO	0.173	0.38
NOBEL	0.213	0.41
YANKS	0.067	0.25
WKEND	0.520	0.50
OD	0.013	0.12
DH	0.080	0.27
O1	0.080	0.27
O2	0.093	0.29
O3	0.067	0.25
O4	0.067	0.25
O5	0.067	0.25
O6	0.080	0.27
O7	0.067	0.25
O8	0.080	0.27
O9	0.080	0.27
O10	0.080	0.27
O11	0.080	0.27
O12	0.080	0.27
O13	0.080	0.27

Source: All exhibits created by case writer.

Exhibit 2

SUPPLEMENT TO THE OAKLAND A's (A)

Correlation Coefficients

	TIX	OPP	POS	GB	DOW
TIX	1.000				
OPP	–0.112	1.000			
POS	–0.115	–0.206	1.000		
GB	0.075	0.185	–0.152	1.000	
DOW	–0.007	–0.056	–0.104	–0.123	1.000
TEMP	–0.061	–0.106	0.052	0.657	–0.135
PREC	–0.097	–0.003	–0.182	–0.161	0.176
TOG	0.129	–0.112	0.126	0.091	–0.556
TV	–0.098	0.124	–0.082	–0.169	0.197
PROMO	0.267	–0.025	–0.002	0.118	–0.002
NOBEL	0.076	–0.093	0.033	0.005	0.082
YANKS	0.807	–0.214	–0.051	0.108	–0.005
WKEND	0.058	–0.043	–0.106	–0.145	0.896
OD	0.158	–0.154	0.187	–0.150	–0.014
DH	0.206	–0.249	–0.078	–0.070	0.158

	TEMP	PREC	TOG	TV	PROMO
TEMP	1.000				
PREC	–0.290	1.000			
TOG	0.113	–0.060	1.000		
TV	–0.078	0.134	–0.273	1.000	
PROMO	0.167	–0.093	–0.017	–0.061	1.000
NOBEL	–0.034	0.060	0.086	0.008	0.019
YANKS	0.014	–0.055	0.064	–0.099	0.160
WKEND	–0.178	0.196	–0.306	0.191	0.017
OD	–0.177	–0.024	0.121	–0.043	–0.053
DH	–0.077	0.191	0.012	0.042	–0.135

	NOBEL	YANKS	WKEND	OD	DH
NOBEL	1.000				
YANKS	0.122	1.000			
WKEND	0.109	0.043	1.000		
OD	–0.061	–0.031	–0.121	1.000	
DH	0.206	0.118	0.087	–0.034	1.000

Exhibit 3

SUPPLEMENT TO THE OAKLAND A'S (A)

Regression Models

Model 1: TIX versus NOBEL

Variable	Coefficient	Std. Error	*T*-stat.
NOBEL	1,804.207	2,753.164	0.655
CONSTANT	10,859.356	1,271.632	8.540

R-Squared = 0.006   Std. Deviation of Residuals = 9767.6
Adjusted R-Square = –0.008   Durbin-Watson D = 1.196

Model 2: TIX versus 01 through 012, NOBEL

Variable	Coefficient	Std. Error	*T*-stat.
NOBEL	323.388	1,755.292	0.184
O1	–4,627.963	3,396.590	–1.363
O2	–1,607.024	3,224.109	–0.498
O3	–3,810.322	3,578.674	–1.065
O4	28,663.478	3,578.674	8.010
O5	–2,177.244	3,526.638	–0.617
O6	–3,412.231	3,358.582	–1.016
O7	–3,628.322	3,578.674	–1.014
O8	–6,516.065	3,358.582	–1.940
O9	1,263.371	3,396.590	0.372
O10	100.833	3,345.816	0.030
O11	–927.898	3,358.582	–0.276
O12	–5,839.463	3,396.590	–1.719
CONSTANT	11,652.167	983.1261	11.852

R-Squared = 0.708   Std. Deviation of Residuals = 5795.1
Adjusted R-Squared = 0.645   Durbin-Watson D = 2.291

Exhibit 3 (continued)

Model 3: TIX versus O1 through O12, PREC, TEMP, PROMO, NOBEL, OD, DH

Variable	Coefficient	Std. Error	*T*-stat.
PREC	–3,772.043	3,383.418	–1.115
TEMP	–184.293	237.731	–0.775
PROMO	5,398.545	1,780.857	3.031
NOBEL	–403.502	1,518.000	–0.266
OD	15,382.632	5,652.397	2.721
DH	7,645.224	2,429.894	3.146
O1	–7,213.660	2,999.437	–2.405
O2	–3,203.395	3,046.540	–1.051
O3	–5,780.245	3,242.464	–1.783
O4	25,640.501	3,196.000	8.023
O5	–3,444.192	3,056.500	–1.127
O6	–4,568.433	2,988.677	–1.529
O7	–5,075.192	3,190.707	–1.591
O8	–5,973.904	3,329.604	–1.794
O9	1,966.401	2,971.357	0.662
O10	–2,352.715	3,002.119	–0.784
O11	–1,701.151	3,023.445	–0.563
O12	–5,627.881	2,911.665	–1.933
CONSTANT	22,740.489	14,777.323	1.539

R-Squared = 0.803 Std. Deviation of Residuals = 5011.0
Adjusted R-Squared = 0.740 Durbin-Watson D = 2.269

Model 4: TIX versus OPP, NOBEL

Variable	Coefficient	Std. Error	*T*-stat.
OPP	–269.135	297.809	–0.904
NOBEL	1,572.135	2,768.562	0.568
CONSTANT	12,807.161	2,182.002	5.869

R-Squared = 0.017 Std. Deviation of Residuals = 9779.9
Adjusted R-Square = 0.010 Durbin-Watson D = 1.146

Exhibit 3 (continued)

Model 5: TIX versus PREC, TOG, TV, PROMO,   NOBEL, YANKS, WKEND, OD, DH

Variable	Coefficient	Std. Error	*T*-stat.
PREC	–3,660.109	3,251.502	–1.126
TOG	1,606.406	1,334.121	1.204
TV	223.421	1,982.301	0.113
PROMO	4,382.173	1,658.644	2.642
NOBEL	–1,244.411	1,546.545	–0.805
YANKS	29,493.164	2,532.314	11.647
WKEND	1,468.269	1,328.585	1.105
OD	16,119.831	5,388.174	2.992
DH	5,815.814	2,375.194	2.449
CONSTANT	5,082.356	2,170.419	2.342

R-Squared = 0.742   Std. Deviation of Residuals = 5273.5
Adjusted R-Squared = 0.706   Durbin-Watson D = 1.733

Model 6: TIX versus PROMO, NOBEL, YANKS, DH

Variable	Coefficient	Std. Error	*T*-stat.
PROMO	4,195.743	1,737.742	2.414
NOBEL	–1,204.082	1,607.869	–0.749
YANKS	29,830.245	2,641.516	11.293
DH	5,274.262	2,457.377	2.146
CONSTANT	8,363.238	527.298	15.861

R-Squared = 0.692   Std. Deviation of Residuals = 5551.0
Adjusted R-Square = 0.675   Durbin-Watson D = 1.96

Exhibit 3 (continued)

Model 7: TIX versus PREC, PROMO, NOBEL, YANKS, OD

Variable	Coefficient	Std. Error	*T*-stat.
PREC	–1,756.508	3,227.439	–0.544
PROMO	3,758.92	1,687.895	2.227
NOBEL	–209.484	1,549.192	–0.135
YANKS	30,568.223	2,570.535	11.892
OD	15,957.998	5,491.220	2.906
CONSTANT	8,457.002	496.203	17.043

R-Squared = 0.709   Std. Deviation of Residuals = 5434.5
Adjusted R-Square = 0.688   Durbin-Watson D = 1.873

Model 8: TIX versus GB, TEMP, PREC, TOG, TV, PROMO, NOBEL, YANKS, WKEND, OD, DH

Variable	Coefficient	Std. Error	*T*-stat.
GB	156.240	136.632	1.144
TEMP	–440.363	258.493	–1.704
PREC	–5,021.658	3,348.736	–1.500
TOG	1,807.918	1,331.109	1.358
TV	572.777	1,991.314	0.288
PROMO	4,736.968	1,665.964	2.843
NOBEL	–1,353.056	1,537.185	–0.880
YANKS	29,038.808	2,536.088	11.450
WKEND	1,319.888	1,330.660	0.992
OD	14,928.553	5,484.738	2.722
DH	5,968.288	2,362.325	2.526
CONSTANT	30,815.082	16,223.465	1.899

R-Squared = 0.753   Std. Deviation of Residuals = 5237.0
Adjusted R-Square = 0.710   Durbin-Watson D = 1.80