

LoanSTAR Monitoring and Analysis Program

**Savings Analysis of Utility Bills
for Unmonitored Sites**

Volume II

Detailed Savings Calculations

by

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SUMMARY

Detailed calculations for each site are shown in this Volume. For each site the ECRM description, approved loan amount, expected savings, the pre and post-retrofit energy use (electricity and gas separately), cost of energy, energy savings (in kWh and MCF), the percentage change in energy use, monthly energy use plots (for electricity and gas separately) and weather adjusted energy savings model parameters are given.

Bastrop ISD

Expected Savings	Unadjusted Savings	Weather Adjusted Savings
\$ 41,646/yr	\$ 41,273/24 Months	\$ 40,250/24 Months
406,799 kWh/yr	475,540 kWh/24 Months	453,323 kWh/24 Months
920 Mcf/yr	-314 Mcf/24 Months	-123 Mcf/24 Months

High School

ECRMs Description

1. Install roof deck insulation
2. Install ducted air return
3. Install motion sensors
4. Install makeup air for kitchen hood

School Year Model-----Electricity

Model: Un-grouped SLR. kWh vs. Temp_(F)

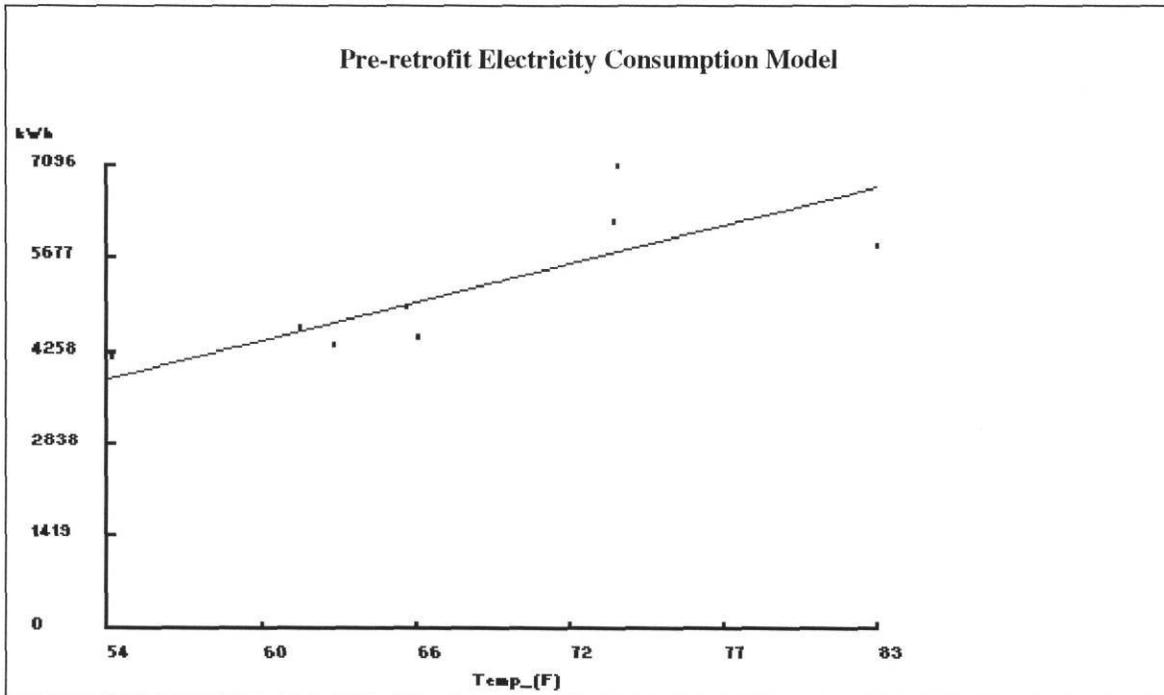
Yint = -1572.7018 (1750.7718) Temp_(F) = 100.2063 (26.3350)
 N = 9 R2 = 0.67 adjR2 = 0.63 RMSE = 705.79 CV-RMSE = 14.0% p = -0.38 DW = 2.42 (p=0)

Savings calculations for Model: Un-grouped SLR. kWh vs. Temp_(F)

Baseline = 89253 Measured = 83830 Saved = 5423 +- 7238 (i.e. +- 133.46%)

Avg savings = 301.3 +- 402.12

Total saved = 5423 × 30.5 = 165,402 kWh



Non-School Year Model-----Electricity

Model: Un-grouped Mean.kWh

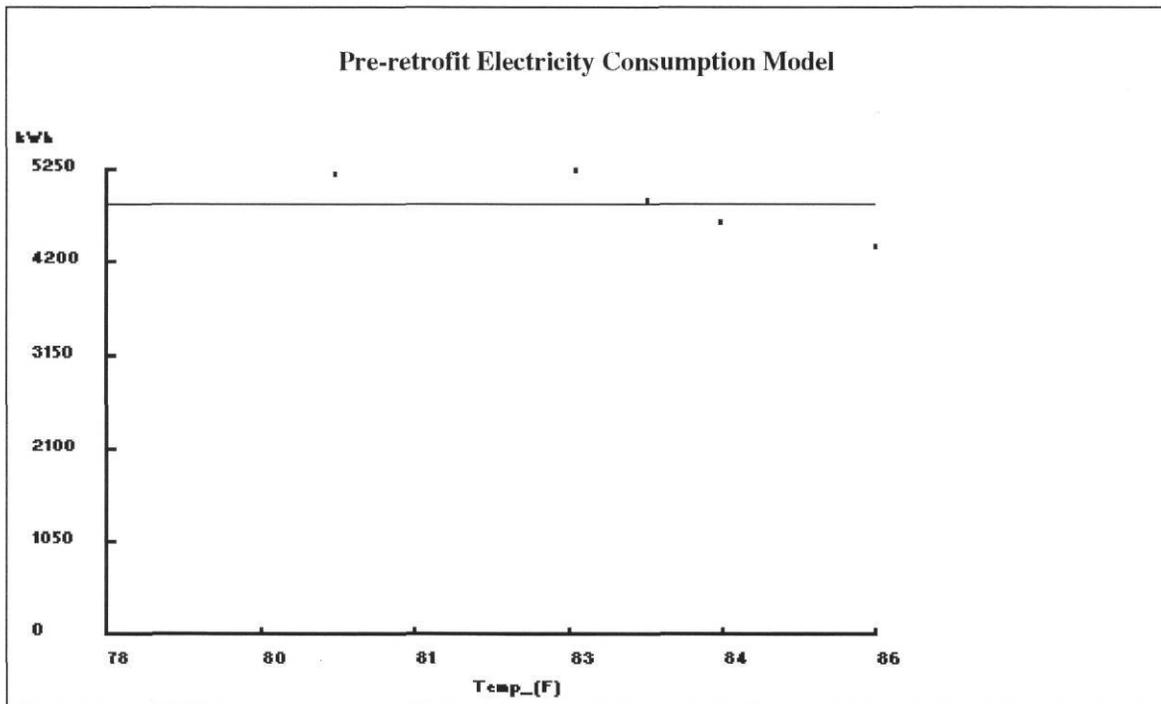
N = 6 Ymean = 4875.50 Std Dev = 327.74 CV-StDev = 6.7%

Savings calculations for Model: Un-grouped Mean.kWh

Baseline = 29253 Measured = 25352 Saved = 3901 +- 2614 (i.e. +- 67.01%)

Avg savings = 650.167 +- 435.66

Total saved = 3901 × 30.5 = 118,981 kWh



School Year Model-----Gas

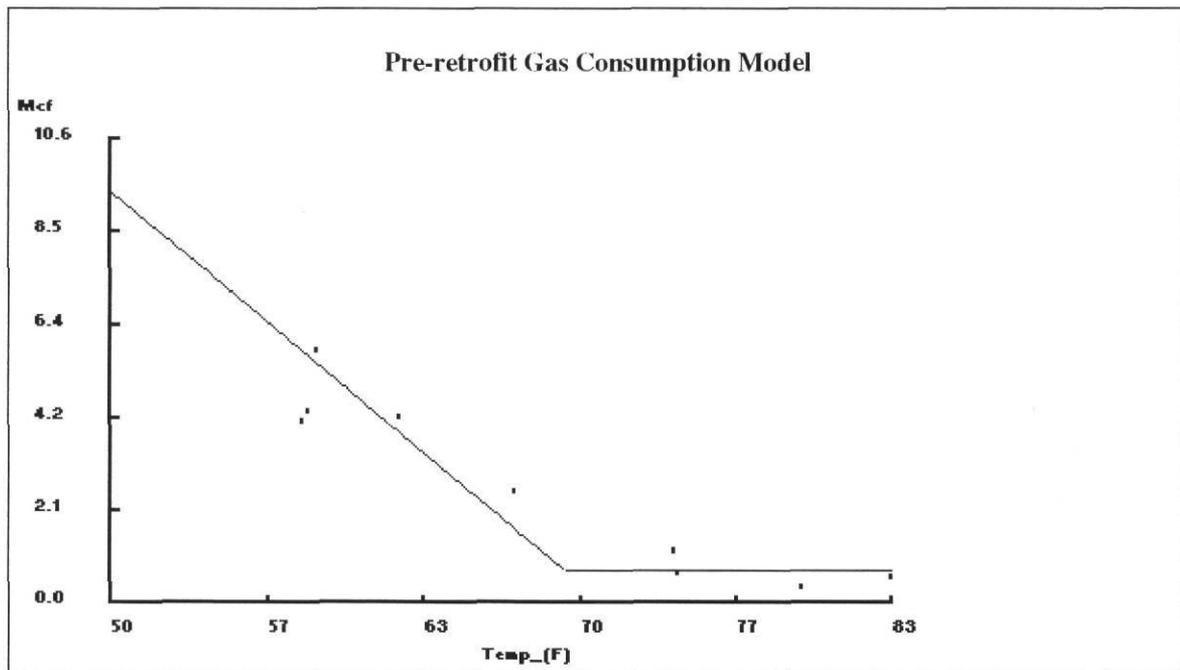
Model: Un-grouped 3P-CP (H). Mcf vs. Temp_(F)

$Y_{cp} = 0.7260 (0.4022)$ $LS = -0.4462 (0.0450)$ $RS = 0.0000 (0.0000)$ $X_{cp} = 69.2880$
 $N = 10$ $N1 = 6$ $N2 = 4$ $R2 = 0.92$ $adjR2 = 0.92$ $RMSE = 0.92$ $CV-RMSE = 26.4\%$
 $p = 0.20$ $DW = 1.59 (i\%)$

Savings calculations for Model: Un-grouped 3P-CP (H). Mcf vs. Temp_(F)

Baseline = 69 Measured = 90 Saved = -21 Avg savings = -1.17

Total saved = $-21 \times 30.5 = -641$ Mcf



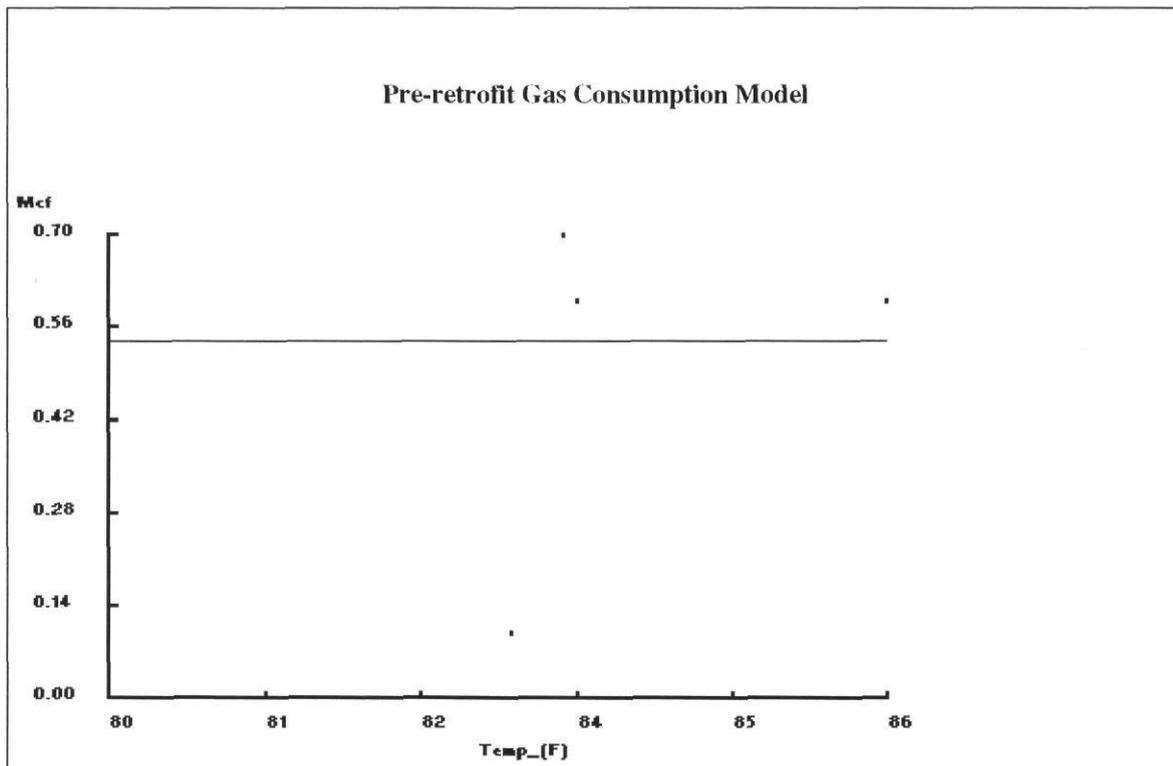
Non-School Year Model-----Gas

Model: Un-grouped Mean.Mcf

N = 5 Ymean = 0.54 Std Dev = 0.25 CV-StDev = 46.5%

Savings calculations for Model: Un -group Mean. Mcf

Baseline = 3 Measured = 3 Saved = 0 +- 19 (i.e. +- 32173.67%) Avg savings = -0.01 +- 3.22
Total saved = 0



Middle School

ECRMs Description

1. Install roof deck insulation
2. Install ducted air return

School Year Model-----Electricity

Model: Un-grouped SLR. kWh vs. Temp_(F)

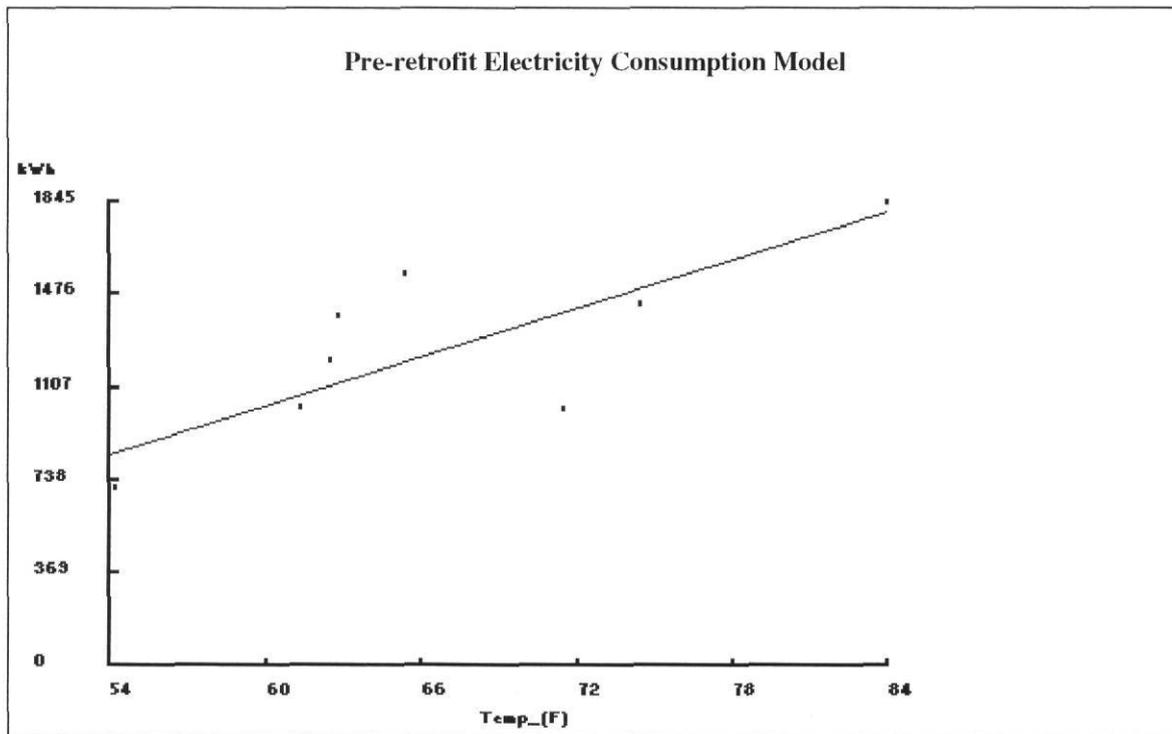
Yint = -899.7955 (569.5353) Temp_(F) = 32.2807 (8.6080)
N = 9 R2 = 0.67 adjR2 = 0.62 RMSE = 235.19 CV-RMSE = 19.3% p = -0.24 DW = 1.93 (p=0)

Savings calculations for Model: Un-grouped SLR. kWh vs. Temp_(F)

Baseline = 23432 Measured = 19122 Saved = 4310 +- 3617 (i.e. +- 83.91%)

Avg savings = 226.858 +- 190.36

Total saved = 4310 × 30.5 = 131,455 kWh



Non-School Year Model-----Electricity

Model: Un-grouped Mean.kWh

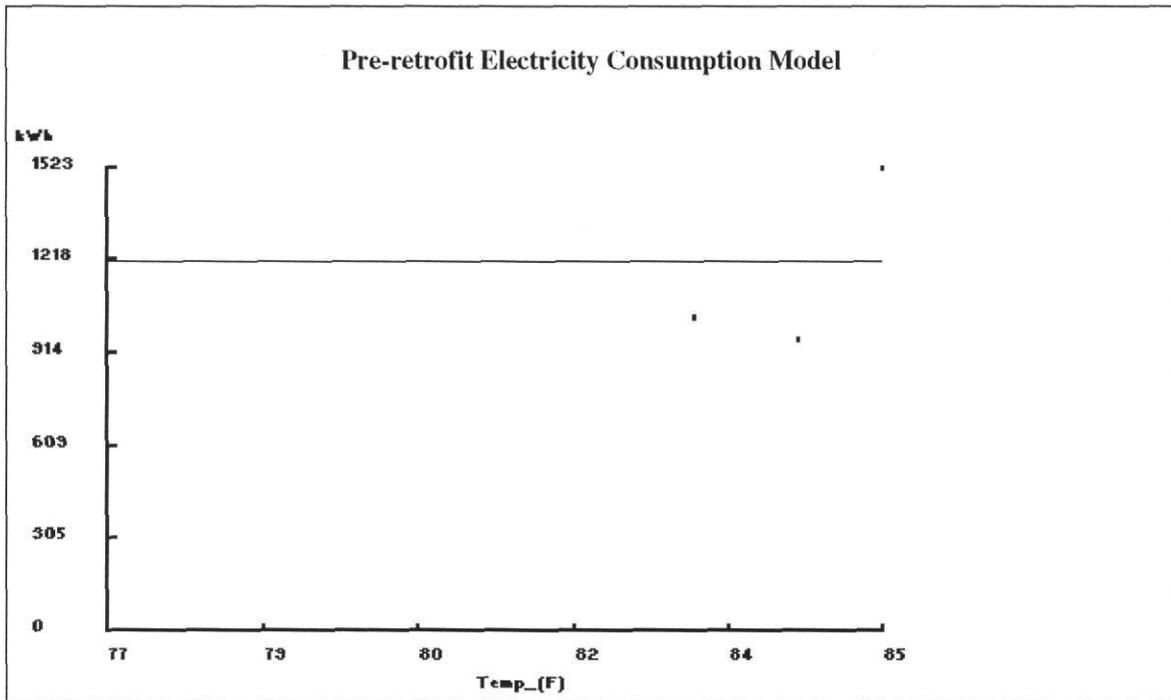
N = 4 Ymean = 1213.75 Std Dev = 268.34 CV-StDev = 22.1%

Savings calculations for Model: Un -group SLR. kWh vs. Temp_(F)

Baseline = 7257 Measured = 6028 Saved = 1229 +- 6984 (i.e. +- 568.24%)

Avg savings = 204,852 +- 1164.05

Total saved = 1229 × 30.5 = 37,485 kWh



School Year Model-----Gas

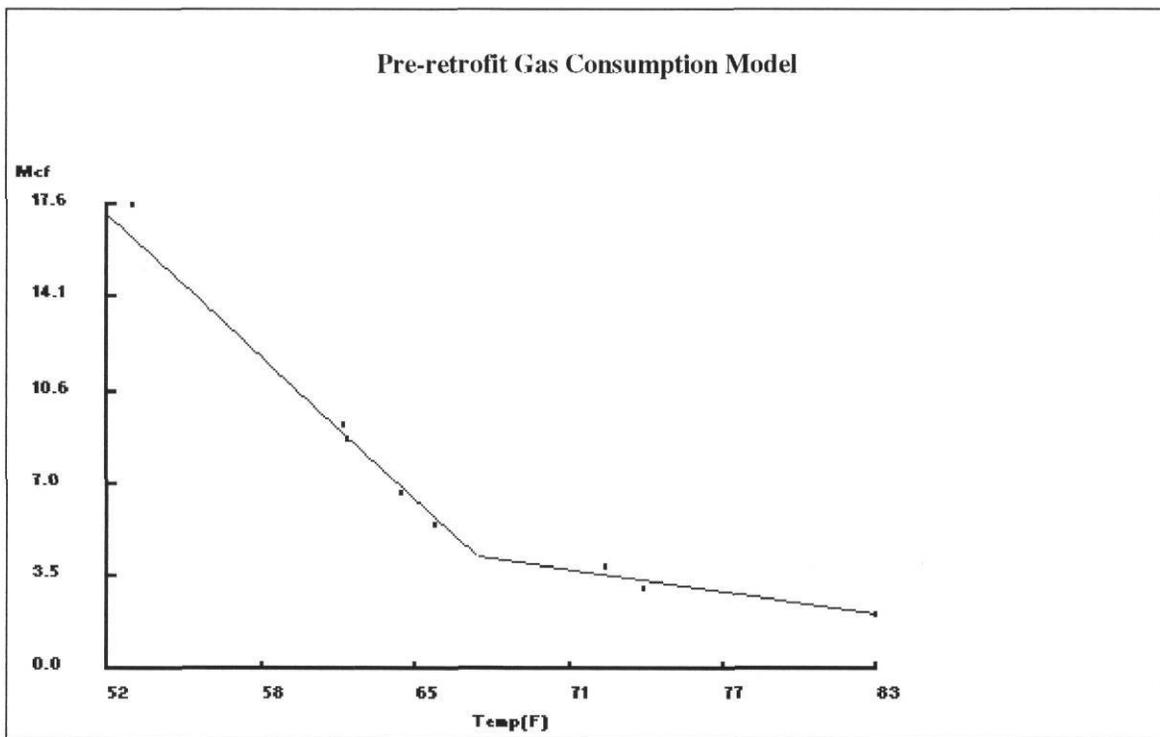
Model: Un-grouped 4P-CP. Mcf vs. Temp(F)

$Y_{cp} = 4.2648 (3.3554)$ $LS = -0.8708 (0.0553)$ $RS = -0.1343 (0.1135)$ $X_{cp} = 67.0800$
 $N = 9$ $N1 = 6$ $N2 = 3$ $R2 = 0.99$ $RMSE = 0.7606$ $CV-RMSE = 9.4\%$ $p = -0.36$ $DW = 2.67 (i\%)$

Savings calculations for Model: Un -group 4P-CP. Mcf vs. Temp_(F)

Baseline = 152 Measured = 132 Saved = 20 Avg savings = 1,148

Total saved = $20 \times 30.5 = 610$ Mcf



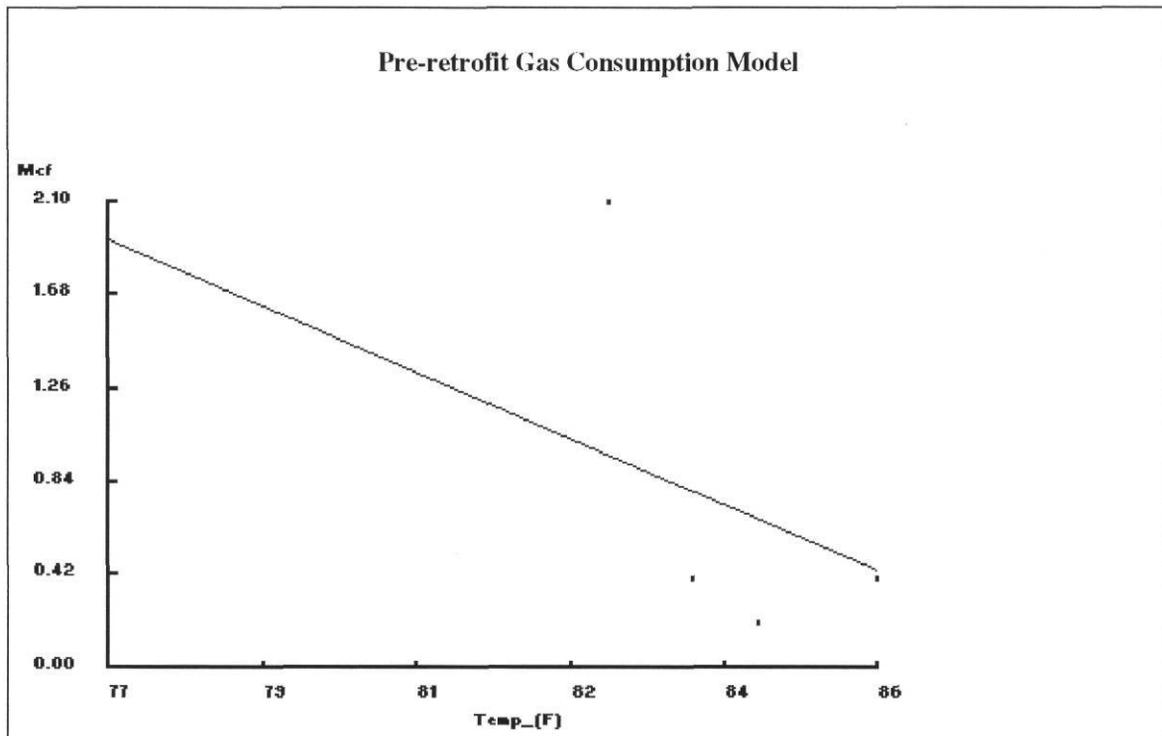
Non-School Year Model-----Gas

Model: Un-grouped SLR. Mcf vs. Temp_(F)

$Y_{int} = 15.7870$ (9.8381) $Temp_F = -0.1793$ (0.1189)
N = 5 R² = 0.43 adjR² = 0.24 RMSE = 0.76 CV-RMSE = 79.2% p = 0.16 DW = 0.84 (1%)

Savings calculations for Model: Un -group SLR. Mcf vs. Temp_(F)

Baseline = 5 Measured = 8 Saved = -3 +- 13 (i.e. +- 385.72%) Avg savings = -0.559 +- 2.16
Total saved = -3 × 30.5 = -92 Mcf

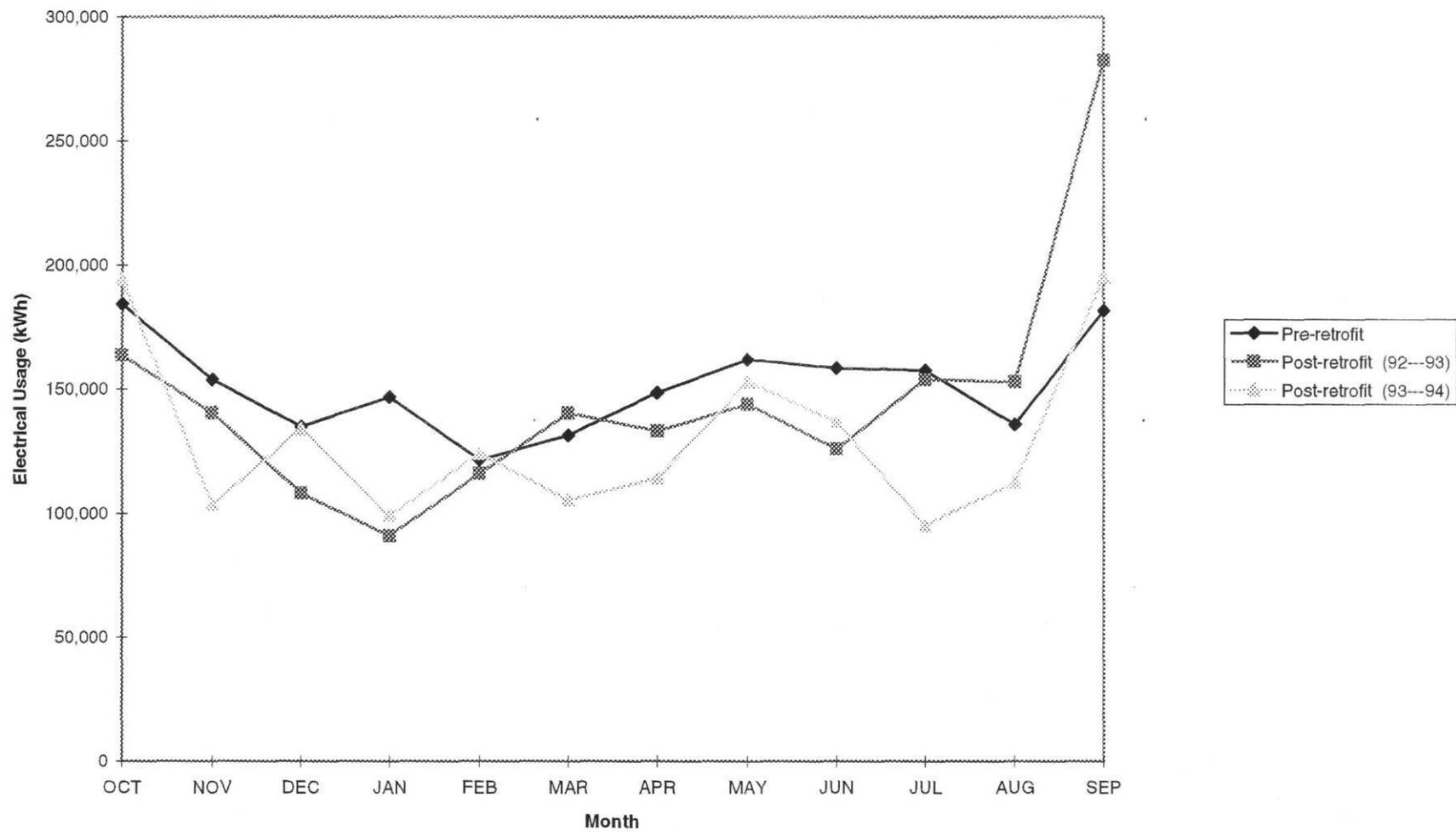


Bastrop ISD----High School Electrical Usage

ECRM Description	1. Install roof deck insulation												
	2. Install ducted air return												
	3. Install motion sensors												
	4. Install makeup air for kitchen hood												
Approved Loan Amount	\$ 178,000 (Includes High School and Middle School)												
Expected Savings	\$41,646/yr												
Pre-retrofit	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Total
kWh Used	184,500	153,900	135,000	146,700	121,500	131,400	148,500	162,000	158,400	157,500	135,900	181,800	1,817,100
Cost	\$13,889	\$11,588	\$10,167	\$11,047	\$ 9,152	\$ 9,896	\$11,182	\$12,197	\$11,625	\$10,249	\$10,235	\$13,686	\$134,913
Post-retrofit (92---93)													
kWh Used	163,800	140,400	108,000	90,900	116,100	140,400	133,200	144,000	126,000	153,900	153,000	282,600	1,752,300
Cost	\$12,333	\$10,573	\$ 8,137	\$ 6,851	\$ 8,746	\$10,573	\$10,032	\$10,844	\$ 9,490	\$11,588	\$11,521	\$21,267	\$131,955
Savings (kWh)	20,700	13,500	27,000	55,800	5,400	-9,000	15,300	18,000	32,400	3,600	-17,100	-100,800	64,800
kWh % change	-11%	-9%	-20%	-38%	-4%	7%	-10%	-11%	-20%	-2%	13%	55%	-4%
Post-retrofit (93---94)													
kWh Used	194,400	103,500	134,100	99,000	124,200	105,300	114,300	153,000	136,800	95,400	112,500	195,300	1,567,800
Cost	\$14,634	\$ 7,798	\$10,099	\$ 7,460	\$ 9,355	\$ 7,934	\$ 8,610	\$11,521	\$10,302	\$ 7,189	\$ 8,475	\$14,702	\$118,079
Savings (kWh)	-9,900	50,400	900	47,700	-2,700	26,100	34,200	9,000	21,600	62,100	23,400	-13,500	249,300
kWh % change	5%	-33%	-1%	-33%	2%	-20%	-23%	-6%	-14%	-39%	-17%	7%	-14%

Bastrop ISD---High School

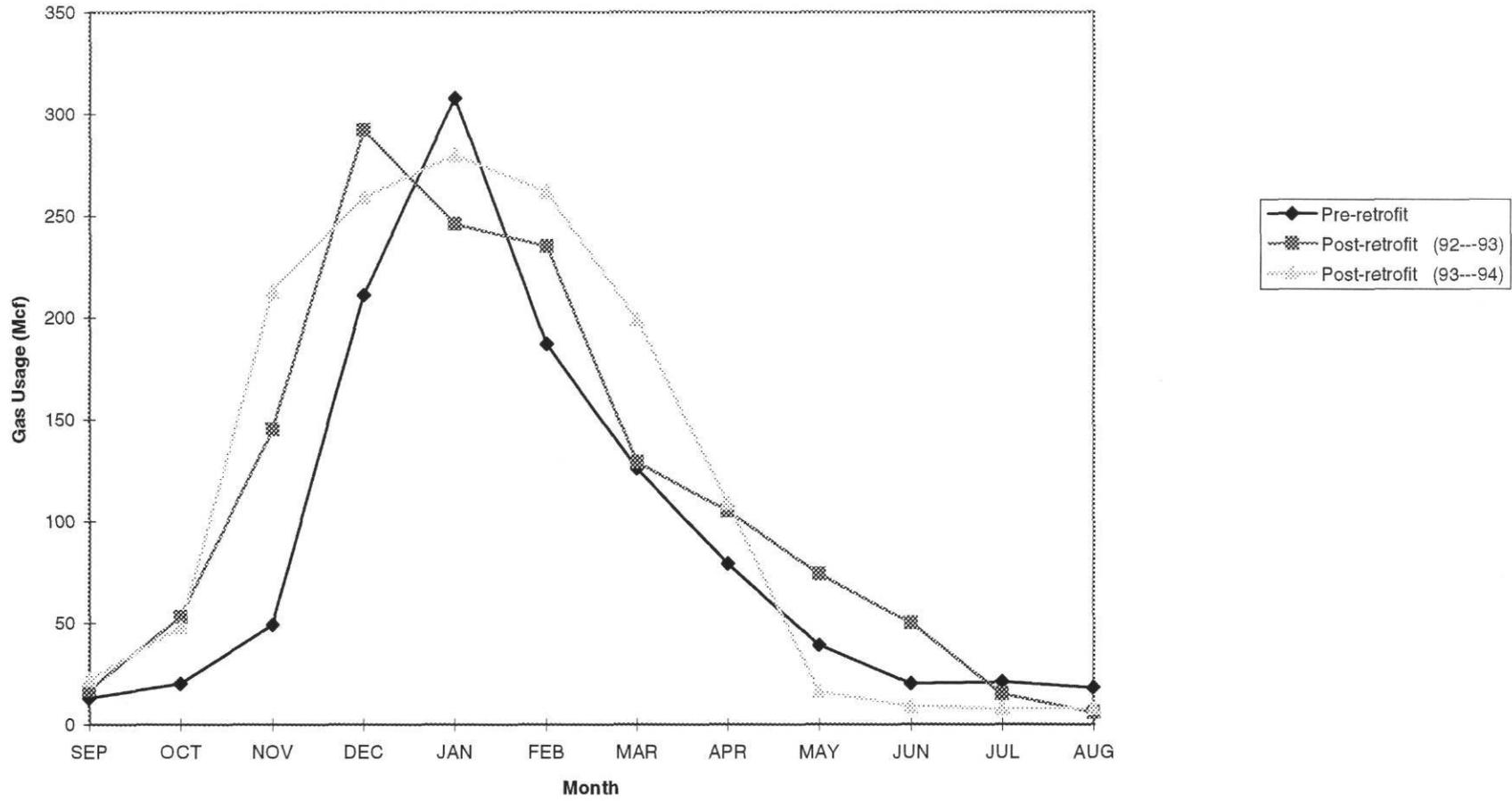
Electrical Usage



Bastrop ISD----High School Gas Usage

ECRM Description	1. Install roof deck insulation												
	2. Install ducted air return												
	3. Install motion sensors												
	4. Install makeup air for kitchen hood												
Approved Loan Amount	\$ 178,000 (Includes High School and Middle School)												
Expected Savings	\$41,646/yr												
Pre-retrofit	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	Total
Mcf Used	13	20	49	211	308	187	126	79	39	20	21	18	1,091
Cost	\$ 67	\$ 97	\$ 212	\$ 844	\$1,236	\$ 679	\$ 448	\$ 291	\$ 156	\$ 88	\$ 103	\$ 90	\$4,311
Post-retrofit (92---93)													
Mcf Used	17	53	145	292	246	235	129	105	74	50	15	6	1367
Cost	\$ 101	\$ 251	\$ 586	\$1,226	\$1,018	\$ 913	\$ 507	\$ 425	\$ 310	\$ 220	\$ 84	\$ 50	\$5,691
Savings (Mcf)	-4	-33	-96	-81	62	-48	-3	-26	-35	-30	6	12	-276
Mcf % change	31%	165%	196%	38%	-20%	26%	2%	33%	90%	150%	-29%	-67%	25%
Post-retrofit (93---94)													
Mcf Used	22	48	213	259	280	262	199	109	16	9	8	8	1433
Cost	\$ 130	\$ 248	\$ 970	\$1,181	\$1,280	\$1,183	\$ 881	\$ 499	\$ 87	\$ 53	\$ 63	\$ 58	\$6,633
Savings (Mcf)	-9	-28	-164	-48	28	-75	-73	-30	23	11	13	10	-342
Mcf % change	69%	140%	335%	23%	-9%	40%	58%	38%	-59%	-55%	-62%	-56%	31%

Bastrop ISD---High School Gas Usage



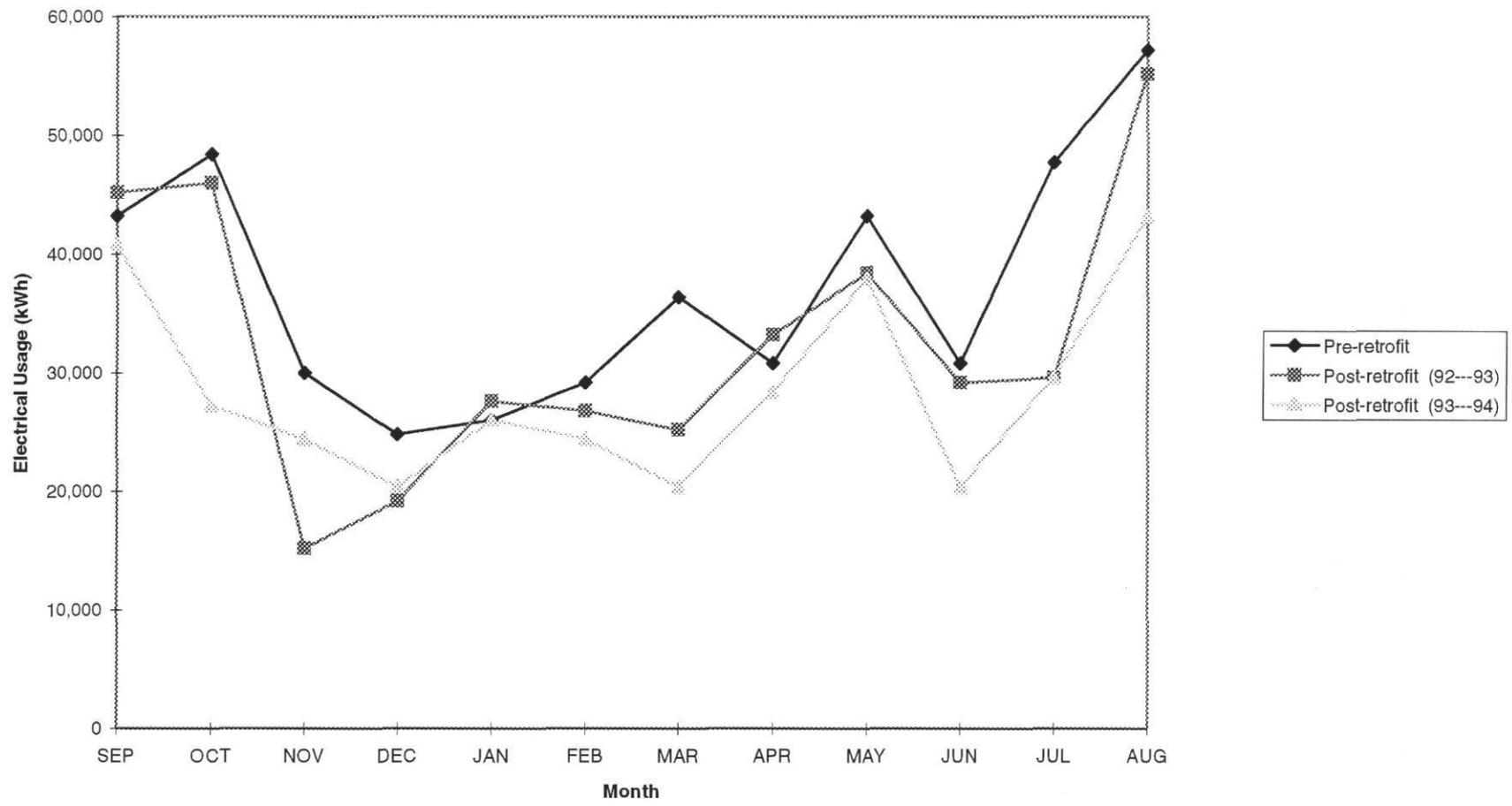
Bastrop ISD----Middle School

Electrical Usage

ECRM Description	1. Install roof deck insulation												
	2. Install ducted air return												
Approved Loan Amount	\$ 178,000 (Includes High School and Middle School)												
Expected Savings	\$41,646/yr												
Pre-retrofit	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	Total
kWh Used	43,200	48,400	30,000	24,800	26,000	29,200	36,400	30,800	43,200	30,800	47,720	57,200	447,720
Cost	\$3,264	\$3,655	\$2,271	\$1,880	\$1,970	\$2,211	\$2,752	\$2,331	\$3,264	\$2,331	\$3,417	\$4,033	\$33,379
Post-retrofit (92---93)													
kWh Used	45,200	46,000	15,200	19,200	27,600	26,800	25,200	33,200	38,400	29,200	29,600	55,200	335,600
Cost	\$3,414	\$3,474	\$1,158	\$1,459	\$2,091	\$2,030	\$1,910	\$2,512	\$2,903	\$2,211	\$2,241	\$4,166	\$25,403
Savings (kWh)	-2,000	2,400	14,800	5,600	-1,600	2,400	11,200	-2,400	4,800	1,600	18,120	2,000	112,120
kWh % change	5%	-5%	-49%	-23%	6%	-8%	-31%	8%	-11%	-5%	-38%	-3%	-25%
Post-retrofit (93---94)													
kWh Used	40,800	27,200	24,400	20,400	26,000	24,400	20,400	28,400	38,000	20,400	29,600	43,200	300,000
Cost	\$3,083	\$2,060	\$1,850	\$1,549	\$1,970	\$1,850	\$1,549	\$2,151	\$2,873	\$1,549	\$2,241	\$3,264	\$22,725
Savings (kWh)	2,400	21,200	5,600	4,400	0	4,800	16,000	2,400	5,200	10,400	18,120	14,000	147,720
kWh % change	-6%	-44%	-19%	-18%	0%	-16%	-44%	-8%	-12%	-34%	-38%	-24%	-33%

Bastrop ISD----Middle School

Electrical Usage

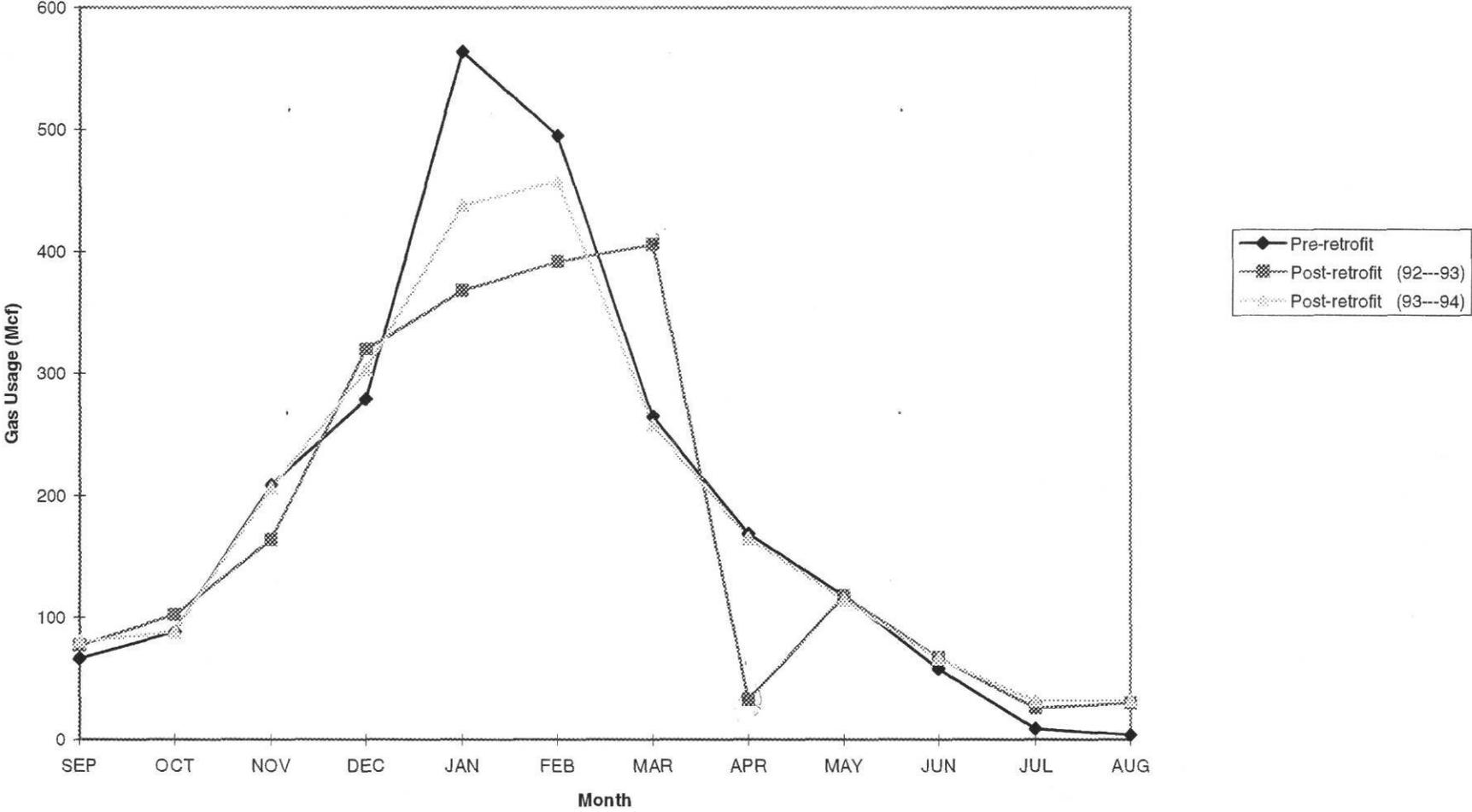


Bastrop ISD----Middle School Gas Usage

ECRM Description	1. Install roof deck insulation												
	2. Install ducted air return												
Approved Loan Amount	\$ 178,000 (Includes High School and Middle School)												
Expected Savings	\$41,646/yr												
Pre-retrofit	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	Total
Mcf Used	66	88	209	279	564	495	265	169	118	58	9	4	2,324
Cost	\$ 276	\$ 366	\$ 843	\$1,135	\$2,272	\$1,925	\$ 966	\$ 602	\$ 422	\$ 237	\$ 60	\$ 63	\$ 9,167
Post-retrofit (92---93)													
Mcf Used	77	102	164	320	368	392	406	33	118	67	26	30	2,103
Cost	\$ 290	\$ 394	\$ 631	\$1,340	\$1,558	\$1,526	\$1,583	\$ 140	\$ 422	\$ 258	\$ 114	\$ 153	\$ 8,409
Savings (Mcf)	-11	-14	45	-41	196	103	-141	136	0	-9	-17	-26	221
Mcf % change	17%	16%	-22%	15%	-35%	-21%	53%	-80%	0%	16%	189%	650%	-10%
Post-retrofit (93---94)													
Mcf Used	80	88	206	303	438	458	258	165	115	66	32	32	2,241
Cost	\$ 367	\$ 401	\$ 924	\$1,370	\$1,990	\$2,066	\$1,115	\$ 716	\$ 505	\$ 301	\$ 159	\$ 150	\$10,064
Savings (Mcf)	-14	0	3	-24	126	37	7	4	3	-8	-23	-28	83
Mcf % change	21%	0%	-1%	9%	-22%	-7%	-3%	-2%	-3%	14%	256%	700%	-4%

Bastrop ISD---Middle School

Gas Usage



City of Plainview

Expected Savings	Unadjusted Savings	Weather Adjusted Savings
\$4,550/yr	\$ 5,610/21 Months	\$ 17,459/21 Months
	28,900 kWh/21 Months	23,821 kWh/21 Months
	798 Mcf/21 Months	3,448 Mcf/21 Months

City Hall-----Electricity

ECRMs Description

1. Fixture relamp/replace

Model: Un-grouped SLR. kWh vs. Temp_(F)

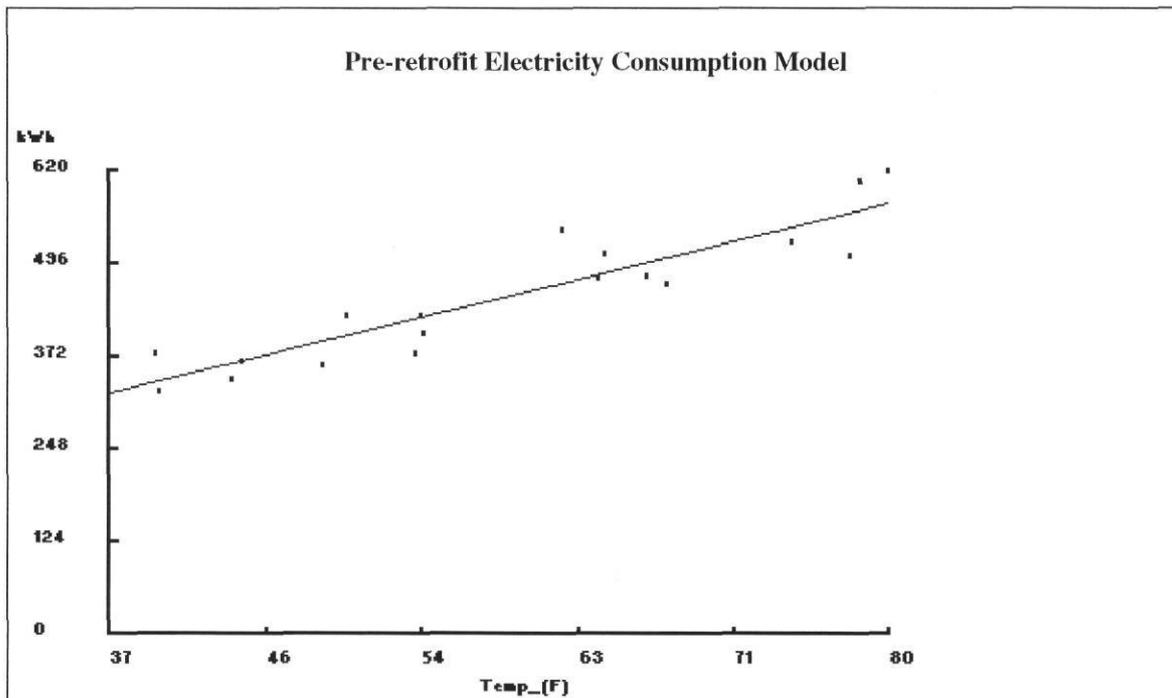
Yint = 96.1880 (35.6966) Temp_(F) = 6.0268 (0.5985)
 N = 19 R2 = 0.86 adjR2 = 0.85 RMSE = 35.18 CV-RMSE = 7.9% p = -0.10 DW = 2.09 (p=0)

Savings calculations for Model: Un-group SLR. kWh vs. Temp_(F)

Baseline = 9415 Measured = 8353 Saved = 1062 +- 441 (i.e. +- 41.57%)

Avg savings = 50.566 +- 21.02

Total saved = 1062 × 30.5 = 32,391 kWh



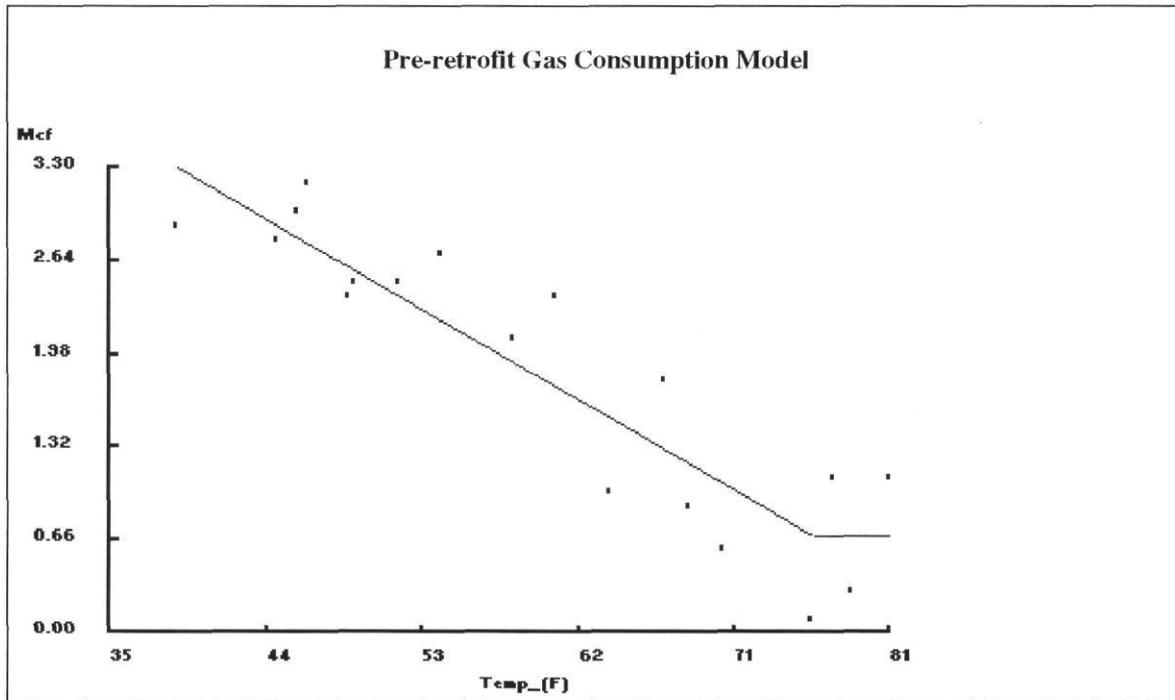
City Hall-----Gas

Model: Un-grouped 3P-CP (H). Mcf vs. Temp_(F)

$Y_{cp} = 0.6896 (0.1585)$ $LS = -0.0703 (0.0072)$ $RS = 0.0000 (0.0000)$ $X_{cp} = 75.9300$
 $N = 19$ $N1 = 16$ $N2 = 3$ $R2 = 0.85$ $adjR2 = 0.84$ $RMSE = 0.41$ $CV-RMSE = 21.4\%$ $p = 0.52$
 $DW = 0.97 (p>0)$

Savings calculations for Model: Un-group 3P-CP (H). Mcf vs. Temp_(F)

Baseline = 42 Measured = 29 Saved = 13 Avg savings = 0.613
Total saved = $13 \times 30.5 = 397$ Mcf



Service Center-----Electricity

ECRMs Description

1. Programmable thermostats
2. Interior lighting controls
3. Fixture relamp/replace

Model: Un-grouped 4P-CP. kWh vs. Temp_(F)

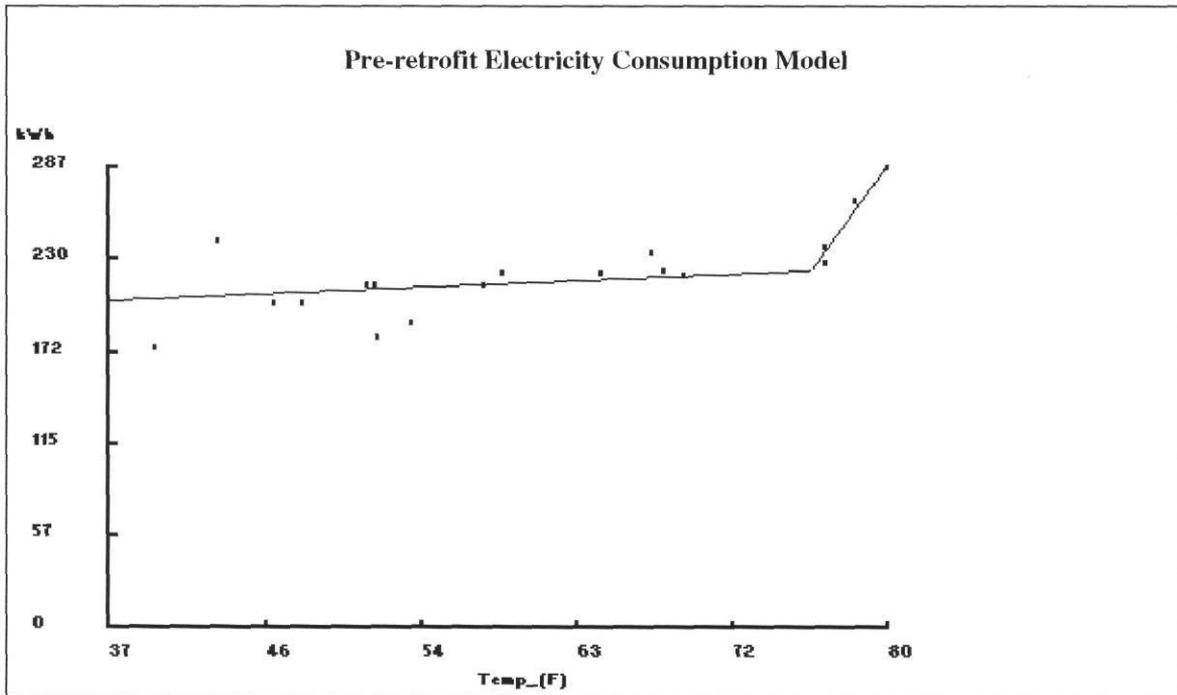
Ycp = 223.1162 (20.8542) LS = 0.4955 (0.3690) RS = 15.0373 (4.4822) Xcp = 75.9500

N = 19 N1 = 15 N2 = 4 R2 = 0.65 RMSE = 16.6946 CV-RMSE = 7.5% p = 0.16 DW = 1.50 (i%)

Savings calculations for Model: Un-group 4P-CP. kWh vs. Temp_(F)

Baseline = 4696 Measured = 5112 Saved = -416 Avg savings = -19.827

Total saved = $-416 \times 30.5 = -12,688$ kWh



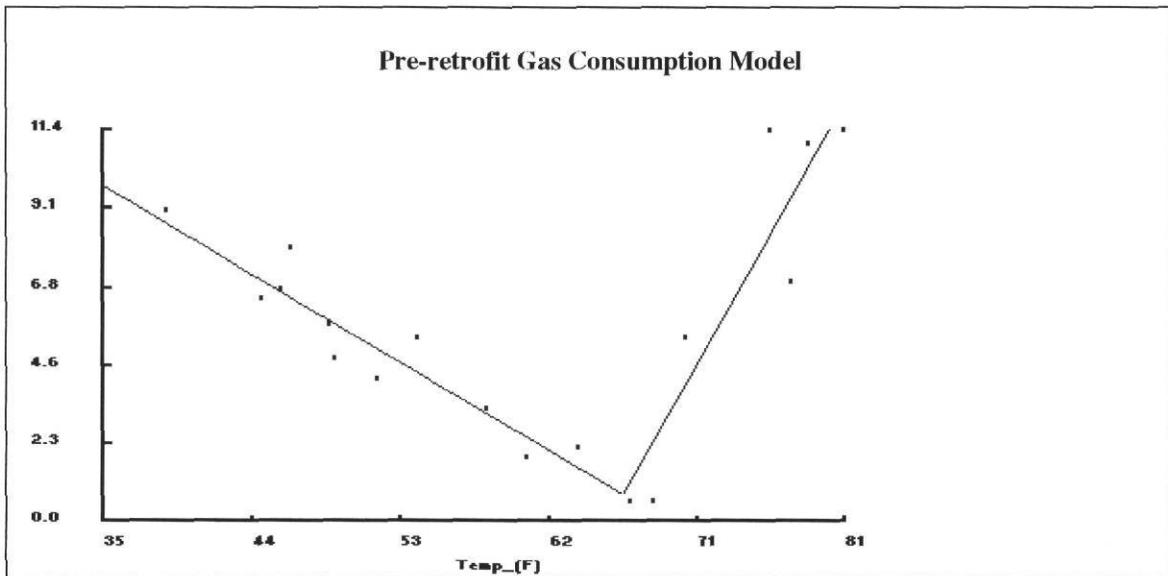
Service Center-----Gas

Model: Un-grouped 4P-CP. Mcf vs. Temp_(F)

$Y_{cp} = 0.7806 (1.9022)$ $LS = -0.2814 (0.0357)$ $RS = 0.8358 (0.1141)$ $X_{cp} = 66.7900$
 $N = 19$ $N1 = 12$ $N2 = 7$ $R2 = 0.87$ $RMSE = 1.3172$ $CV-RMSE = 21.8\%$ $p = 0.31$ $DW = 1.31 (i\%)$

Savings calculations for Model: Un-group 4P-CP. Mcf vs. Temp_(F)

Baseline = 131 Measured = 36 Saved = 95 Avg savings = 4.542
Total saved = $95 \times 30.5 = 2,898$ Mcf



Unger Memorial Library-----Electricity

ECRMs Description

1. Attic/Ceiling insulation

Model: Un-grouped SLR. kWh vs. Temp_(F)

$Y_{int} = 155.3142$ (34.5491) $Temp_{(F)} = 5.5858$ (0.5793)

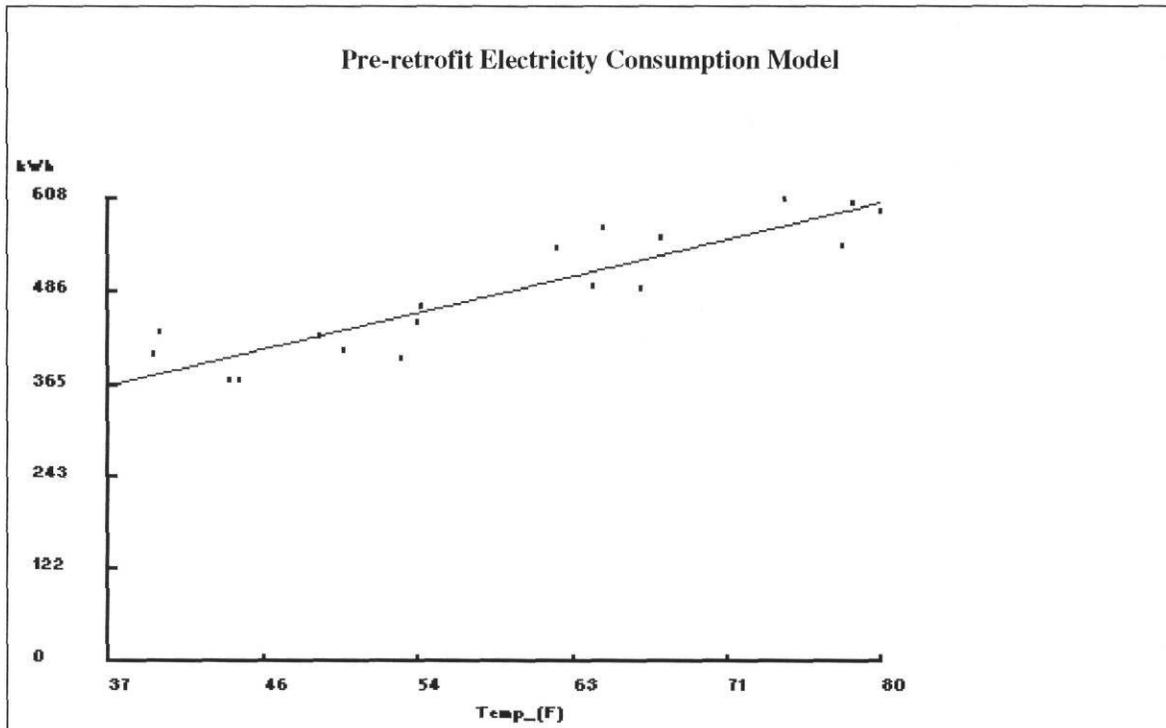
$N = 19$ $R^2 = 0.85$ $adjR^2 = 0.84$ $RMSE = 34.06$ $CV-RMSE = 7.1\%$ $p = -0.03$ $DW = 1.84$ ($p=0$)

Savings calculations for Model: Un-group SLR. kWh vs. Temp_(F)

Baseline = 10115 Measured = 9980 Saved = 135 +- 465 (i.e. +- 343.67%)

Avg savings = 6.446 +- 22.15

Total saved = $135 \times 30.5 = 4,118$ kWh



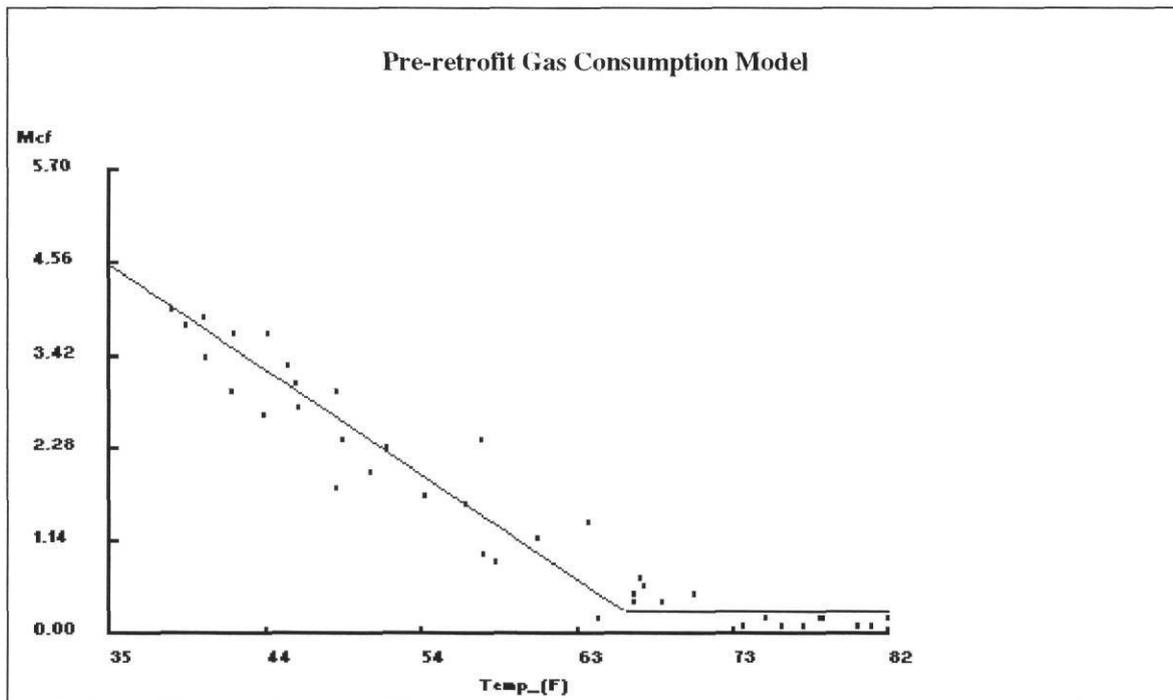
Unger Memorial Library-----Gas

Model: Un-grouped 3P-CP (H). Mcf vs. Temp_(F)

Ycp = 0.2850 (0.0913) LS = -0.1357 (0.0061) RS = 0.0000 (0.0000) Xcp = 66.2160
N = 40 N1 = 25 N2 = 15 R2 = 0.93 adjR2 = 0.93 RMSE = 0.40 CV-RMSE = 23.3% p = 0.34
DW = 1.32 (p>0)

Savings calculations for Model: Un-group 4P-CP. Mcf vs. Temp_(F)

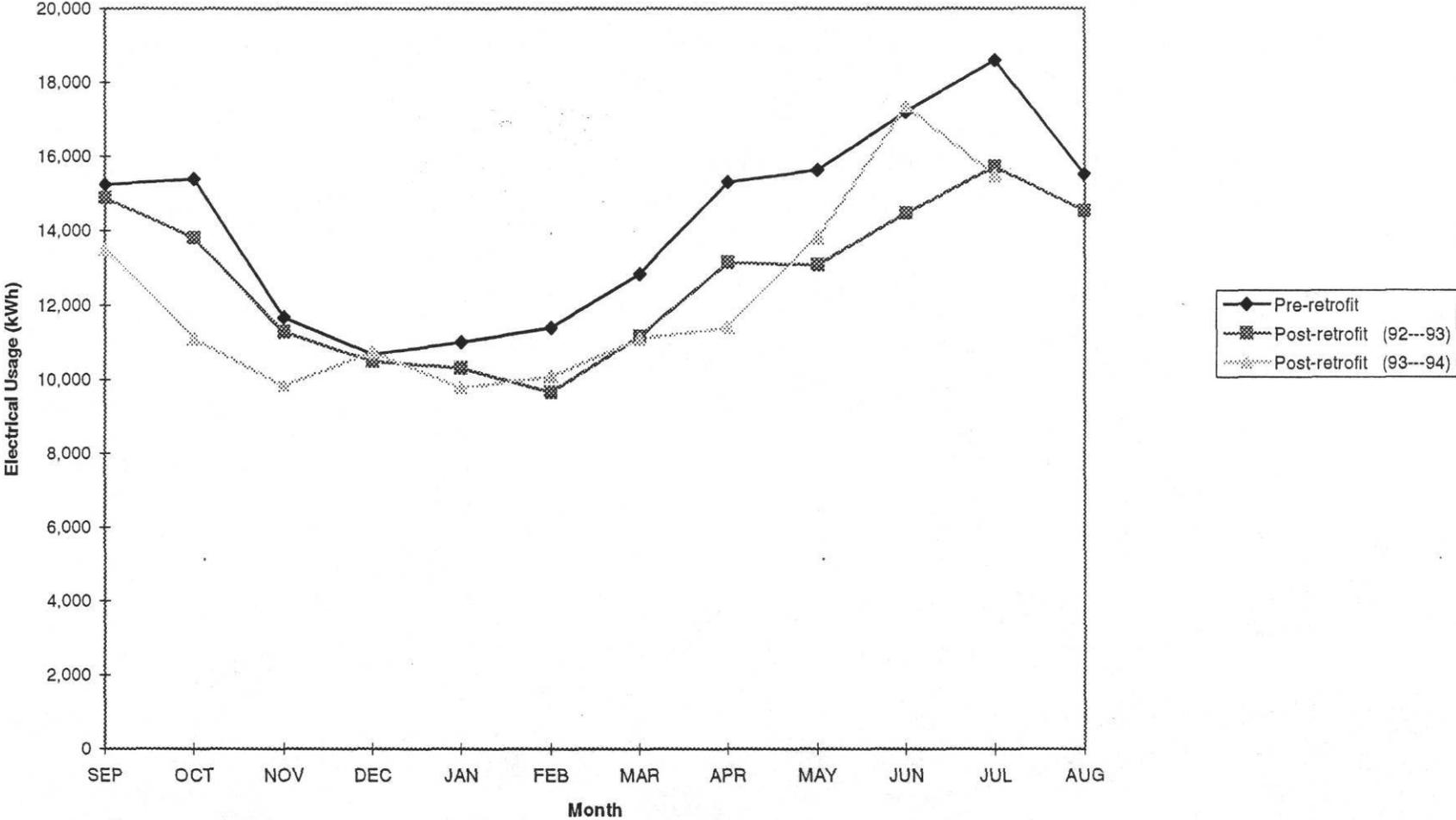
Baseline = 40 Measured = 35 Saved = 5 Avg savings = 0.234
Total saved = 5 × 30.5 = 153 Mcf



ECRMs Description	1. Fixture relamp/replace												
Approved Loan Amount	\$ 12,751(Includes City Hall,Service Center & Unger Memorial Library)												
Expected Savings	\$4,550/yr												
Pre-retrofit	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	Total
kWh Used	15,240	15,390	11,670	10,680	11,010	11,400	12,840	15,300	15,630	17,190	18,600	15,510	170,460
Post-retrofit (92---93)													
kWh Used	14,880	13,800	11,280	10,500	10,320	9,660	11,160	13,140	13,080	14,460	15,720	14,520	152,520
Savings (kWh)	360	1,590	390	180	690	1,740	1,680	2,160	2,550	2,730	2,880	990	17,940
kWh % change	-2%	-10%	-3%	-2%	-6%	-15%	-13%	-14%	-16%	-16%	-15%	-6%	-11%
Post-retrofit (93---94)													
kWh Used	13,500	11,100	9,840	10,740	9,780	10,080	11,100	11,400	13,800	17,340	15,480		
Savings (kWh)	1,740	4,290	1,830	-60	1,230	1,320	1,740	3,900	1,830	-150	3,120		
kWh % change	-11%	-28%	-16%	1%	-11%	-12%	-14%	-25%	-12%	1%	-17%		

City of Plainview---City Hall

Electrical Usage

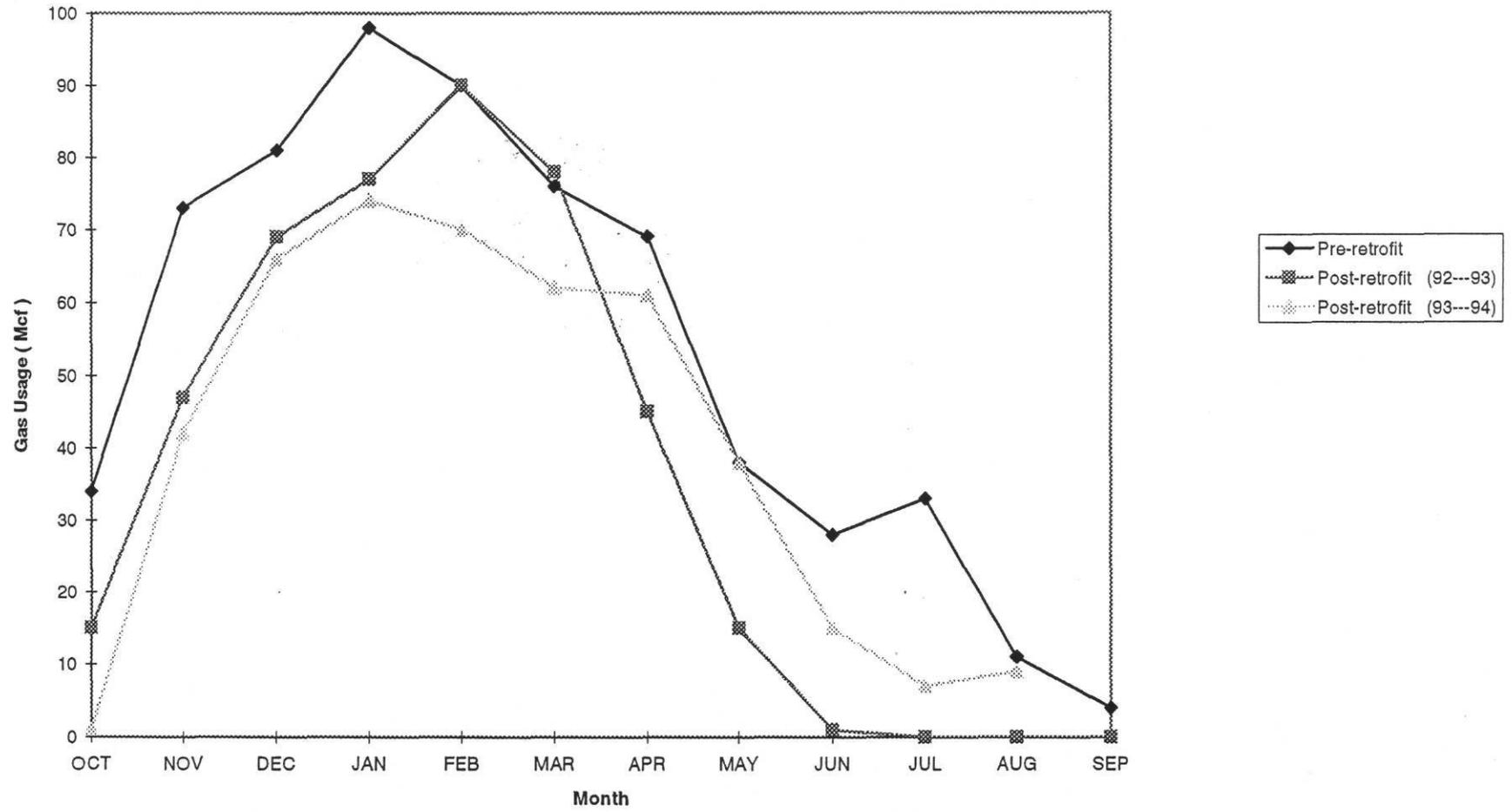


City of Plainview----City Hall Gas Usage

ECRMs Description	1. Fixture relamp/replace												
Approved Loan Amount	\$ 12,751(Includes City Hall,Service Center & Unger Memorial Library)												
Expected Savings	\$4,550/yr												
Pre-retrofit	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Total
Mcf Used	34	73	81	98	90	76	69	38	28	33	11	4	635
Post-retrofit (92---93)													
Mcf Used	15	47	69	77	90	78	45	15	1	0	0	0	437
Savings (Mcf)	19	26	12	21	0	-2	24	23	27	33	11	4	198
Mcf % change	-56%	-36%	-15%	-21%	0%	3%	-35%	-61%	-96%	-100%	-100%	-100%	-31%
Post-retrofit (93---94)													
Mcf Used	1	42	66	74	70	62	61	38	15	7	9		
Savings (Mcf)	33	31	15	24	20	14	8	0	13	26	2		
Mcf % change	-97%	-42%	-19%	-24%	-22%	-18%	-12%	0%	-46%	-79%	-18%		

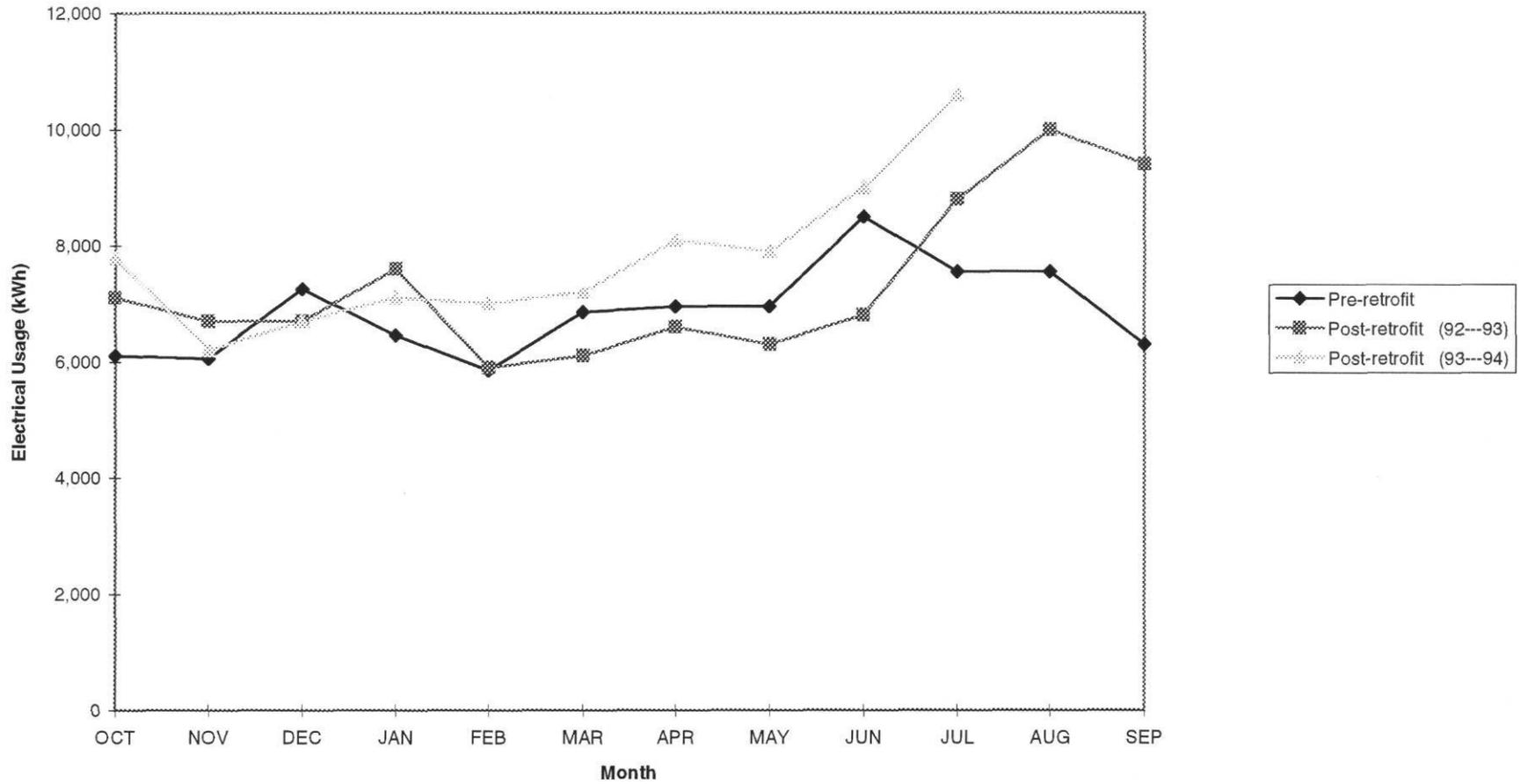
City of Plainview—City Hall

Gas Usage



ECRMs Description	1. Programmable thermostats												
	2. Interior lighting controls												
	3. Fixture relamp/replace												
Approved Loan Amount	\$ 12,751 (Includes City Hall,Service Center & Unger Memorial Library)												
Expected Savings	\$4,550/yr												
Pre-retrofit	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Total
kWh Used	6,100	6,050	7,250	6,450	5,850	6,850	6,950	6,950	8,500	7,550	7,550	6,300	82,350
Post-retrofit (92---93)													
kWh Used	7,100	6,700	6,700	7,600	5,900	6,100	6,600	6,300	6,800	8,800	10,000	9,400	88,000
Savings (kWh)	-1,000	-650	550	-1,150	-50	750	350	650	1,700	-1,250	-2,450	-3,100	-5,650
kWh % change	16%	11%	-8%	18%	1%	-11%	-5%	-9%	-20%	17%	32%	49%	7%
Post-retrofit (93---94)													
kWh Used	7,800	6,200	6,700	7,100	7,000	7,200	8,100	7,900	9,000	10,600			
Savings (kWh)	-1,700	-150	550	-650	-1,150	-350	-1,150	-950	-500	-3,050			
kWh % change	28%	2%	-8%	10%	20%	5%	17%	14%	6%	40%			

City of Plainview---Service Center Electrical Usage



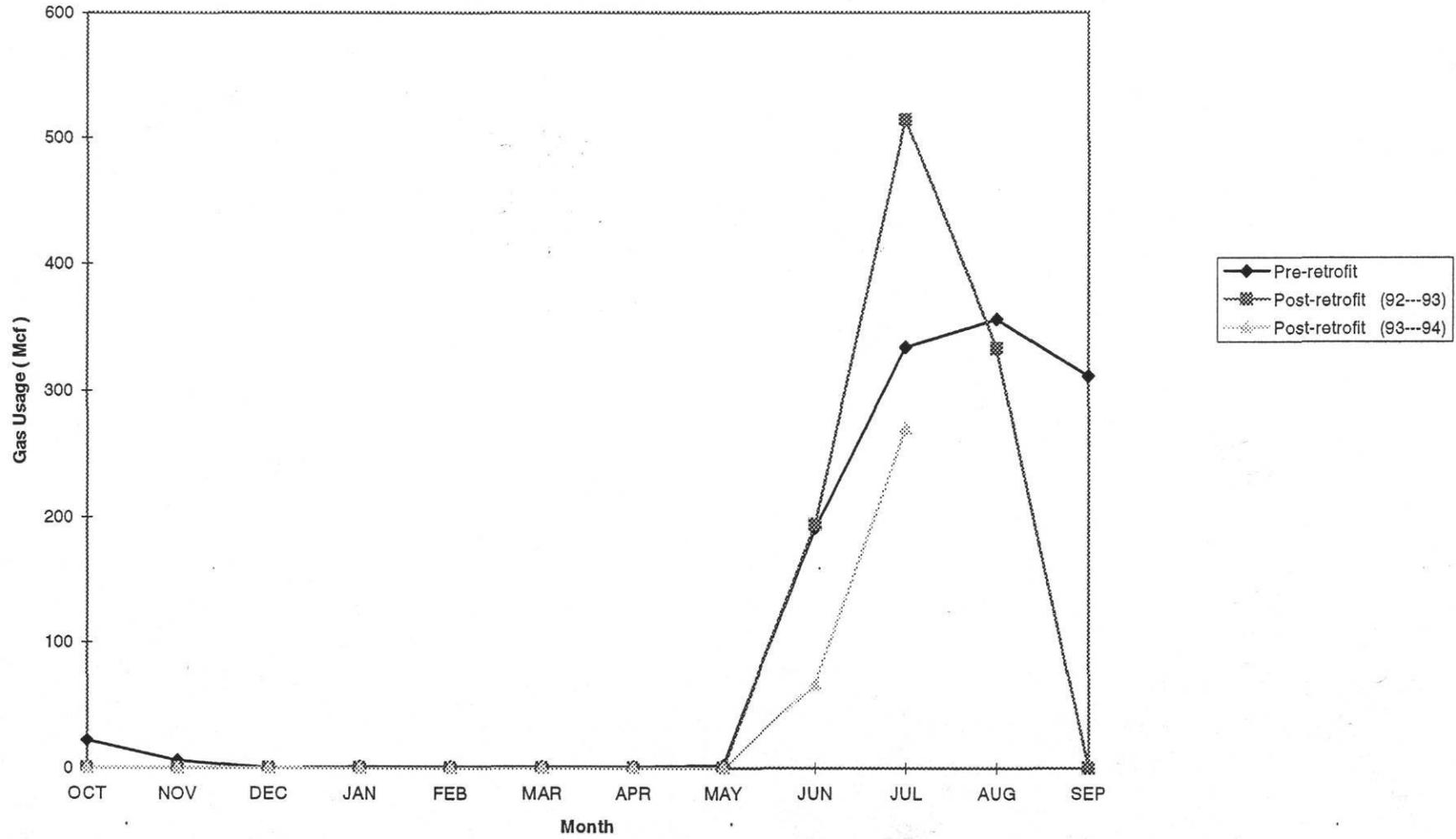
City of Plainview----Service Center

Gas Usage

ECRMs Description	1. Programmable thermostats												
	2. Interior lighting controls												
	3. Fixture relamp/replace												
Approved Loan Amount	\$ 12,751(Includes City Hall,Service Center & Unger Memorial Library)												
Expected Savings	\$4,550/yr												
Pre-retrofit	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Total
Mcf Used	22	6	0	1	1	1	1	2	191	334	356	311	1226
Post-retrofit (92---93)													
Mcf Used	0	0	0	0	0	0	0	0	194	514	333	0	1041
Savings (Mcf)	22	6	0	1	1	1	1	2	-3	-180	23	311	185
Mcf % change	-100%	-100%	0%	-100%	-100%	-100%	-100%	-100%	2%	54%	-6%	-100%	-15%
Post-retrofit (93---94)													
Mcf Used	0	0	0	0	0	0	0	0	67	270			
Savings (Mcf)	22	6	0	1	1	1	1	2	124	64			
Mcf % change	-100%	-100%	0%	-100%	-100%	-100%	-100%	-100%	-65%	-19%			

City of Plainview---Service Center

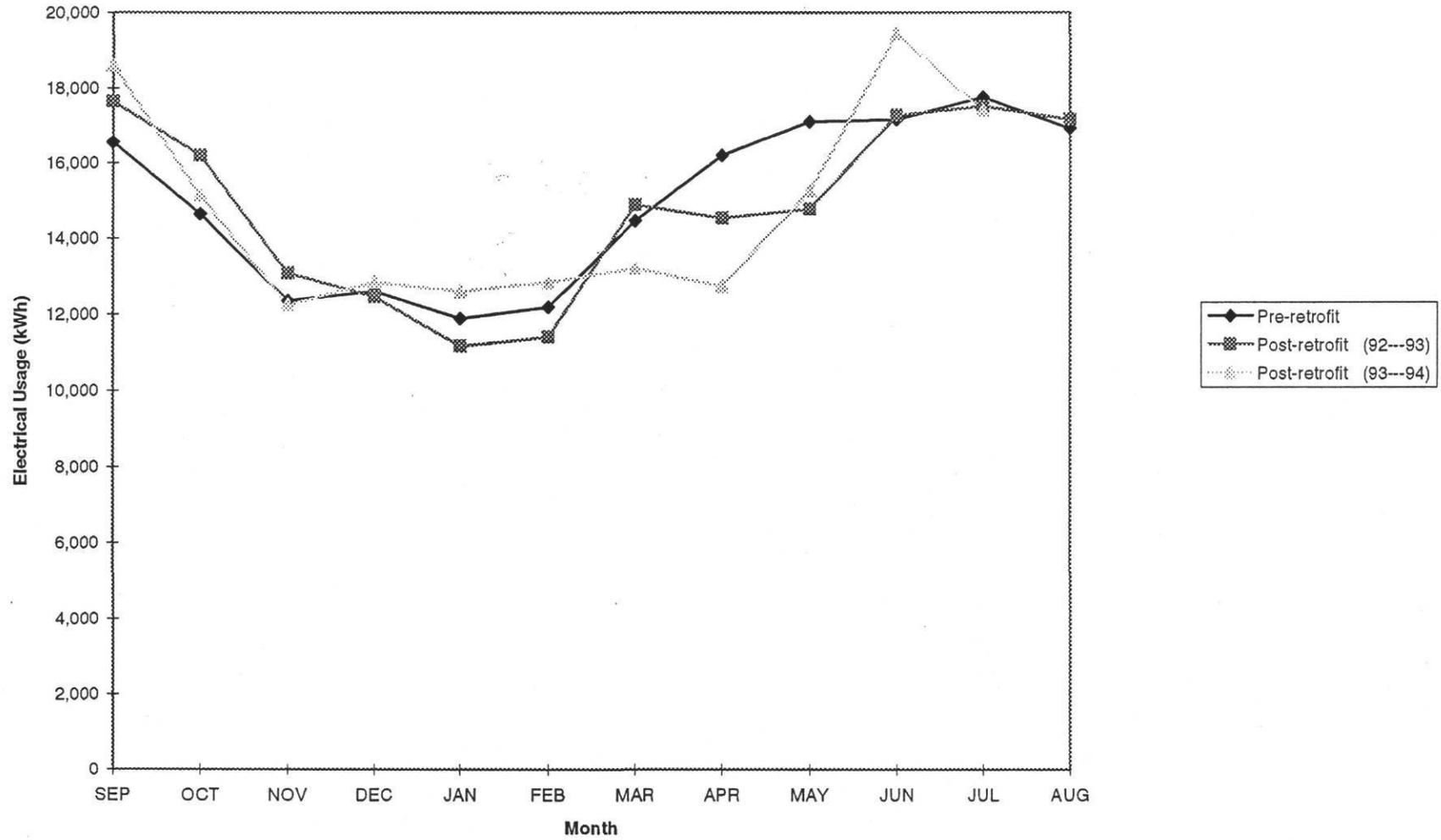
Gas Usage



ECRMs Description	1. Attic/Ceiling insulation												
Approved Loan Amount	\$ 12,751(Includes City Hall,Service Center & Unger Memorial Library)												
Expected Savings	\$4,550/yr												
Pre-retrofit	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	Total
kWh Used	16,560	14,640	12,360	12,600	11,880	12,180	14,460	16,200	17,100	17,160	17,760	16,920	179,820
Post-retrofit (92---93)													
kWh Used	17,640	16,200	13,080	12,460	11,160	11,400	14,880	14,520	14,760	17,280	17,520	17,160	178,060
Savings (kWh)	-1,080	-1,560	-720	140	720	780	-420	1,680	2,340	-120	240	-240	1,760
kWh % change	7%	11%	6%	-1%	-6%	-6%	3%	-10%	-14%	1%	-1%	1%	-1%
Post-retrofit (93---94)													
kWh Used	18,600	15,120	12,240	12,840	12,600	12,840	13,200	12,720	15,240	19,440	17,400		
Savings (kWh)	-2,040	-480	120	-240	-720	-660	1,260	3,480	1,860	-2,280	360		
kWh % change	12%	3%	-1%	2%	6%	5%	-9%	-21%	-11%	13%	-2%		

City of Plainview--Unger Memorial Library

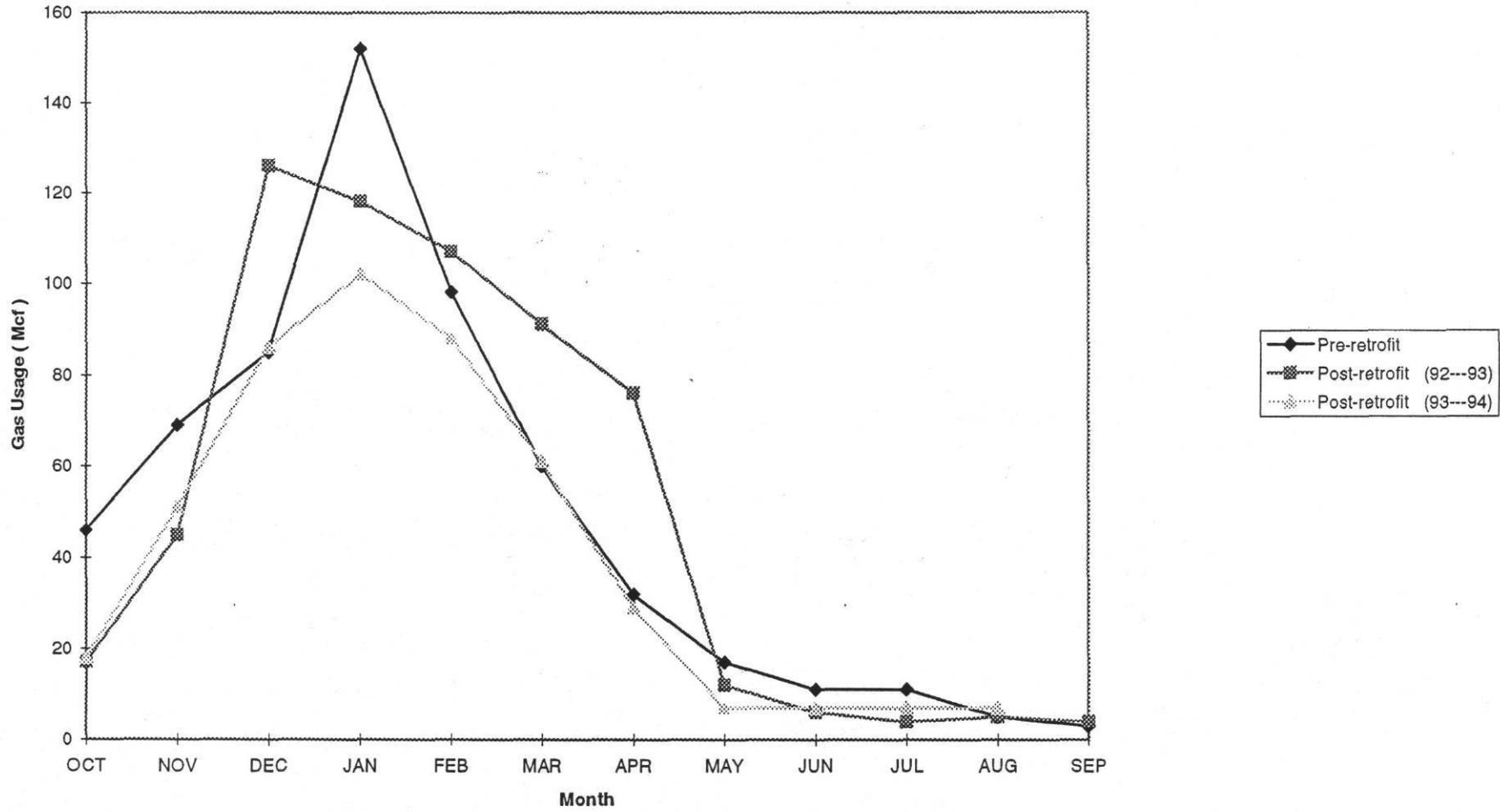
Electrical Usage



City of Plainview----Unger Memorial Library Gas Usage

ECRMs Description	1. Attic/Ceiling insulation												
Approved Loan Amount	\$ 12,751(Includes City Hall,Service Center & Unger Memorial Library)												
Expected Savings	\$4,550/yr												
Pre-retrofit	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Total
Mcf Used	46	69	85	152	98	60	32	17	11	11	5	3	589
Post-retrofit (92---93)													
Mcf Used	17	45	126	118	107	91	76	12	6	4	5	4	611
Savings (Mcf)	29	24	-41	34	-9	-31	-44	5	5	7	0	-1	-22
Mcf % change	-63%	-35%	48%	-22%	9%	52%	138%	-29%	-45%	-64%	0%	33%	4%
Post-retrofit (93---94)													
Mcf Used	18	51	86	102	88	61	29	7	7	7	7		
Savings (Mcf)	28	18	-1	50	10	-1	3	10	4	4	-2		
Mcf % change	-61%	-26%	1%	-33%	-10%	2%	-9%	-59%	-36%	-36%	40%		

City of Plainview—Unger Memorial Library Gas Usage



White Deer ISD

Expected Savings	Unadjusted Savings	Weather Adjusted Savings
\$7,419/yr	\$ 6,113/27 Months	\$ 620/27 Months
7,687 kWh/yr	17,900 kWh/27 Months	13,909 kWh/27 Months
1630 Mcf/yr	1,171 Mcf/27 Months	-62 Mcf/27 Months

High School

ECRMs Description

1. Repair boiler
2. Add insulation to roof
3. Programmable thermostats
4. Timer controls

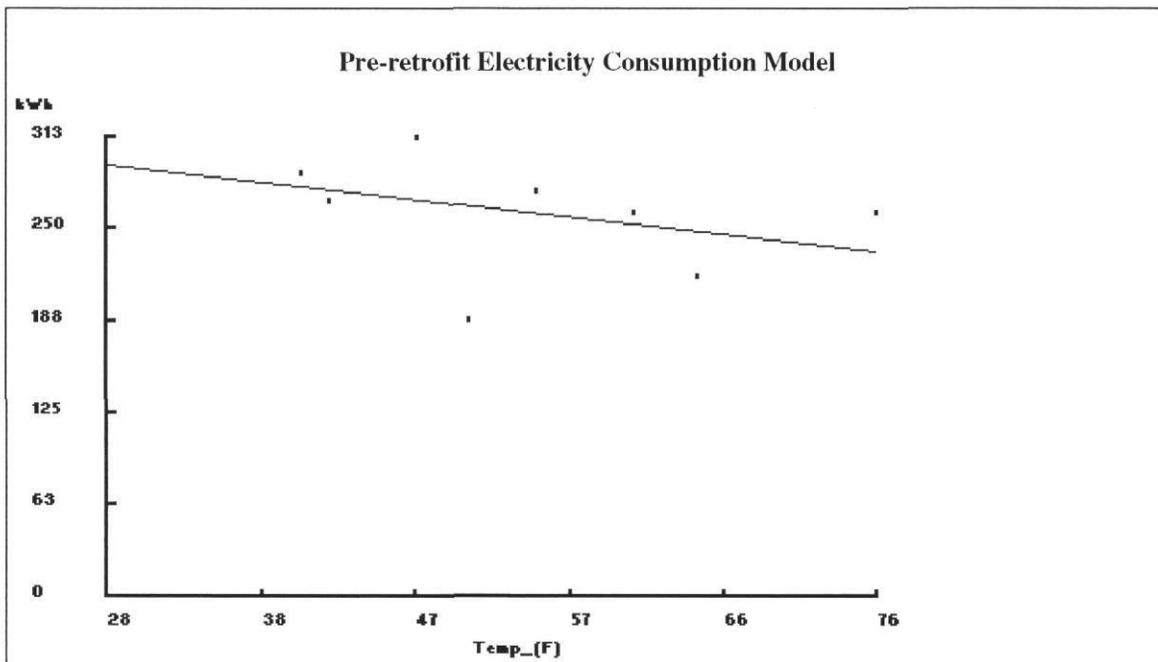
School Year Model-----Electricity

Model: Un-grouped SLR. kWh vs. Temp_(F)

$Y_{int} = 329.6750$ (49.8592) $Temp_{(F)} = -1.2577$ (0.9382)
 $N = 9$ $R^2 = 0.20$ $adjR^2 = 0.09$ $RMSE = 37.75$ $CV-RMSE = 14.2\%$ $p = 0.36$ $DW = 1.27$ (1%)

Savings calculations for Model: Un-group SLR. kWh vs. Temp_(F)

Baseline = 4743 Measured = 4320 Saved = 423 +- 993 (i.e. +- 234.59%)
 Avg savings = 23.526 +- 55.19
 Total saved = $423 \times 30.5 = 12,902$ kWh



Non-School Year Model-----Electricity

Model: Un-grouped Mean.kWh

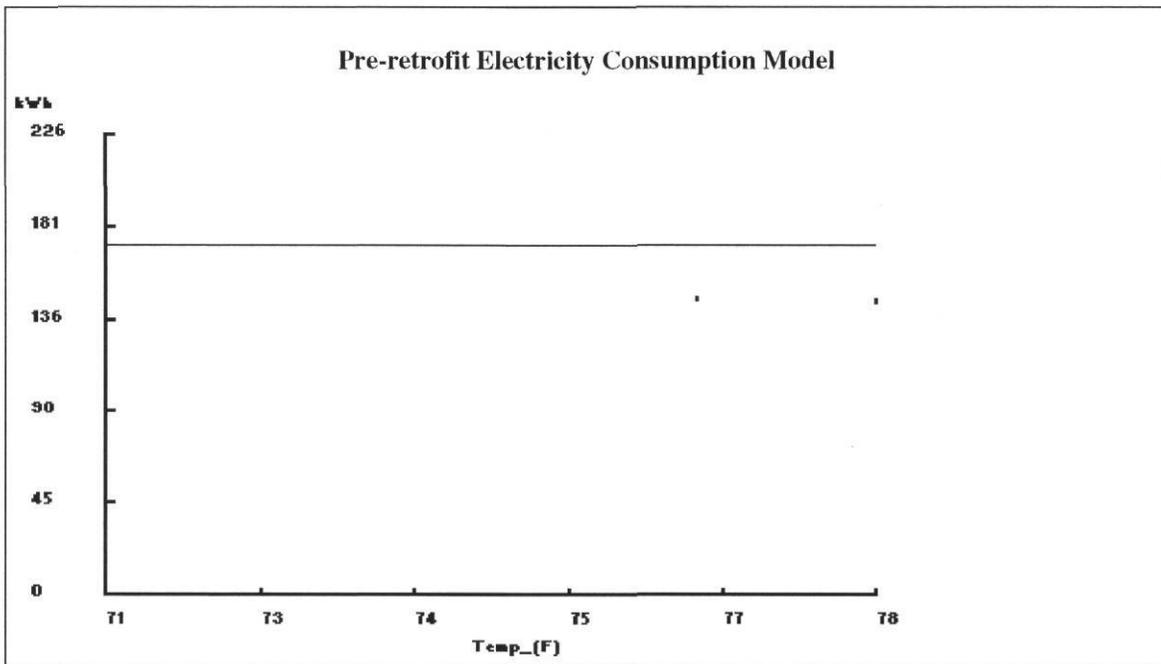
N = 3 Ymean = 172.33 Std Dev = 46.48 CV-StDev = 27.0%

Savings calculations for Model: Un-group Mean. kWh

Baseline = 1206 Measured = 1173 Saved = 33 +- 653 (i.e. +- 1959.87%)

Avg savings = 4.762 +- 93.33

Total saved = $33 \times 30.5 = 1,007$ kWh



School Year Model-----Gas

Model: Un-grouped SLR. Mcf vs. Temp_(F)

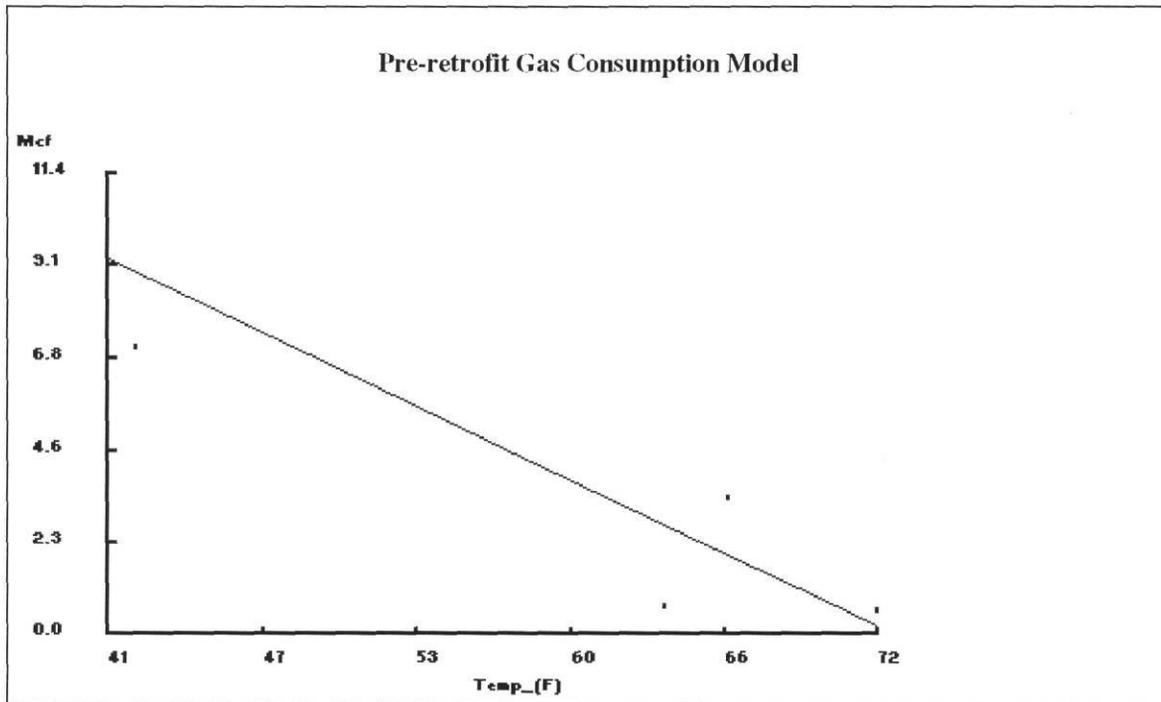
$Y_{int} = 20.9108 (4.3219)$ $Temp_(F) = -0.2868 (0.0742)$
N = 5 R² = 0.83 adjR² = 0.78 RMSE = 2.18 CV-RMSE = 47.0% p = -0.04 DW = 1.60 (p=0)

Savings calculations for Model: Un-group SLR. Mcf vs. Temp_(F)

Baseline = 108 Measured = 109 Saved = -1 +- 57 (i.e. +- -4364.68%)

Avg savings = -0.073 +- 3.19

Total saved = -1 × 30.5 = -31 Mcf



Non-School Year Model-----Gas

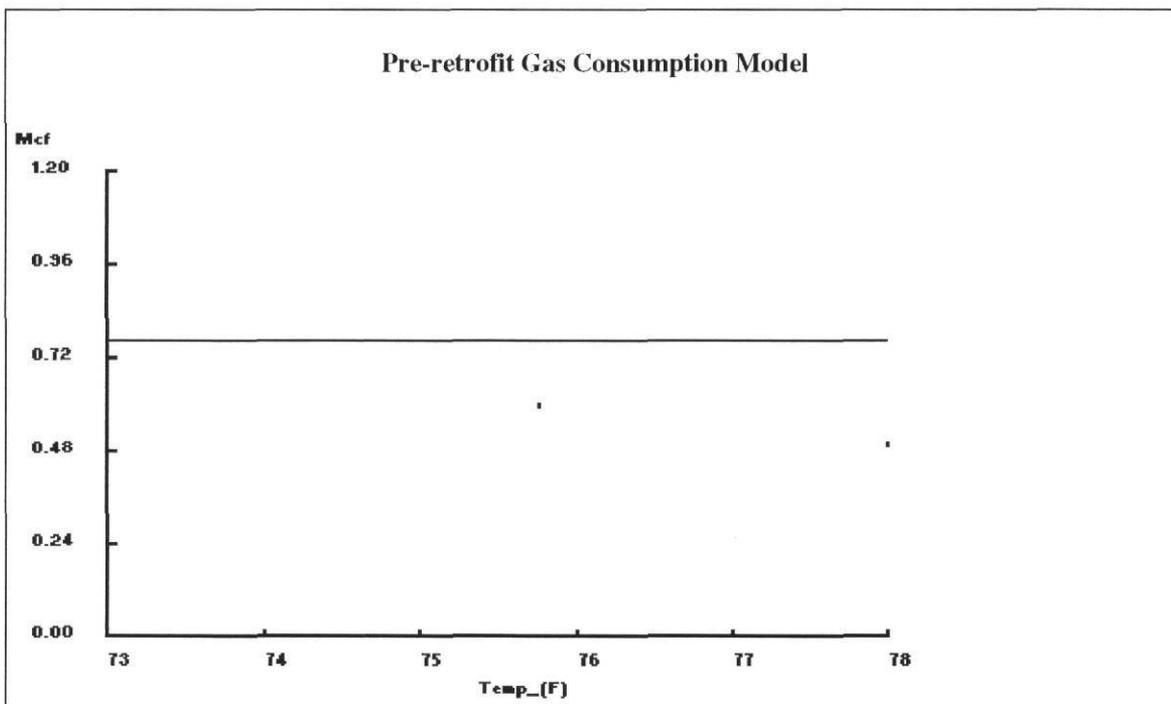
Model: Un-grouped Mean.Mcf

N = 3 Ymean = 0.77 Std Dev = 0.38 CV-StDev = 49.4%

Savings calculations for Model: Un-group SLR, Mcf vs. Temp_(F)

Baseline = 108 Measured = 109 Saved = -1 +- 57 (i.e. +- -4364.68%) Avg savings = -0.073 +- 3.19

Total saved = -1 × 30.5 = -31 Mcf



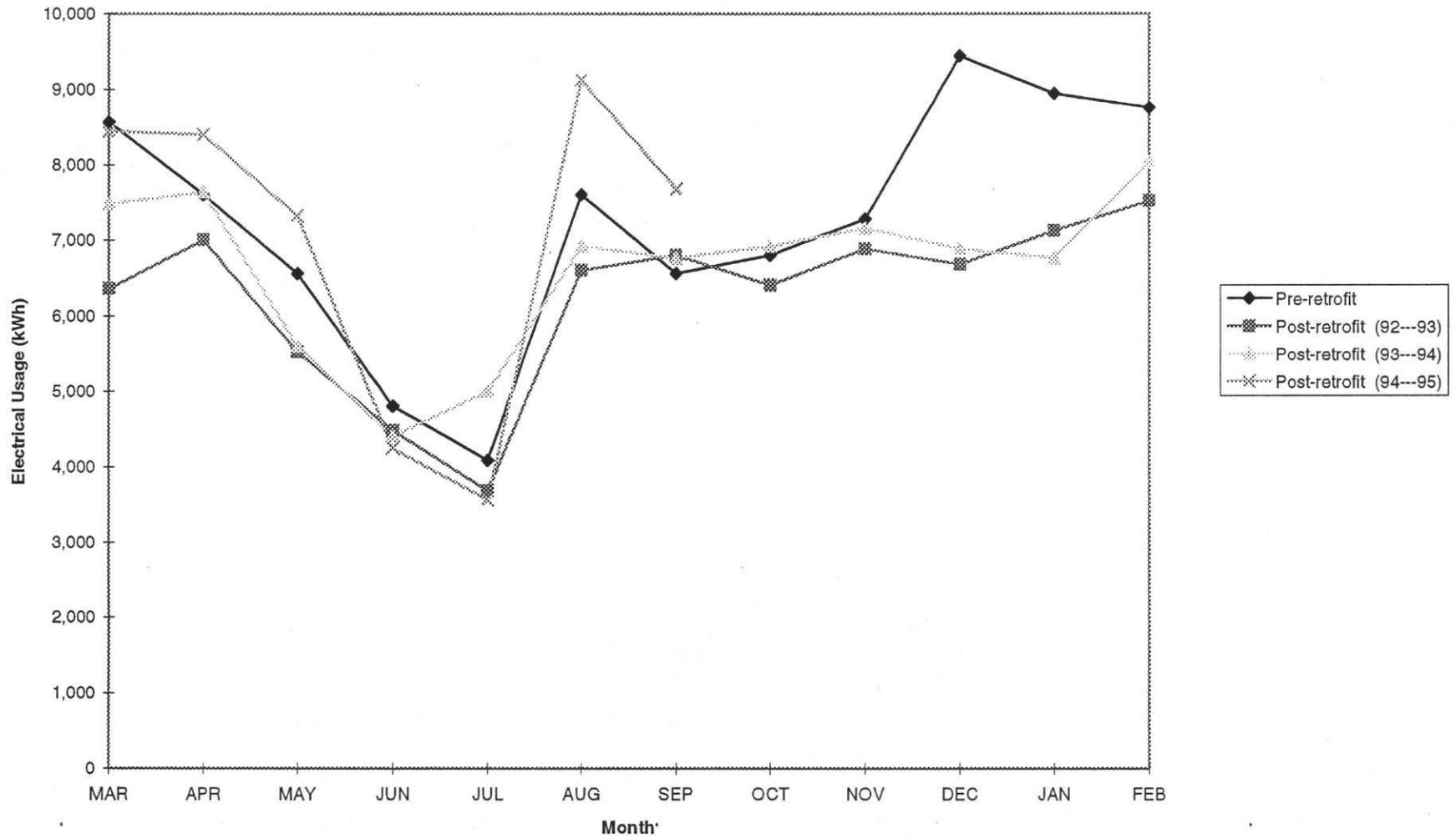
White Deer ISD---High School

Electrical Usage

ECRMs Description	1. Repair boiler												
	2. Add insulation to roof												
	3. Programmable thermostats												
	4. Timer controls												
Approved Loan Amount	\$35,157 (High School)												
Expected Savings	\$7,419/yr												
Pre-retrofit	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	Total
kWh Used	8,560	7,600	6,560	4,800	4,080	7,600	6,560	6,800	7,280	9,440	8,940	8,750	86,970
Cost	\$ 524	\$ 466	\$ 407	\$ 295	\$ 256	\$ 467	\$ 402	\$ 417	\$ 446	\$ 575	\$ 544	\$ 532	\$5,331
Post-retrofit (92---93)													
kWh Used	6,360	7,000	5,520	4,480	3,680	6,600	6,800	6,400	6,880	6,680	7,120	7,520	75,040
Cost	\$ 395	\$ 422	\$ 345	\$ 280	\$ 233	\$ 397	\$ 420	\$ 386	\$ 422	\$ 410	\$ 435	\$ 462	\$4,607
Savings (kWh)	2,200	600	1,040	320	400	1,000	-240	400	400	2,760	1,820	1,230	11,930
kWh % change	-26%	-8%	-16%	-7%	-10%	-13%	4%	-6%	-5%	-29%	-20%	-14%	-14%
Post-retrofit (93---94)													
kWh Used	7,480	7,640	5,600	4,400	5,000	6,920	6,760	6,920	7,160	6,880	6,760	8,040	79,560
Cost	\$ 460	\$ 455	\$ 350	\$ 276	\$ 313	\$ 424	\$ 416	\$ 412	\$ 424	\$ 410	\$ 400	\$ 477	\$4,817
Savings (kWh)	1,080	-40	960	400	-920	680	-200	-120	120	2,560	2,180	710	7,410
kWh % change	-13%	1%	-15%	-8%	23%	-9%	3%	2%	-2%	-27%	-24%	-8%	-9%
Post-retrofit (94---95)													
kWh Used	8,440	8,400	7,320	4,240	3,560	9,120	7,680						
Cost	\$ 505	\$ 501	\$ 442	\$ 259	\$ 218	\$ 541	\$ 458						
Savings (kWh)	120	-800	-760	560	520	-1,520	-1,120						
kWh % change	-1%	11%	12%	-12%	-13%	20%	17%						

White Deer ISD---High School

Electrical Usage



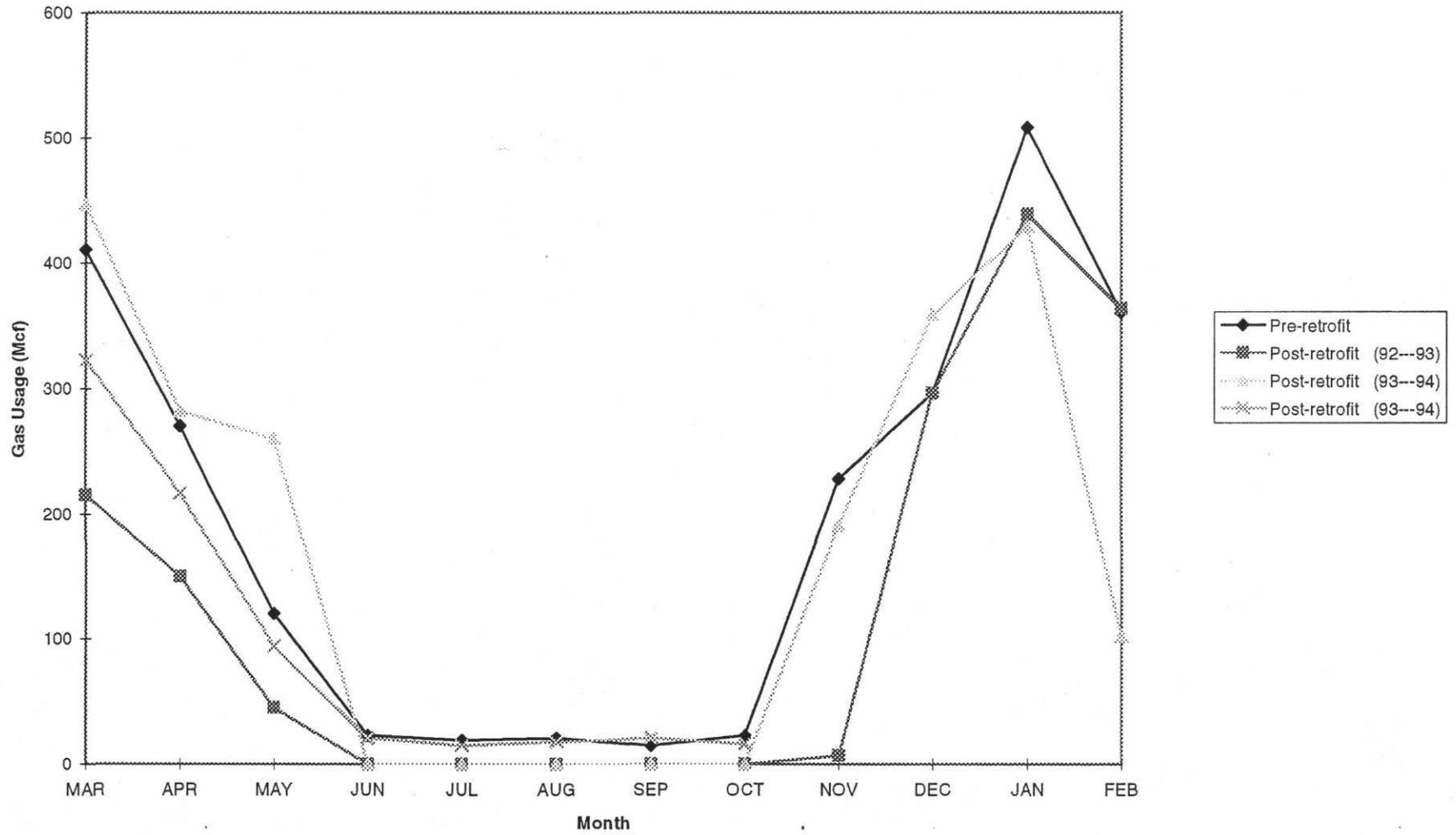
White Deer ISD---High School

Gas Usage

ECRMs Description	1. Repair boiler												
	2. Add insulation to roof												
	3. Programmable thermostats												
	4. Timer controls												
Approved Loan Amount	\$35,157 (High School)												
Expected Savings	\$7,419/yr												
Pre-retrofit	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	Total
Mcf Used	411	270	120	23	19	21	15	23	228	296	508	361	2295
Cost	\$1,739	\$1,138	\$ 503	\$ 91	\$ 74	\$ 83	\$ 57	\$ 91	\$ 962	\$1,248	\$2,151	\$1,527	\$9,664
Post-retrofit (92---93)													
Mcf Used	215	150	45	0	0	0	0	0	7	296	439	364	1516
Cost	\$ 907	\$ 630	\$ 185	\$ 6	\$ 6	\$ 6	\$ 6	\$ 6	\$ 23	\$1,251	\$1,859	\$1,540	\$6,425
Savings (Mcf)	196	120	75	23	19	21	15	23	221	0	69	-3	779
Mcf % change	-48%	-44%	-63%	-100%	-100%	-100%	-100%	-100%	-97%	0%	-14%	1%	-34%
Post-retrofit (93---94)													
Mcf Used	447	282	260	0	0	0	0	0	191	359	429	102	2070
Cost	\$1,893	\$1,192	\$1,098	\$ 6	\$ 6	\$ 6	\$ 6	\$ 6	\$ 805	\$1,519	\$1,817	\$ 427	\$8,781
Savings (Mcf)	-36	-12	-140	23	19	21	15	23	37	-63	79	259	225
Mcf % change	9%	4%	117%	-100%	-100%	-100%	-100%	-100%	-16%	21%	-16%	-72%	-10%
Post-retrofit (93---94)													
Mcf Used	323	217	94	21	15	18	21	16					
Cost	\$1,366	\$ 916	\$ 393	\$ 83	\$ 57	\$ 70	\$ 83	\$ 61					
Savings (Mcf)	88	53	26	2	4	3	-6	7					
Mcf % change	-21%	-20%	-22%	-9%	-21%	-14%	40%	-30%					

White Deer ISD---High School

Gas Usage



Buffalo ISD

Expected Savings	Unadjusted Savings	Weather Adjusted Savings
\$19,277/yr	\$ 11,938/16 Months	\$ 11,280/16 Months
271,817 kWh/yr	163,782 kWh/16 Months	154,177 kWh/16 Months
177 Mcf/yr	184 Mcf/16 Months	183 Mcf/16 Months

High School

ECRMs Description

1. Exterior lighting conversion
2. Fixture relamping
3. Reduce infiltration
4. Replace domestic hot water heater
5. Replace Gym heater
6. Install eleven rooftop AC units

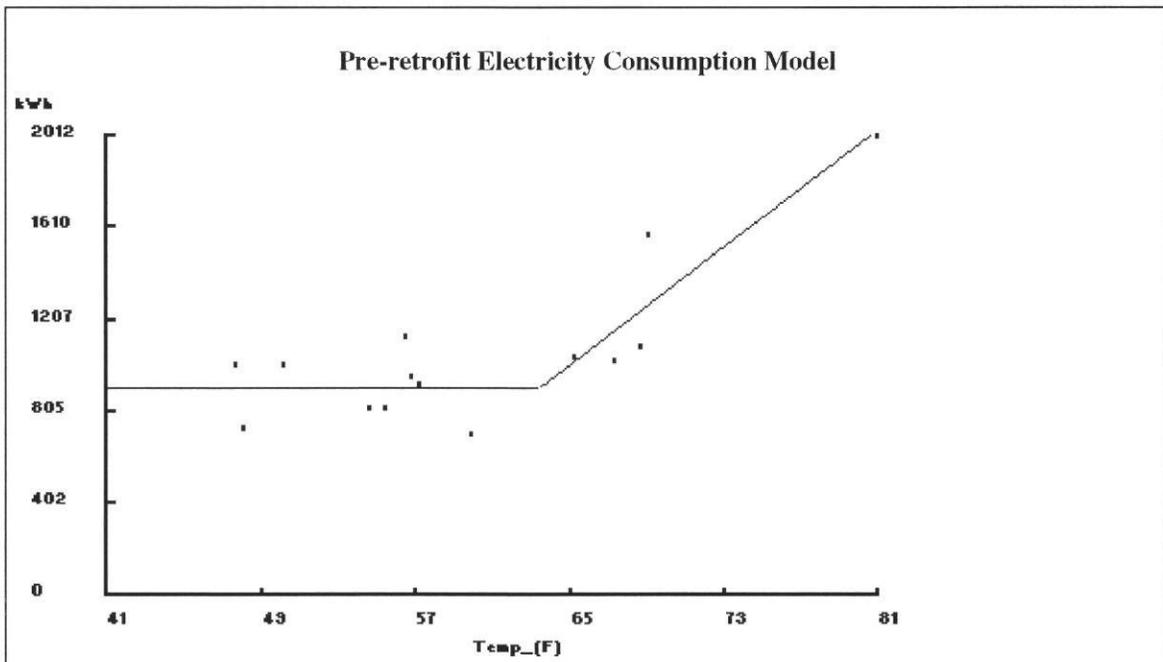
School Year Model-----Electricity

Model: Un-grouped 3P-CP (C). kWh vs. Temp_(F)

$Y_{cp} = 903.4520 (43.4513)$
 $LS = 0.0000 (0.0000)$
 $RS = 64.1349 (8.4927)$
 $X_{cp} = 63.0120$
 $N = 15$
 $N1 = 10$
 $N2 = 5$
 $R2 = 0.81$
 $adjR2 = 0.80$
 $RMSE = 150.28$
 $CV-RMSE = 14.3\%$
 $p = -0.16$
 $DW = 2.24 (1\%)$

Savings calculations for Model: Un-group 3P-CP (C). kWh vs. Temp_(F)

Baseline = 12801 Measured = 11119 Saved = 1682 Avg savings = 140.156
 Total saved = $1682 \times 30.5 = 51,300$ kWh



Non-School Year Model-----Electricity

Model: Un-grouped Mean.kWh

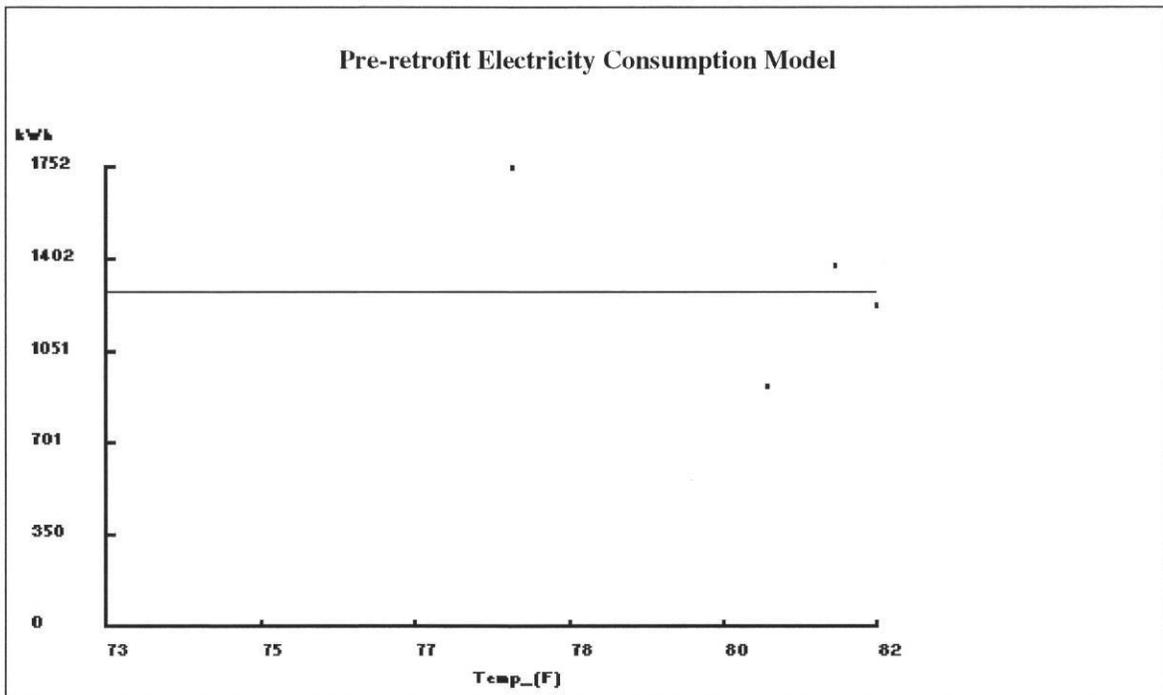
N = 5 Ymean = 1279.00 Std Dev = 314.53 CV-StDev = 24.6%

Savings calculations for Model: Un -group Mean. kWh

Baseline = 5116 Measured = 3478 Saved = 1638 +- 2554 (i.e. +- 155.91%)

Avg savings = 409.5 +- 638.44

Total saved = $1638 \times 30.5 = 49,959$ kWh



School Year Model-----Gas

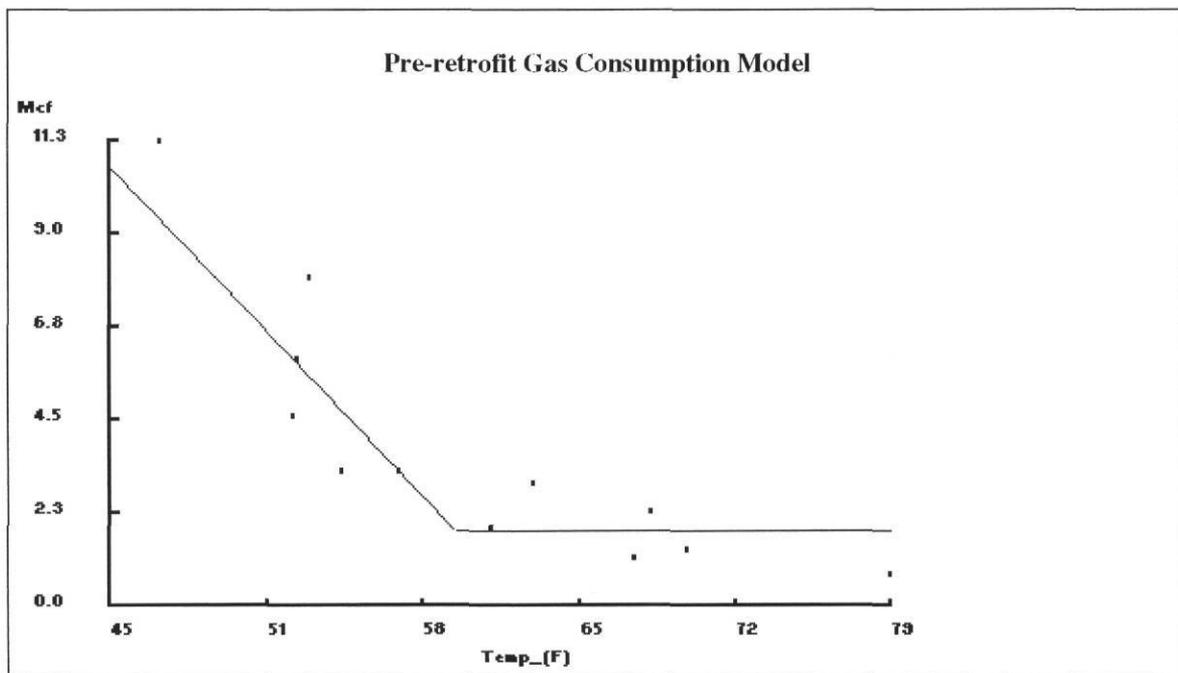
Model: Un-grouped 3P-CP (H). Mcf vs. Temp_(F)

$Y_{cp} = 1.8014 (0.4882)$ $LS = -0.5918 (0.0748)$ $RS = 0.0000 (0.0000)$ $X_{cp} = 59.5040$
 $N = 13$ $N1 = 7$ $N2 = 6$ $R2 = 0.85$ $adjR2 = 0.84$ $RMSE = 1.34$ $CV-RMSE = 31.0\%$ $p = -0.26$
 $DW = 2.32 (i\%)$

Savings calculations for Model: Un -group 3P-CP (H). Mcf vs. Temp_(F)

Baseline = 54 Measured = 61 Saved = -6 Avg savings = -0.524

Total saved = $-6 \times 30.5 = -183$ Mcf



Non-School Year Model-----Gas

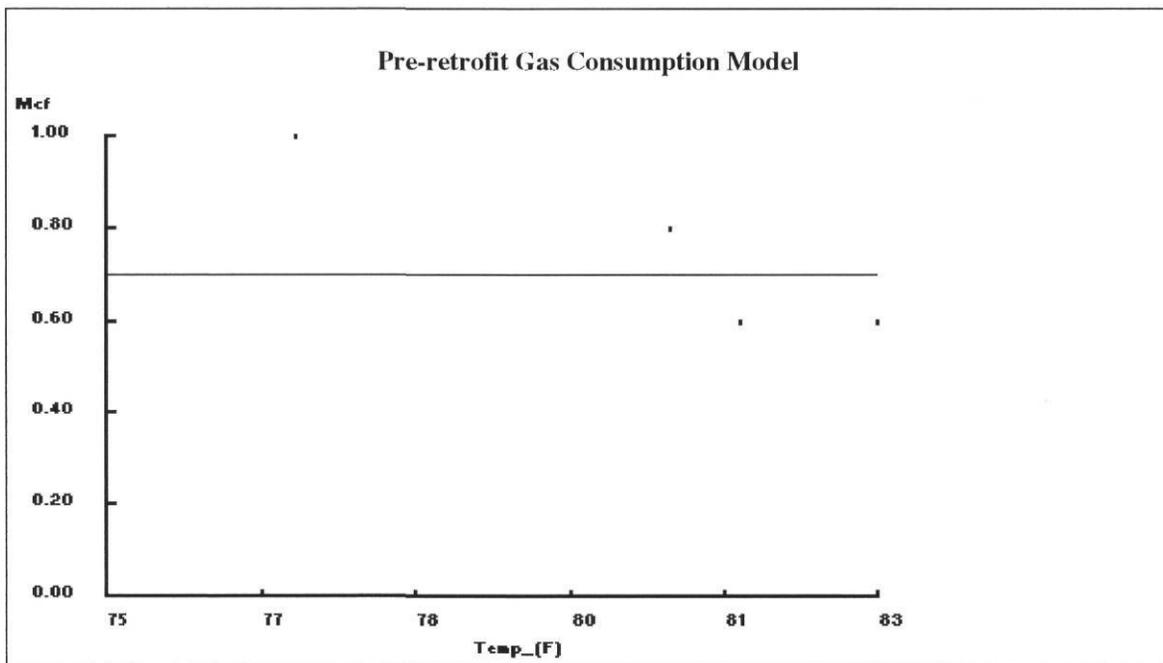
Model: Un-grouped Mean.Mcf

N = 5 Ymean = 0.70 Std Dev = 0.20 CV-StDev = 28.6%

Savings calculations for Model: Un -group Mean. Mcf

Baseline = 3 Measured = 4 Saved = -1 +- 132 (i.e. +- -16478.13%) Avg savings = -0.2 +- 32.96

Total saved = $-1 \times 30.5 = -31$ Mcf



Elementary School

ECRMs Description

1. Exterior lighting conversion
2. Fixture relamping
3. Install eleven efficient window AC units

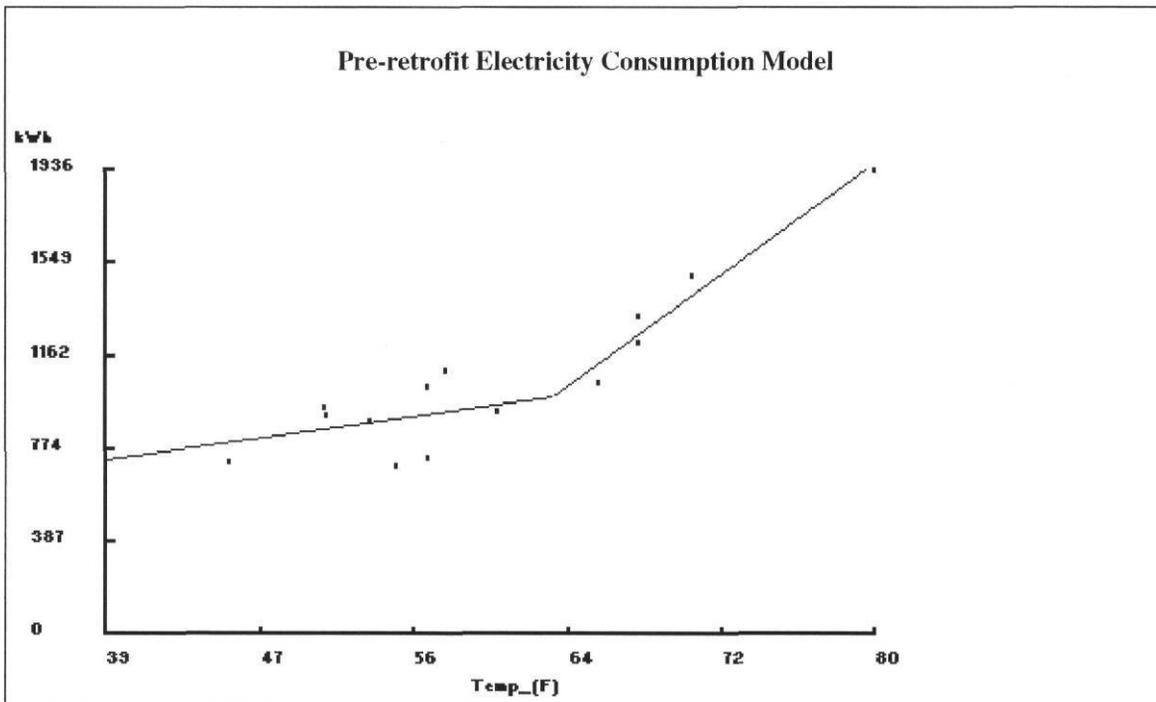
School Year Model-----Electricity

Model: Un-grouped 4P-CP. kWh vs. Temp_(F)

$Y_{cp} = 988.7816 (270.9334)$ $LS = 10.7569 (4.9814)$ $RS = 56.9774 (12.1150)$ $X_{cp} = 62.9926$
 $N = 15$ $N1 = 10$ $N2 = 5$ $R2 = 0.90$ $RMSE = 111.7486$ $CV-RMSE = 10.6\%$ $p = -0.05$
 $DW = 1.83(i\%)$

Savings calculations for Model: Un -group 4P-CP. kWh vs. Temp_(F)

Baseline = 12763 Measured = 12164 Saved = 599 Avg savings = 49.899
Total saved = $599 \times 30.5 = 18,270$ kWh



Non-School Year Model-----Electricity

Model: Un-grouped Mean.kWh

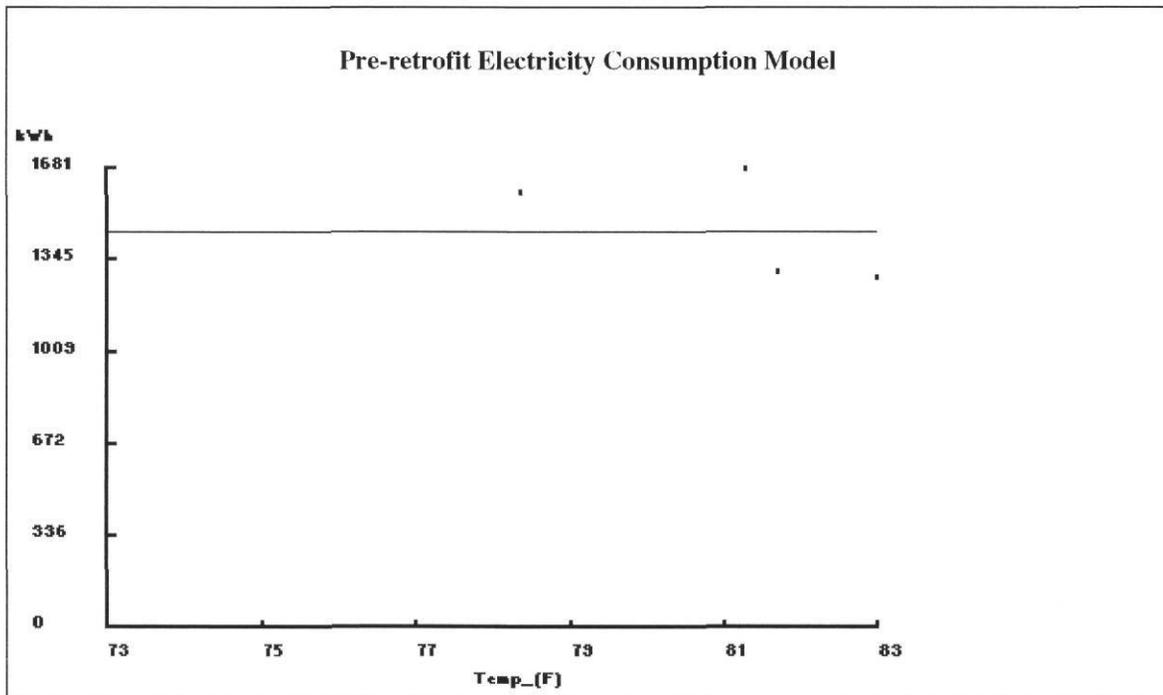
N = 5 Ymean = 1447.54 Std Dev = 179.42 CV-StDev = 12.4%

Savings calculations for Model: Un -group Mean. kWh

Baseline = 5790 Measured = 4655 Saved = 1136 +- 1296 (i.e. +- 114.14%)

Avg savings = 283.915 +- 324.07

Total saved = 1136 × 30.5 = 34,648 kWh



School Year Model-----Gas

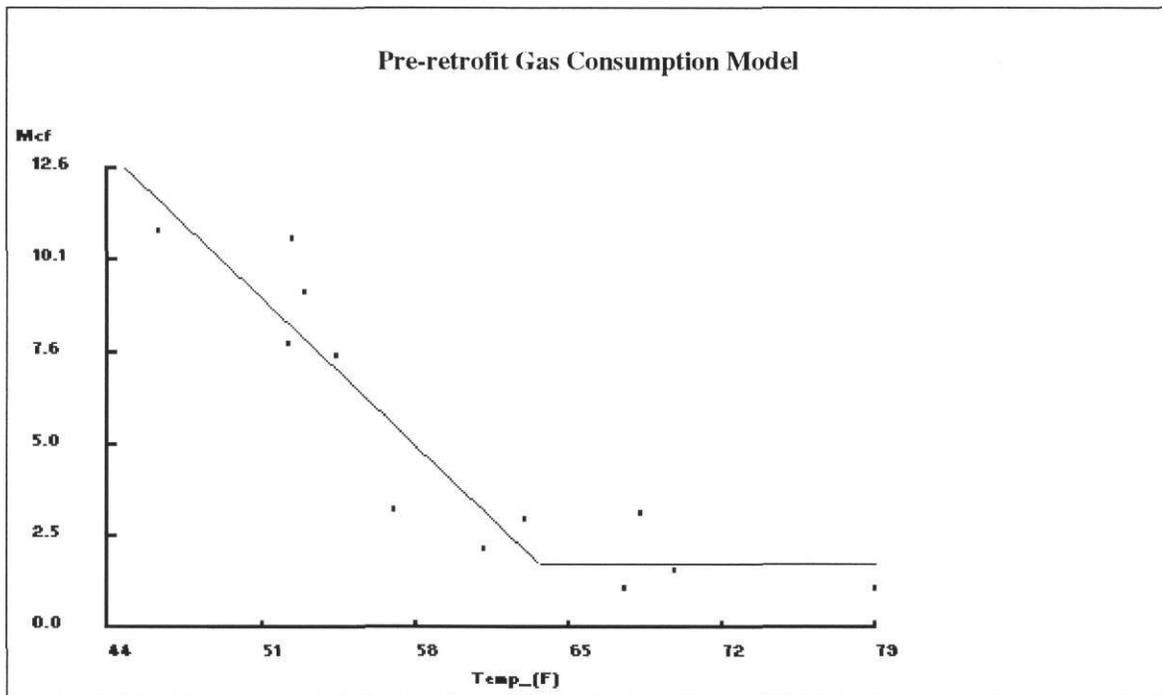
Model: Un-grouped 3P-CP (H), Mcf vs. Temp_(F)

Ycp = 1.7660 (0.5246) LS = -0.5903 (0.0563) RS = 0.0000 (0.0000) Xcp = 63.5796
N = 13 N1 = 9 N2 = 4 R2 = 0.91 adjR2 = 0.90 RMSE = 1.32 CV-RMSE = 23.1% p = -0.20
DW = 2.37 (i%)

Savings calculations for Model: Un -group 3P-CP (H), Mcf vs. Temp_(F)

Baseline = 75 Measured = 62 Saved = 13 Avg savings = 1.107

Total saved = 13 × 30.5 = 397 Mcf



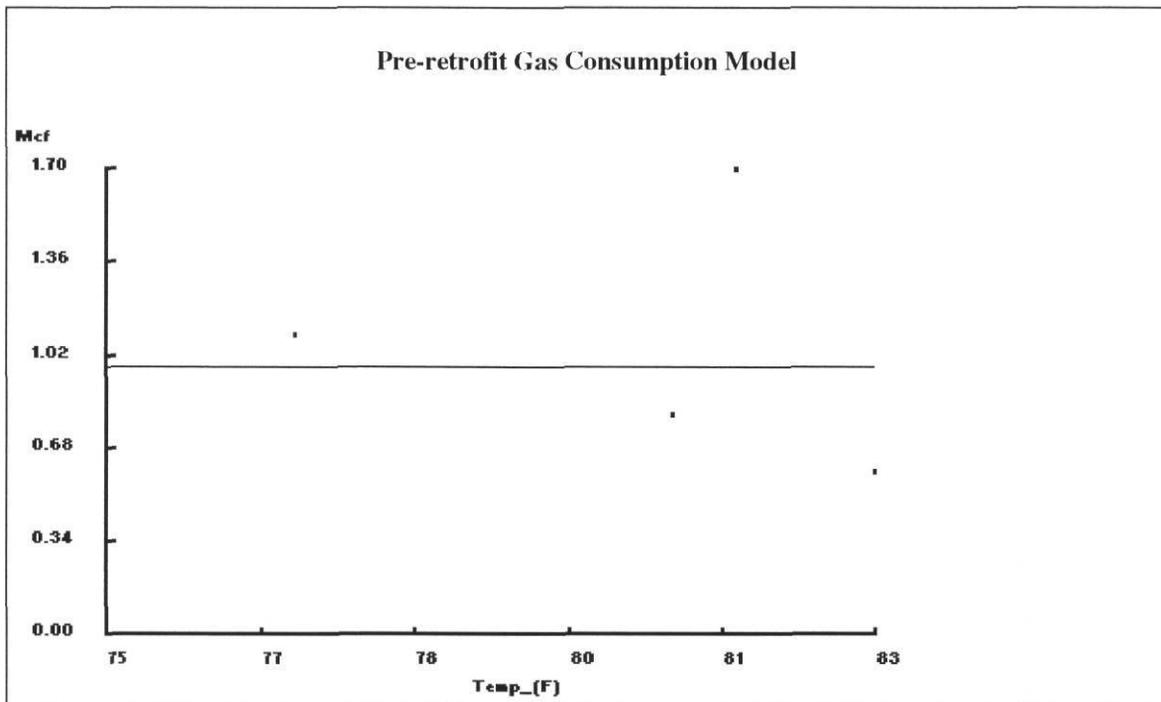
Non-School Year Model-----Gas

Model: Un-grouped Mean.Mcf

N = 5 Ymean = 0.98 Std Dev = 0.44 CV-StDev = 45.3%

Savings calculations for Model: Un -group Mean. Mcf

Baseline = 4 Measured = 4 Saved = 0 +- 49 (i.e. +- 15249.69%) Avg savings = 0.08 +- 12.2
Total saved = 0



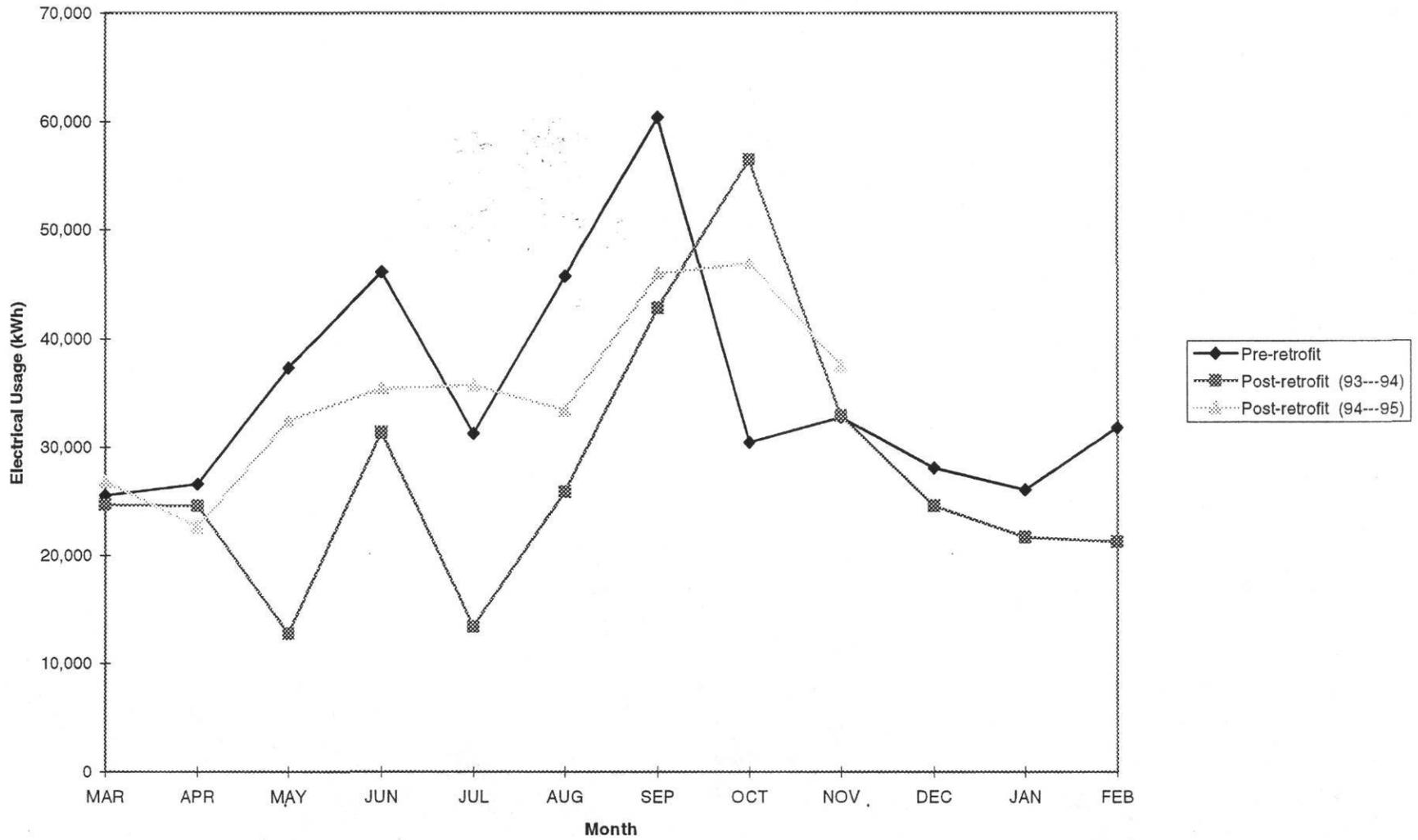
Buffalo ISD----High School

Electrical Usage

ECRMs Description	1. Exterior lighting conversion												
	2. Fixture relamping												
	3. Reduce infiltration												
	4. Replace domestic hot water heater												
	5. Replace Gym heater												
	6. Install eleven rooftop AC units												
Approved Loan Amount	\$114,654 (Includes High School and Elementary School)												
Expected Savings	\$19,277/yr												
Pre-retrofit	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	Total
kWh Used	25,530	26,580	37,290	46,110	31,230	45,720	60,360	30,420	32,760	28,050	26,040	31,770	421,860
Cost	\$1,609	\$1,671	\$2,335	\$3,272	\$2,348	\$3,429	\$4,526	\$2,287	\$2,053	\$1,630	\$1,643	\$1,993	\$28,796
Post-retrofit (93---94)													
kWh Used	24,660	24,540	12,720	31,320	13,380	25,860	42,840	56,460	32,880	24,540	21,660	21,240	332,100
Cost	\$1,547	\$1,540	\$ 802	\$2,336	\$1,021	\$1,950	\$4,053	\$5,622	\$2,686	\$1,995	\$1,779	\$1,745	\$27,076
Savings (kWh)	870	2,040	24,570	14,790	17,850	19,860	17,520	-26,040	-120	3,510	4,380	10,530	89,760
kWh % change	-3%	-8%	-66%	-32%	-57%	-43%	-29%	86%	0%	-13%	-17%	-33%	-21%
Post-retrofit (94---95)													
kWh Used	26,820	22,560	32,460	35,400	35,700	33,420	45,960	46,920	37,440				
Cost	\$2,194	\$1,852	\$2,636	\$3,179	\$3,211	\$3,009	\$2,259	\$4,213	\$2,960				
Savings (kWh)	-1,290	4,020	4,830	10,710	-4,470	12,300	14,400	-16,500	-4,680				
kWh % change	5%	-15%	-13%	-23%	14%	-27%	-24%	54%	14%				

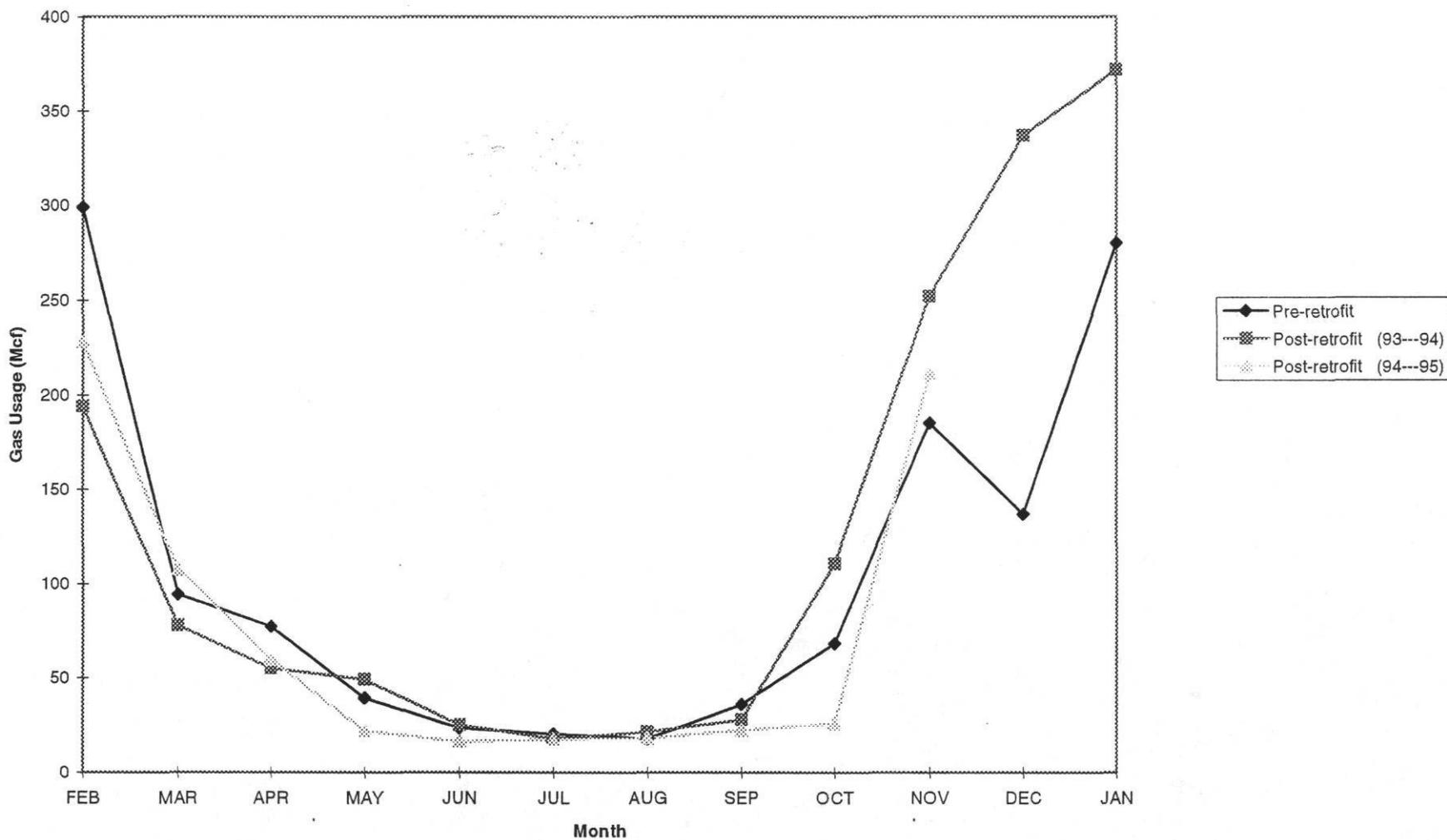
Buffalo ISD----High School

Electrical Usage



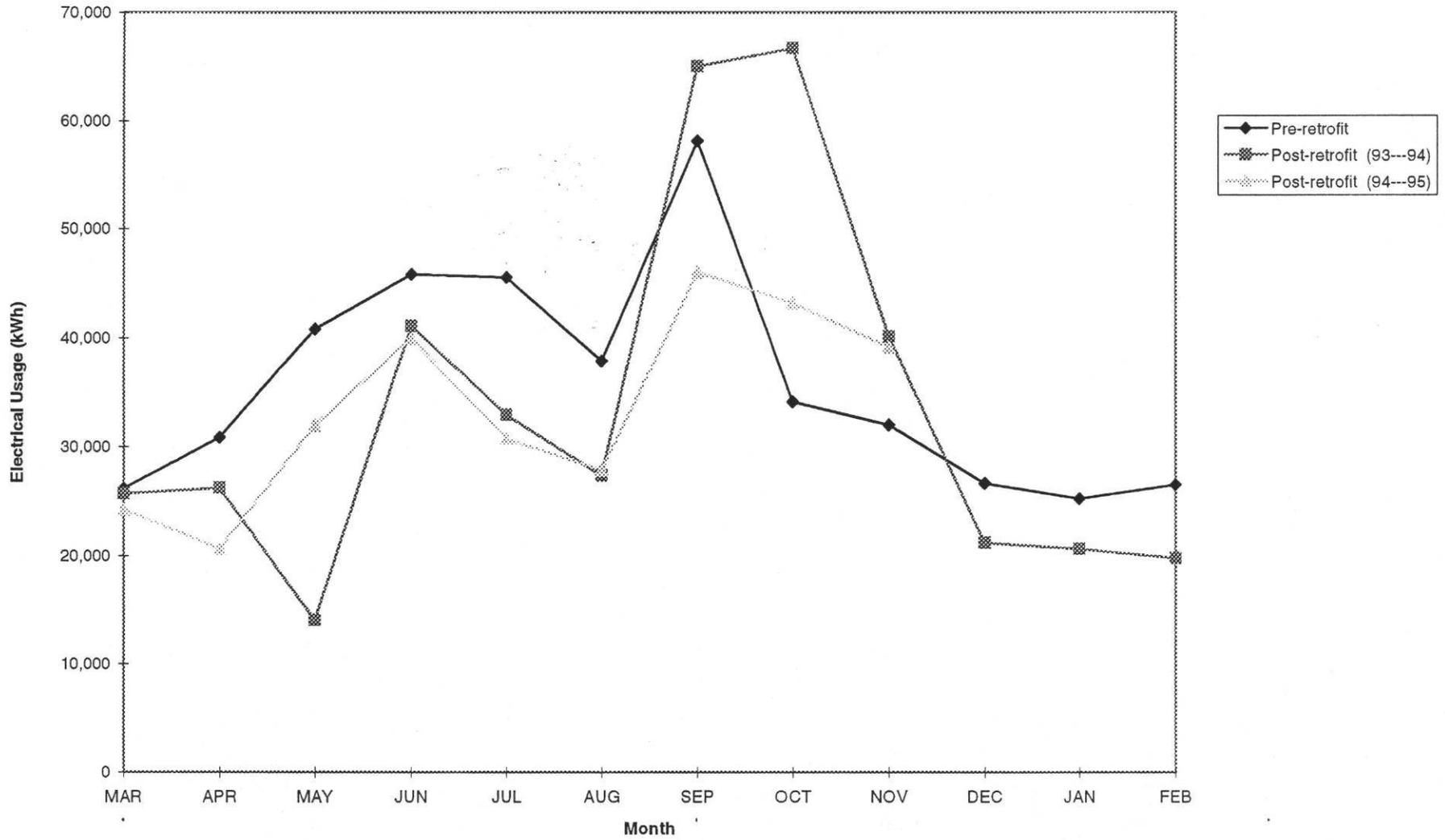
ECRMs Description	1. Exterior lighting conversion												
	2. Fixture relamping												
	3. Reduce infiltration												
	4. Replace domestic hot water heater												
	5. Replace Gym heater												
	6. Install eleven rooftop AC units												
Approved Loan Amount	\$114,654 (Includes High School and Elementary School)												
Expected Savings	\$19,277/yr												
Pre-retrofit	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	Total
Mcf Used	299	94	77	40	23	20	18	36	68	185	137	280	1,278
Cost	\$1,277	\$ 640	\$ 347	\$ 184	\$ 109	\$ 90	\$ 88	\$ 172	\$ 317	\$ 843	\$ 588	\$1,264	\$5,919
Post-retrofit (93---94)													
Mcf Used	194	78	55	49	25	18	22	28	111	252	337	372	1,541
Cost	\$ 900	\$ 373	\$ 282	\$ 255	\$ 150	\$ 110	\$ 151	\$ 139	\$ 567	\$1,191	\$1,517	\$1,691	\$7,326
Savings (Mcf)	105	17	22	-10	-2	3	-4	8	-42	-67	-200	-92	-262
Mcf % change	-35%	-18%	-28%	25%	7%	-12%	20%	-22%	62%	36%	146%	33%	21%

Buffalo ISD---- High School



ECRMs Description	1. Exterior lighting conversion												
	2. Fixture relamping												
	3. Install eleven efficient window AC units												
Approved Loan Amount	\$114,654 (Includes High School and Elementary School)												
Expected Savings	\$19,277/yr												
Pre-retrofit	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	Total
kWh Used	26,188	30,854	40,776	45,796	45,532	37,864	58,080	34,116	31,984	26,650	25,260	26,518	429,618
Cost	\$1,724	\$1,909	\$2,623	\$3,350	\$3,482	\$2,919	\$4,431	\$2,635	\$2,079	\$1,630	\$1,668	\$1,743	\$30,193
Post-retrofit (93---94)													
kWh Used	25,712	26,216	14,020	41,068	32,956	27,376	65,032	66,680	40,072	21,164	20,616	19,756	400,668
Cost	\$1,686	\$1,717	\$ 922	\$3,128	\$2,546	\$2,137	\$6,214	\$6,711	\$3,345	\$1,802	\$1,772	\$1,329	\$33,309
Savings (kWh)	476	4,638	26,756	4,728	12,576	10,488	-6,952	-32,564	-8,088	5,486	4,644	6,762	28,950
kWh % change	-2%	-15%	-66%	-10%	-28%	-28%	12%	95%	25%	-21%	-18%	-25%	-7%
Post-retrofit (94---95)													
kWh Used	24,268	20,632	31,964	39,948	30,716	27,896	45,984	43,152	39,120				
Cost	\$2,066	\$1,774	\$2,674	\$3,662	\$2,821	\$2,596	\$2,348	\$3,956	\$2,973				
Savings (kWh)	1,920	10,222	8,812	5,848	14,816	9,968	12,096	-9,036	-7,136				
kWh % change	-7%	-33%	-22%	-13%	-33%	-26%	-21%	26%	22%				

Buffalo ISD—Elementary School Electrical Usage

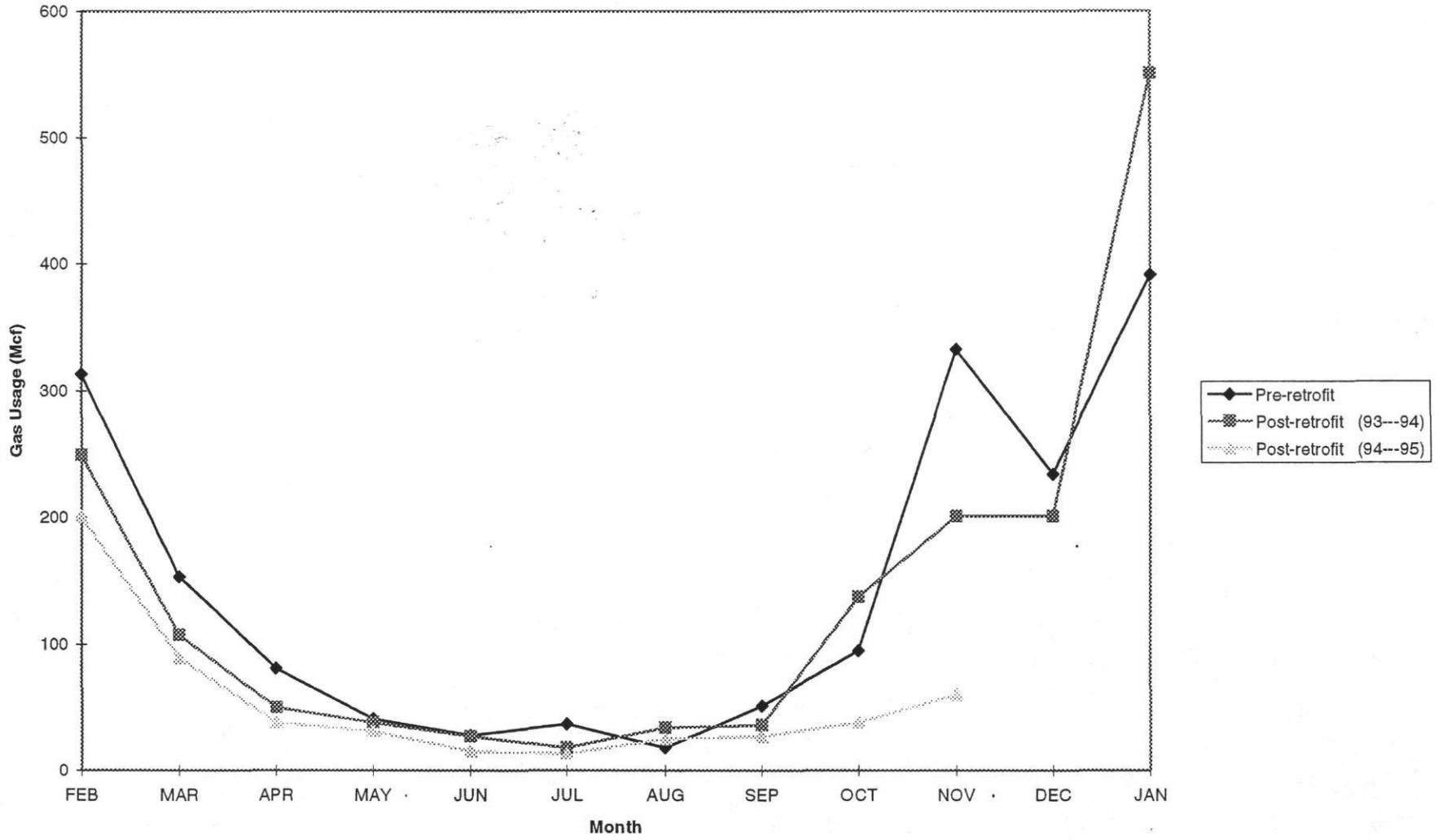


Buffalo ISD-----Elementary School Gas Usage

ECRMs Description	1. Exterior lighting conversion												
	2. Fixture relamping												
	3. Install eleven efficient window AC units												
Approved Loan Amount	\$114,654 (Includes High School and Elementary School)												
Expected Savings	\$19,277/yr												
Pre-retrofit	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	Total
Mcf Used	313	153	81	41	28	37	18	51	95	332	234	391	1,774
Cost	\$1,345	\$ 678	\$ 366	\$ 205	\$ 139	\$ 169	\$ 99	\$ 253	\$ 452	\$1,517	\$1,000	\$1,777	\$8,000
Post-retrofit (93---94)													
Mcf Used	249	107	50	38	27	18	34	36	137	201	201	551	\$1,649
Cost	\$1,228	\$ 568	\$ 304	\$ 247	\$ 202	\$ 153	\$ 242	\$ 255	\$ 768	\$1,035	\$ 995	\$2,574	\$8,571
Savings (Mcf)	64	46	31	3	1	19	-16	15	-42	131	33	-160	125
Mcf % change	-20%	-30%	-38%	-7%	-4%	-51%	89%	-29%	44%	-39%	-14%	41%	-7%
Post-retrofit (94---95)													
Mcf Used	201	89	38	31	15	13	25	27	38	60			
Cost	\$1,030	\$ 507	\$ 248	\$ 217	\$ 141	\$ 124	\$ 196	\$ 200	\$ 254	\$ 345			
Savings (Mcf)	112	64	43	10	13	24	-7	24	57	272			
Mcf % change	-36%	-42%	-53%	-24%	-46%	-65%	39%	-47%	-60%	-82%			

Buffalo ISD----Elementary School

Gas Usage



Terrell ISD

Expected Savings	Unadjusted Savings	Weather Adjusted Savings
\$40,716/yr	\$5,029/8 Months	\$ 707/8 Months
573,504 kWh/yr	104,410 kWh/8 Months	40,870 kWh/8 Months
210 Mcf/yr	-462 Mcf/8 Months	-458 Mcf/8 Months

High School

ECRMs Description

1. Fixture relamping
2. Replacement of electric motor
3. Replacement of chiller and tower
4. Replacement of DHW heater

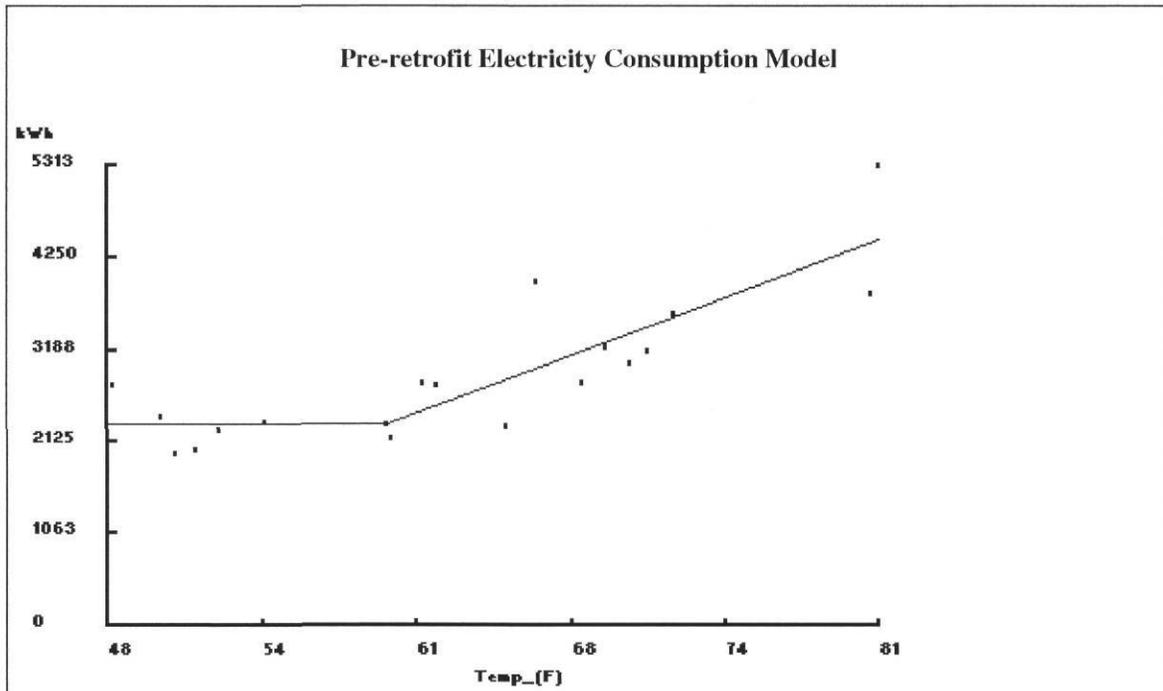
School Year Model-----Electricity

Model: Un-grouped 3P-CP (C). kWh vs. Temp_(F)

Ycp = 2335.1066 (124.4087) LS = 0.0000 (0.0000) RS = 99.5193 (14.1407) Xcp = 59.6960
 N = 20 N1 = 7 N2 = 13 R2 = 0.73 adjR2 = 0.72 RMSE = 431.82 CV-RMSE = 15.0% p = -0.18
 DW = 2.21 (i%)

Savings calculations for Model: Un-group 3P-CP (C). kWh vs. Temp_(F)

Baseline = 22792 Measured = 22351 Saved = 441 Avg savings =55.149
 Total saved = 441 × 30.5 = 13,451 kWh



Non-School Year Model-----Electricity

Model: Un-grouped SLR. kWh vs. Temp_(F)

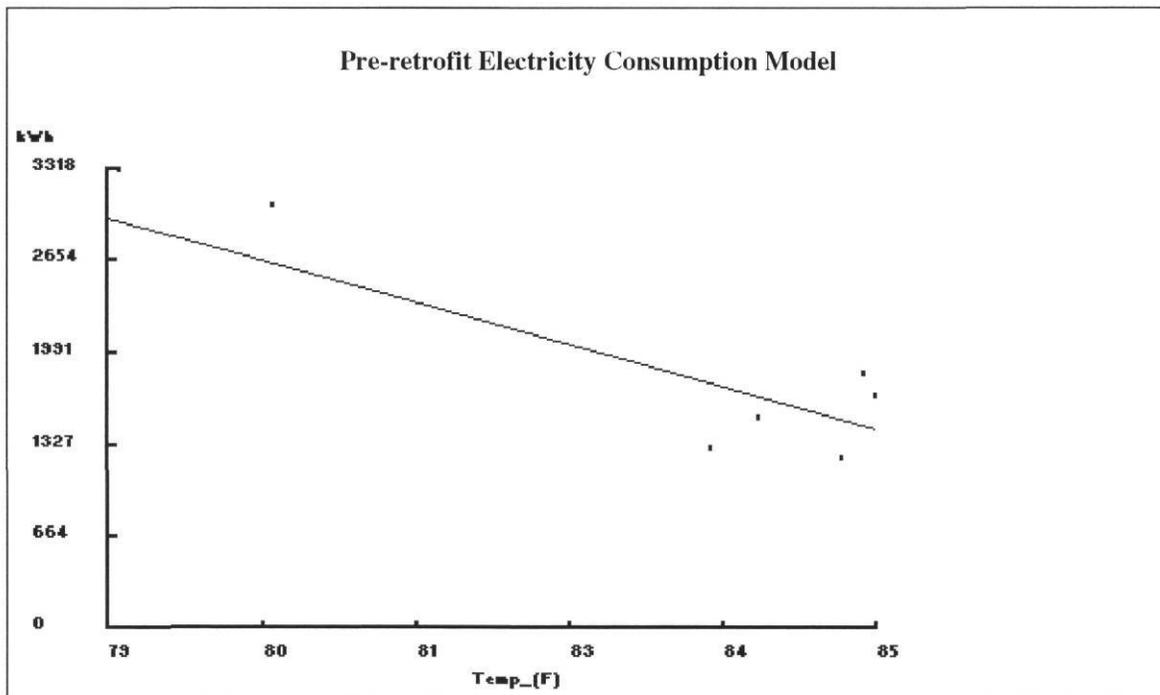
$Y_{int} = 21469.9227$ (4795.0095) $Temp_{(F)} = -235.4536$ (58.0903)
N = 8 $R^2 = 0.73$ $adjR^2 = 0.69$ $RMSE = 443.16$ $CV-RMSE = 21.7\%$ $p = -0.25$ $DW = 2.29$ (p=0)

Savings calculations for Model: Un-group SLR. kWh vs. Temp_(F)

Baseline = 5358 Measured = 5937 Saved = -579 +- 1860 (i.e. +- -321.16%)

Avg savings = -192.999 +- 619.84

Total saved = $-579 \times 30.5 = -17,660$ kWh



Middle School

ECRMs Description

1. Fixture relamping

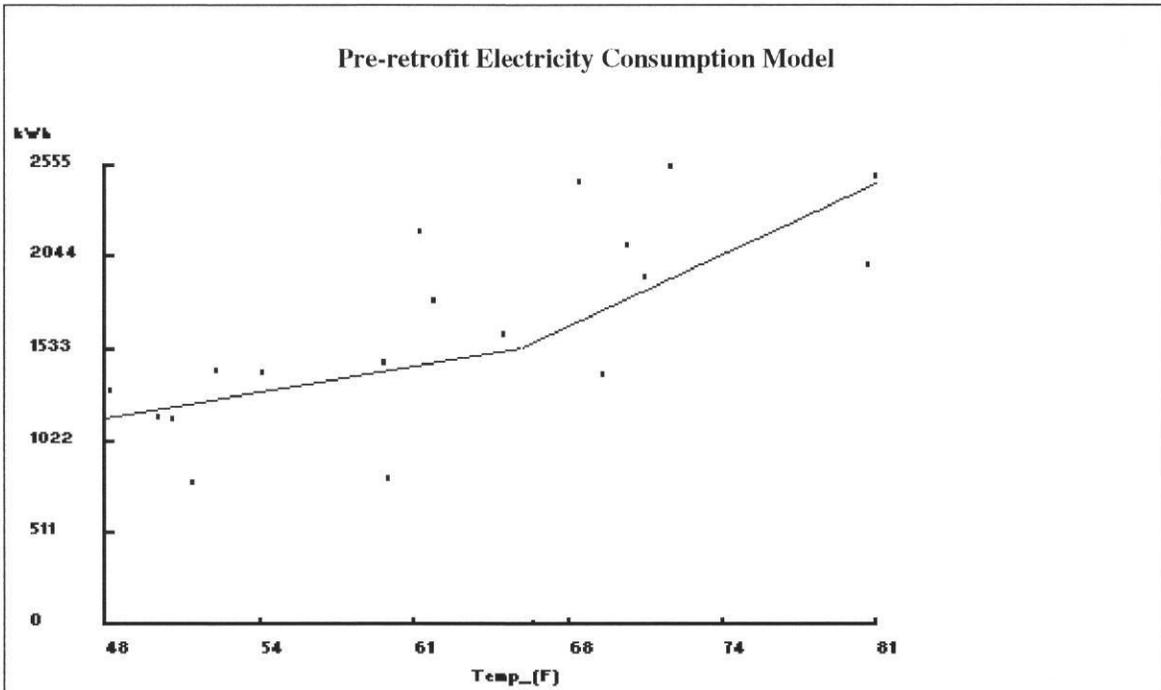
School Year Model-----Electricity

Model: Un-grouped 4P-CP. kWh vs. Temp_(F)

$Y_{cp} = 1543.0135 (1216.6819)$ $LS = 21.3427 (21.0918)$ $RS = 59.2360 (50.5522)$ $X_{cp} = 65.7440$
 $N = 20$ $N1 = 12$ $N2 = 8$ $R^2 = 0.35$ $RMSE = 549.1432$ $CV-RMSE = 35.1\%$ $p = 0.32$
 $DW = 1.35 (1\%)$

Savings calculations for Model: Un-group 4P-CP. kWh vs. Temp_(F)

Baseline = 12316 Measured = 10814 Saved = 1502 Avg savings = 187.689
Total saved = $1502 \times 30.5 = 45,811$ kWh



Non-School Year Model-----Electricity

Model: Un-grouped SLR. kWh vs. Temp_(F)

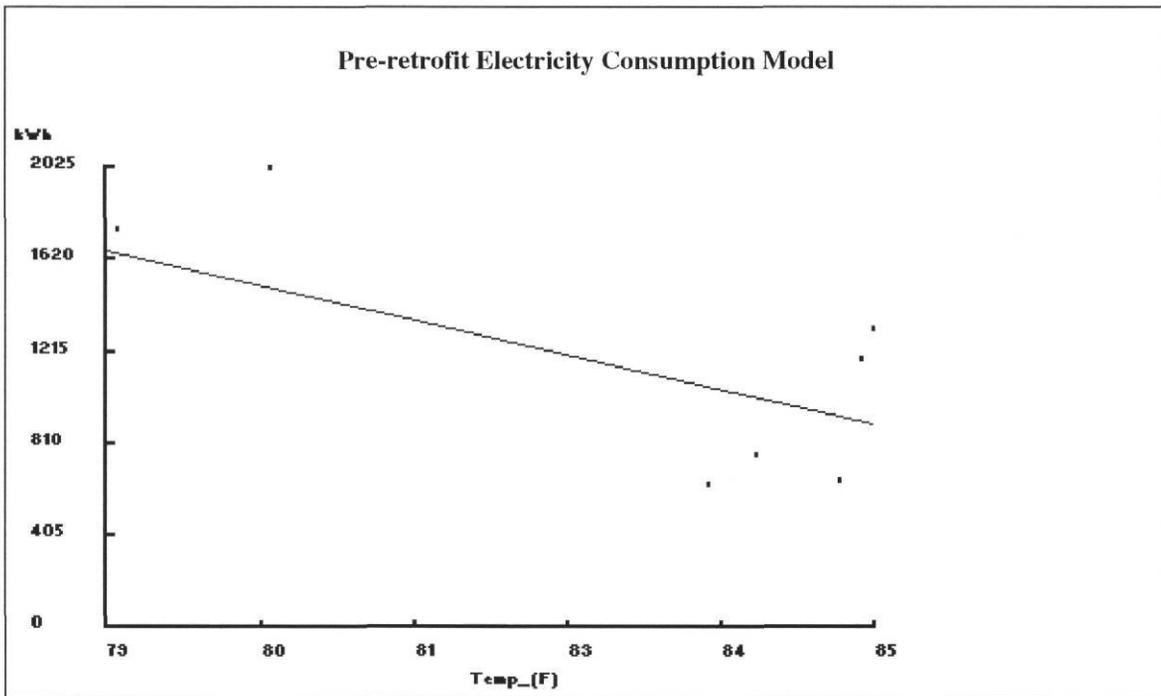
$Y_{int} = 10826.6018$ (4479.3749) $Temp_{(F)} = -116.7027$ (54.2665)
N = 8 $R^2 = 0.44$ $adjR^2 = 0.34$ $RMSE = 413.99$ $CV-RMSE = 34.5\%$ $p = -0.33$ $DW = 2.51$ (p=0)

Savings calculations for Model: Un-group SLR. kWh vs. Temp_(F)

Baseline = 3211 Measured = 2734 Saved = 477 +- 1688 (i.e. +- 354.06%)

Avg savings = 158.919 +- 562.66

Total saved = $477 \times 30.5 = 14,549$ kWh



Project Hope Building

ECRMs Description

1. Conversion to heat pumps

School Year Model-----Electricity

Model: Un-grouped Mean.kWh

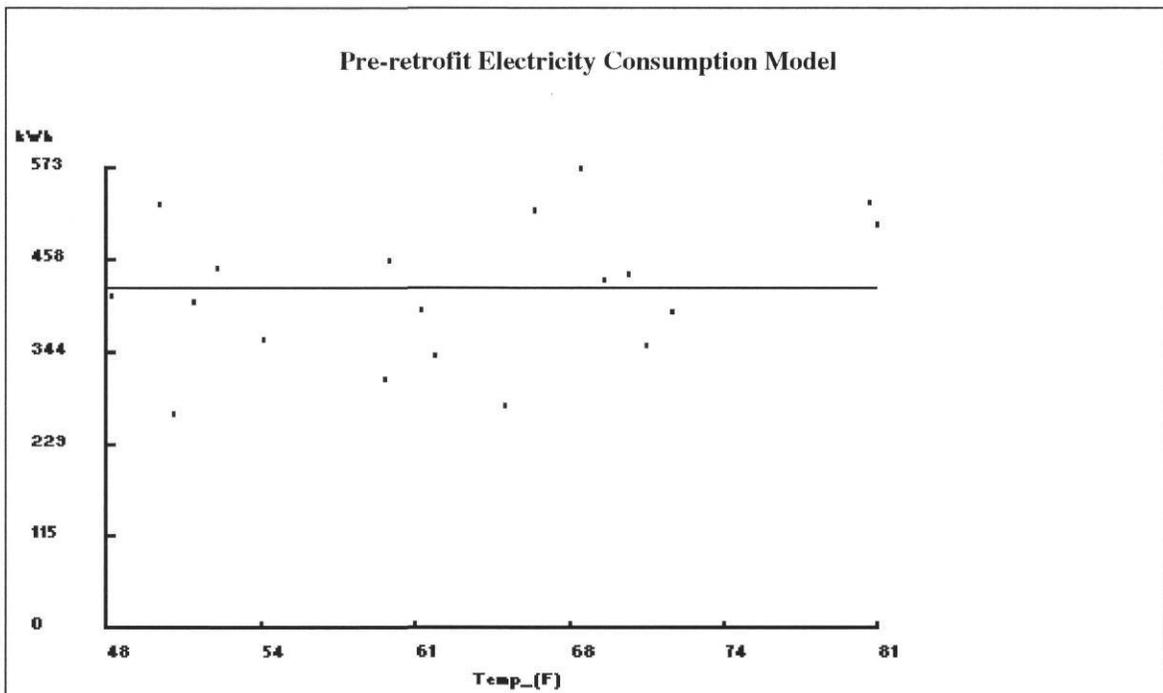
N = 20 Ymean = 424.30 Std Dev = 88.59 CV-StDev = 20.9%

Savings calculations for Model: Un-group Mean. kWh

Baseline = 3394 Measured = 3709 Saved = -315 +- 814 (i.e. +- -258.85%)

Avg savings = -39.325 +- 101.79

Total saved = $-315 \times 30.5 = -9,608$ kWh



Non-School Year Model----- Electricity

Model: Un-grouped Mean.kWh

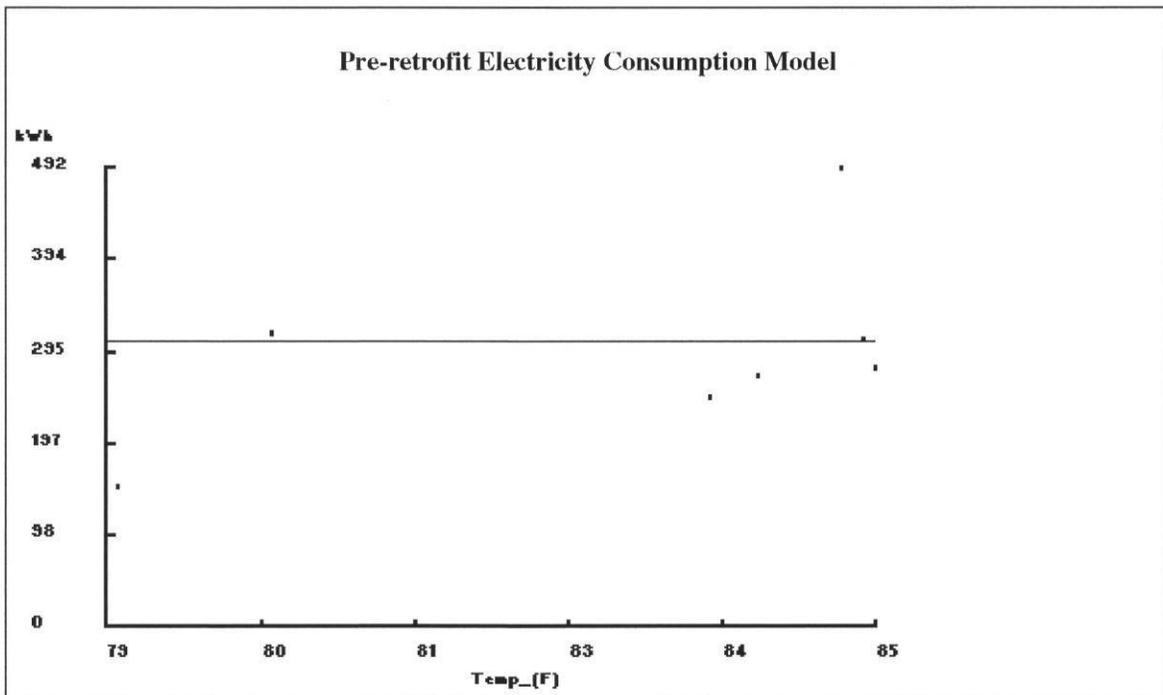
N = 8 Ymean = 307.00 Std Dev = 100.61 CV-StDev = 32.8%

Savings calculations for Model: Un-group Mean. kWh

Baseline = 921 Measured = 1107 Saved = -186 +- 676 (i.e. +- -363.29%)

Avg savings = -62.0 +- 225.24

Total saved = $-186 \times 30.5 = -5,673$ kWh



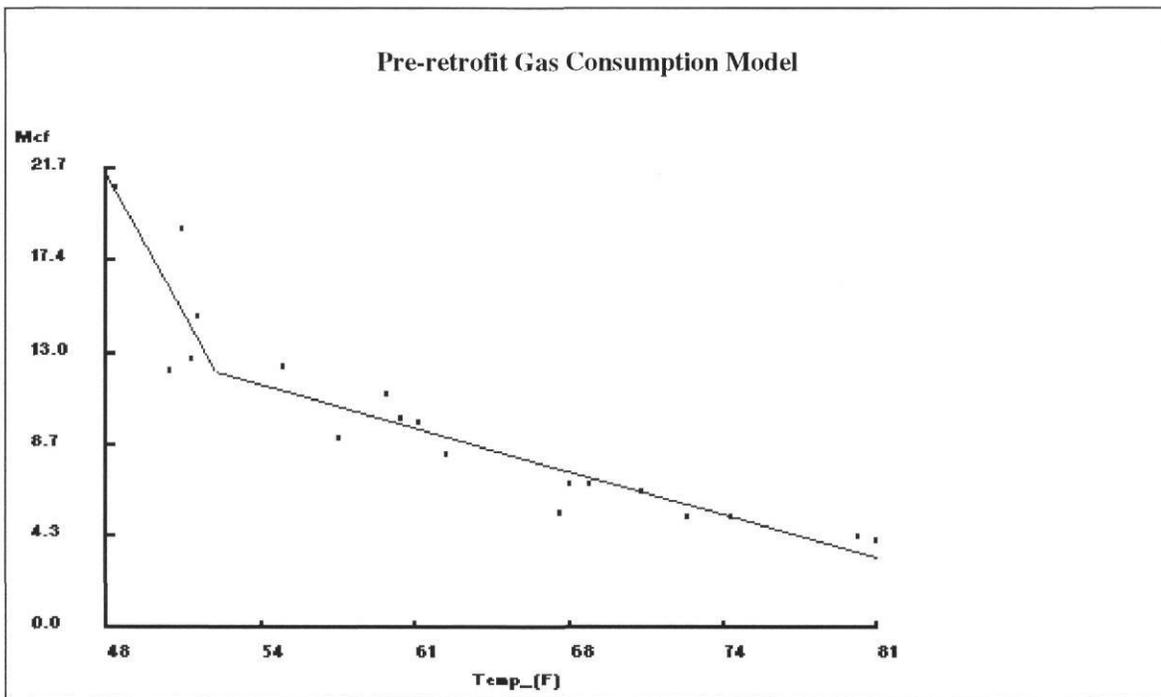
School Year Model-----Gas

Model: Un-grouped 4P-CP. Mcf vs. Temp_(F)

$Y_{cp} = 12.0937$ (16.3473) $LS = -2.0092$ (0.3209) $RS = -0.3063$ (0.4745) $X_{cp} = 52.4620$
 $N = 20$ $N1 = 6$ $N2 = 14$ $R2 = 0.92$ $RMSE = 1.6216$ $CV-RMSE = 15.7\%$ $p = -0.27$ $DW = 2.52$ (i%)

Savings calculations for Model: Un-group 3P-CP (H). Mcf vs. Temp_(F)

Baseline = 99 Measured = 113 Saved = -13 Avg savings = -1.483
Total saved = $-13 \times 30.5 = -397$ Mcf



Non-School Year Model-----Gas

Model: Un-grouped SLR. Mcf vs. Temp_(F)

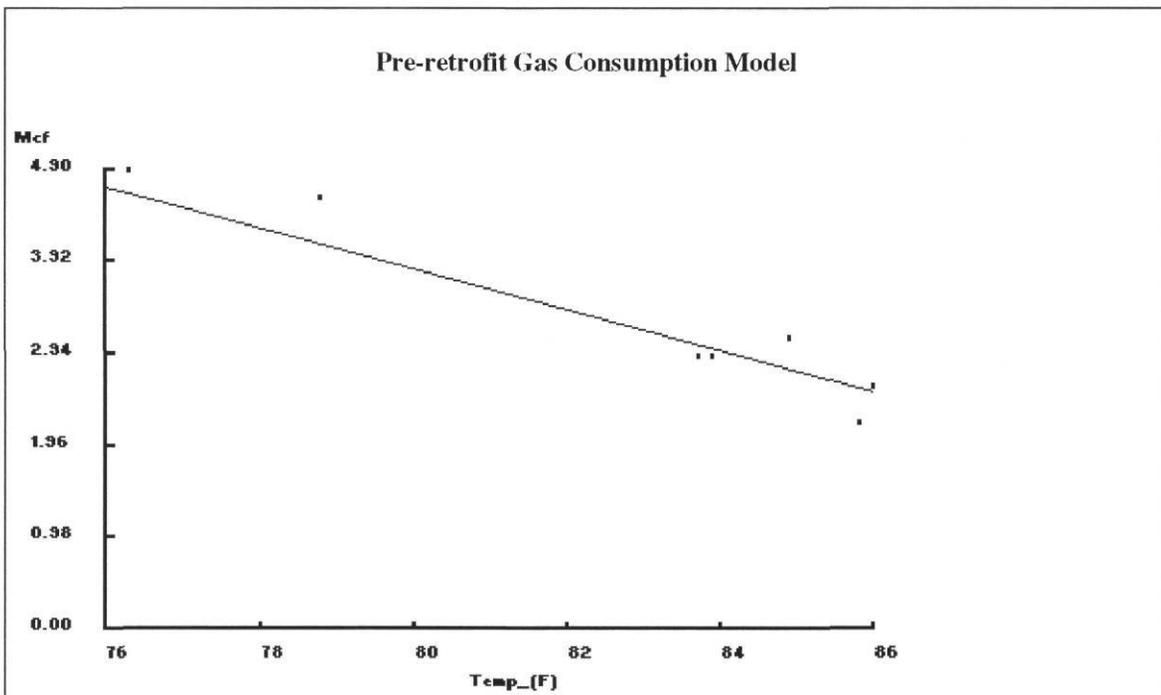
$Y_{int} = 21.1453$ (2.9369) $Temp_{(F)} = -0.2178$ (0.0360)

$N = 8$ $R^2 = 0.86$ $adjR^2 = 0.84$ $RMSE = 0.40$ $CV-RMSE = 11.8\%$ $p = -0.59$ $DW = 2.89$ ($p=0$)

Savings calculations for Model: Un-group SLR. Mcf vs. Temp_(F)

Baseline = 9 Measured = 12 Saved = -2 +- 1 (i.e. +- -41.67%) Avg savings = -0.761 +- 0.32

Total saved = $-2 \times 30.5 = -61$ Mcf

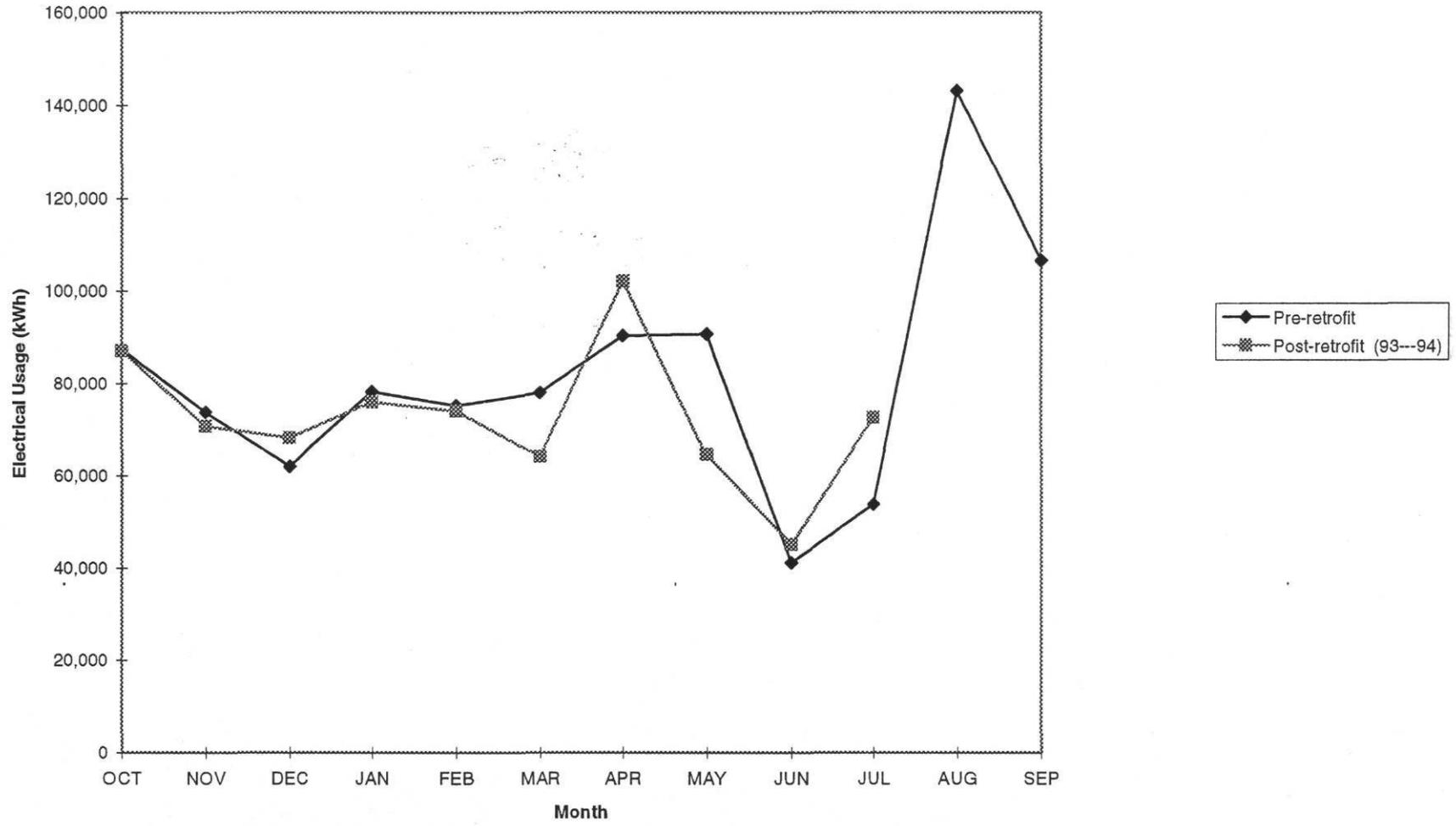


Terrell ISD----High School Electrical Usage

ECRMs Description	1. Fixture relamping												
	2. Replacement of electric motor												
	3. Replacement of chiller and tower												
	4. Replacement of DHW heater												
Approved Loan Amount	\$211,438 (Includes High School,Middle School and Project Hope Bldg.)												
Expected Savings	\$40,716/yr												
Pre-retrofit	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Total
kWh Used	87,458	73,845	62,055	78,278	75,240	78,045	90,360	90,765	41,160	53,820	143,213	106,493	980,732
Cost	\$5,406	\$4,566	\$3,839	\$4,844	\$4,662	\$4,830	\$5,590	\$6,512	\$3,067	\$4,228	\$5,658	\$7,134	\$60,337
Post-retrofit (93---94)													
kWh Used	87,075	70,740	68,175	76,050	74,025	64,125	102,105	64,530	45,090	72,585			
Cost	\$7,050	\$5,680	\$5,519	\$6,156	\$5,988	\$5,194	\$8,213	\$5,755	\$4,032	\$6,485			
Savings (kWh)	383	3,105	-6,120	2,228	1,215	13,920	-11,745	26,235	-3,930	-18,765			
kWh % change	0%	-4%	10%	-3%	-2%	-18%	13%	-29%	10%	35%			

Terrell ISD---High School

Electrical Usage

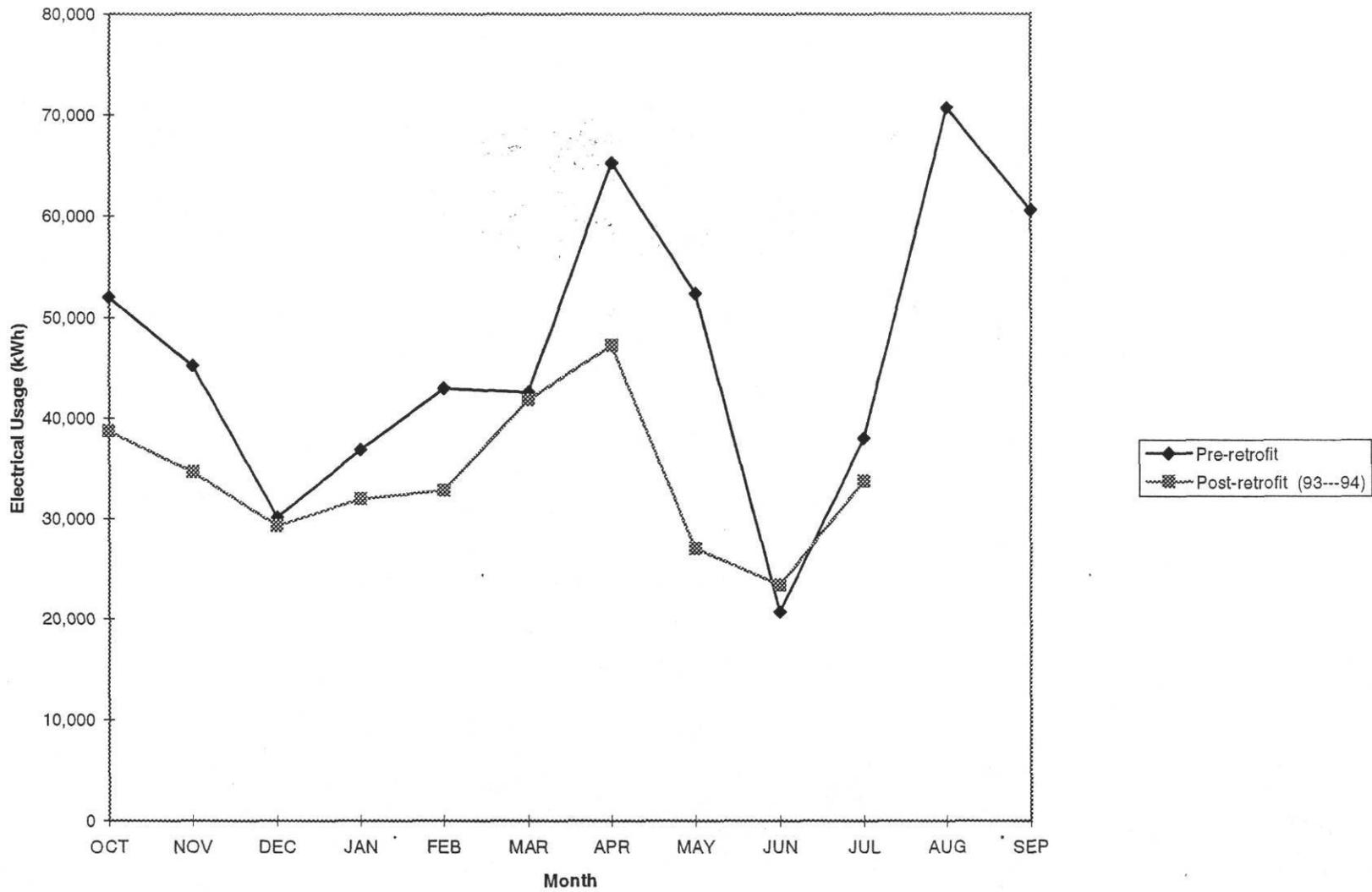


Terrell ISD---Middle School Electrical Usage

ECRMs Description	1.Fixture relamping												
Approved Loan Amount	\$211,438 (Includes High School,Middle School and Project Hope Bldg.)												
Expected Savings	\$40,716/yr												
Pre-retrofit	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Total
kWh Used	51,975	45,225	30,150	36,900	42,975	42,600	65,250	52,350	20,700	38,025	70,650	60,525	557,325
Cost	\$3,220	\$2,802	\$1,874	\$2,292	\$2,671	\$2,645	\$4,042	\$3,774	\$1,550	\$2,842	\$5,272	\$4,509	\$37,493
Post-retrofit (93---94)													
kWh Used	38,700	34,650	29,250	31,950	32,850	41,850	47,250	27,000	23,400	33,750			
Cost	\$3,142	\$2,790	\$2,376	\$2,595	\$2,666	\$3,395	\$3,809	\$2,416	\$2,100	\$3,023			
Savings (kWh)	13,275	10,575	900	4,950	10,125	750	18,000	25,350	-2,700	4,275			
kWh % change	-26%	-23%	-3%	-13%	-24%	-2%	-28%	-48%	13%	-11%			

Terrell ISD—Middle School

Electrical Usage



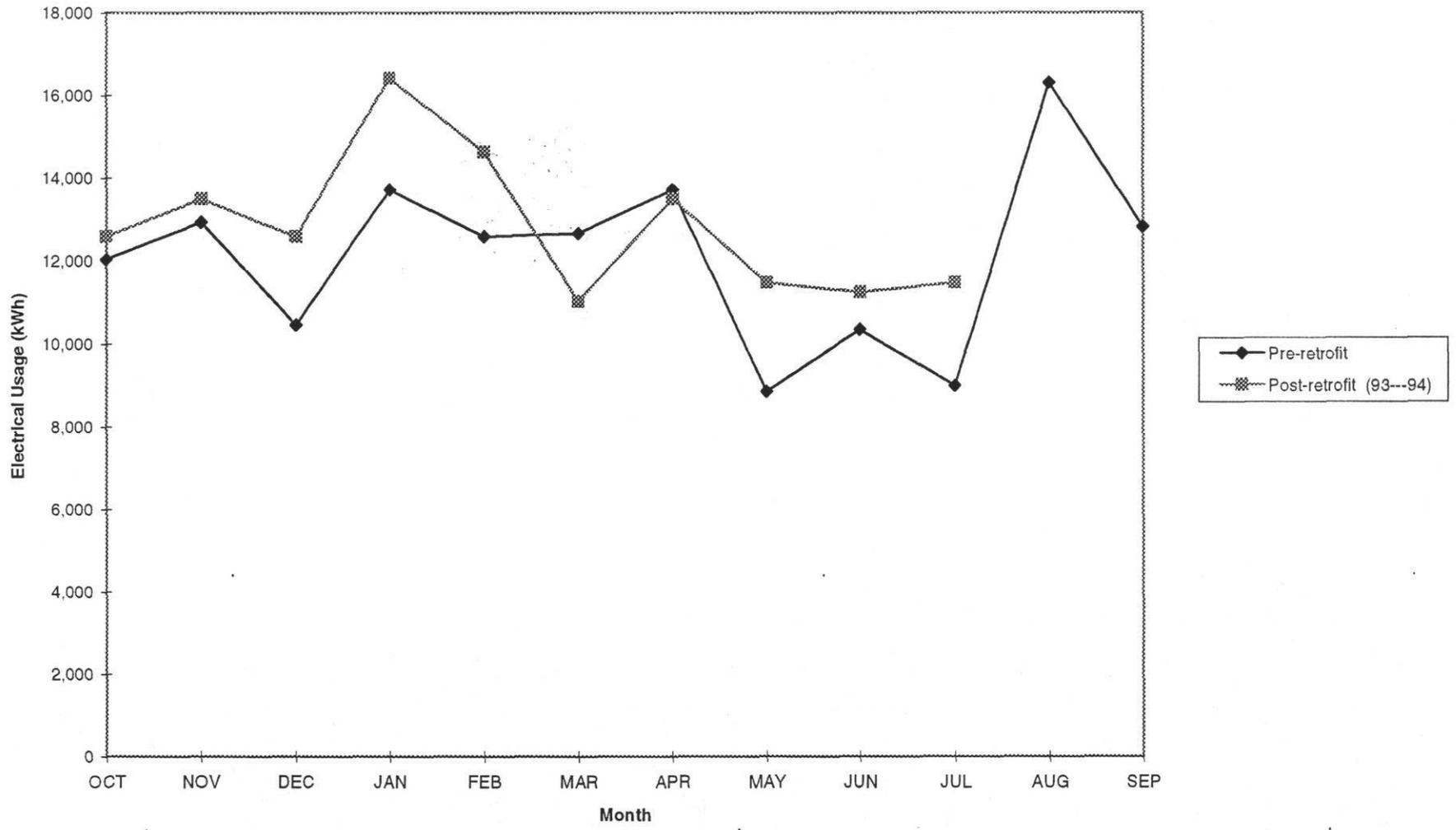
Terrell ISD----Project Hope Building

Electrical Usage

ECRMs Description	1.Conversion to heat pumps												
Approved Loan Amount	\$211,438 (Includes High School,Middle School and Project Hope Bldg.)												
Expected Savings	\$40,716/yr												
Pre-retrofit	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Total
kWh Used	12,038	12,938	10,463	13,725	12,600	12,675	13,725	8,850	10,350	9,000	16,313	12,825	145,502
Cost	\$ 757	\$ 812	\$ 660	\$ 861	\$ 792	\$ 799	\$ 862	\$ 659	\$ 782	\$ 684	\$1,228	\$ 968	\$ 9,866
Post-retrofit (93---94)													
kWh Used	12,600	13,500	12,600	16,425	14,625	11,025	13,500	11,475	11,250	11,475			
Cost	\$1,033	\$1,096	\$1,032	\$1,341	\$1,195	\$ 905	\$1,099	\$1,036	\$1,017	\$1,038			
Savings (kWh)	-562	-562	-2,137	-2,700	-2,025	1,650	225	-2,625	-900	-2,475			
kWh % change	5%	4%	20%	20%	16%	-13%	-2%	30%	9%	28%			

Terrell ISD--Project Hope Building

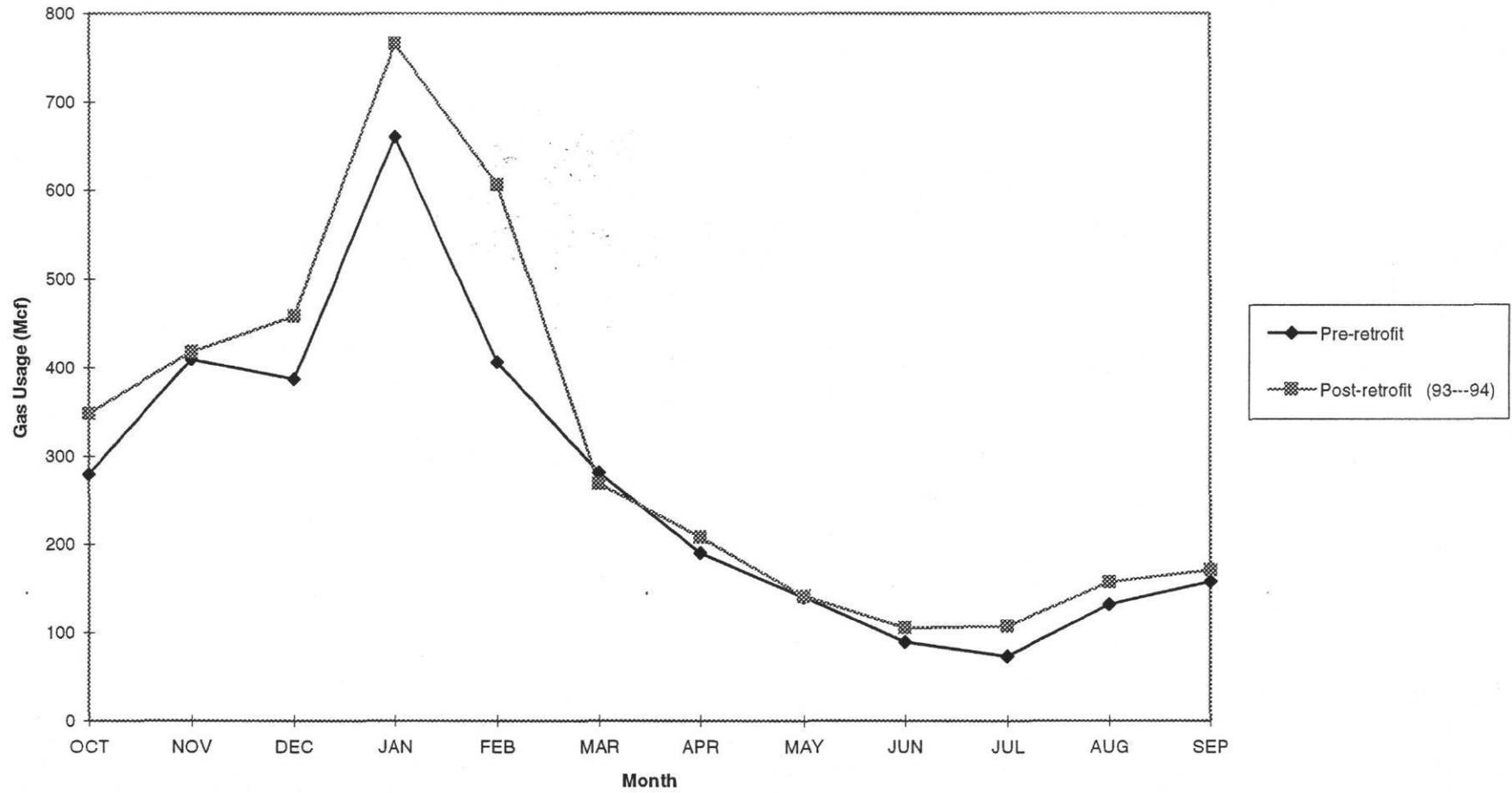
Electrical Usage



ECRMs Description	1.Fixture relamping												
	2.Conversion to heat pumps												
	3.Replacementof electric motor												
	4.Replacement of chiller and tower												
	5.Replacement of DHW heater												
Approved Loan Amount	\$211,438 (Includes High School,Middle School and Project Hope Bldg.)												
Expected Savings	\$40,716/yr												
Pre-retrofit	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Total
Mcf Used	279	409	387	660	406	281	190	140	89	73	132	158	3,204
Cost	\$ 1,314	\$1,868	\$1,672	\$2,850	\$1,725	\$1,258	\$ 880	\$ 675	\$ 410	\$ 344	\$ 633	\$ 748	\$14,377
Post-retrofit (93--94)													
Mcf Used	348	418	458	766	606	269	208	141	105	107	157	171	3,754
Cost	\$ 1,609	\$1,779	\$1,838	\$3,037	\$2,449	\$1,099	\$ 964	\$ 636	\$ 456	\$ 489	\$ 718	\$ 775	\$15,849
Savings (Mcf)	-69	-9	-71	-106	-200	12	-18	-1	-16	-34	-25	-13	-550
Mcf % change	25%	2%	18%	16%	49%	-4%	9%	1%	18%	47%	19%	8%	17%

Terrell ISD

Gas Usage



Hubbard ISD

Expected Savings	Unadjusted Savings	Weather Adjusted Savings
\$ 48,576/yr	\$ 29,287/21 Months	\$ 37,585/21 Months
847,758 kWh/yr	614,186 kWh/21 Months	717,451 kWh/21 Months
- 1,643 Mcf/yr	-2,615 Mcf/21 Months	-2,315 Mcf/21 Months

Elementary School

ECRMs Description

1. Fixture relamping
2. Window solar gain control
3. Replace panel-ray heat/AC window units

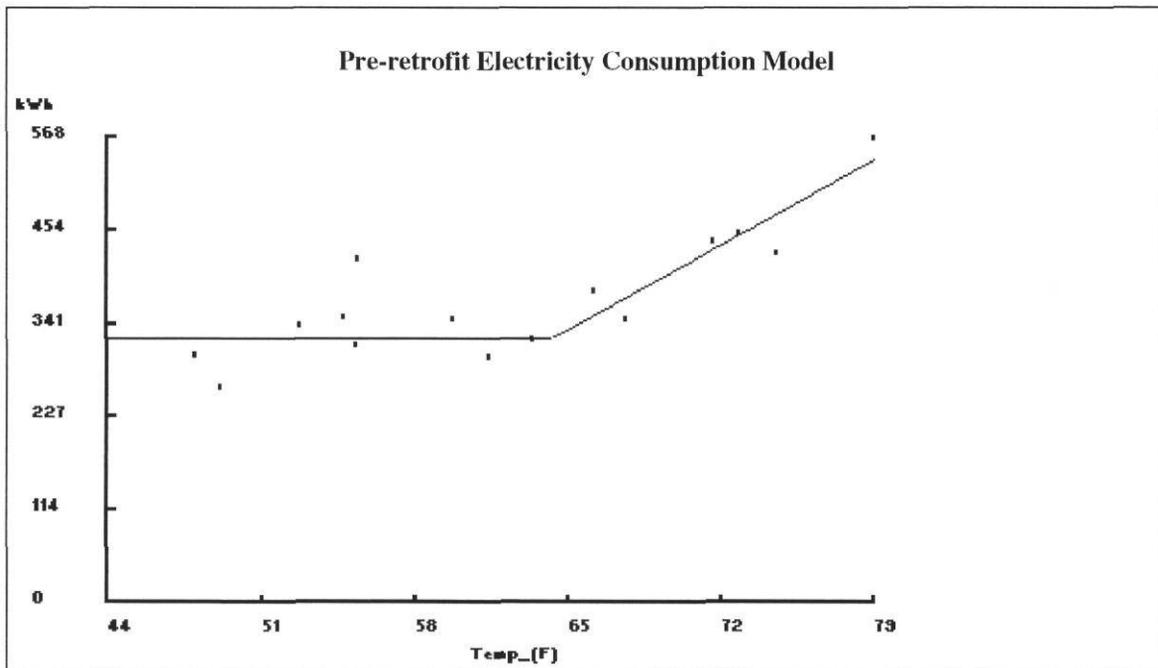
School Year Model-----Electricity

Model: Un-group 3P-CP (C). kWh vs. Temp_(F)

$Y_{cp} = 323.6151$ (11.8688) $LS = 0.0000$ (0.0000) $RS = 14.5699$ (2.1873) $X_{cp} = 64.3320$
 $N = 16$ $N1 = 10$ $N2 = 6$ $R2 = 0.76$ $adjR2 = 0.74$ $RMSE = 40.12$ $CV-RMSE = 11.0\%$
 $p = 0.17$ $DW = 1.65$ (i%)

Savings calculations for Model: Un-group 3P-CP (C). kWh vs. Temp_(F)

Baseline = 6110 Measured = 5758 Saved = 352 Avg savings = 20.683
 Total saved = $352 \times 30.5 = 10,736$ kWh



Non-School Year Model-----Electricity

Model: Un-group Mean. kWh

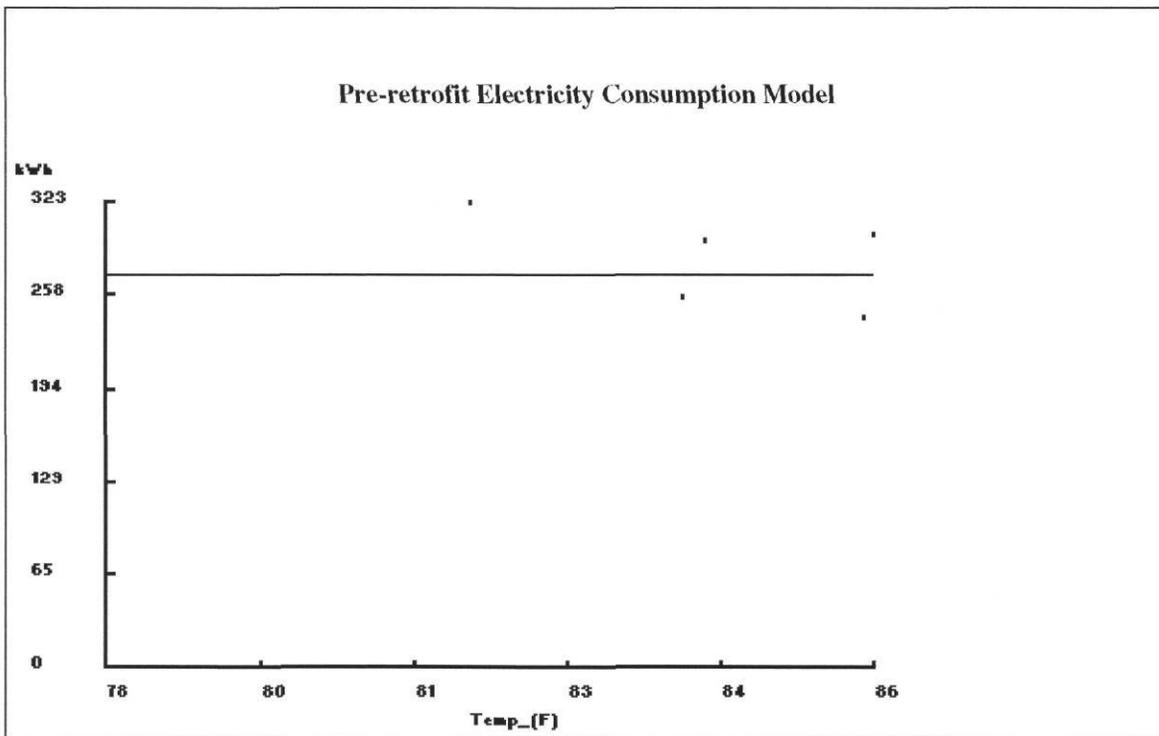
N = 6 Ymean = 272.83 Std Dev = 40.26 CV-StDev = 14.8%

Savings calculations for Model: Un-group Mean. kWh

Baseline = 1091 Measured = 1456 Saved = -365 +- 31 (i.e. +- 8.57%)

Avg savings = -91.167 +- 7.81

Total saved = $-365 \times 30.5 = -11,133$ kWh



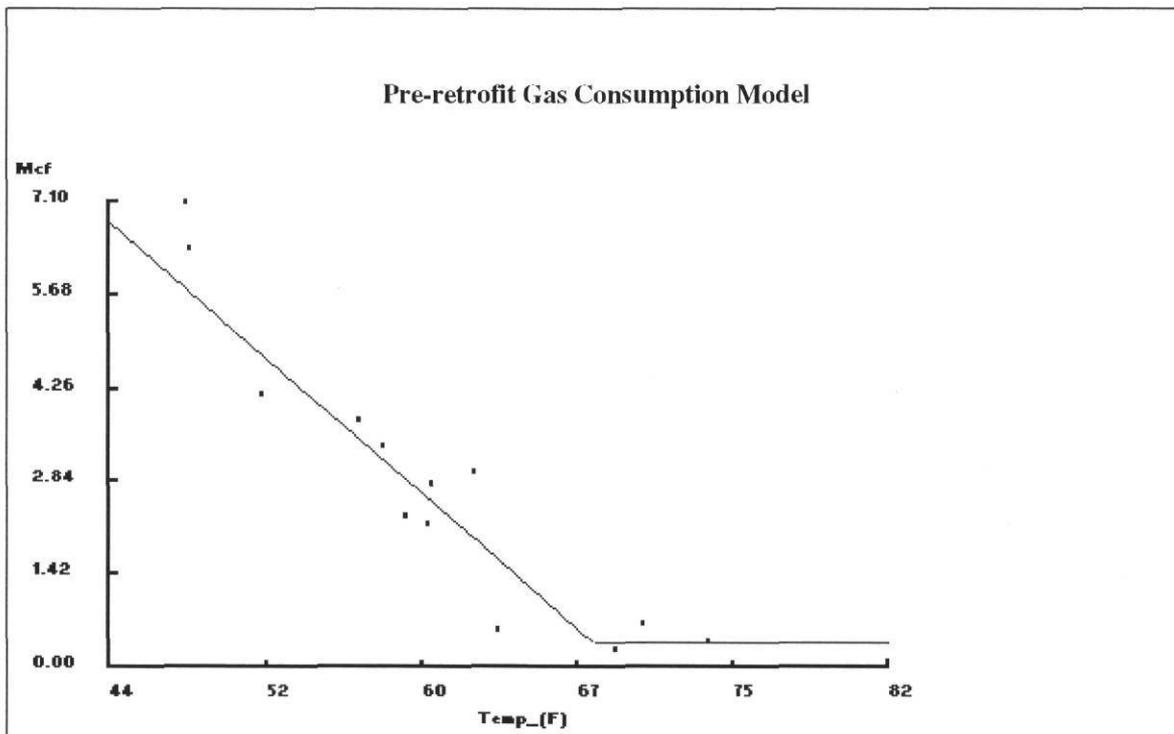
School Year Model-----Gas

Model: Un-group 3P-CP (H). Mcf vs. Temp_(F)

Ycp = 0.3747 (0.3009) LS = -0.2731 (0.0255) RS = 0.0000 (0.0000) Xcp = 67.9600
N = 15 N1 = 11 N2 = 4 R2 = 0.90 adjR2 = 0.89 RMSE = 0.75 CV-RMSE = 26.1%
p = -0.09 DW = 2.11 (i%)

Savings calculations for Model: Un-group 3P-CP (H). Mcf vs. Temp_(F)

Baseline = 51 Measured = 50 Saved = 1 Avg savings = 0.064
Total saved = 1 × 30.5 = 31 Mcf



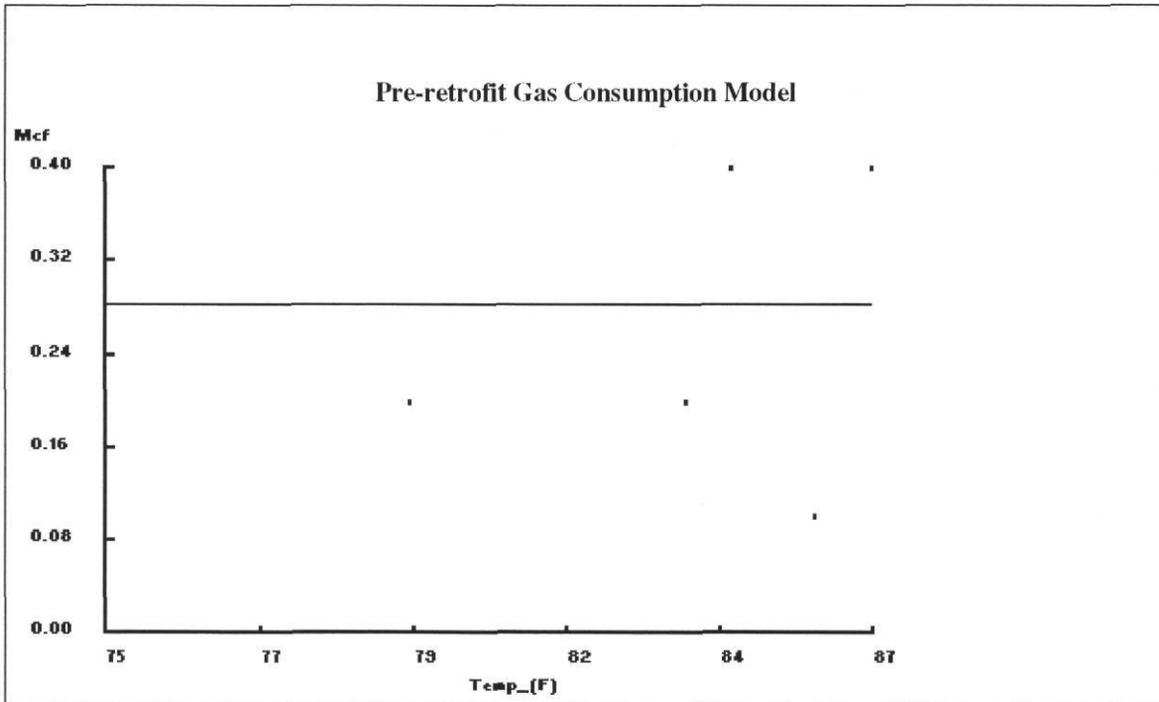
Non-School Year Model-----Gas

Model: Un-group Mean. Mcf

N = 6 Ymean = 0.28 Std Dev = 0.13 CV-StDev = 46.9%

Savings calculations for Model: Un-group Mean. Mcf

Baseline = 1 Measured = 1 Saved = 0 +- 23 (i.e. +- 34981.74%) Avg savings = -0.017 +- 5.83
Total saved = 0



Middle School

ECRMs Description

1. Fixture relamping

School Year Model-----Electricity

Model: Un-group Mean. kWh

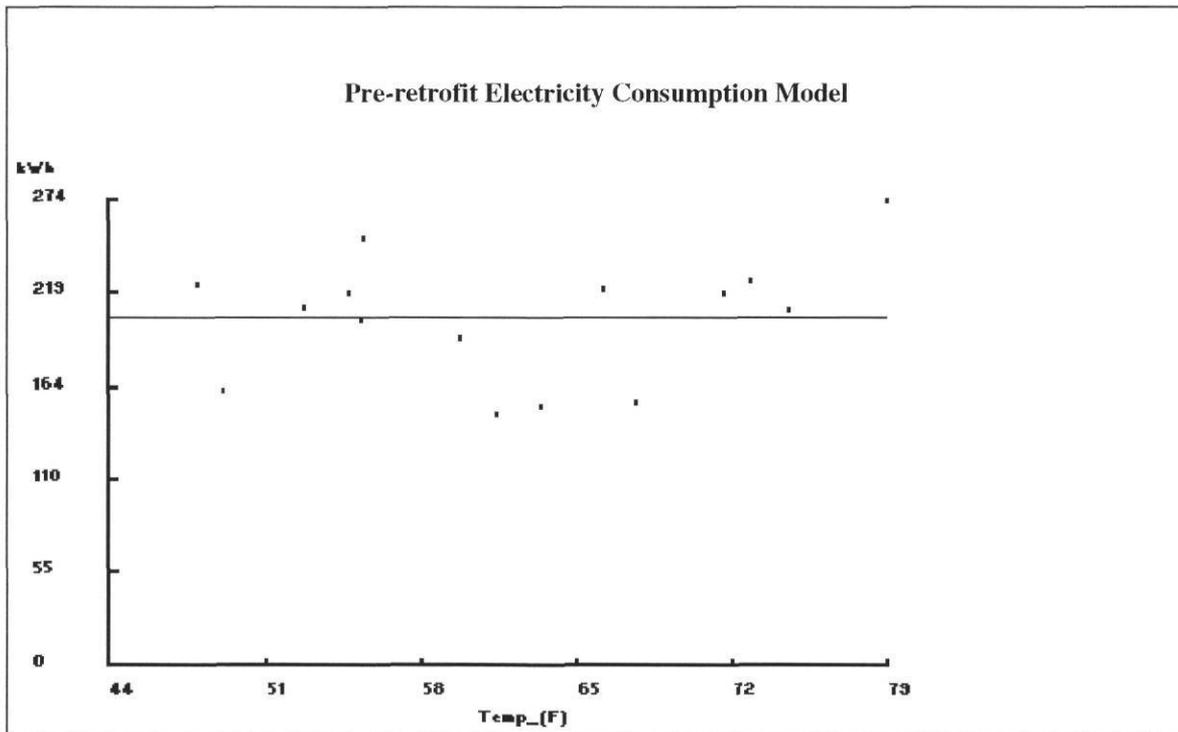
N = 16 Ymean = 205.75 Std Dev = 35.56 CV-StDev = 17.3%

Savings calculations for Model: Un-group Mean. kWh

Baseline = 3498 Measured = 3996 Saved = -498 +- 667 (i.e. +- -133.9%)

Avg savings = -29.309 +- 39.25

Total saved = $-498 \times 30.5 = -15,189$ kWh



Non-School Year Model-----Electricity

Model: Un-group Mean. kWh

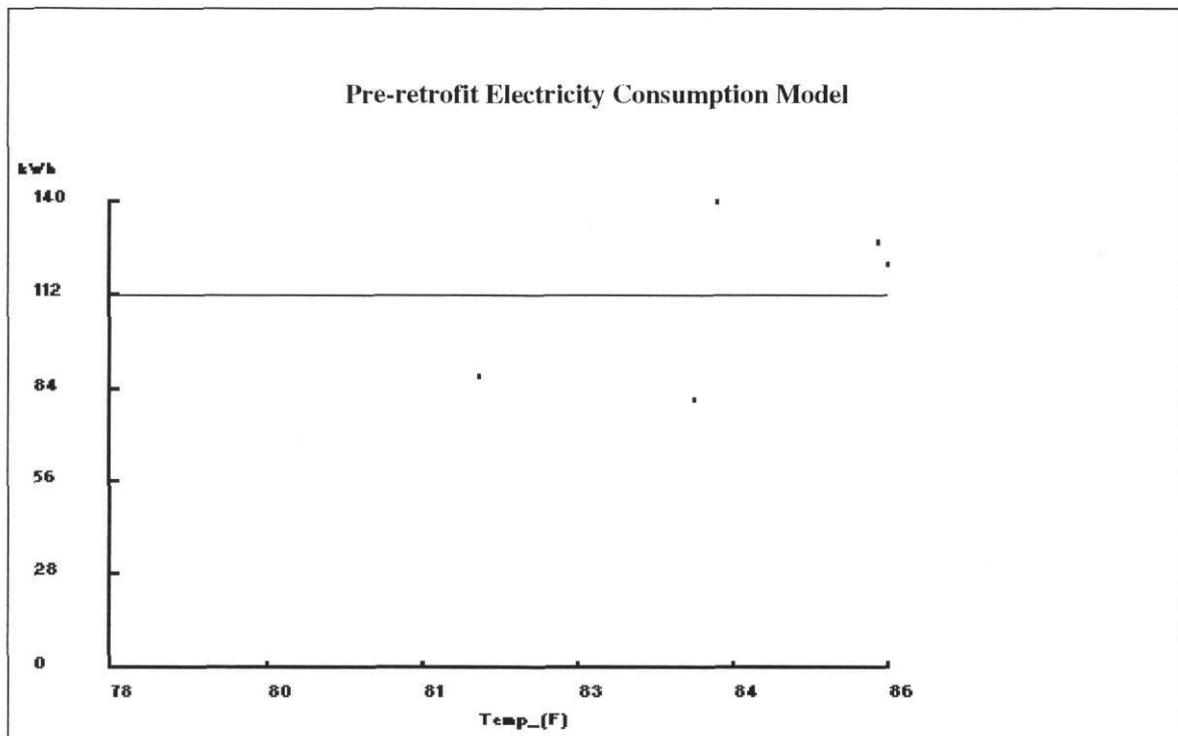
N = 6 Ymean = 112.00 Std Dev = 23.07 CV-StDev = 20.6%

Savings calculations for Model: Un-group Mean. kWh

Baseline = 448 Measured = 816 Saved = -368 +- 149 (i.e. +- 40.53%)

Avg savings = -92.0 +- 37.29

Total saved = $-368 \times 30.5 = -11,224$ kWh



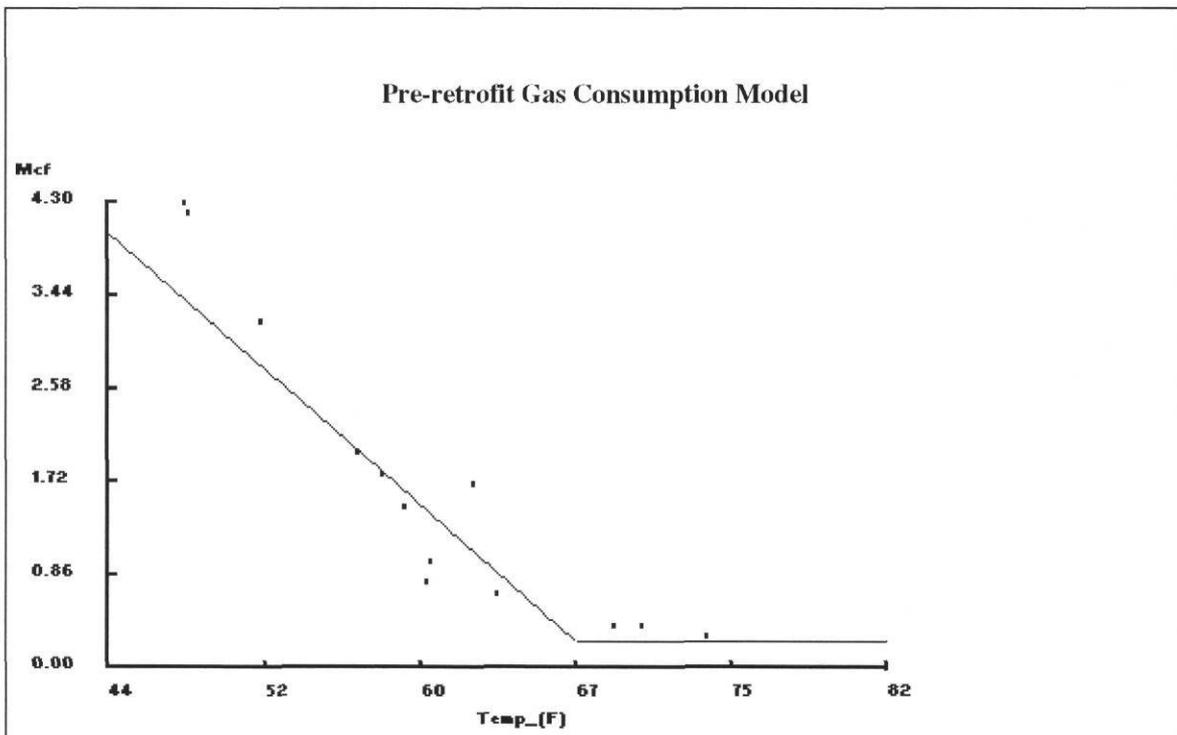
School Year Model-----Gas

Model: Un-group 3P-CP (H). Mcf vs. Temp_(F)

Ycp = 0.2544 (0.2411) LS = -0.1650 (0.0215) RS = 0.0000 (0.0000) Xcp = 67.2000
N = 15 N1 = 11 N2 = 4 R2 = 0.82 adjR2 = 0.81 RMSE = 0.61 CV-RMSE = 36.7%
p = -0.18 DW = 2.35 (i%)

Savings calculations for Model: Un-group 3P-CP (H). Mcf vs. Temp_(F)

Baseline = 30 Measured = 38 Saved = -8 Avg savings = -0.514
Total saved = -8 × 30.5 = -244 Mcf



Non-School Year Model-----Gas

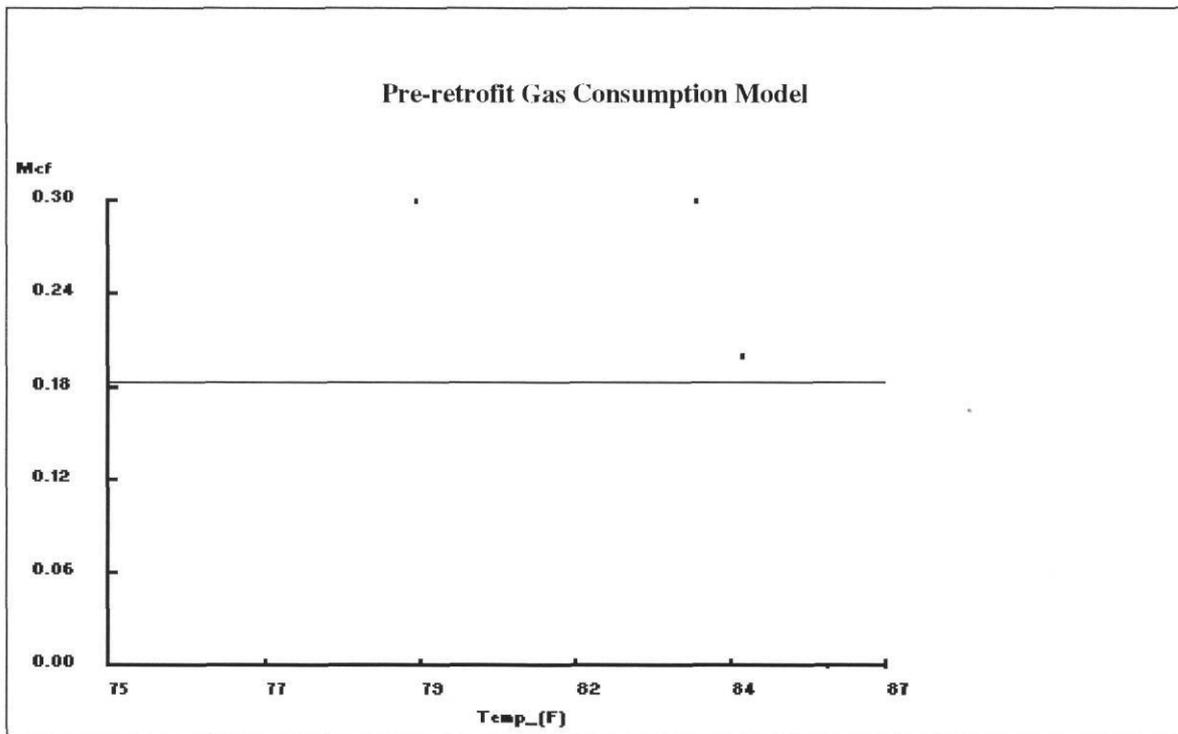
Model: Un-group Mean. Mcf

N = 6 Ymean = 0.18 Std Dev = 0.15 CV-StDev = 80.3%

Savings calculations for Model Un-group Mean. Mcf

Baseline = 1 Measured = 1 Saved = 0 +- 11 (i.e. +- 2370.37%) Avg savings = -0.117 +- 2.77

Total saved = 0



High School

ECRMs Description

1. Fixture relamping
2. Exterior wall insulation
3. Replace of resistance heating
4. Electric to gas DHW conversion

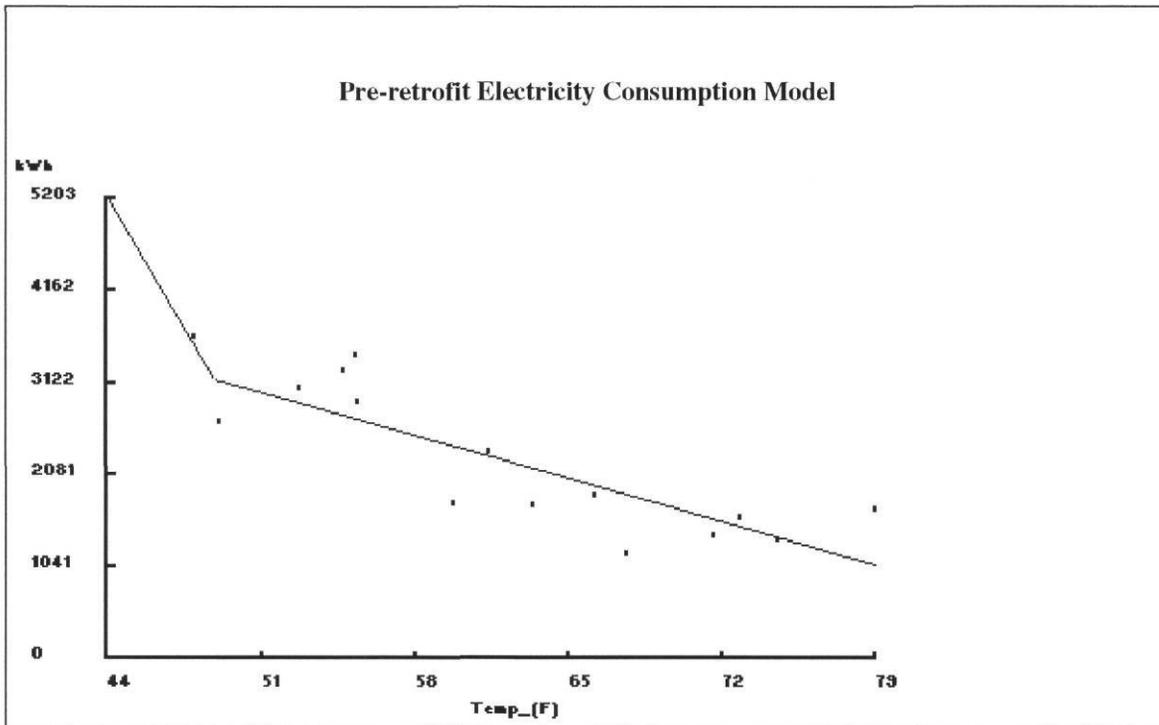
School Year Model-----Electricity

Model: Un-group 4P-CP. kWh vs. Temp_(F)

Ycp = 3164.9494 (4774.5988) LS = -414.9033 (99.9167) RS = -69.0656 (145.3743)
Xcp = 48.7560 N = 16 N1 = 2 N2 = 14 R2 = 0.86 RMSE = 441.6095 CV-RMSE = 18.0%
p = 0.14 DW = 1.66 (1%)

Savings calculations for Model: Un-group 4P-CP. kWh vs. Temp_(F)

Baseline = 42494 Measured = 16890 Saved = 25604 Avg savings = 1506.119
Total saved = 25604 × 30.5 = 780,922 kWh



Non-School Year Model-----electricity

Model: Un-group Mean. kWh

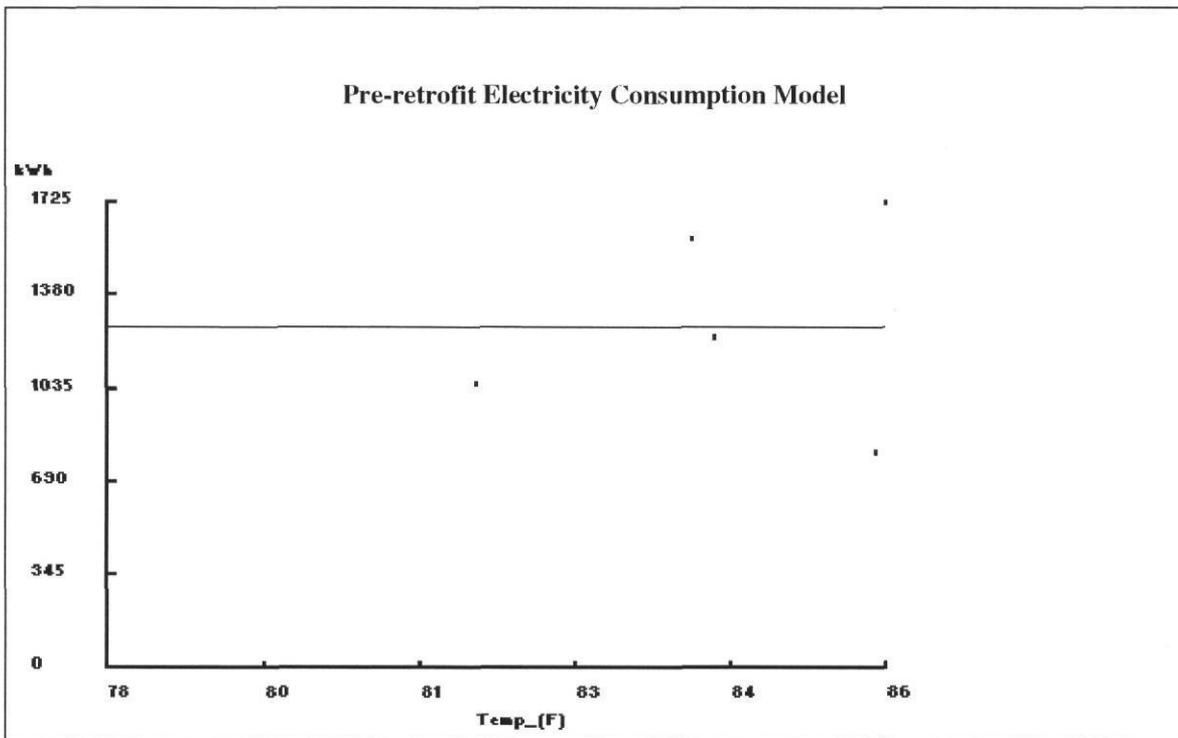
N = 6 Ymean = 1265.67 Std Dev = 341.40 CV-StDev = 27.0%

Savings calculations for Model: Un-group Mean. kWh

Baseline = 5063 Measured = 6265 Saved = -1202 +- 3331 (i.e. +- -277.06%)

Avg savings = -300.583 +- 832.81

Total saved = $-1202 \times 30.5 = -36,661$ kWh



Refugio County

Expected Savings	Unadjusted Savings	Weather Adjusted Savings
\$7,283/yr	\$15,960/22 Months	\$15,461/22 Months
60,369 kWh/yr	1,124 kWh/22 Months	4,727kWh/22 Months
78 Mcf/yr	3,461 Mcf/22 Months	3,325 Mcf/22 Months

Courthouse-----Electricity

ECRMs Description

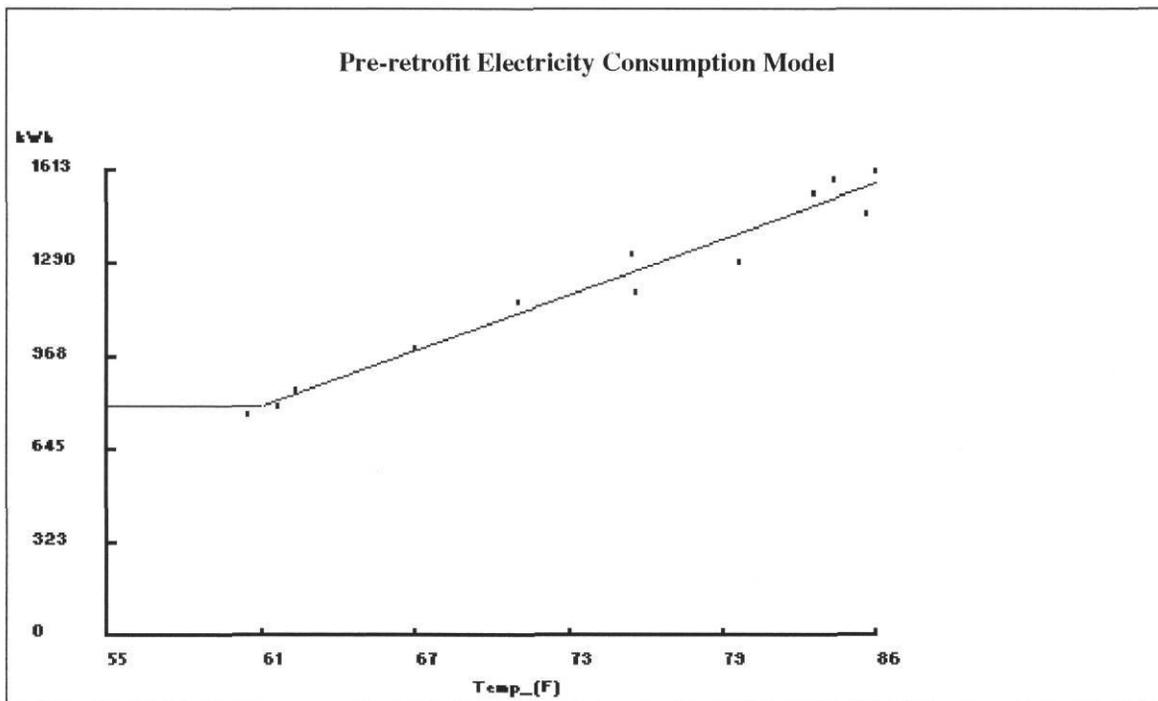
1. Fixture relamping
2. Install solar film

Model: Un-grouped 3P-CP (C). kWh vs. Temp_(F)

$Y_{cp} = 799.9997 (28.4845)$
 $LS = 0.0000 (0.0000)$
 $RS = 31.3192 (1.8309)$
 $X_{cp} = 60.9400$
 $N = 13$
 $N1 = 2$
 $N2 = 11$
 $R2 = 0.96$
 $adjR2 = 0.96$
 $RMSE = 62.25$
 $CV-RMSE = 5.2\%$
 $p = 0.82$
 $DW = 0.25 (p > 0)$

Savings calculations for Model: Un-group 3P-CP (C). kWh vs. Temp_(F)

Baseline = 25430
 Measured = 25876
 Saved = -446
 Avg savings = -20.282
 Total saved = $-446 \times 30.5 = -13,603$ kWh



Courthouse-----Gas

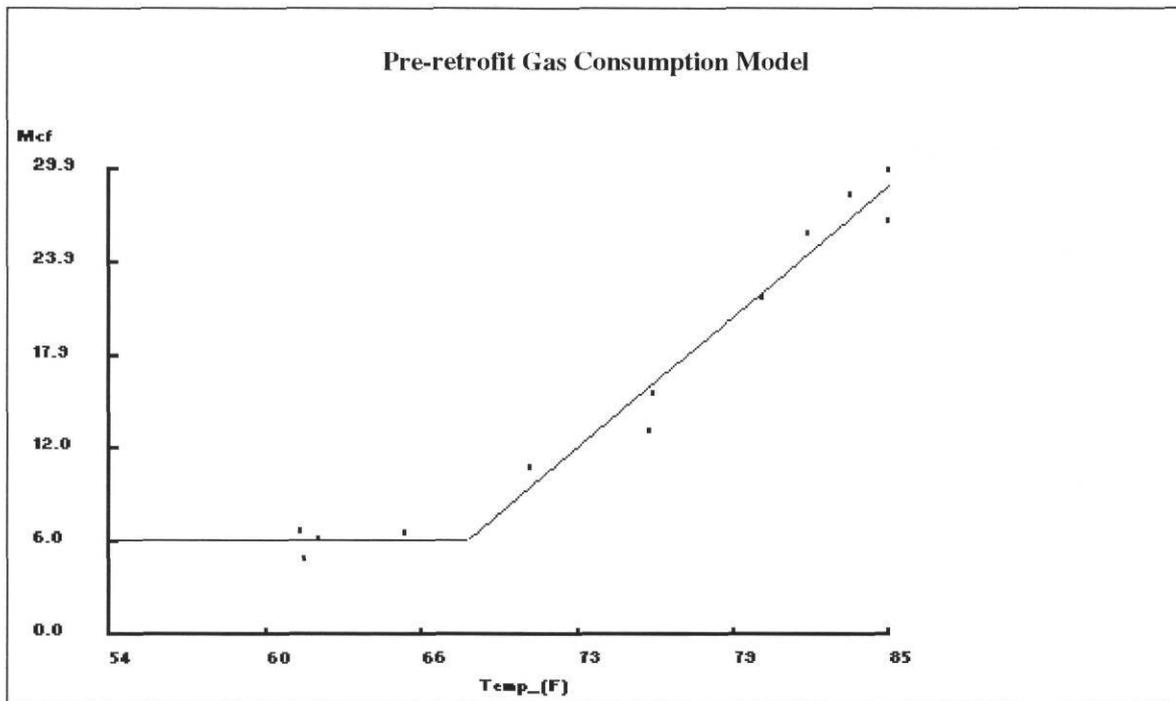
Model: Un-grouped 3P-CP (C). Mcf vs. Temp_(F)

$Y_{cp} = 6.1335 (0.5788)$ $LS = 0.0000 (0.0000)$ $RS = 1.3417 (0.0590)$ $X_{cp} = 68.2440$
 $N = 13$ $N1 = 5$ $N2 = 8$ $R2 = 0.98$ $adjR2 = 0.98$ $RMSE = 1.45$ $CV-RMSE = 9.3\%$ $p = -0.22$
 $DW = 2.05 (i\%)$

Savings calculations for Model: Un-group 3P-CP (C). Mcf vs. Temp_(F)

Baseline = 329 Measured = 220 Saved = 109 Avg savings = 4.951

Total saved = $109 \times 30.5 = 3,325$ Mcf



County Library-----Electricity

ECRMs Description

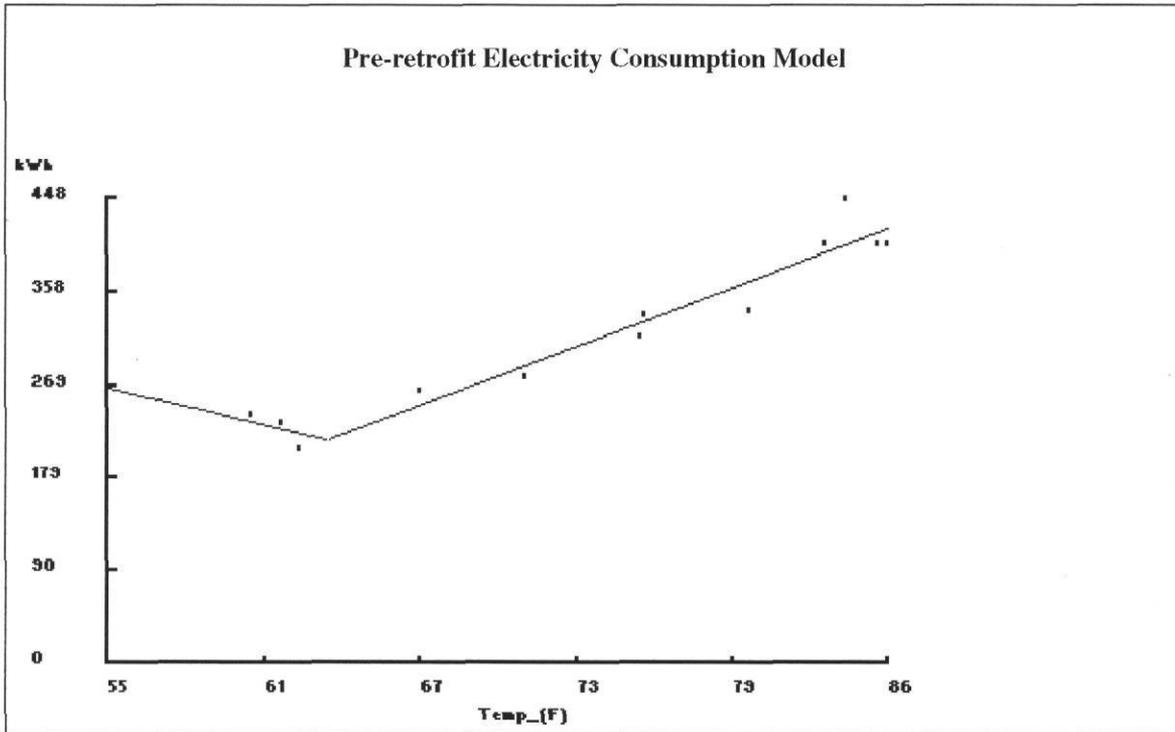
1. Fixture relamping

Model: Un-grouped 4P-CP. kWh vs. Temp_(F)

$Y_{cp} = 215.2622 (176.4005)$ $LS = -5.8579 (2.9051)$ $RS = 9.2276 (4.4850)$ $X_{cp} = 63.3960$
 $N = 13$ $N1 = 4$ $N2 = 9$ $R2 = 0.95$ $RMSE = 20.0171$ $CV-RMSE = 6.3\%$ $p = -0.44$ $DW = 1.93 (i\%)$

Savings calculations for Model: Un-group 4P-CP. kWh vs. Temp_(F)

Baseline = 6898 Measured = 6438 Saved = 460 Avg savings = 20.892
Total saved = $460 \times 30.5 = 14,030$ kWh



Museum-----Electricity

ECRMs Description

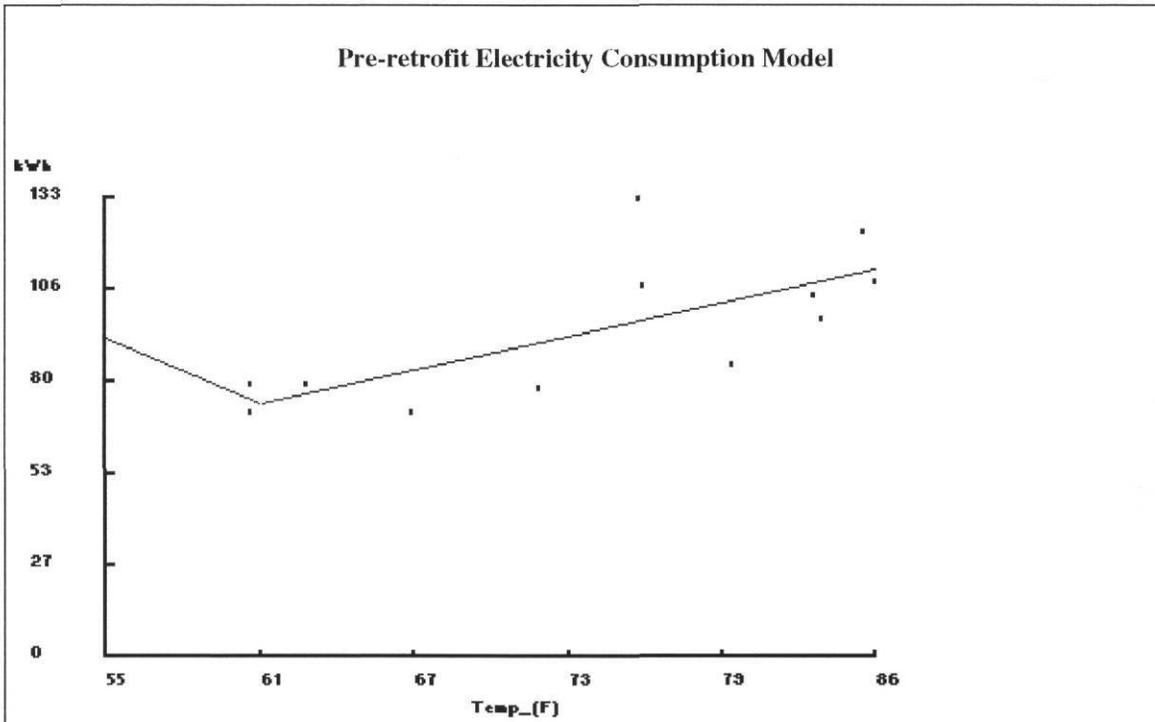
1. Install programmable thermostats

Model: Un-grouped 4P-CP. kWh vs. Temp_(F)

$Y_{cp} = 73.2066 (170.5547)$ $LS = -3.0536 (2.8729)$ $RS = 1.5904 (4.2407)$ $X_{cp} = 60.7800$
 $N = 13$ $N1 = 3$ $N2 = 10$ $R2 = 0.51$ $RMSE = 15.2894$ $CV-RMSE = 16.1\%$ $p = -0.45$
 $DW = 2.74 (1\%)$

Savings calculations for Model: Un-group 4P-CP. kWh vs. Temp_(F)

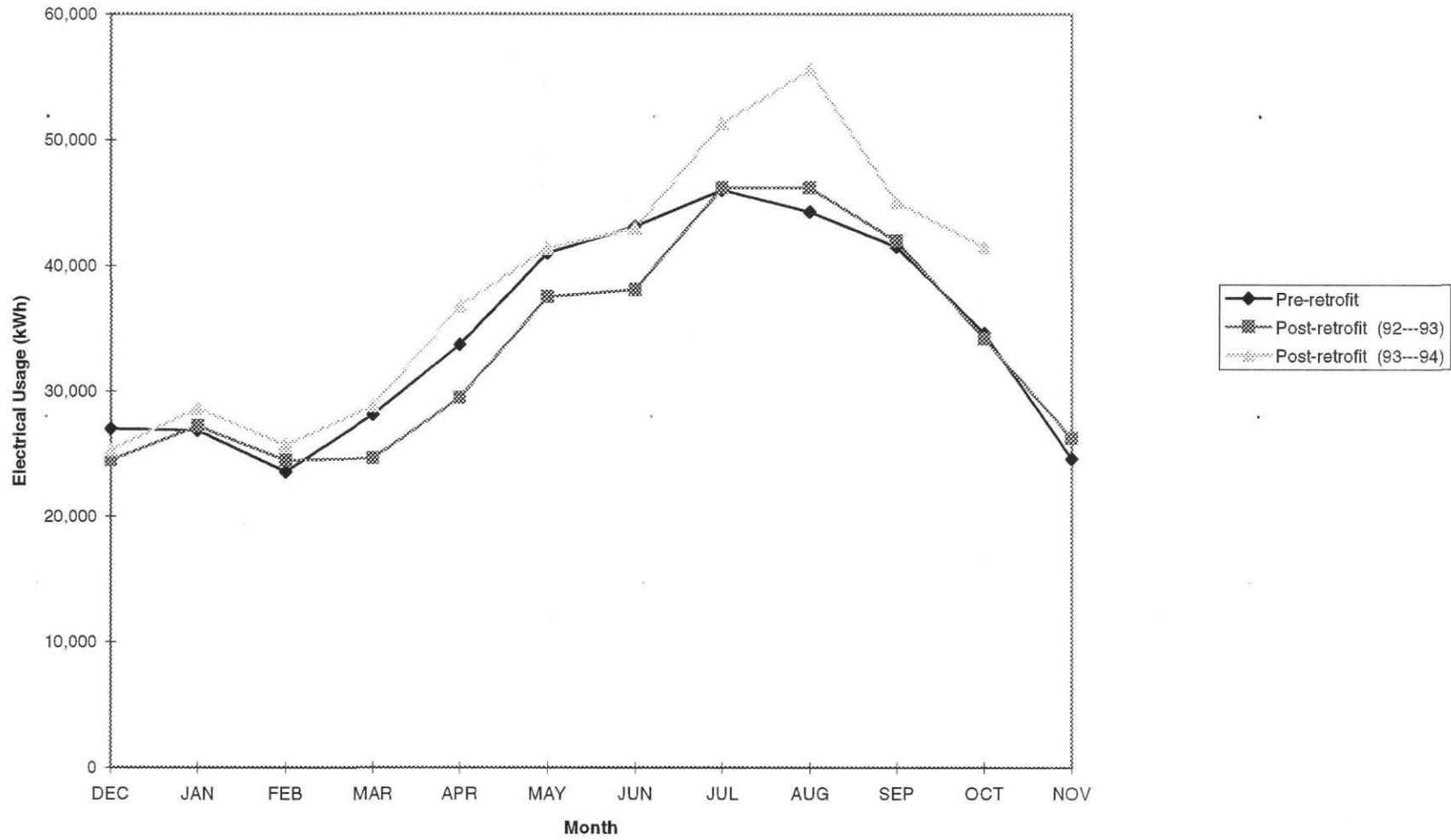
Baseline = 2058 Measured = 1917 Saved = 141 Avg savings = 6.391
Total saved = $141 \times 30.5 = 4,300$ kWh



Refugio County----Court House Electrical Usage

ECRMs Description	1.Fixture relamping												
	2.Install solar film												
Approved Loan Amount	\$16,402 (Includes Court house, Library and Museum)												
Expected Savings	\$7,283/yr												
Pre-retrofit	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	Total
kWh Used	27,000	26,850	23,550	28,100	33,700	41,000	43,100	46,000	44,290	41,500	34,600	24,600	414,290
Cost	\$2,083	\$2,187	\$2,103	\$2,331	\$2,631	\$2,987	\$2,991	\$2,768	\$3,032	\$3,007	\$2,724	\$2,182	\$31,026
Post-retrofit (92---93)													
kWh Used	24,480	27,200	24,480	24,640	29,440	37,520	38,080	46,160	46,160	42,000	34,160	26,240	400,560
Cost	\$2,128	\$2,219	\$2,128	\$2,110	\$2,267	\$2,586	\$2,722	\$2,967	\$2,995	\$2,983	\$2,681	\$2,152	\$29,938
Savings (kWh)	2,520	-350	-930	3,460	4,260	3,480	5,020	-160	-1,870	-500	440	-1,640	13,730
kWh % change	-9%	1%	4%	-13%	-16%	-15%	-18%	0%	5%	1%	-1%	7%	-3%
Post-retrofit (93---94)													
kWh Used	25,280	28,640	25,680	28,800	36,800	41,360	42,960	51,280	55,600	45,040	41,520		
Cost	\$2,084	\$2,197	\$2,126	\$2,232	\$2,648	\$2,937	\$3,048	\$3,723	\$3,932	\$3,540	\$3,460		
Savings (kWh)	1,720	-1,790	-2,130	-700	-3,100	-360	140	-5,280	-11,310	-3,540	-6,920		
kWh % change	-6%	7%	9%	3%	12%	2%	0%	16%	28%	8%	15%		

Refugio County--Court House Electrical Usage

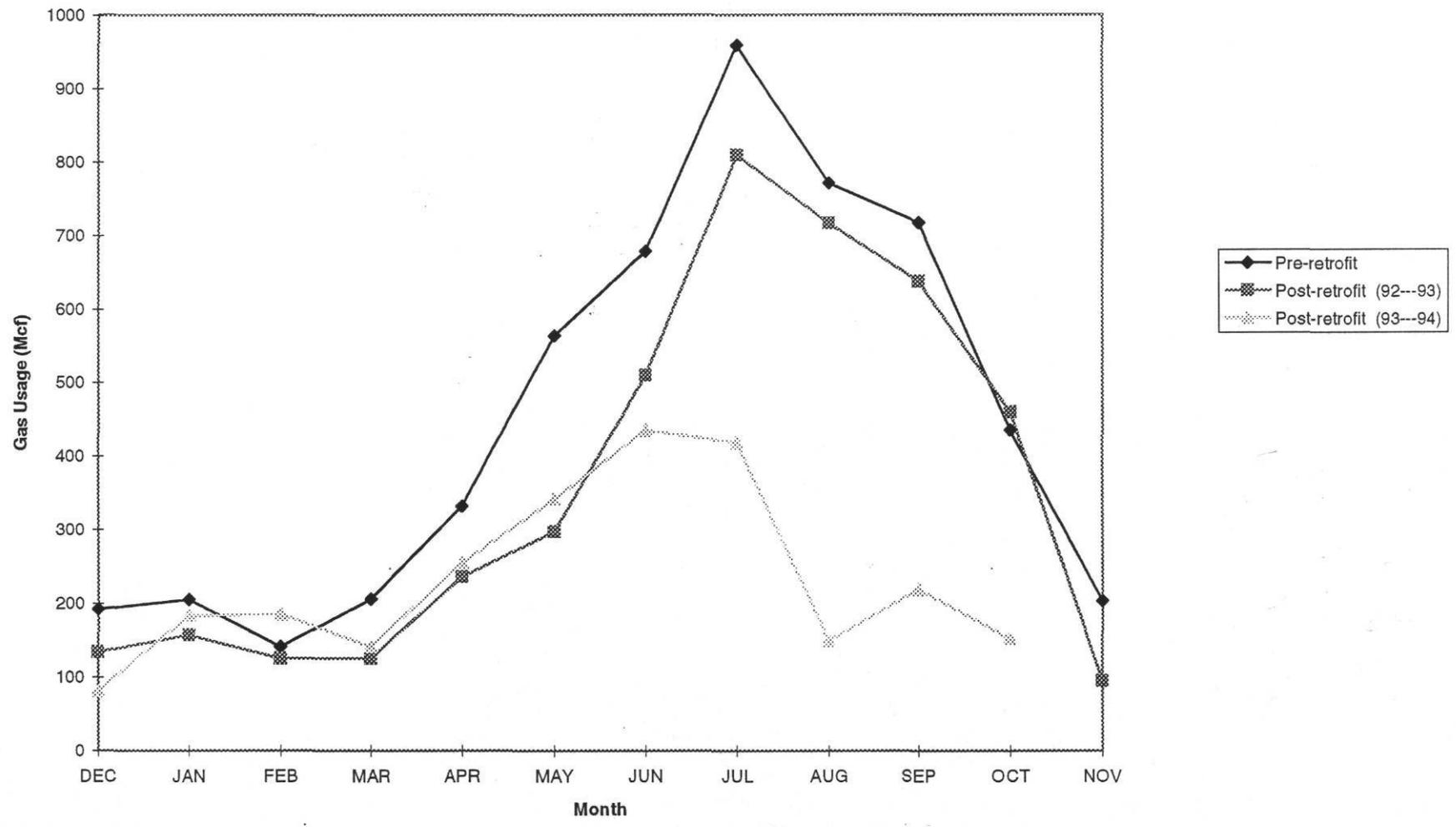


Refugio County---Court House Gas Usage

ECRMs Description	1.Fixture relamping												
	2.Install solar film												
Approved Loan Amount	\$16,402 (Includes Court house, Library and Museum)												
Expected Savings	\$7,283/yr												
Pre-retrofit	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	Total
Mcf Used	192	205	141	206	332	564	678	959	771	717	435	203	5,403
Cost	\$ 861	\$ 856	\$ 690	\$1,027	\$1,945	\$2,816	\$3,412	\$4,011	\$3,263	\$2,881	\$1,740	\$ 844	\$24,346
Post-retrofit (92---93)													
Mcf Used	134	157	125	125	236	297	510	809	716	637	459	95	4,300
Cost	\$ 874	\$ 589	\$ 451	\$1,196	\$1,012	\$1,131	\$2,803	\$4,722	\$3,258	\$3,075	\$2,077	\$ 612	\$21,800
Savings (Mcf)	58	48	16	81	96	267	168	150	55	80	-24	108	1,103
Mcf % change	-30%	-23%	-11%	-39%	-29%	-47%	-25%	-16%	-7%	-11%	6%	-53%	-20%
Post-retrofit (93---94)													
Mcf Used	81	183	185	141	255	341	435	418	149	219	151		
Cost	\$ 431	\$ 932	\$ 822	\$ 604	\$1,210	\$1,582	\$2,220	\$2,007	\$ 825	\$ 902	\$ 603		
Savings (Mcf)	111	22	-44	65	77	223	243	541	622	498	284		
Mcf % change	-58%	-11%	31%	-32%	-23%	-40%	-36%	-56%	-81%	-69%	-65%		

Refugio County---Court House

Gas Usage

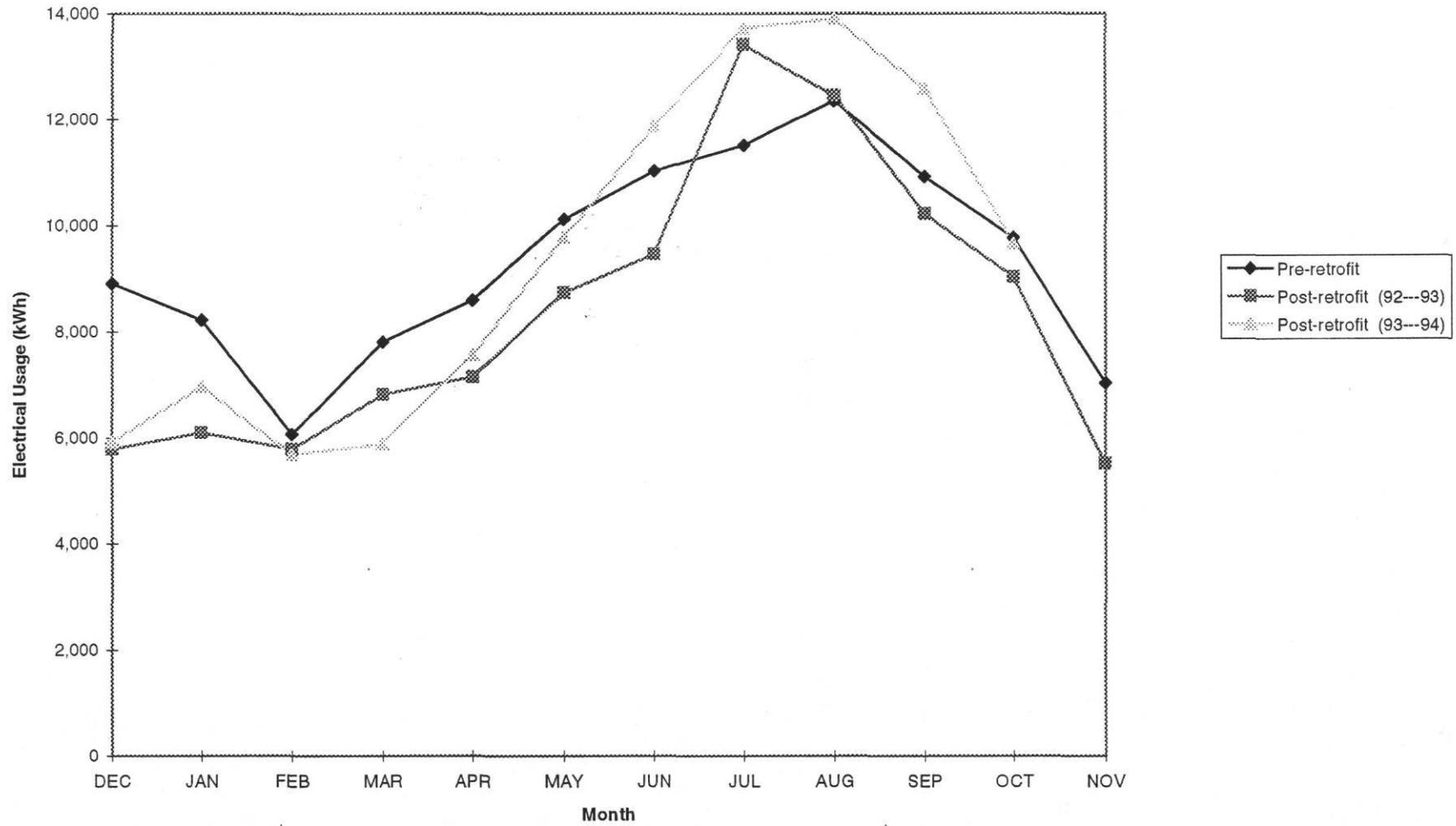


Reugio County---Library Electrical Usage

ECRMs Description	1.Fixture relamping												
Approved Loan Amount	\$16,402 (Includes Court house, Library and Museum)												
Expected Savings	\$7,283/yr												
Pre-retrofit	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	Total
kWh Used	8,904	8,220	6,072	7,812	8,592	10,116	11,028	11,508	12,360	10,920	9,768	7,032	112,332
Cost	\$ 822	\$ 802	\$ 751	\$ 798	\$ 967	\$ 990	\$1,107	\$1,043	\$1,173	\$1,144	\$ 893	\$ 733	\$11,223
Post-retrofit (92---93)													
kWh Used	5,784	6,096	5,784	6,816	7,152	8,736	9,456	13,416	12,456	10,224	9,024	5,520	100,464
Cost	\$ 662	\$ 761	\$ 885	\$ 936	\$1,010	\$1,179	\$1,106	\$1,036	\$ 853	\$ 731	\$ 737	\$ 743	\$10,639
Savings (kWh)	3,120	2,124	288	996	1,440	1,380	1,572	-1,908	-96	696	744	1,512	11,868
kWh % change	-35%	-26%	-5%	-13%	-17%	-14%	-14%	17%	1%	-6%	-8%	-22%	-11%
Post-retrofit (93---94)													
kWh Used	5,928	6,960	5,688	5,880	7,560	9,768	11,880	13,728	13,896	12,600	9,648		
Cost	\$ 737	\$ 744	\$ 673	\$ 674	\$ 856	\$ 998	\$1,088	\$1,175	\$1,195	\$1,161	\$ 875		
Savings (kWh)	2,976	1,260	384	1,932	1,032	348	-852	-2,220	-1,536	-1,680	120		
kWh % change	-33%	-15%	-6%	-25%	-12%	-3%	8%	19%	12%	15%	-1%		

Refugio County---Library

Electrical Usage

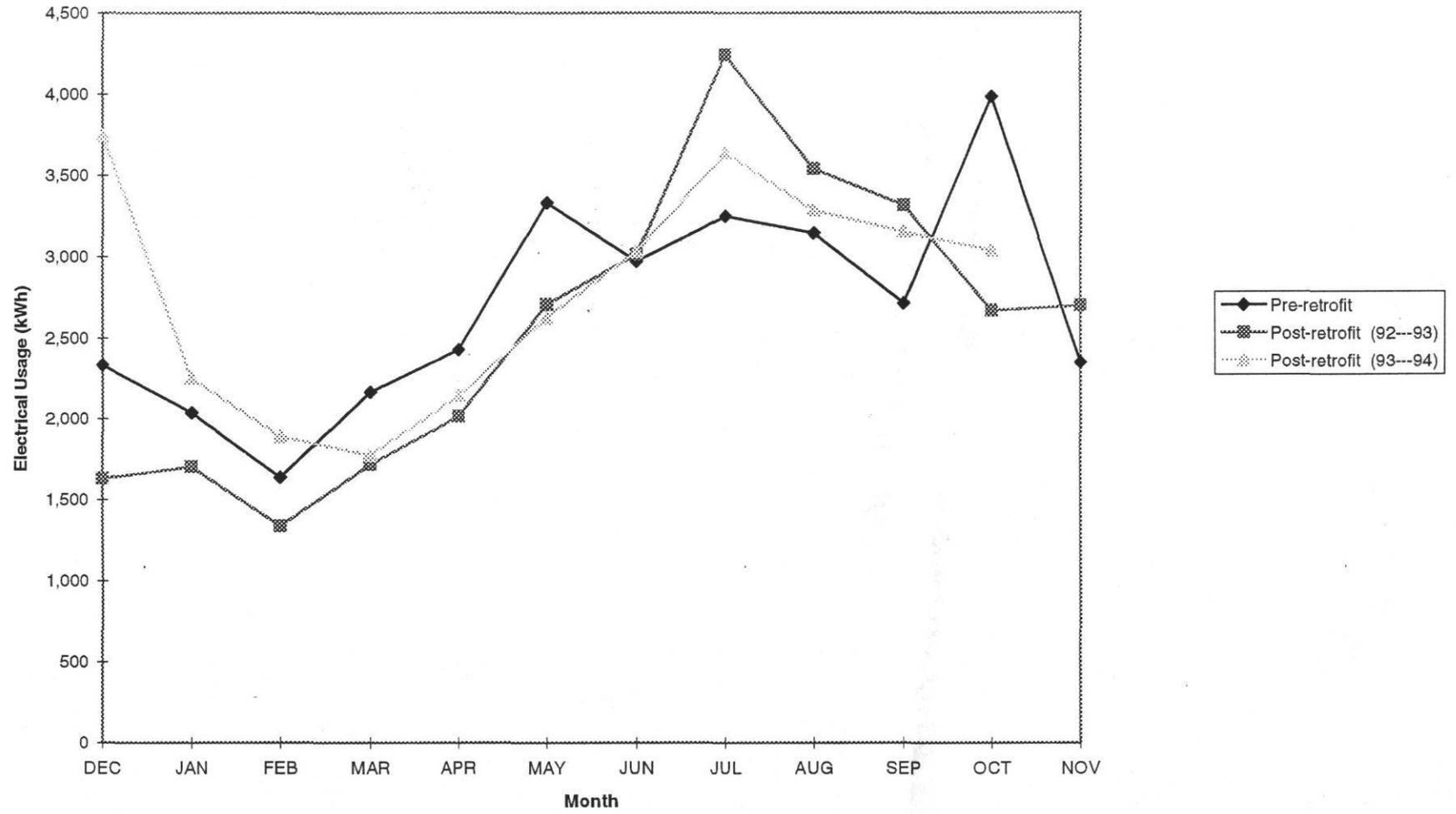


Refugio County----Museum

Electrical Usage

ECRMs Description	1.Install programmable thermostats												
Approved Loan Amount	\$16,402 (Includes Court house, Library and Museum)												
Expected Savings	\$7,283/yr												
Pre-retrofit	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	Total
kWh Used	2,331	2,036	1,639	2,166	2,427	3,329	2,970	3,246	3,144	2,712	3,984	2,346	32,330
Cost	\$ 219	\$ 291	\$ 173	\$ 221	\$ 270	\$ 360	\$ 362	\$ 357	\$ 369	\$ 311	\$ 344	\$ 236	\$3,513
Post-retrofit (92---93)													
kWh Used	1,632	1,704	1,338	1,716	2,016	2,706	3,012	4,242	3,540	3,312	2,664	2,694	30,576
Cost	\$ 179	\$ 182	\$ 152	\$ 181	\$ 250	\$ 330	\$ 364	\$ 471	\$ 414	\$ 409	\$ 263	\$ 265	\$3,460
Savings (kWh)	699	332	301	450	411	623	-42	-996	-396	-600	1,320	-348	1,754
kWh % change	-30%	-16%	-18%	-21%	-17%	-19%	1%	31%	13%	22%	-33%	15%	-5%
Post-retrofit (93---94)													
kWh Used	3,744	2,250	1,890	1,776	2,142	2,622	3,030	3,636	3,282	3,150	3,036		
Cost	\$ 348	\$ 225	\$ 197	\$ 187	\$ 264	\$ 319	\$ 366	\$ 437	\$ 396	\$ 389	\$ 292		
Savings (kWh)	-1,413	-214	-251	390	285	707	-60	-390	-138	-438	948		
kWh % change	61%	11%	15%	-18%	-12%	-21%	2%	12%	4%	16%	-24%		

Regugio County---Museum Electrical Usage

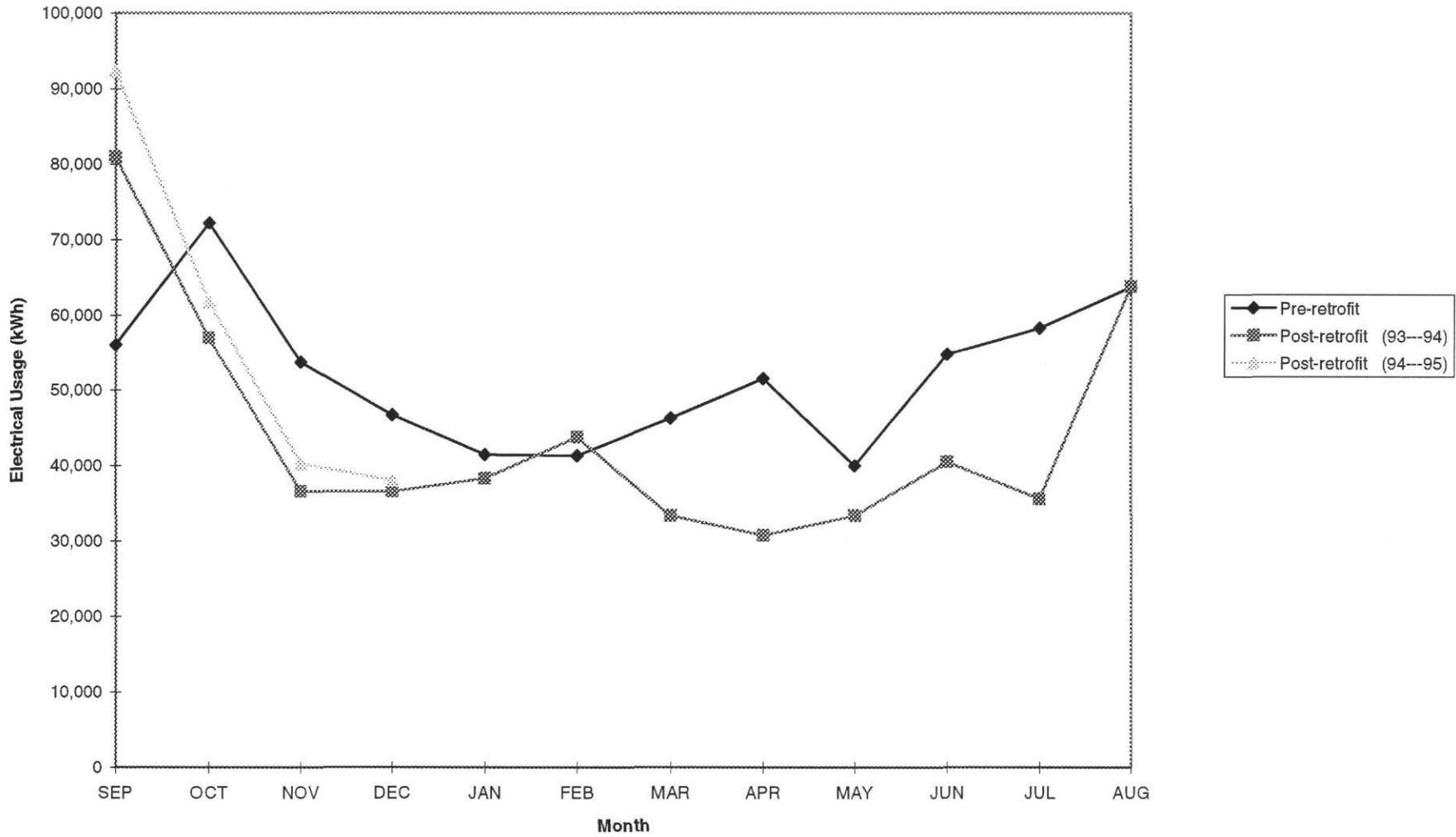


Lake Dallas ISD----High School

Electrical Usage

ECRM Description	1. Delamping 2. Energy efficient fluorescent lamps 3. Incandescent to HPS lamps 4. Fixture relamping 5. Interior lighting control 6. Electric to gas water heater 7. High efficiency HVAC Units												
Approved Loan Amount	\$129,293 (Includes High School, Middle School, Elementary School,Primary School,Corinth Primary, Administration,Vocational Bldg.,Maintenance Bldg. and Field House)												
Expected Savings													
Pre-retrofit	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	Total
kWh Used	56,025	72,225	53,775	46,733	41,468	41,345	46,328	51,548	40,005	54,765	58,275	63,765	626,257
Post-retrofit (93---94)													
kWh Used	80,955	56,970	36,585	36,630	38,340	43,830	33,345	30,825	33,345	40,500	35,640	63,855	530,820
Savings (kWh)	-24,930	15,255	17,190	10,103	3,128	-2,485	12,983	20,723	6,660	14,265	22,635	-90	95,437
kWh % change	44%	-21%	-32%	-22%	-8%	6%	-28%	-40%	-17%	-26%	-39%	0%	-15%
Post-retrofit (94---95)													
kWh Used	92,340	61,740	40,320	38,070									
Savings (kWh)	-36,315	10,485	13,455	8,663									
kWh % change	65%	-15%	-25%	-19%									

Lake Dallas ISD----High School Electrical Usage



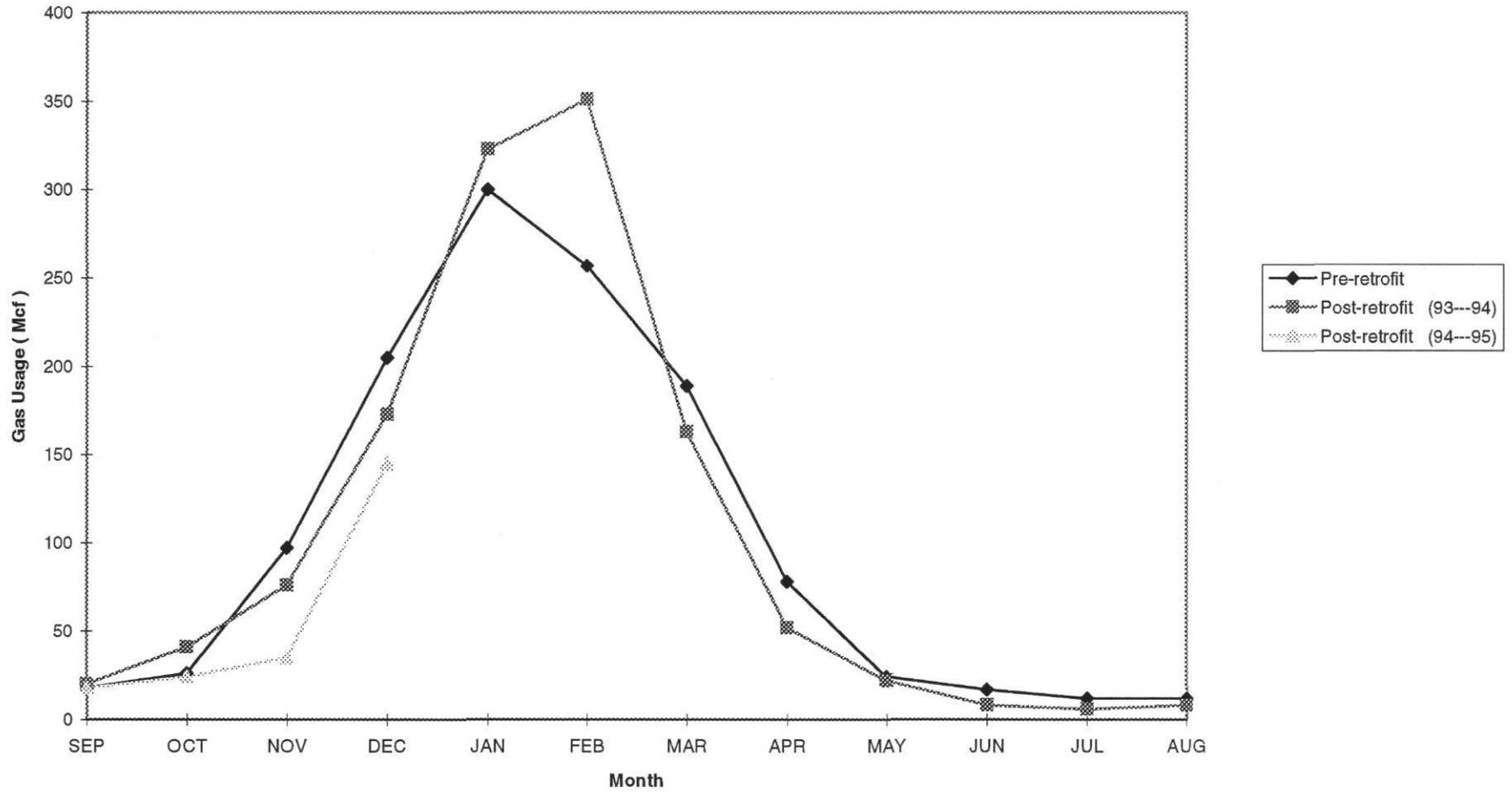
Lake Dallas ISD----High School

Gas Usage

ECRM Description	1. Delamping												
	2. Energy efficient fluorescent lamps												
	3. Incandescent to HPS lamps												
	4. Fixture relamping												
	5. Interior lighting control												
	6. Electric to gas water heater												
	7. High efficiency HVAC Units												
Approved Loan Amount	\$129,293 (Includes High School, Middle School, Elementary School,Primary School,Corinth Primary, Administration,Vocational Bldg.,Maintenance Bldg. and Field House)												
Expected Savings													
Pre-retrofit	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	Total
Mcf Used	18	26	97	205	300	257	189	78	24	17	12	12	1,235
Post-retrofit (93---94)													
Mcf Used	20	41	76	173	323	351	163	52	22	8	6	8	1243
Savings (Mcf)	-2	-15	21	32	-23	-94	26	26	2	9	6	4	-8
Mcf % change	11%	58%	-22%	-16%	8%	37%	-14%	-33%	-8%	-53%	-50%	-33%	1%
Post-retrofit (94---95)													
Mcf Used	18	24	35	145									
Savings (Mcf)	0	2	62	60									
Mcf % change	0%	-8%	-64%	-29%									

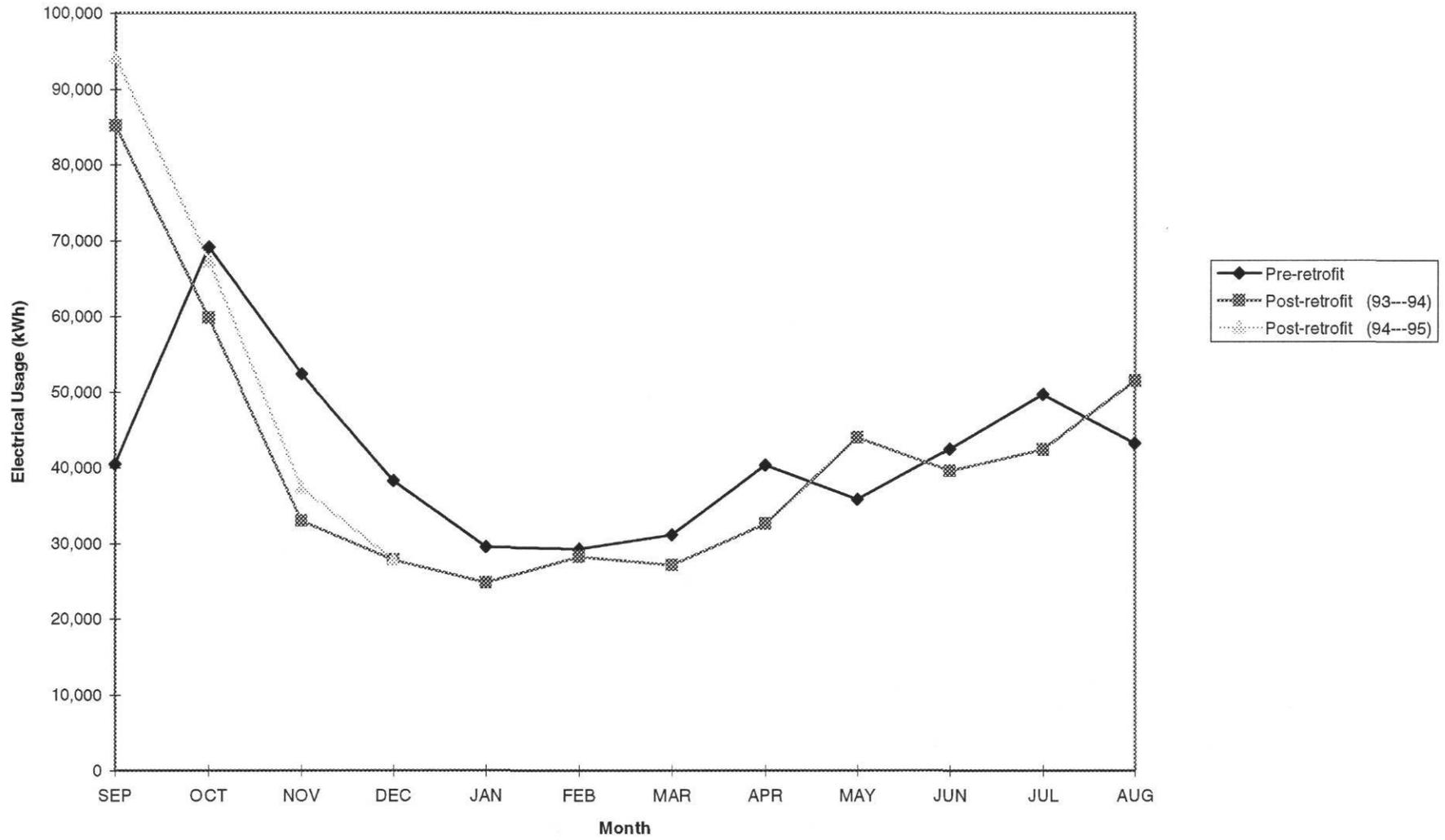
Lake Dallas ISD----High School

Gas Usage



ECRM Description	1. Delamping												
	2. Energy efficient fluorescent lamps												
	3. Incandescent to HPS lamps												
	4. Fixture relamping												
	5. Interior lighting control												
Approved Loan Amount	\$129,293 (Includes High School, Middle School, Elementary School,Primary School,Corinth Primary, Administration,Vocational Bldg.,Maintenance Bldg. and Field House)												
Expected Savings													
Pre-retrofit	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	Total
kWh Used	40,500	69,120	52,380	38,250	29,520	29,250	31,140	40,320	35,820	42,480	49,680	43,200	501,660
Post-retrofit (93---94)													
kWh Used	85,140	59,760	32,994	27,828	24,840	28,278	27,126	32,598	43,974	39,564	42,372	51,498	495,972
Savings (kWh)	-44,640	9,360	19,386	10,422	4,680	972	4,014	7,722	-8,154	2,916	7,308	-8,298	5,688
kWh % change	110%	-14%	-37%	-27%	-16%	-3%	-13%	-19%	23%	-7%	-15%	19%	-1%
Post-retrofit (94---95)													
kWh Used	94,230	67,356	37,404	27,864									
Savings (kWh)	-53,730	1,764	14,976	10,386									
kWh % change	133%	-3%	-29%	-27%									

Lake Dallas ISD----Middle School Electrical Usage

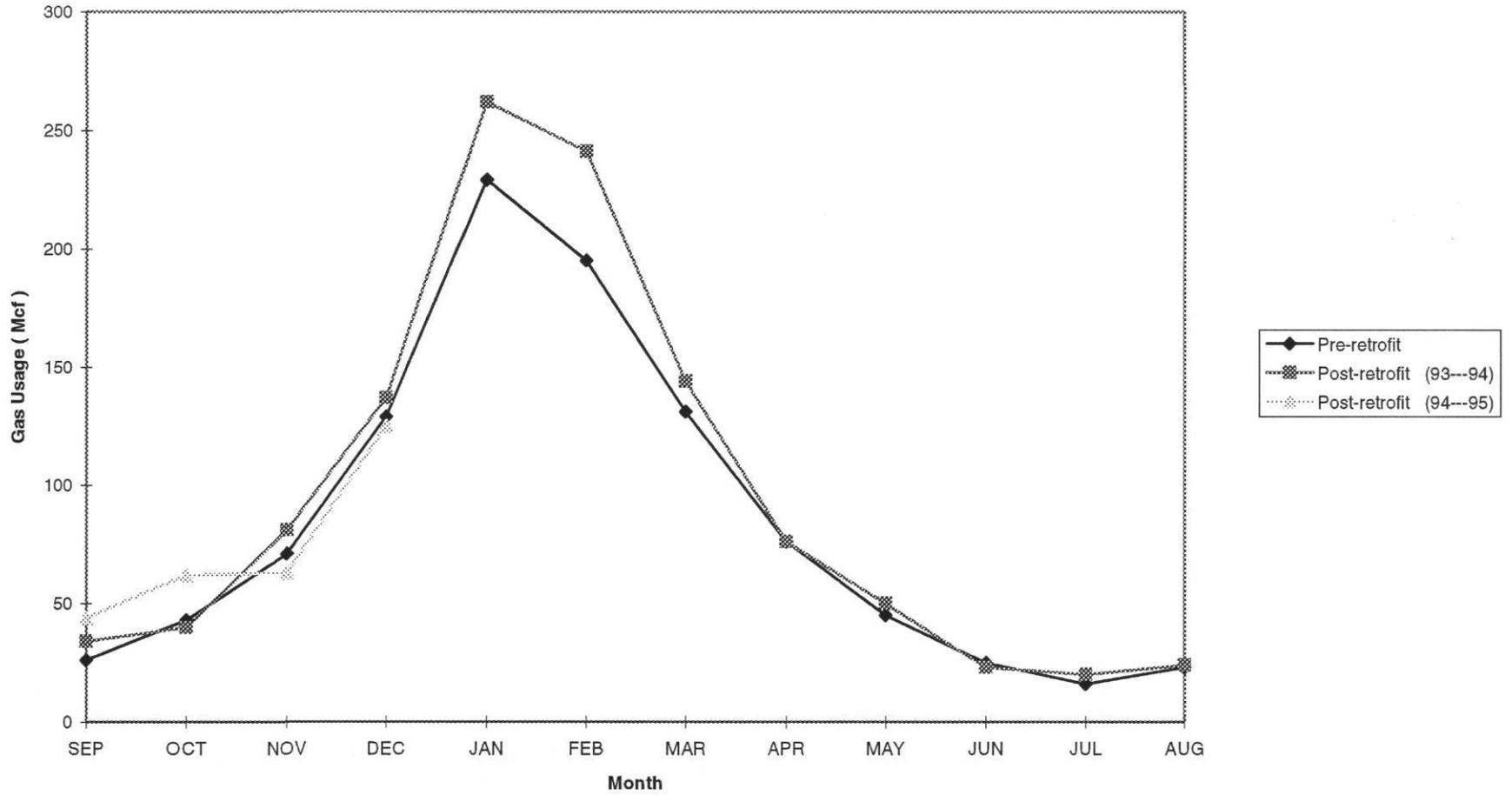


Lake Dallas ISD----Middle School Gas Usage

ECRM Description	1. Delamping												
	2. Energy efficient fluorescent lamps												
	3. Incandescent to HPS lamps												
	4. Fixture relamping												
	5. Interior lighting control												
Approved Loan Amount	\$129,293 (Includes High School, Middle School, Elementary School,Primary School,Corinth Primary, Administration,Vocational Bldg.,Maintenance Bldg. and Field House)												
Expected Savings													
Pre-retrofit	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	Total
Mcf Used	26	43	71	129	229	195	131	76	45	25	16	23	1,009
Post-retrofit (93---94)													
Mcf Used	34	40	81	137	262	241	144	76	50	23	20	24	1132
Savings (Mcf)	-8	3	-10	-8	-33	-46	-13	0	-5	2	-4	-1	-123
Mcf % change	31%	-7%	14%	6%	14%	24%	10%	0%	11%	-8%	25%	4%	12%
Post-retrofit (94---95)													
Mcf Used	44	62	63	125									
Savings (Mcf)	-18	-19	8	4									
Mcf % change	69%	44%	-11%	-3%									

Lake Dallas ISD-----Middle School

Gas Usage



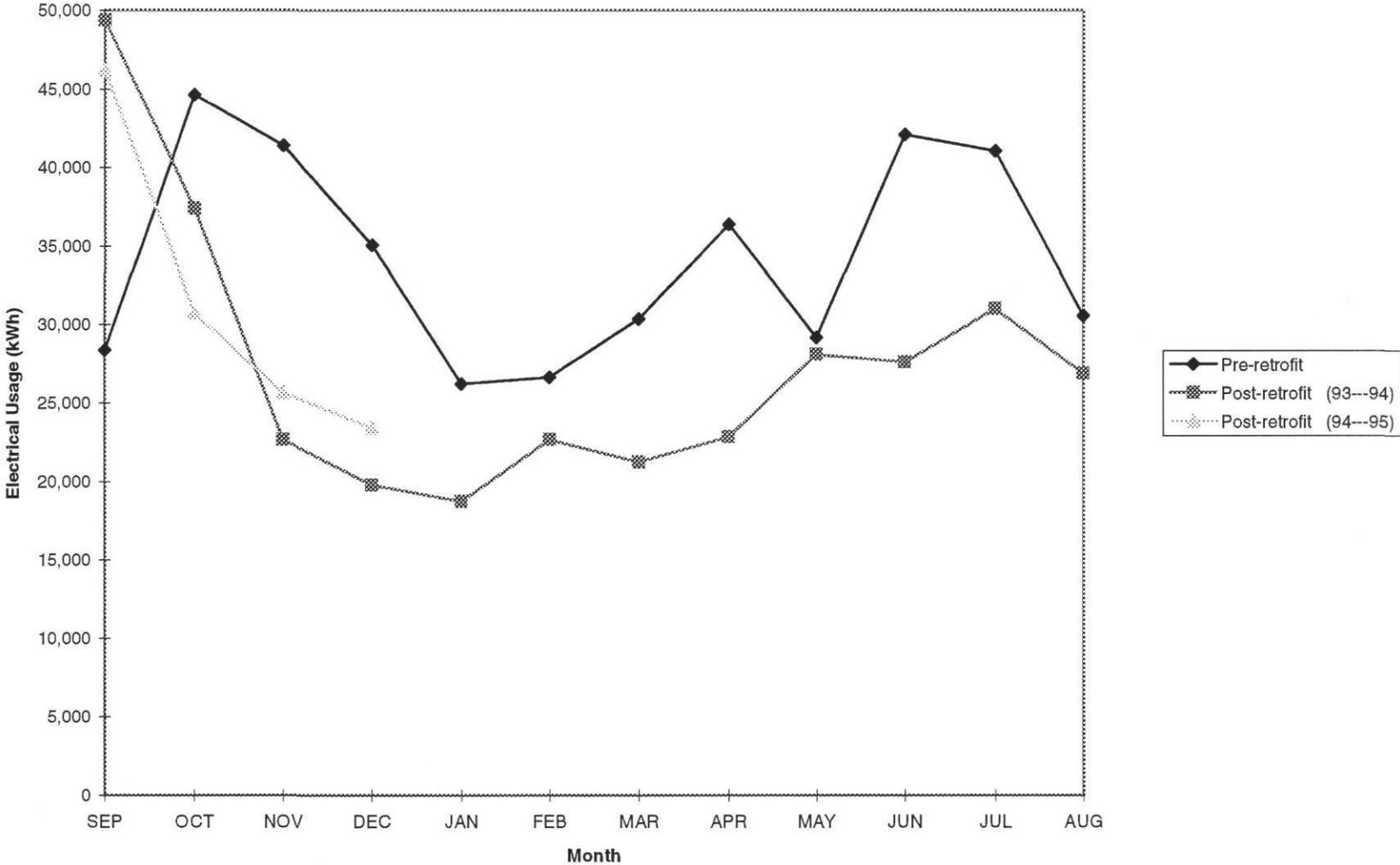
Lake Dallas ISD----Elementary School

Electrical Usage

ECRM Description	1. Delamping												
	2. Energy efficient fluorescent lamps												
	3. Fixture relamping												
	4. Interior lighting control												
Approved Loan Amount	\$129,293 (Includes High School, Middle School, Elementary School,Primary School,Corinth Primary, Administration,Vocational Bldg.,Maintenance Bldg. and Field House)												
Expected Savings													
Pre-retrofit	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	Total
kWh Used	28,371	44,622	41,412	35,078	26,217	26,631	30,360	36,387	29,178	42,087	41,040	30,555	411,938
Post-retrofit (93---94)													
kWh Used	49,386	37,410	22,665	19,779	18,732	22,674	21,255	22,854	28,092	27,618	31,020	26,877	328,362
Savings (kWh)	-21,015	7,212	18,747	15,299	7,485	3,957	9,105	13,533	1,086	14,469	10,020	3,678	83,576
kWh % change	74%	-16%	-45%	-44%	-29%	-15%	-30%	-37%	-4%	-34%	-24%	-12%	-20%
Post-retrofit (94---95)													
kWh Used	46,215	30,744	25,656	23,442									
Savings (kWh)	-17,844	13,878	15,756	11,636									
kWh % change	63%	-31%	-38%	-33%									

Lake Dallas ISD----Elementary School

Electrical Usage



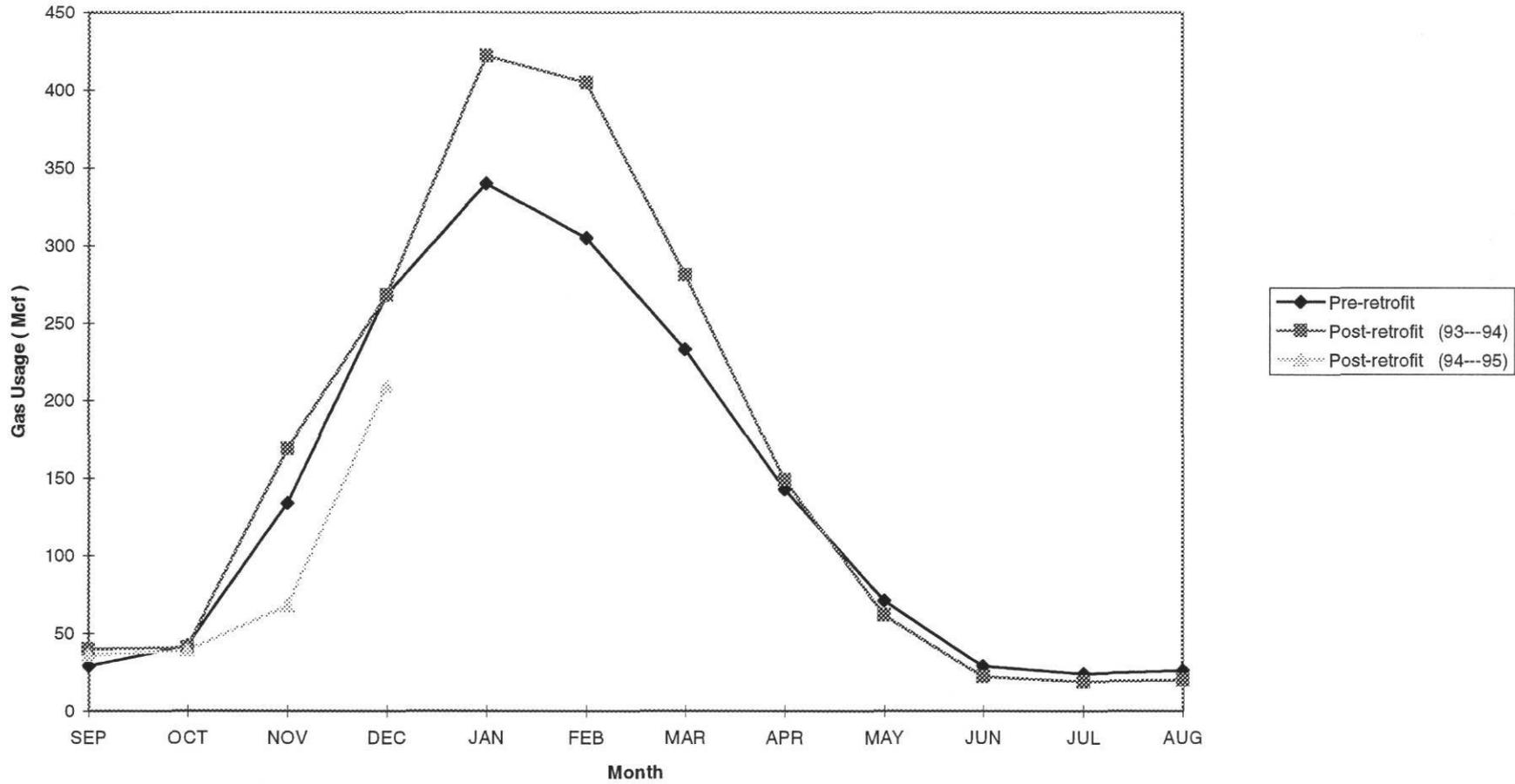
Lake Dallas ISD----Elementary School

Gas Usage

ECRM Description	1. Delamping												
	2. Energy efficient fluorescent lamps												
	3. Incandescent to HPS lamps												
	4. Fixture relamping												
	5. Interior lighting control												
	6. Incandescent to fluorescent lamps												
Approved Loan Amount	\$129,293 (Includes High School, Middle School, Elementary School,Primary School,Corinth Primary, Administration,Vocational Bldg.,Maintenance Bldg. and Field House)												
Expected Savings													
Pre-retrofit	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	Total
Mcf Used	29	42	134	268	340	305	233	143	71	29	24	26	1,644
Post-retrofit (93---94)													
Mcf Used	40	41	169	268	422	405	281	149	62	22	19	20	1898
Savings (Mcf)	-11	1	-35	0	-82	-100	-48	-6	9	7	5	6	-254
Mcf % change	38%	-2%	26%	0%	24%	33%	21%	4%	-13%	-24%	-21%	-23%	15%
Post-retrofit (94---95)													
Mcf Used	36	39	68	209									
Savings (Mcf)	-7	3	66	59									
Mcf % change	24%	-7%	-49%	-22%									

Lake Dallas ISD-----Elementary School

Gas Usage

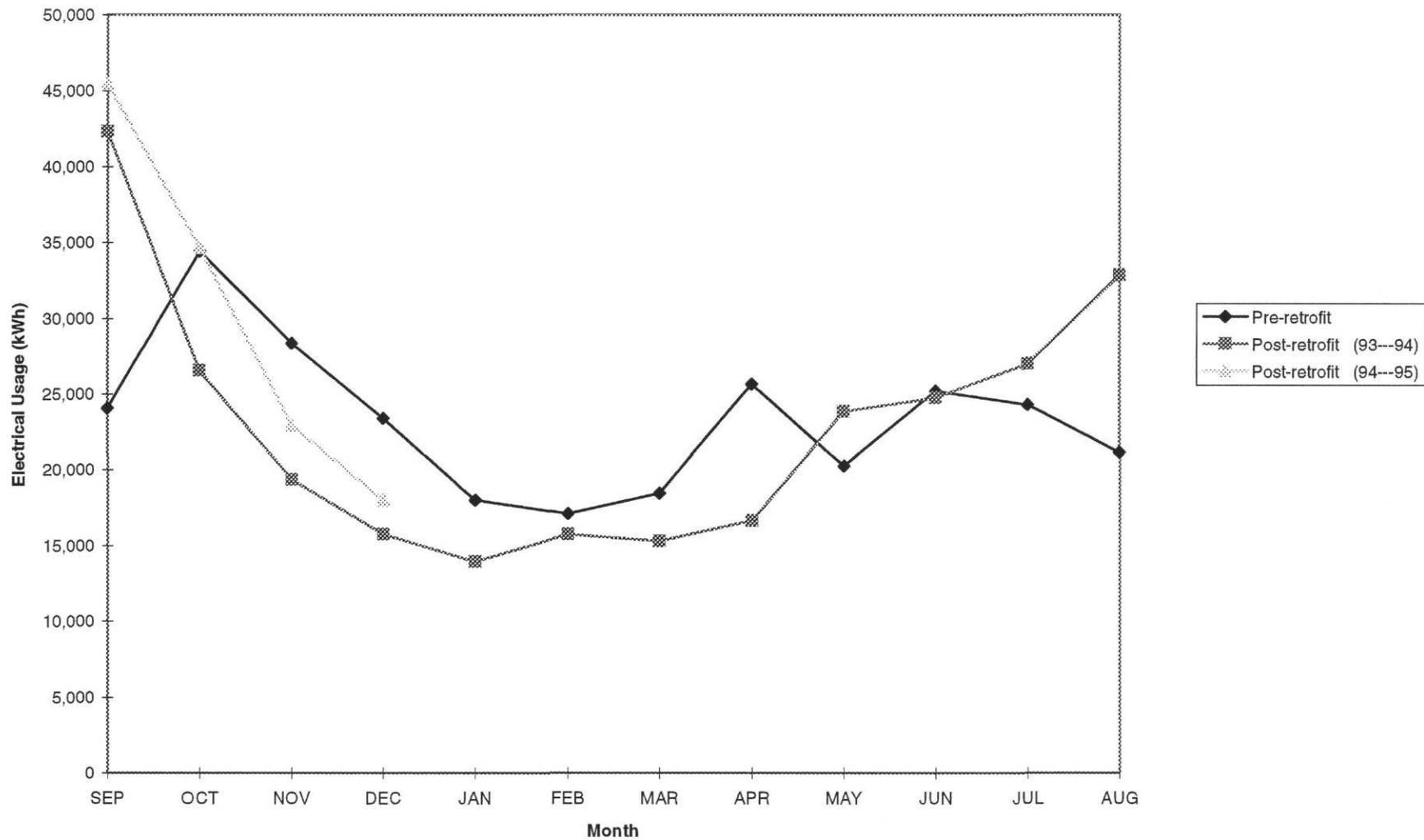


Lake Dallas ISD----Primary School

Electrical Usage

ECRM Description	1. Energy efficient fluorescent lamps												
	2. Incandescent to fluorescent lamps												
	3. Fixture relamping												
Approved Loan Amount	\$129,293 (Includes High School, Middle School, Elementary School,Primary School,Corinth Primary, Administration,Vocational Bldg.,Maintenance Bldg. and Field House)												
Expected Savings													
Pre-retrofit	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	Total
kWh Used	24,075	34,425	28,350	23,400	18,000	17,100	18,450	25,650	20,250	25,200	24,300	21,150	280,350
Post-retrofit (93---94)													
kWh Used	42,300	26,550	19,350	15,750	13,950	15,750	15,300	16,650	23,850	24,750	27,000	32,850	274,050
Savings (kWh)	-18,225	7,875	9,000	7,650	4,050	1,350	3,150	9,000	-3,600	450	-2,700	-11,700	6,300
kWh % change	76%	-23%	-32%	-33%	-23%	-8%	-17%	-35%	18%	-2%	11%	55%	-2%
Post-retrofit (94---95)													
kWh Used	45,450	34,650	22,950	18,000									
Savings (kWh)	-21,375	-225	5,400	5,400									
kWh % change	89%	1%	-19%	-23%									

Lake Dallas ISD----Primary School Electrical Usage



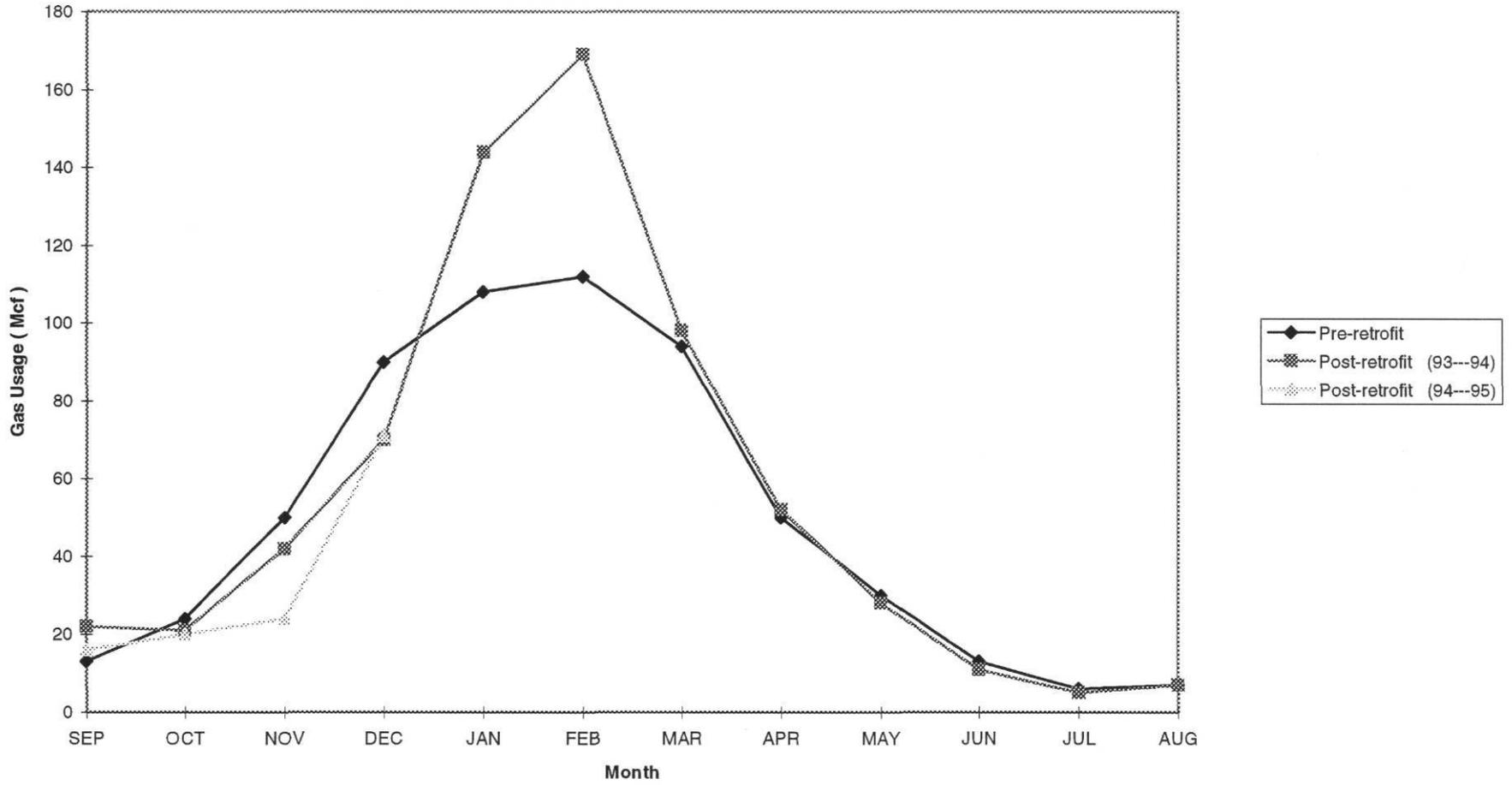
Lake Dallas ISD----Primary School

Gas Usage

ECRM Description	1. Energy efficient fluorescent lamps												
	2. Incandescent to fluorescent lamps												
	3. Fixture relamping												
Approved Loan Amount	\$129,293 (Includes High School, Middle School, Elementary School,Primary School,Corinth Primary, Administration,Vocational Bldg.,Maintenance Bldg. and Field House)												
Expected Savings													
Pre-retrofit	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	Total
Mcf Used	13	24	50	90	108	112	94	50	30	13	6	7	597
Post-retrofit (93---94)													
Mcf Used	22	21	42	70	144	169	98	52	28	11	5	7	669
Savings (Mcf)	-9	3	8	20	-36	-57	-4	-2	2	2	1	0	-72
Mcf % change	69%	-13%	-16%	-22%	33%	51%	4%	4%	-7%	-15%	-17%	0%	12%
Post-retrofit (94---95)													
Mcf Used	16	20	24	71									
Savings (Mcf)	-3	4	26	19									
Mcf % change	23%	-17%	-52%	-21%									

Lake Dallas ISD----Primary School

Gas Usage

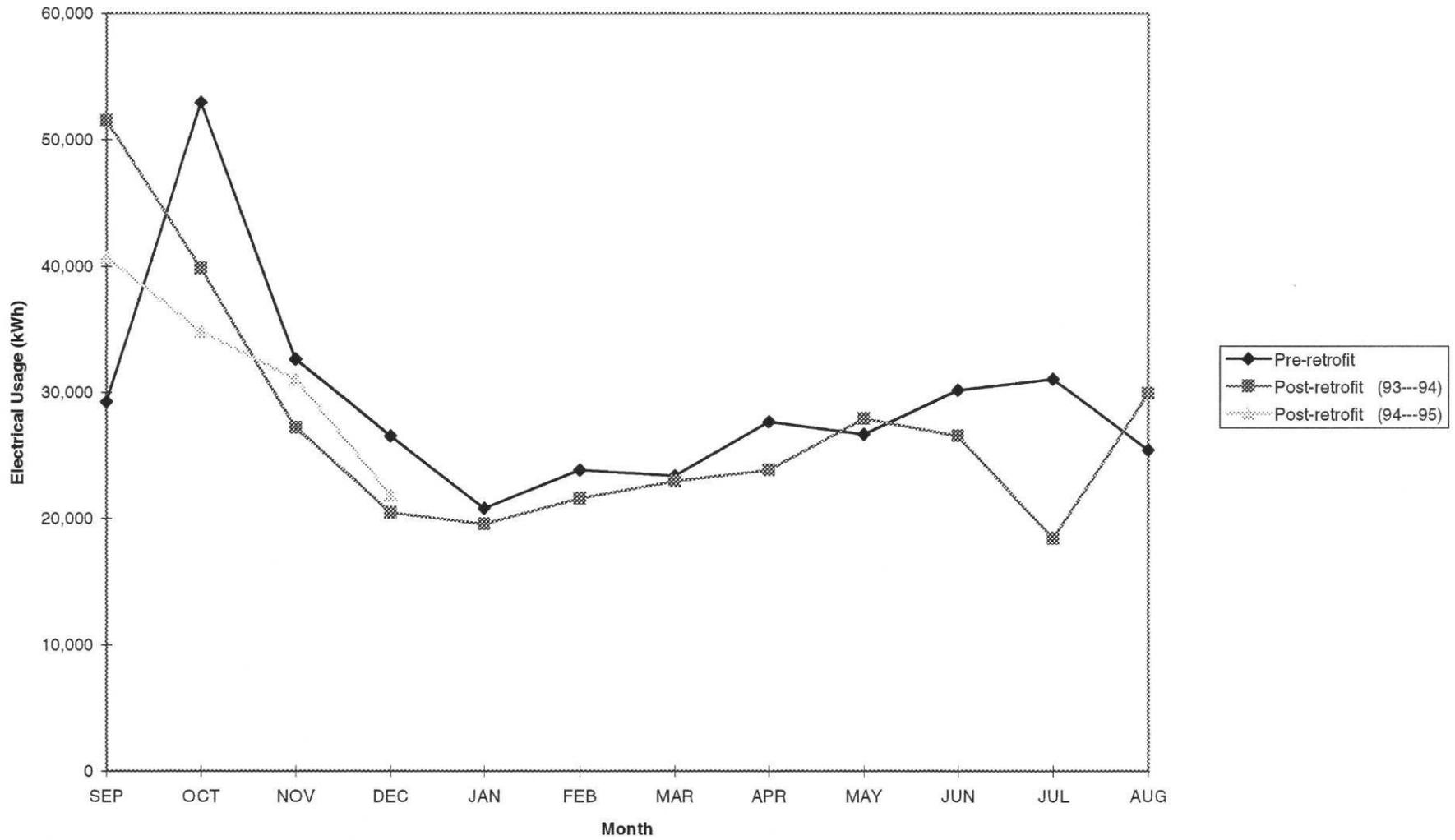


Lake Dallas ISD----Corinth Primary Campus

Electrical Usage

ECRM Description	1. Delamping												
	2. Energy efficient fluorescent lamps												
	3. Fixture relamping												
	4. Interior lighting control												
Approved Loan Amount	\$129,293 (Includes High School, Middle School, Elementary School,Primary School,Corinth Primary, Administration,Vocational Bldg.,Maintenance Bldg. and Field House)												
Expected Savings													
Pre-retrofit	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	Total
kWh Used	29,250	52,988	32,625	26,550	20,813	23,850	23,400	27,675	26,663	30,150	31,050	25,425	350,439
Post-retrofit (93---94)													
kWh Used	51,525	39,825	27,225	20,475	19,575	21,600	22,950	23,850	27,900	26,550	18,450	29,925	329,850
Savings (kWh)	-22,275	13,163	5,400	6,075	1,238	2,250	450	3,825	-1,237	3,600	12,600	-4,500	20,589
kWh % change	76%	-25%	-17%	-23%	-6%	-9%	-2%	-14%	5%	-12%	-41%	18%	-6%
Post-retrofit (94---95)													
kWh Used	40,725	34,875	31,050	21,825									
Savings (kWh)	-11,475	18,113	1,575	4,725									
kWh % change	39%	-34%	-5%	-18%									

Lake Dallas ISD----Corinth Primary Campus Electrical Usage



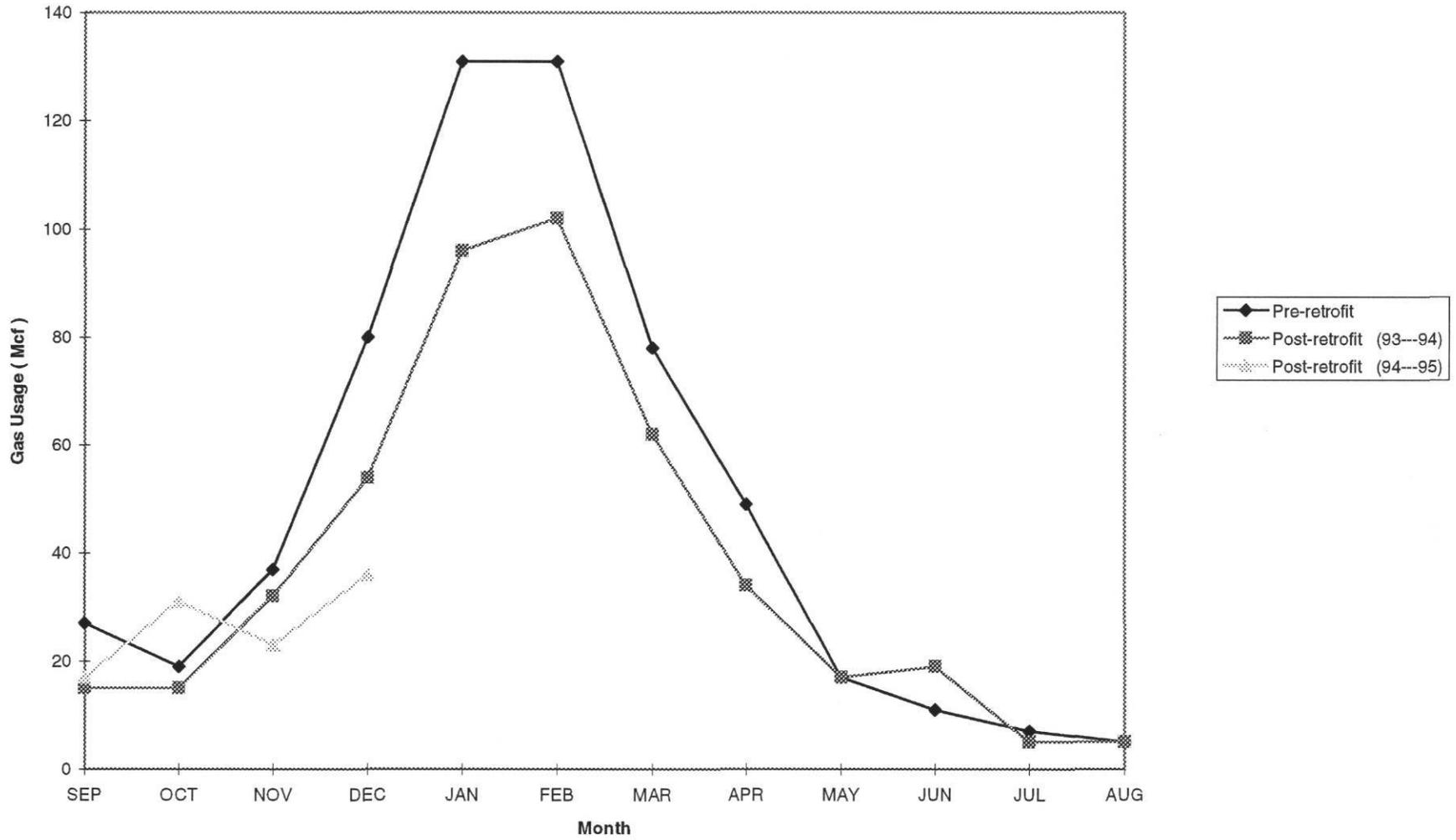
Lake Dallas ISD----Corinth Primary Campus

Gas Usage

ECRM Description	1. Delamping												
	2. Energy efficient fluorescent lamps												
	3. Fixture relamping												
	4. Interior lighting control												
Approved Loan Amount	\$129,293 (Includes High School, Middle School, Elementary School,Primary School,Corinth Primary, Administration,Vocational Bldg.,Maintenance Bldg. and Field House)												
Expected Savings													
Pre-retrofit	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	Total
Mcf Used	27	19	37	80	131	131	78	49	17	11	7	5	592
Post-retrofit (93---94)													
Mcf Used	15	15	32	54	96	102	62	34	17	19	5	5	456
Savings (Mcf)	12	4	5	26	35	29	16	15	0	-8	2	0	136
Mcf % change	-44%	-21%	-14%	-33%	-27%	-22%	-21%	-31%	0%	73%	-29%	0%	-23%
Post-retrofit (94---95)													
Mcf Used	17	31	23	36									
Savings (Mcf)	10	-12	14	44									
Mcf % change	-37%	63%	-38%	-55%									

Lake Dallas ISD-----Corinth Primary Campus

Gas Usage

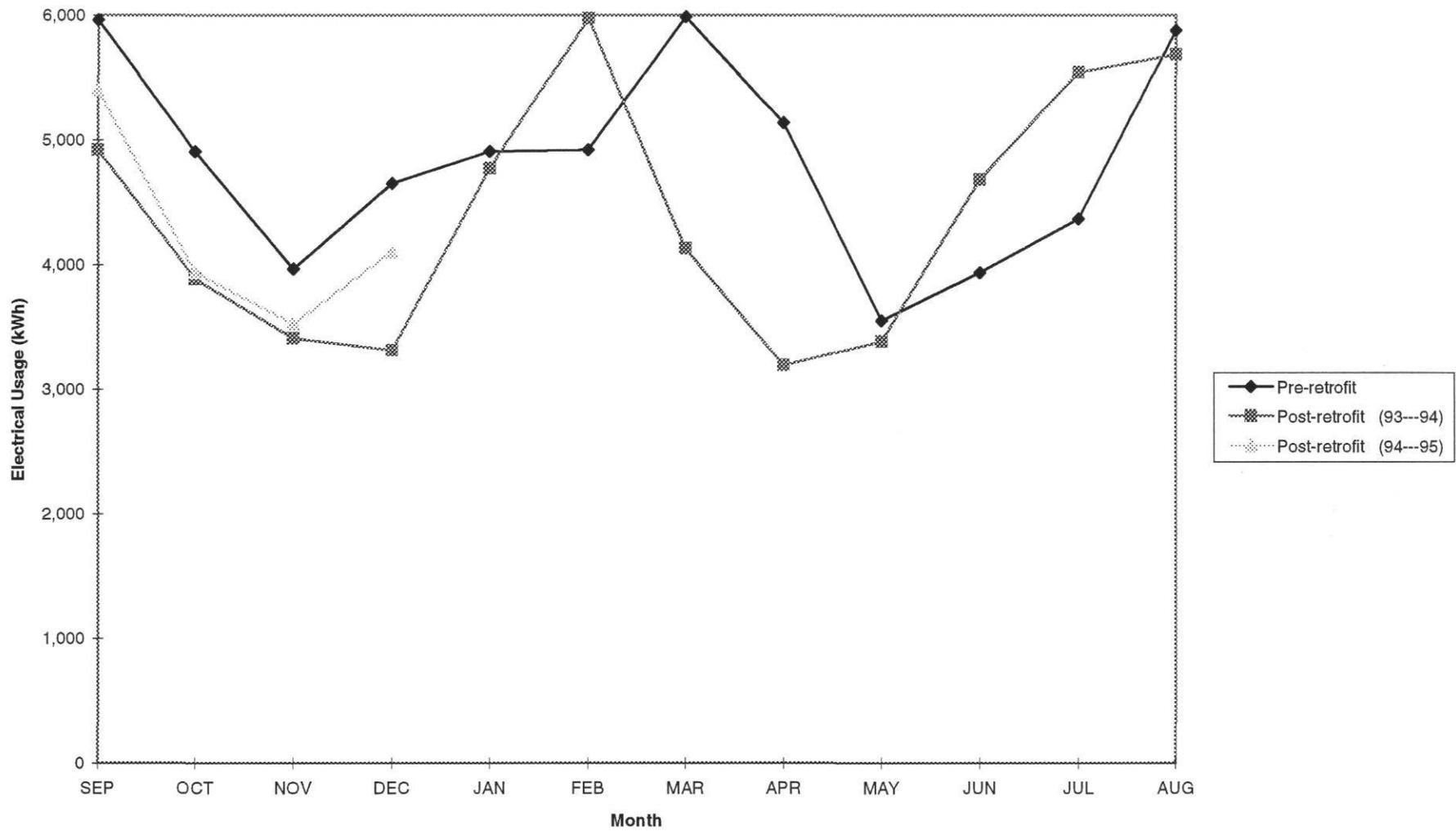


Lake Dallas ISD----- Administration Building Electrical Usage

ECRM Description	1. Delamping												
	2. Energy efficient fluorescent lamps												
	3. Fixture relamping												
Approved Loan Amount	\$129,293 (Includes High School, Middle School, Elementary School,Primary School,Corinth Primary, Administration,Vocational Bldg.,Maintenance Bldg. and Field House)												
Expected Savings													
Pre-retrofit	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	Total
kWh Used	5,964	4,908	3,966	4,653	4,907	4,920	5,988	5,136	3,552	3,936	4,368	5,880	58,178
Post-retrofit (93---94)													
kWh Used	4,920	3,888	3,408	3,312	4,776	5,976	4,128	3,192	3,384	4,680	5,544	5,688	52,896
Savings (kWh)	1,044	1,020	558	1,341	131	-1,056	1,860	1,944	168	-744	-1,176	192	5,282
kWh % change	-18%	-21%	-14%	-29%	-3%	21%	-31%	-38%	-5%	19%	27%	-3%	-9%
Post-retrofit (94---95)													
kWh Used	5,400	3,936	3,528	4,104									
Savings (kWh)	564	972	438	549									
kWh % change	-9%	-20%	-11%	-12%									

Lake Dallas ISD----Administration Building

Electrical Usage

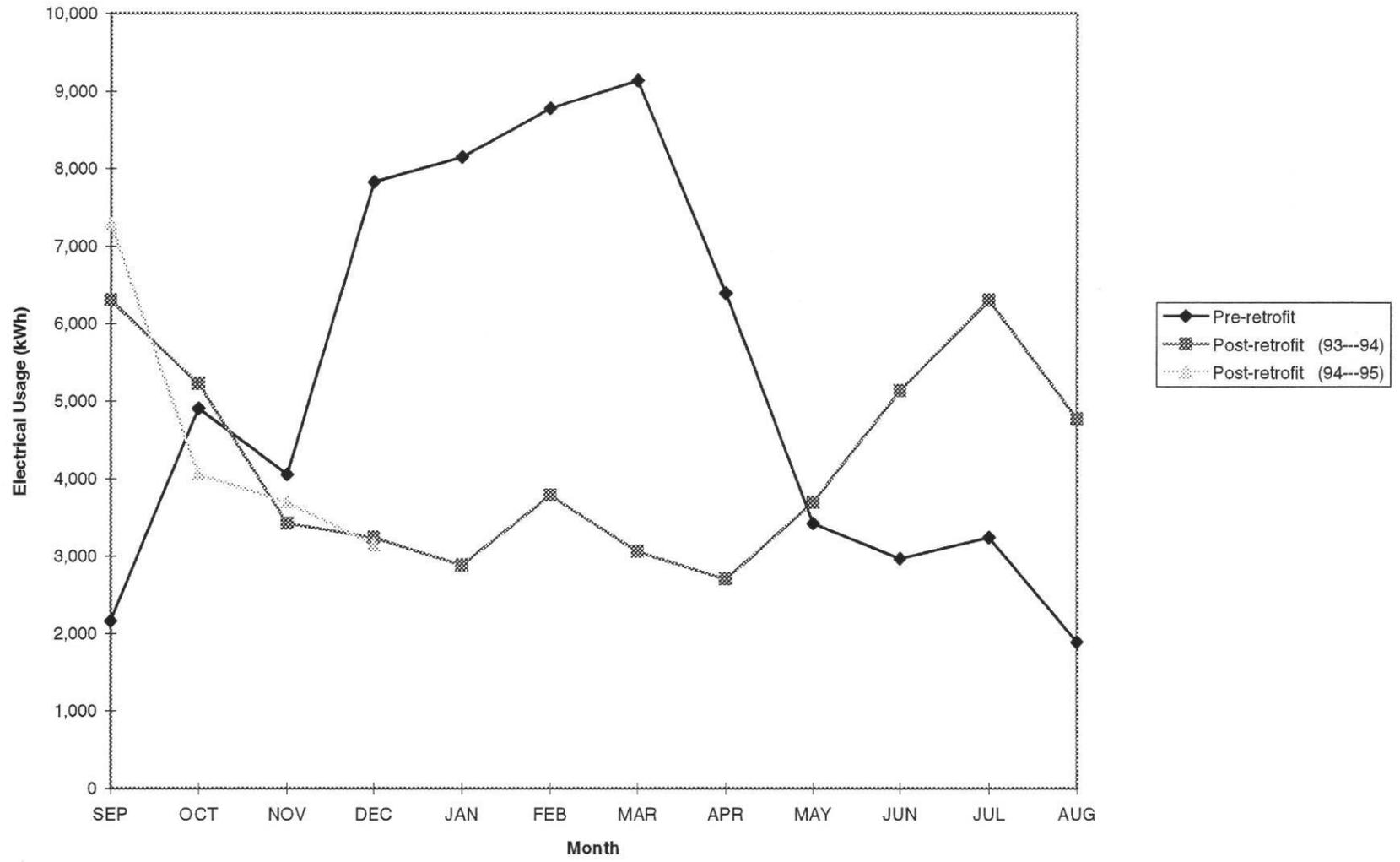


Lake Dallas ISD---Vocational Building

Electrical Usage

ECRM Description	1. Energy efficient fluorescent lamps												
	2. Fixture relamping												
Approved Loan Amount	\$129,293 (Includes High School, Middle School, Elementary School,Primary School,Corinth Primary, Administration,Vocational Bldg.,Maintenance Bldg. and Field House)												
Expected Savings													
Pre-retrofit	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	Total
kWh Used	2,160	4,905	4,050	7,830	8,145	8,775	9,135	6,390	3,420	2,970	3,240	1,890	62,910
Post-retrofit (93---94)													
kWh Used	6,300	5,220	3,420	3,240	2,880	3,780	3,060	2,700	3,690	5,130	6,300	4,770	50,490
Savings (kWh)	-4,140	-315	630	4,590	5,265	4,995	6,075	3,690	-270	-2,160	-3,060	-2,880	12,420
kWh % change	192%	6%	-16%	-59%	-65%	-57%	-67%	-58%	8%	73%	94%	152%	-20%
Post-retrofit (94---95)													
kWh Used	7,290	4,050	3,690	3,150									
Savings (kWh)	-5,130	855	360	4,680									
kWh % change	238%	-17%	-9%	-60%									

Lake Dallas ISD----Vocational Building Electrical Usage

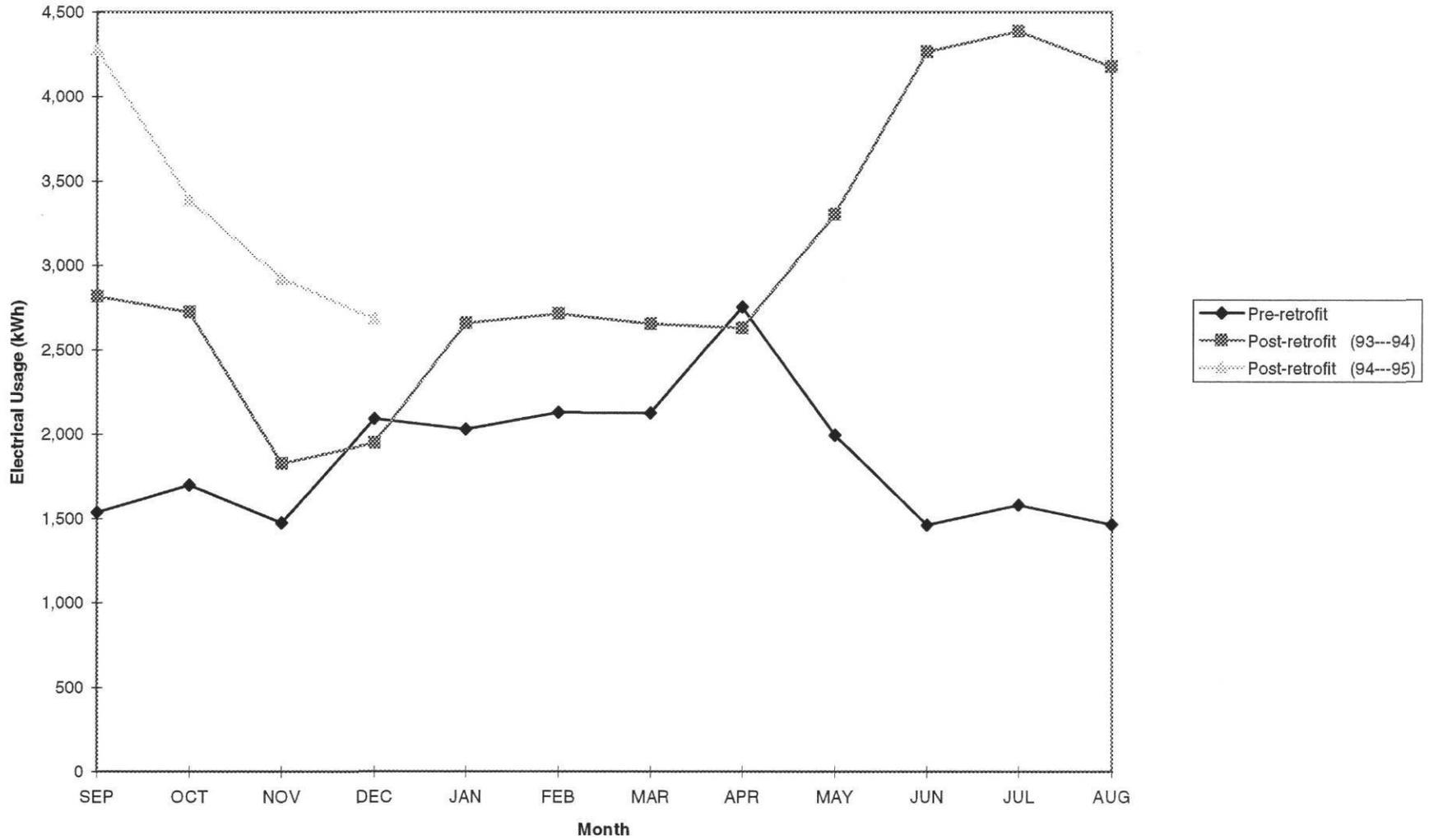


Lake Dallas ISD----Maintenance Building

Electrical Usage

ECRM Description	1. Energy efficient fluorescent lamps												
	2. Fixture relamping												
Approved Loan Amount	\$129,293 (Includes High School, Middle School, Elementary School,Primary School,Corinth Primary, Administration,Vocational Bldg.,Maintenance Bldg. and Field House)												
Expected Savings													
Pre-retrofit	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	Total
kWh Used	1,537	1,698	1,474	2,092	2,028	2,127	2,126	2,754	1,995	1,463	1,580	1,466	22,340
Post-retrofit (93---94)													
kWh Used	2,818	2,724	1,827	1,947	2,658	2,715	2,655	2,631	3,303	4,266	4,389	4,179	36,112
Savings (kWh)	-1,281	-1,026	-353	145	-630	-588	-529	123	-1,308	-2,803	-2,809	-2,713	-13,772
kWh % change	83%	60%	24%	-7%	31%	28%	25%	-4%	66%	192%	178%	185%	62%
Post-retrofit (94---95)													
kWh Used	4,278	3,390	2,922	2,682									
Savings (kWh)	-2,741	-1,692	-1,448	-590									
kWh % change	178%	100%	98%	28%									

Lake Dallas ISD----Maintenance Building Electrical Usage

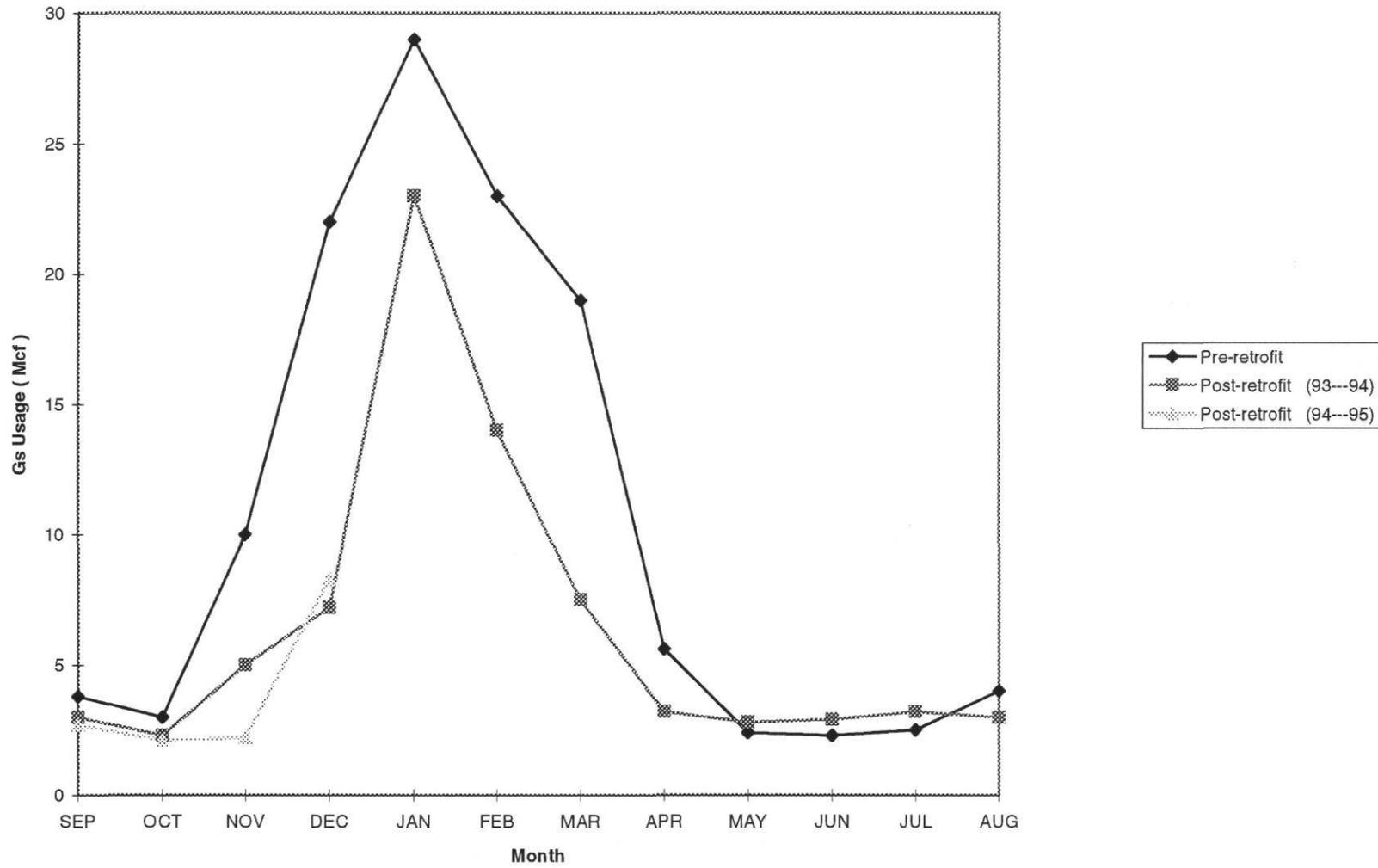


Lake Dallas ISD----Maintenance Building Gas usage

ECRM Description	1. Energy efficient fluorescent lamps												
	2. Fixture relamping												
Approved Loan Amount	\$129,293 (Includes High School, Middle School, Elementary School,Primary School,Corinth Primary, Administration,Vocational Bldg.,Maintenance Bldg. and Field House)												
Expected Savings													
Pre-retrofit	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	Total
Mcf Used	3.8	3	10	22	29	23	19	5.6	2.4	2.3	2.5	4	127
Post-retrofit (93---94)													
Mcf Used	3	2.3	5	7.2	23	14	7.5	3.2	2.8	2.9	3.2	3	77.1
Savings (Mcf)	0.8	0.7	5	14.8	6	9	11.5	2.4	-0.4	-0.6	-0.7	1	49.5
Mcf % change	-21%	-23%	-50%	-67%	-21%	-39%	-61%	-43%	17%	26%	28%	-25%	-39%
Post-retrofit (94---95)													
Mcf Used	2.7	2.1	2.2	8.3									
Savings (Mcf)	1.1	0.9	7.8	13.7									
Mcf % change	-29%	-30%	-78%	-62%									

Lake Dallas ISD----Maintenance Building

Gas Usage

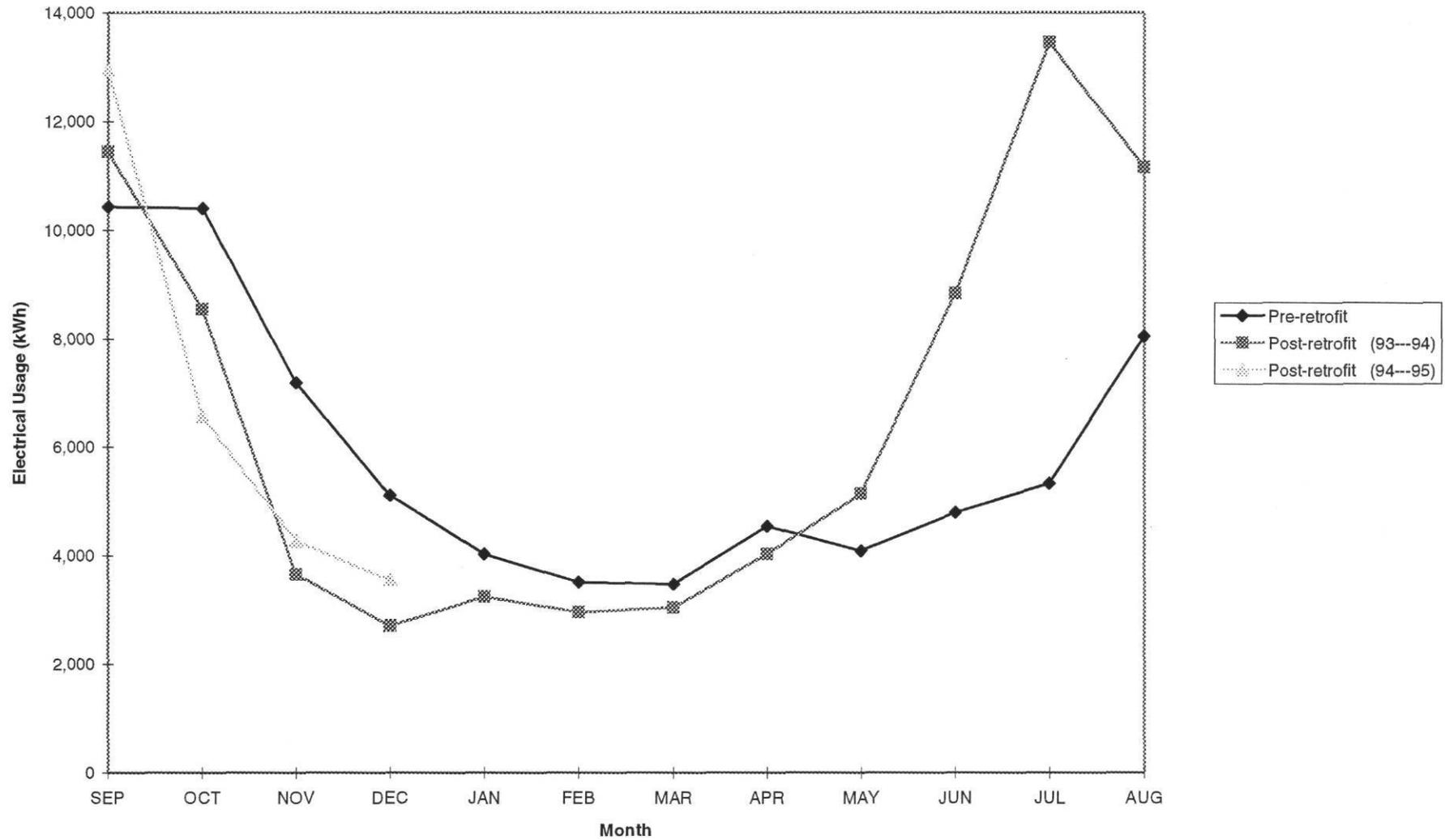


Lake Dallas ISD----Field House

Electrical Usage

ECRM Description	1. Energy efficient fluorescent lamps												
	2. Fixture relamping												
Approved Loan Amount	\$129,293 (Includes High School, Middle School, Elementary School,Primary School,Corinth Primary, Administration,Vocational Bldg.,Maintenance Bldg. and Field House)												
Expected Savings													
Pre-retrofit	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	Total
kWh Used	10,434	10,398	7,188	5,106	4,032	3,516	3,474	4,542	4,086	4,788	5,328	8,040	70,932
Post-retrofit (93---94)													
kWh Used	11,436	8,544	3,660	2,700	3,240	2,952	3,036	4,032	5,136	8,832	13,452	11,154	78,174
Savings (kWh)	-1,002	1,854	3,528	2,406	792	564	438	510	-1,050	-4,044	-8,124	-3,114	-7,242
kWh % change	10%	-18%	-49%	-47%	-20%	-16%	-13%	-11%	26%	84%	152%	39%	10%
Post-retrofit (94---95)													
kWh Used	12,942	6,576	4,272	3,546									
Savings (kWh)	-2,508	3,822	2,916	1,560									
kWh % change	24%	-37%	-41%	-31%									

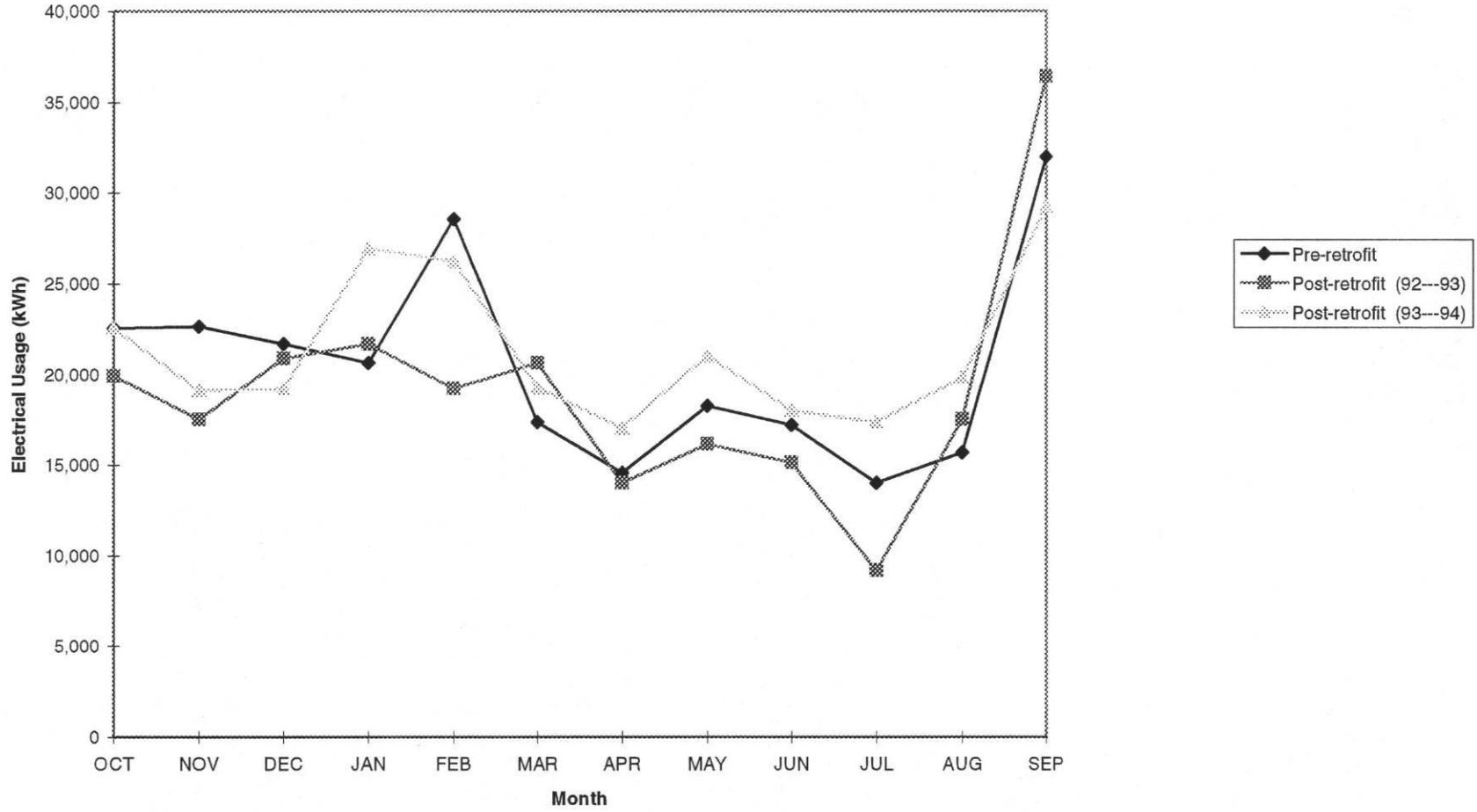
Lake Dallas ISD----Field House Electrical Usage



Center ISD----High School Electrical Usage

ECRM Description	1.Fixture relamping (Exterior & Interior)												
	2.Install 4 heat pump package units												
	3.Install 5 heat pumps												
Approved Loan Amount	\$169,745 (Includes High School,Middle School and Elementary School)												
Expected Savings													
Pre-retrofit	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Total
kWh Used	22,560	22,640	21,680	20,640	28,560	17,360	14,560	18,240	17,200	14,000	15,680	32,000	245,120
Cost	\$1,684	\$1,684	\$1,624	\$1,466	\$1,901	\$1,249	\$1,109	\$1,306	\$1,256	\$ 936	\$1,089	\$2,263	\$17,567
Post-retrofit (92---93)													
kWh Used	19,920	17,520	20,880	21,680	19,200	20,640	14,000	16,160	15,120	9,200	17,520	36,400	228,240
Cost	\$1,413	\$1,260	\$1,478	\$1,444	\$1,308	\$1,400	\$ 999	\$1,049	\$1,007	\$ 872	\$1,131	\$1,905	\$15,266
Savings (kWh)	2,640	5,120	800	-1,040	9,360	-3,280	560	2,080	2,080	4,800	-1,840	-4,400	16,880
kWh % change	-12%	-23%	-4%	5%	-33%	19%	-4%	-11%	-12%	-34%	12%	14%	-7%
Post-retrofit (93---94)													
kWh Used	22,560	19,120	19,200	26,960	26,240	19,280	17,040	21,040	18,000	17,360	19,840	29,280	255,920
Cost	\$1,441	\$1,273	\$1,262	\$1,473	\$1,503	\$1,265	\$1,148	\$1,365	\$1,594	\$1,406	\$1,459	\$1,673	\$16,862
Savings (kWh)	0	3,520	2,480	-6,320	2,320	-1,920	-2,480	-2,800	-800	-3,360	-4,160	2,720	-10,800
kWh % change	0%	-16%	-11%	31%	-8%	11%	17%	15%	5%	24%	27%	-9%	4%

Center ISD---High School Electrical Usage

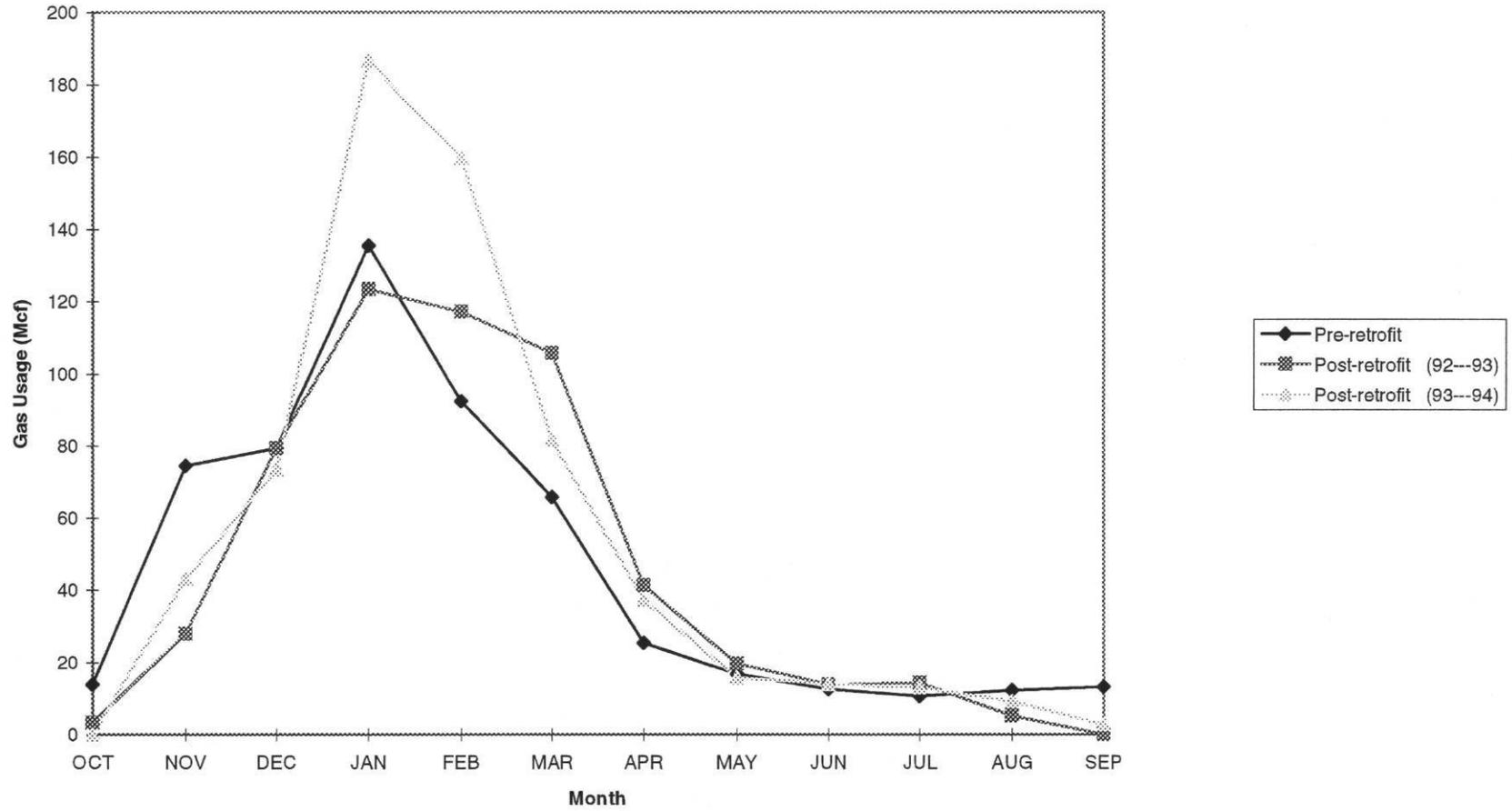


Center ISD----High School Gas Usage

ECRM Description	1.Fixture relamping (Exterior & Interior)												
	2.Install 4 heat pump package units												
	3.Install 5 heat pumps												
Approved Loan Amount	\$169,745 (Includes High School,Middle School and Elementary School)												
Expected Savings													
Pre-retrofit	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Total
Mcf Used	14	75	79	135	92	66	26	17	13	11	12	13	552
Cost	\$ 66	\$ 288	\$ 306	\$ 511	\$ 333	\$ 277	\$ 110	\$ 77	\$ 62	\$ 55	\$ 60	\$ 63	\$2,208
Post-retrofit (92---93)													
Mcf Used	3	28	79	123	117	106	41	20	14	14	5	0	551
Cost	\$ 27	\$ 123	\$ 306	\$ 492	\$ 409	\$ 370	\$ 154	\$ 81	\$ 62	\$ 63	\$ 36	\$ 7	\$2,130
Savings (Mcf)	11	47	0	12	-25	-40	-16	-3	-1	-4	7	13	1
Mcf % change	-77%	-62%	0%	-9%	27%	61%	62%	17%	10%	35%	-58%	-100%	0%
Post-retrofit (93---94)													
Mcf Used	0	43	74	187	160	82	37	16	14	13	9	3	636
Cost	\$ 7	\$ 199	\$ 328	\$ 813	\$ 663	\$ 346	\$ 167	\$ 80	\$ 73	\$ 69	\$ 51	\$ 25	\$2,821
Savings (Mcf)	14	31	6	-51	-67	-16	-12	1	-2	-3	3	11	-84
Mcf % change	-100%	-42%	-7%	38%	73%	24%	46%	-5%	12%	24%	-25%	-80%	15%

Center ISD---High School

Gas Usage

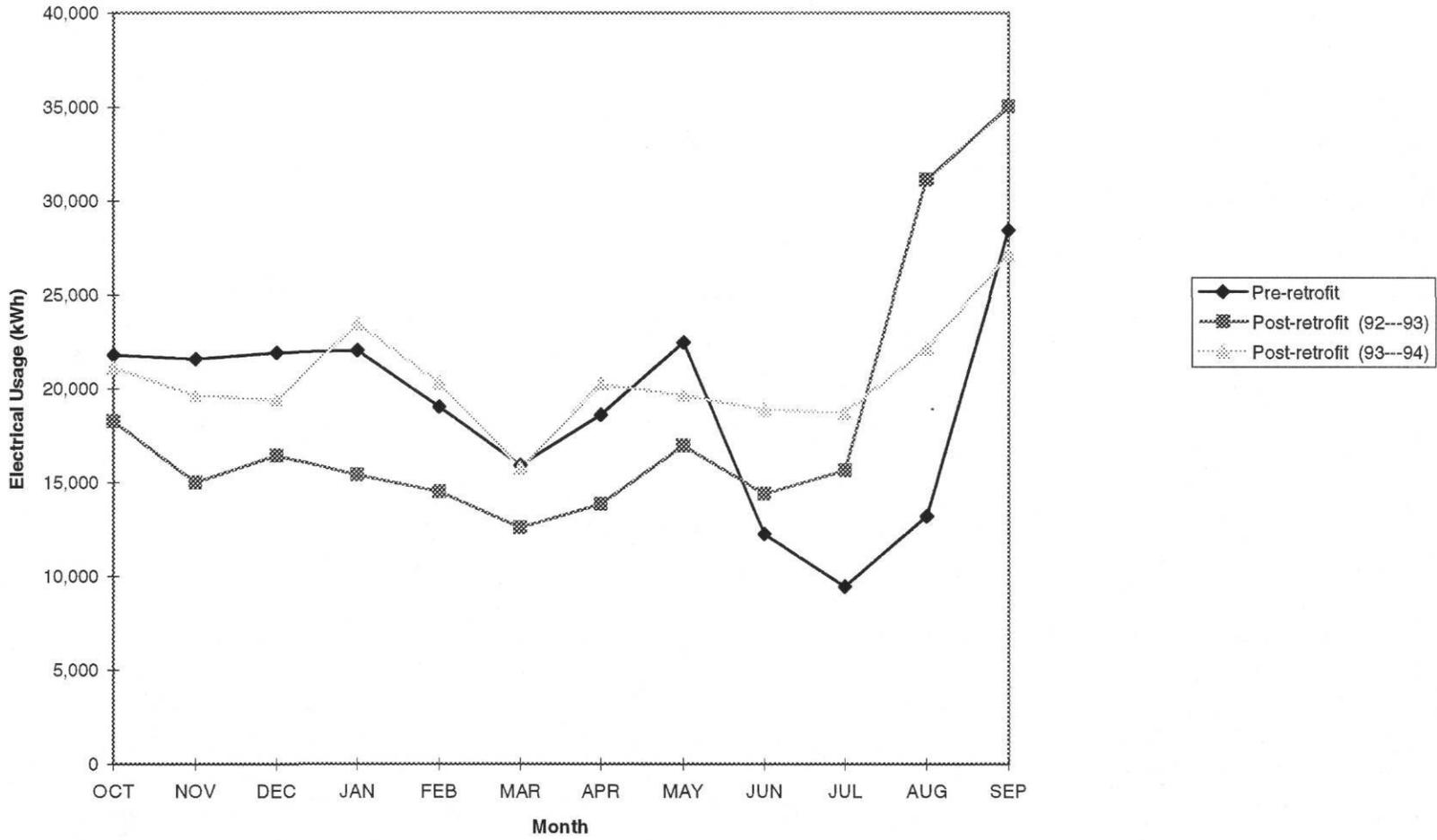


Center ISD---Middle School

Electrical Usage

ECRM Description	1.Fixture relamping (Exterior & Interior)												
	2.Install 25 DX cooling units w/gas fired furnaces												
	3.Install 18 heat pump package units												
Approved Loan Amount	\$169,745 (Includes High School,Middle School and Elementary School)												
Expected Savings													
Pre-retrofit	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Total
kWh Used	21,790	21,581	21,910	22,053	19,030	15,915	18,603	22,457	12,257	9,440	13,215	28,445	226,696
Cost	\$1,653	\$1,656	\$1,657	\$1,611	\$1,423	\$1,232	\$1,386	\$1,689	\$1,033	\$ 742	\$1,142	\$2,096	\$17,320
Post-retrofit (92---93)													
kWh Used	18,263	14,991	16,433	15,395	14,513	12,595	13,827	16,966	14,384	15,633	31,129	35,033	219,162
Cost	\$1,256	\$1,121	\$1,251	\$1,191	\$1,077	\$ 944	\$1,005	\$1,174	\$1,028	\$1,068	\$2,089	\$2,296	\$15,500
Savings (kWh)	3,527	6,590	5,477	6,658	4,517	3,320	4,776	5,491	-2,127	-6,193	-17,914	-6,588	7,534
kWh % change	-16%	-31%	-25%	-30%	-24%	-21%	-26%	-24%	17%	66%	136%	23%	-3%
Post-retrofit (93---94)													
kWh Used	21,115	19,635	19,377	23,469	20,320	15,777	20,229	19,628	18,887	18,734	22,179	27,170	246,520
Cost	\$1,434	\$1,449	\$1,437	\$1,621	\$1,458	\$1,207	\$1,340	\$1,344	\$1,314	\$1,180	\$1,541	\$1,711	\$17,036
Savings (kWh)	675	1,946	2,533	-1,416	-1,290	138	-1,626	2,829	-6,630	-9,294	-8,964	1,275	-19,824
kWh % change	-3%	-9%	-12%	6%	7%	-1%	9%	-13%	54%	98%	68%	-4%	9%

Center ISD---Middle School Electrical Usage



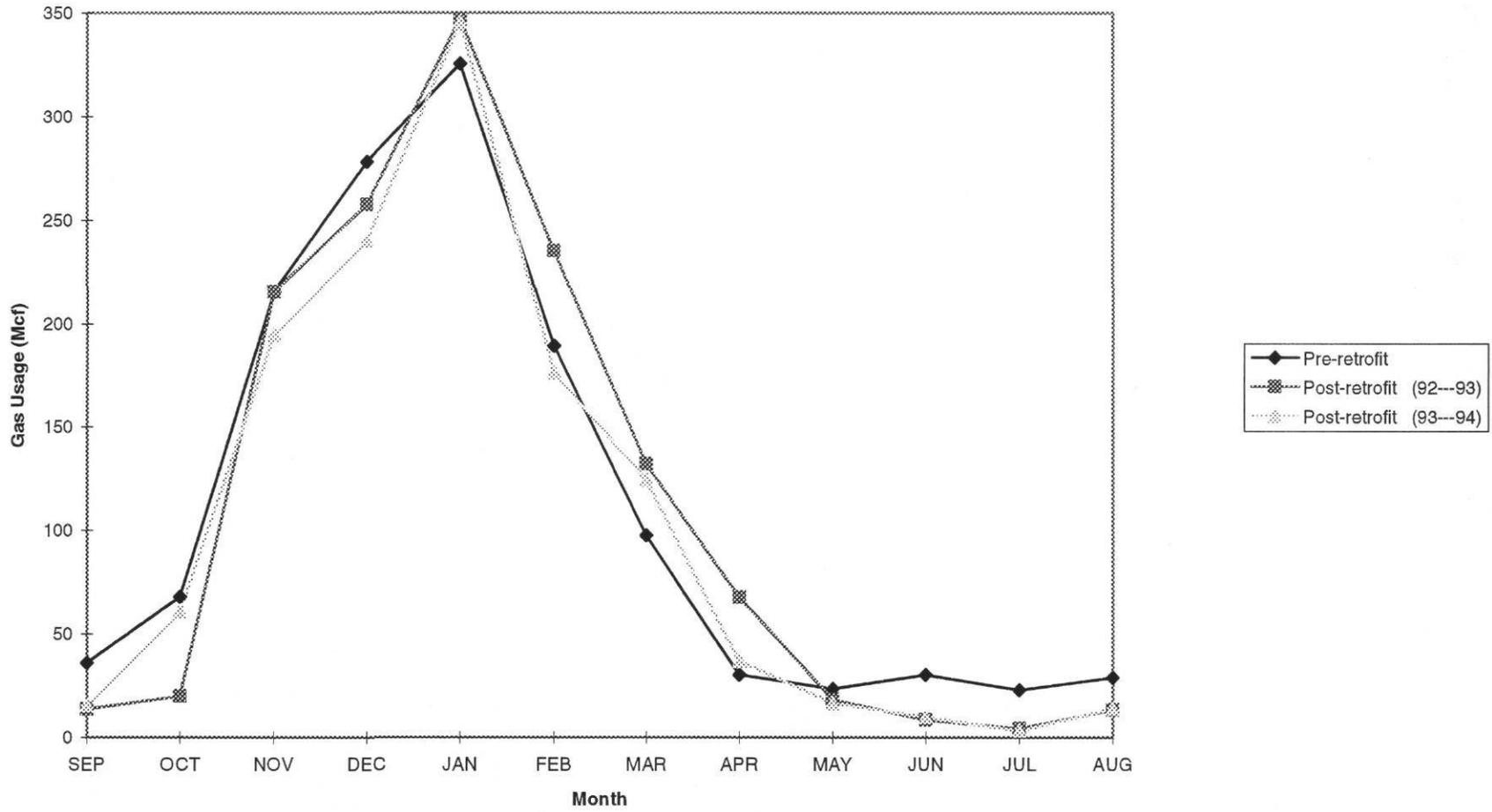
Center ISD----Middle School

Gas Usage

ECRM Description	1.Fixture relamping (Exterior & Interior)												
	2.Install 25 DX cooling units w/gas fired furnaces												
	3.Install 18 heat pump package units												
Approved Loan Amount	\$169,745 (Includes High School,Middle School and Elementary School)												
Expected Savings													
Pre-retrofit	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	Total
Mcf Used	36	68	215	278	326	189	98	30	24	30	23	29	1345
Cost	\$ 146	\$ 264	\$ 812	\$1,048	\$1,155	\$ 743	\$ 365	\$ 124	\$ 101	\$ 128	\$ 99	\$ 120	\$5,105
Post-retrofit (92---93)													
Mcf Used	14	20	215	258	347	235	132	68	18	8	4	13	1333
Cost	\$ 68	\$ 92	\$ 812	\$1,021	\$1,201	\$ 814	\$ 459	\$ 242	\$ 77	\$ 43	\$ 33	\$ 71	\$4,933
Savings (Mcf)	22	48	0	21	-22	-46	-35	-37	5	22	18	16	12
Mcf % change	-62%	-71%	0%	-7%	7%	24%	36%	124%	-22%	-73%	-81%	-54%	-1%
Post-retrofit (93---94)													
Mcf Used	15	61	195	240	346	176	124	37	17	10	3	14	1237
Cost	\$ 80	\$ 273	\$ 848	\$1,045	\$1,437	\$ 733	\$ 520	\$ 165	\$ 83	\$ 56	\$ 27	\$ 71	\$5,338
Savings (Mcf)	21	7	21	38	-20	13	-27	-7	7	20	20	15	108
Mcf % change	-58%	-11%	-10%	-14%	6%	-7%	27%	22%	-29%	-68%	-86%	-51%	-8%

Center ISD---Middle School

Gas Usage

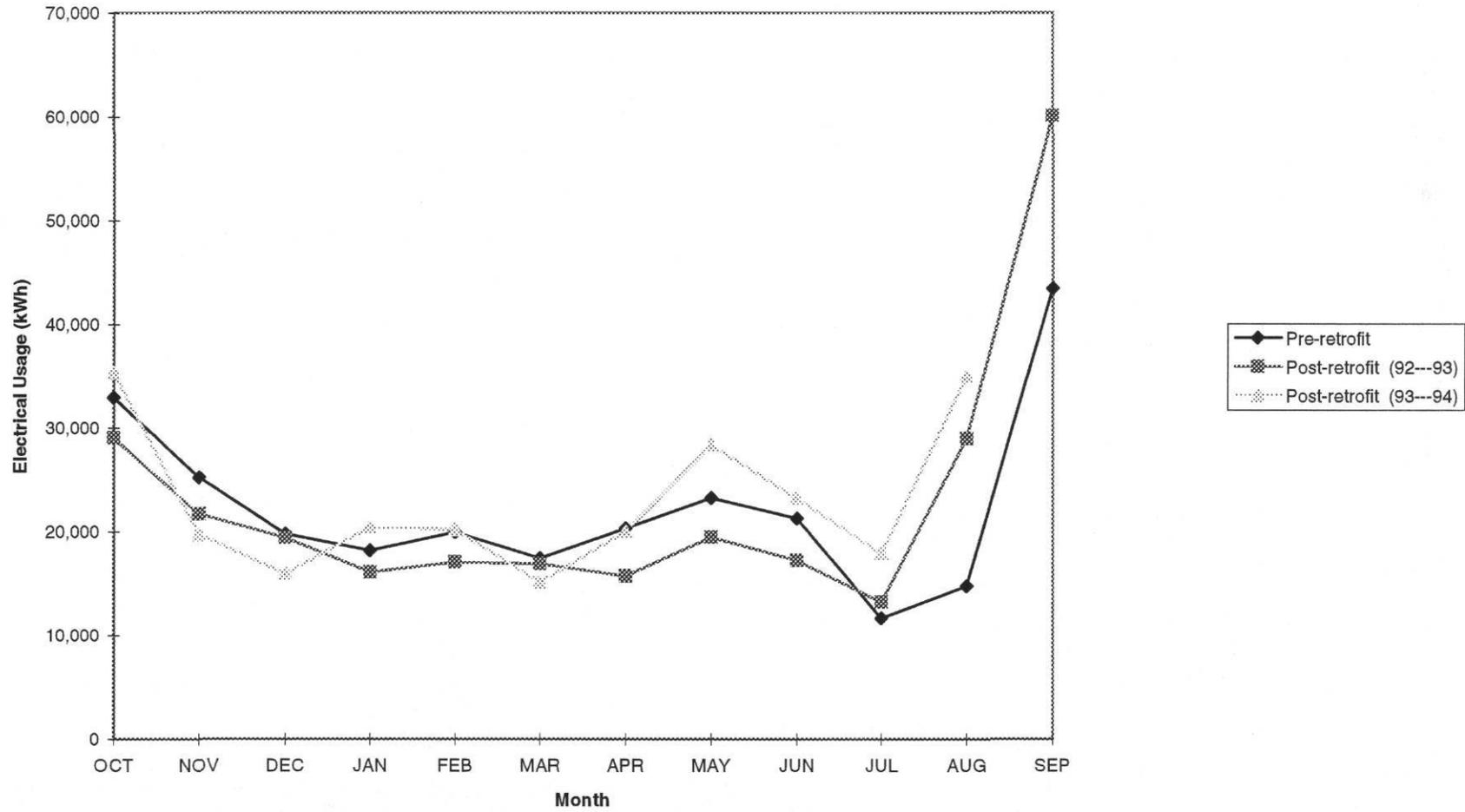


Center ISD---Elementary School

Electrical Usage

ECRM Description	1.Fixture relamping (Exterior & Interior)												
Approved Loan Amount	\$169,745 (Includes High School,Middle School and Elementary School)												
Expected Savings													
Pre-retrofit	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Total
kWh Used	32,937	25,238	19,761	18,170	19,947	17,416	20,308	23,270	21,267	11,677	14,754	43,471	268,216
Cost	\$2,418	\$1,926	\$1,490	\$1,297	\$1,399	\$1,252	\$1,501	\$1,749	\$1,623	\$ 925	\$1,105	\$3,106	\$19,791
Post-retrofit (92---93)													
kWh Used	29,014	21,687	19,387	16,096	17,071	16,887	15,710	19,463	17,197	13,210	29,000	60,081	274,803
Cost	\$2,097	\$1,616	\$1,393	\$1,137	\$1,200	\$1,186	\$1,137	\$1,481	\$1,358	\$1,071	\$1,961	\$3,695	\$19,332
Savings (kWh)	3,923	3,551	374	2,074	2,876	529	4,598	3,807	4,070	-1,533	-14,246	-16,610	-6,587
kWh % change	-12%	-14%	-2%	-11%	-14%	-3%	-23%	-16%	-19%	13%	97%	38%	2%
Post-retrofit (93---94)													
kWh Used	35,371	19,715	15,925	20,438	20,208	15,148	20,019	28,357	23,183	17,935	34,977		251,276
Cost	\$2,417	\$1,577	\$1,306	\$1,383	\$1,410	\$1,247	\$1,398	\$1,972	\$1,716	\$1,292	\$2,267		\$17,985
Savings (kWh)	-2,434	5,523	3,836	-2,268	-261	2,268	289	-5,087	-1,916	-6,258	-20,223		-26,531
kWh % change	7%	-22%	-19%	12%	1%	-13%	-1%	22%	9%	54%	137%		10%

Center ISD----Elementary School Electrical Usage

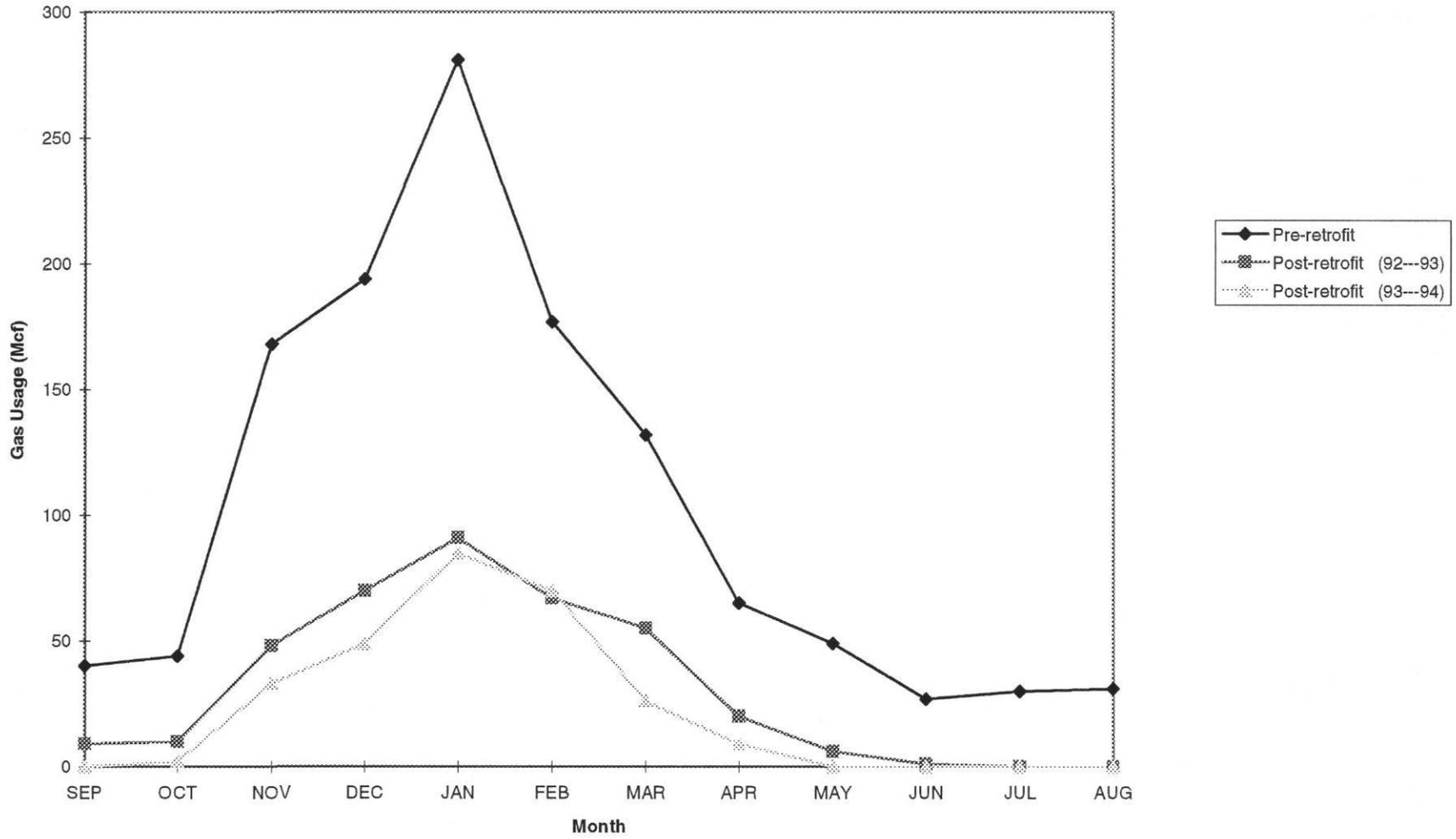


Center ISD----Elementary School

Gas Usage

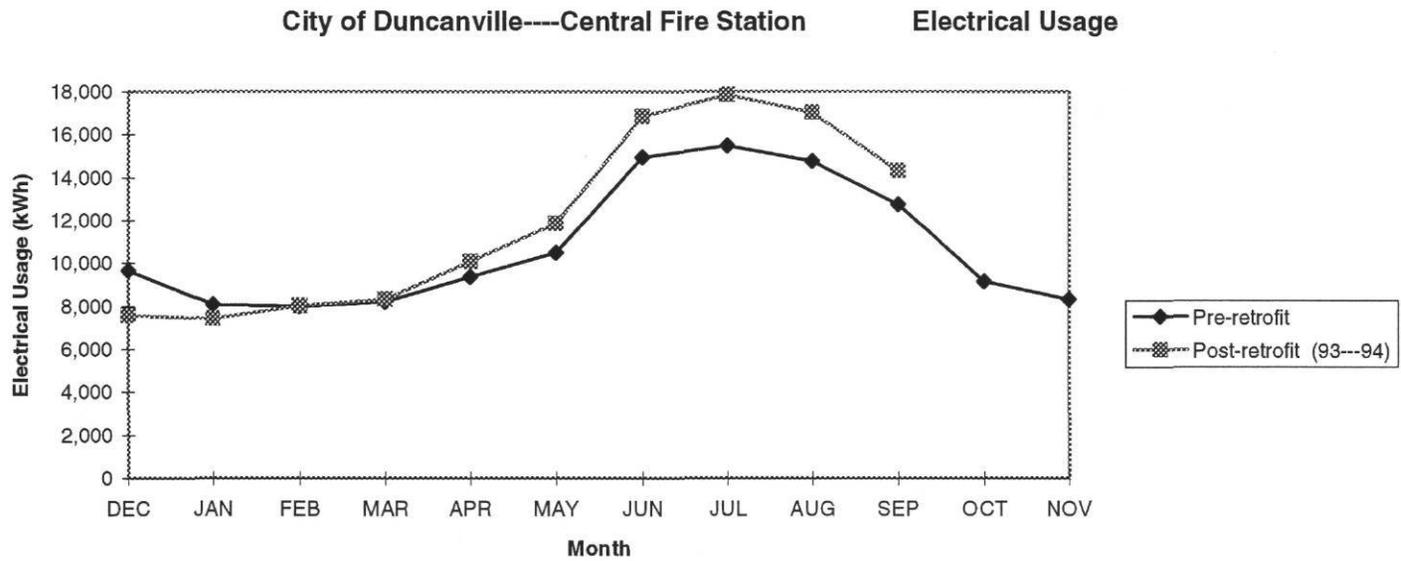
ECRM Description	1.Fixture relamping (Exterior & Interior)												
	2.Install 25 DX cooling units w/gas fired furnaces												
	3.Install 18 heat pump package units												
Approved Loan Amount	\$169,745 (Includes High School,Middle School and Elementary School)												
Expected Savings													
Pre-retrofit	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	Total
Mcf Used	40	44	168	194	281	177	132	65	49	27	30	31	1238
Cost	\$ 162	\$ 176	\$ 632	\$ 731	\$1,059	\$ 628	\$ 533	\$ 244	\$ 190	\$ 116	\$ 127	\$ 129	\$4,727
Post-retrofit (92---93)													
Mcf Used	9	10	48	70	91	67	55	20	6	1	0	0	377
Cost	\$ 55	\$ 58	\$ 201	\$ 286	\$ 367	\$ 240	\$ 200	\$ 83	\$ 35	\$ 16	\$ 7	\$ 7	\$1,555
Savings (Mcf)	31	34	120	124	190	110	77	45	43	26	30	31	861
Mcf % change	-78%	-77%	-71%	-64%	-68%	-62%	-58%	-69%	-88%	-96%	-100%	-100%	-70%
Post-retrofit (93---94)													
Mcf Used	0	2	33	49	85	70	26	9	0	0	0	0	274
Cost	\$ 7	\$ 22	\$ 156	\$ 224	\$ 377	\$ 310	\$ 121	\$ 54	\$ 7	\$ 7	\$ 7	\$ 7	\$1,299
Savings (Mcf)	40	42	135	145	196	107	106	56	49	27	30	31	964
Mcf % change	-100%	-95%	-80%	-75%	-70%	-60%	-80%	-86%	-100%	-100%	-100%	-100%	-78%

Center ISD---Elementary School Gas Usage



City of Duncanville---Center Fire Station Electrical Usage

ECRM Description	1.Fixture relamping												
Approved Loan Amount	\$112,327(Includes Library,Service center,Senior center,Central fire station,Fire station #2,DPS&FTB,City hall)												
Expected Savings													
Pre-retrofit	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	Total
kWh Used	9,651	8,094	7,994	8,210	9,352	10,491	14,935	15,465	14,763	12,749	9,139	8,328	129,171
Cost	\$ 675	\$ 598	\$ 617	\$ 632	\$ 688	\$ 723	\$ 879	\$ 886	\$ 901	\$ 836	\$ 658	\$ 598	\$ 8,691
Post-retrofit (93---94)													
kWh Used	7,584	7,440	8,016	8,304	10,080	11,856	16,848	17,856	17,016	14,328			119,328
Cost	\$ 692	\$ 684	\$ 714	\$ 729	\$ 817	\$ 850	\$1,059	\$1,077	\$ 777	\$ 972			\$ 8,371
Savings (kWh)	2,067	654	-22	-94	-728	-1,365	-1,913	-2,391	-2,253	-1,579			-7,624
kWh % change	-21%	-8%	0%	1%	8%	13%	13%	15%	15%	12%			6%

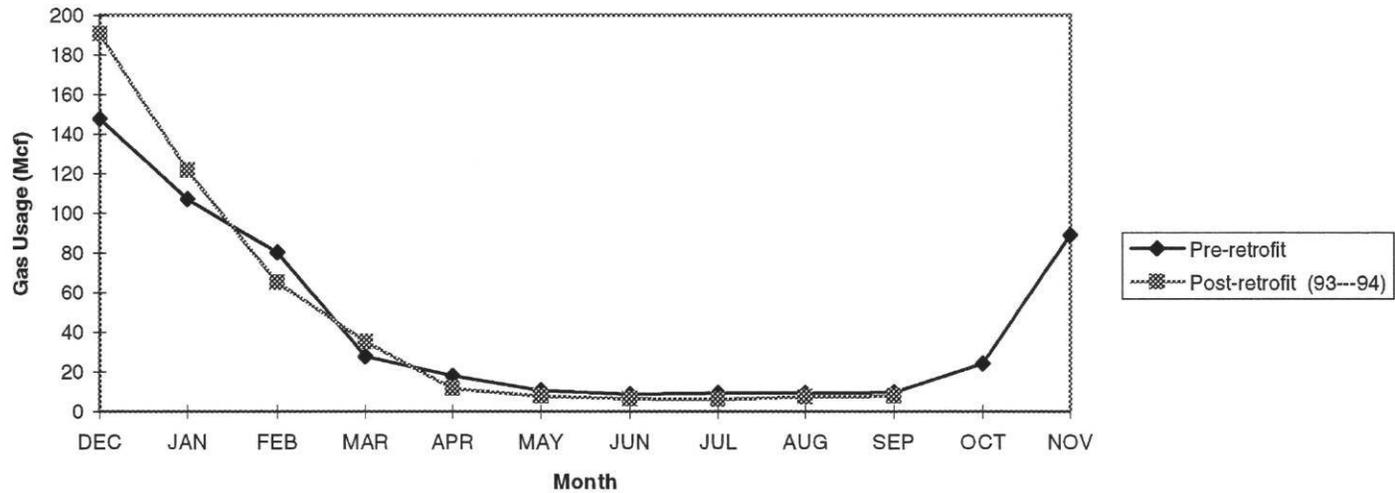


City of Duncanville----Central Fire Station

Gas Usage

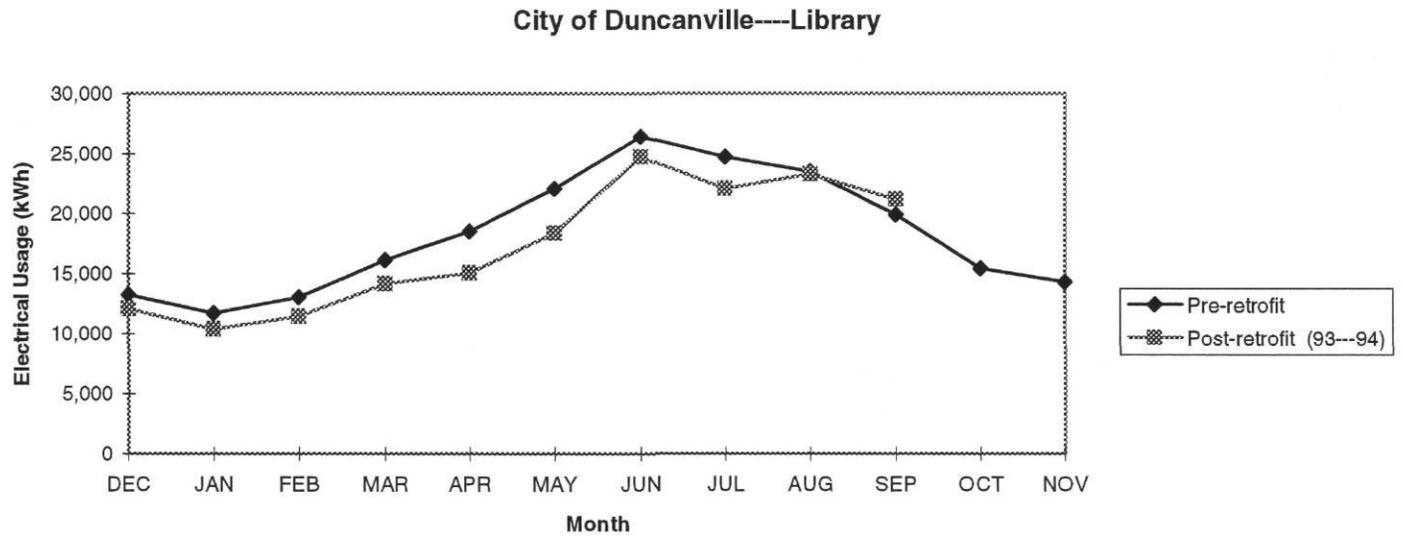
ECRM Description	1.Fixture relamping												
Approved Loan Amount	\$112,327(Includes Library,Service center,Senior center,Central fire station,Fire station #2,DPS&FTB,City hall)												
Expected Savings													
Pre-retrofit	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	Total
Mcf Used	147.8	107.2	80.4	27.8	18.1	10.6	8.8	9.3	9.5	9.6	24.2	89.1	542.4
Cost	\$ 821	\$ 591	\$ 438	\$ 154	\$ 112	\$ 66	\$ 54	\$ 53	\$ 57	\$ 57	\$ 141	\$ 502	\$ 3,046
Post-retrofit (93---94)													
Mcf Used	190.6	121.7	65.1	35.1	11.7	7.6	6.4	6	7.3	7.9			459.4
Cost	\$1,005	\$ 651	\$ 361	\$ 203	\$ 75	\$ 46	\$ 42	\$ 40	\$ 47	\$ 49			\$ 2,519
Savings (Mcf)	-42.8	-14.5	15.3	-7.3	6.4	3	2.4	3.3	2.2	1.7			-30.3
Mcf % change	29%	14%	-19%	26%	-35%	-28%	-27%	-35%	-23%	-18%			6%

City of Duncanville----Central Fire Station



City of Duncanville----Library Electrical Usage

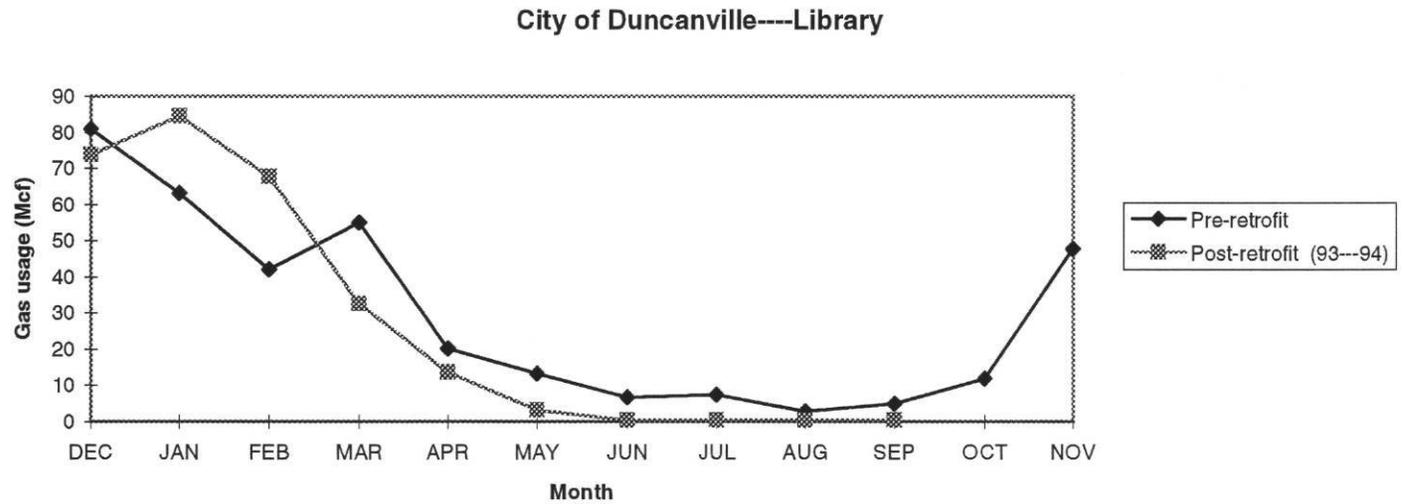
ECRM Description	1.Fixture relamping												
	2.Programmable thermostats												
Approved Loan Amount	\$112,327(Includes Library,Service center,Senior center,Central fire station,Fire station #2,DPS&FTB,City hall)												
Expected Savings													
Pre-retrofit	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	Total
kWh Used	13,250	11,695	13,040	16,126	18,508	22,096	26,425	24,751	23,499	19,881	15,438	14,298	219,007
Cost	\$ 833	\$ 736	\$ 820	\$1,009	\$1,157	\$1,651	\$1,976	\$1,872	\$1,764	\$1,492	\$ 974	\$ 854	\$ 15,138
Post-retrofit (93---94)													
kWh Used	12,060	10,350	11,430	14,130	15,030	18,360	24,750	22,050	23,310	21,150			172,620
Cost	\$ 989	\$ 851	\$ 937	\$1,156	\$1,222	\$1,648	\$2,220	\$1,980	\$1,146	\$1,900			\$ 14,049
Savings (kWh)	1,190	1,345	1,610	1,996	3,478	3,736	1,675	2,701	189	-1,269			16,651
kWh % change	-9%	-12%	-12%	-12%	-19%	-17%	-6%	-11%	-1%	6%			-8%



City of Duncanville----Library

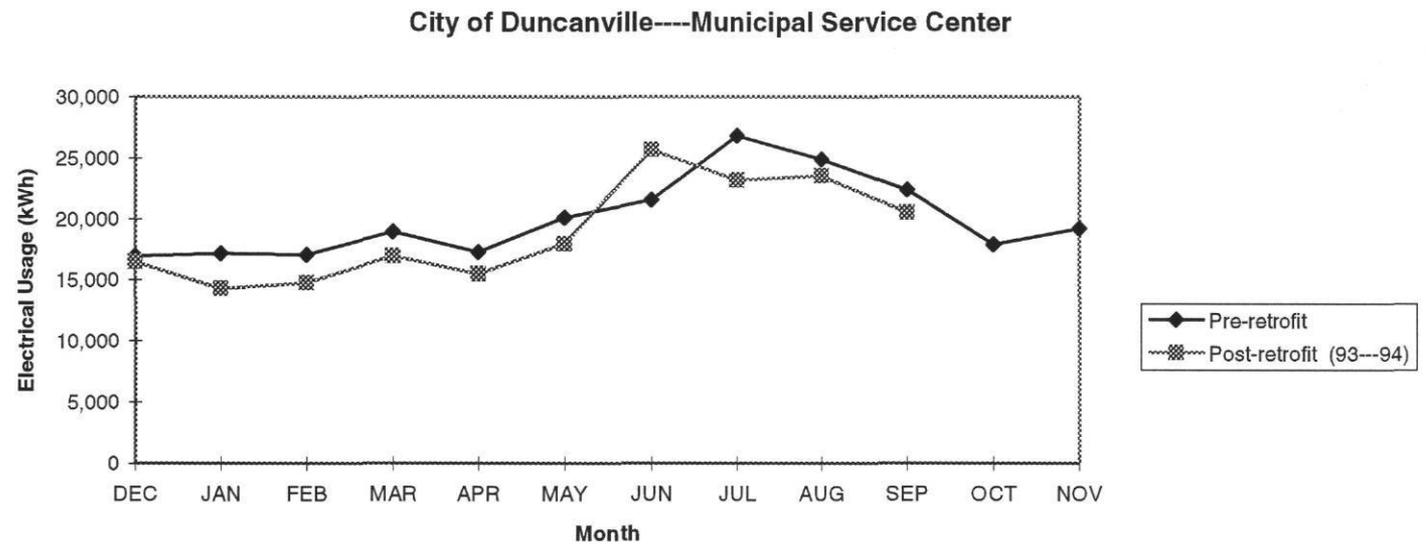
Gas Usage

ECRM Description	1.Fixture relamping 2.Programmable thermostats												
Approved Loan Amount	\$112,327(Includes Library,Service center,Senior center,Central fire station,Fire station #2,DPS&FTB,City hall)												
Expected Savings													
Pre-retrofit	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	Total
Mcf Used	80.9	63.1	42.1	55	20.2	13.3	6.7	7.4	2.8	4.9	11.9	47.8	356.1
Cost	\$ 450	\$ 357	\$ 233	\$ 315	\$ 122	\$ 78	\$ 42	\$ 45	\$ 21	\$ 32	\$ 75	\$ 273	\$ 2,043
Post-retrofit (93---94)													
Mcf Used	73.8	84.5	67.8	32.5	13.6	3.2	0.4	0.3	0.4	0.4			276.9
Cost	\$ 396	\$ 455	\$ 376	\$ 189	\$ 86	\$ 23	\$ 9	\$ 8	\$ 9	\$ 9			\$ 1,560
Savings (Mcf)	7.1	-21.4	-25.7	22.5	6.6	10.1	6.3	7.1	2.4	4.5			19.5
Mcf % change	-9%	34%	61%	-41%	-33%	-76%	-94%	-96%	-86%	-92%			-5%



City of Duncanville---Municipal Service Center Electrical Usage

ECRM Description	1.Fixture relamping 2.Timer AC/heat												
Approved Loan Amount	\$112,327(Includes Library,Service center,Senior center,Central fire station,Fire station #2,DPS&FTB,City hall)												
Expected Savings													
Pre-retrofit	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	Total
kWh Used	16,943	17,156	17,050	18,932	17,287	20,077	21,525	26,840	24,892	22,365	17,874	19,198	240,139
Cost	\$1,114	\$1,121	\$1,116	\$1,234	\$1,173	\$1,295	\$1,320	\$1,539	\$1,443	\$1,391	\$1,231	\$1,117	\$ 15,094
Post-retrofit (93---94)													
kWh Used	16,470	14,292	14,742	16,938	15,516	17,937	25,650	23,184	23,544	20,484			188,757
Cost	\$1,278	\$1,208	\$1,230	\$1,290	\$1,248	\$1,273	\$1,527	\$1,462	\$1,096	\$1,353			\$ 12,965
Savings (kWh)	473	2,864	2,308	1,994	1,771	2,140	-4,125	3,656	1,348	1,881			14,310
kWh % change	-3%	-17%	-14%	-11%	-10%	-11%	19%	-14%	-5%	-8%			-6%

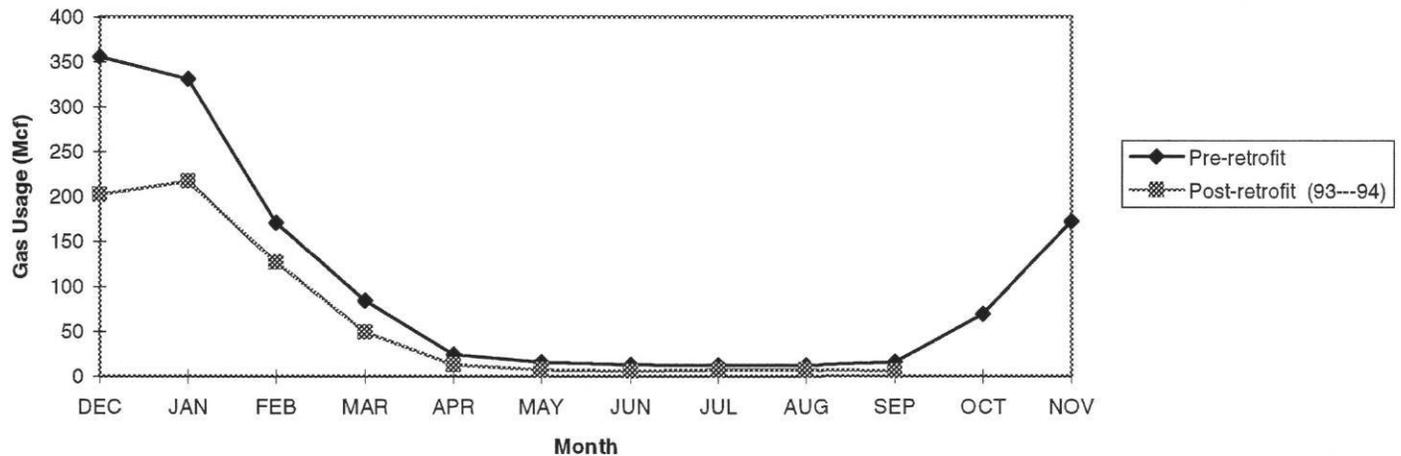


City of Duncanville-----Municipal Service Center

Gas Usage

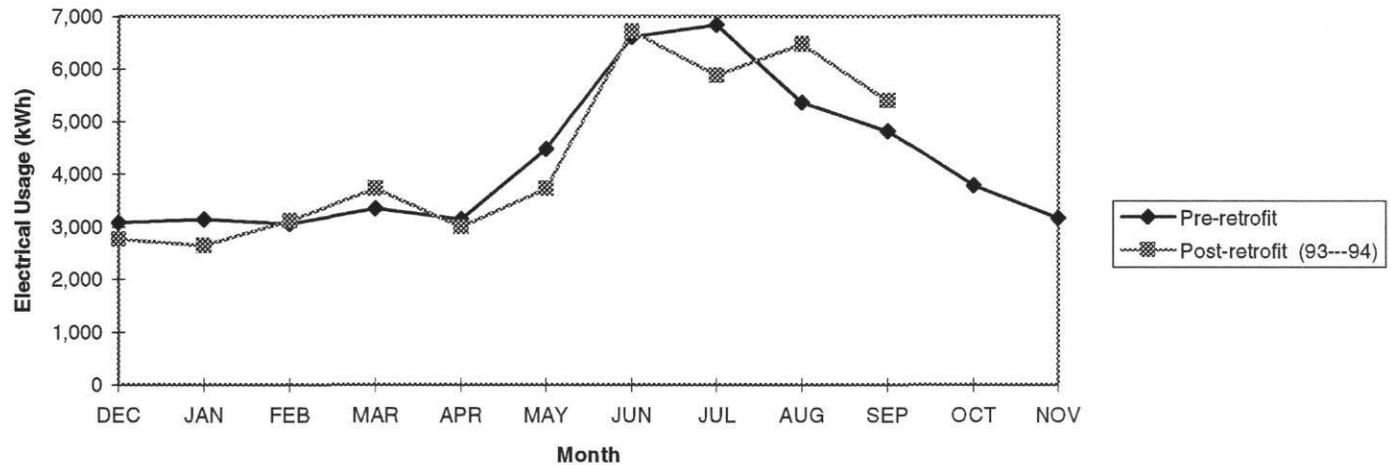
ECRM Description	1.Fixture relamping 2.Timer AC/heat												
Approved Loan Amount	\$112,327(Includes Library,Service center,Senior center,Central fire station,Fire station #2,DPS&FTB,City hall)												
Expected Savings													
Pre-retrofit	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	Total
Mcf Used	356	331	171	84	24	16	13	12	12	16	69	172	1276
Cost	\$1,936	\$1,847	\$ 948	\$ 478	\$ 147	\$ 96	\$ 72	\$ 75	\$ 75	\$ 97	\$ 392	\$ 955	\$ 7,118
Post-retrofit (93---94)													
Mcf Used	202	217	127	49	13	7	6	7	7	6			641
Cost	\$1,065	\$1,150	\$ 688	\$ 278	\$ 81	\$ 44	\$ 41	\$ 42	\$ 43	\$ 39			\$ 3,471
Savings (Mcf)	154	114	44	35	11	9	7	5	5	10			394
Mcf % change	-43%	-34%	-26%	-42%	-46%	-56%	-54%	-42%	-42%	-63%			-31%

City of Duncanville-----Municipal Service Center



ECRM Description	1.Fixture relamping												
	2.Programmable thermostats												
Approved Loan Amount	\$112,327(Includes Library,Service center,Senior center,Central fire station,Fire station #2,DPS&FTB,City hall)												
Expected Savings													
Pre-retrofit	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	Total
kWh Used	3,077	3,147	3,060	3,353	3,144	4,482	6,617	6,847	5,364	4,815	3,780	3,163	50,849
Cost	\$ 242	\$ 243	\$ 237	\$ 255	\$ 275	\$ 379	\$ 536	\$ 562	\$ 452	\$ 410	\$ 287	\$ 239	\$ 4,117
Post-retrofit (93---94)													
kWh Used	2,760	2,640	3,120	3,720	3,000	3,720	6,720	5,880	6,480	5,400			43,440
Cost	\$ 271	\$ 261	\$ 300	\$ 349	\$ 289	\$ 380	\$ 648	\$ 573	\$ 368	\$ 531			\$ 3,970
Savings (kWh)	317	507	-60	-367	144	762	-103	967	-1,116	-585			466
kWh % change	-10%	-16%	2%	11%	-5%	-17%	2%	-14%	21%	12%			-1%

City of Duncanville---Hopkin Senior Center

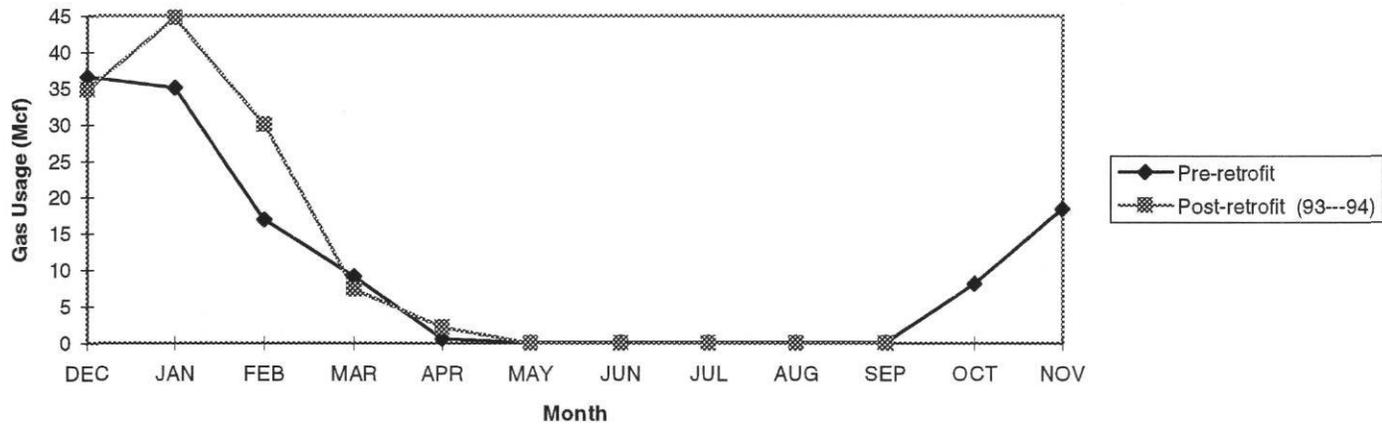


City of Duncanville-----Hopkin Senior Center

Gas Usage

ECRM Description	1.Fixture relamping												
	2.Programmable thermostats												
Approved Loan Amount	\$112,327(Includes Library,Service center,Senior center,Central fire station,Fire station #2,DPS&FTB,City hall)												
Expected Savings													
Pre-retrofit	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	Total
Mcf Used	36.6	35.1	17	9.1	0.6	0.1	0.1	0.1	0.1	0.1	8.2	18.5	125.6
Cost	\$ 210	\$ 203	\$ 100	\$ 60	\$ 14	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 55	\$ 112	\$ 789
Post-retrofit (93---94)													
Mcf Used	34.8	44.7	30.1	7.4	2.2	0	0	0	0	0			119.2
Cost	\$ 192	\$ 246	\$ 173	\$ 51	\$ 23	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7			\$ 720
Savings (Mcf)	1.8	-9.6	-13.1	1.7	-1.6	0.1	0.1	0.1	0.1	0.1			-20.3
Mcf % change	-5%	27%	77%	-19%	267%	-100%	-100%	-100%	-100%	-100%			16%

City of Duncanville-----Hopkin Senior Center

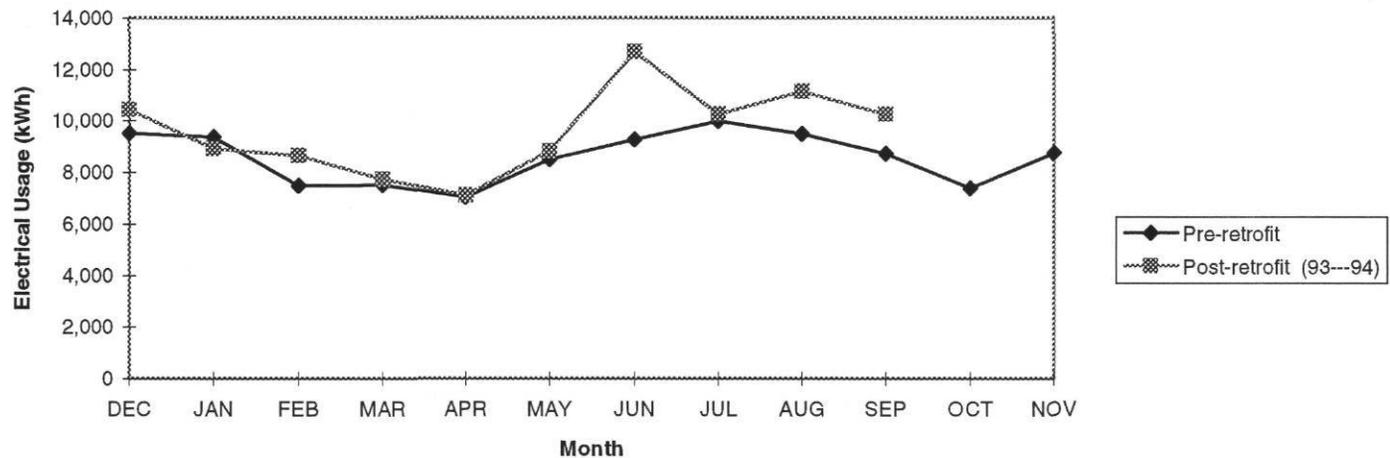


City of Plainview---Fire Station 2

Electrical Usage

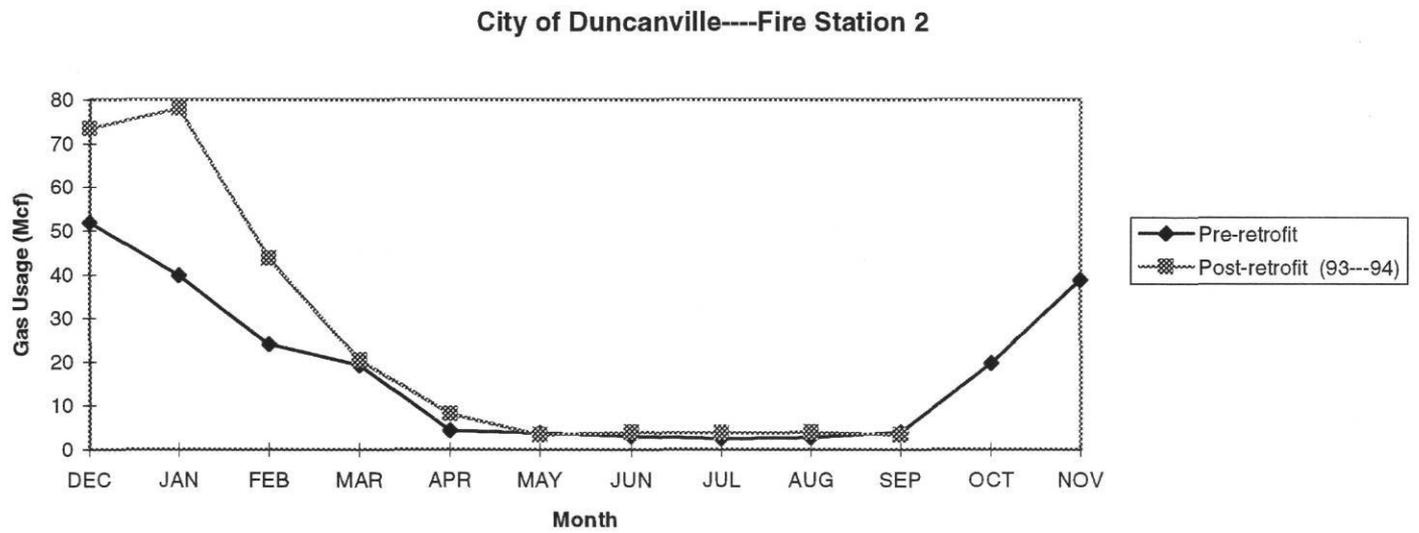
ECRM Description	1.Fixture relamping												
	2.Programmable thermostats												
Approved Loan Amount	\$112,327(Includes Library,Service center,Senior center,Central fire station,Fire station #2,DPS&FTB,City hall)												
Expected Savings													
Pre-retrofit	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	Total
kWh Used	9,526	9,354	7,490	7,509	7,042	8,504	9,262	9,990	9,498	8,713	7,374	8,754	103,016
Cost	\$ 603	\$ 592	\$ 477	\$ 480	\$ 435	\$ 645	\$ 702	\$ 758	\$ 722	\$ 663	\$ 470	\$ 532	\$ 7,079
Post-retrofit (93---94)													
kWh Used	10,440	8,910	8,640	7,740	7,110	8,820	12,690	10,260	11,160	10,260			96,030
Cost	\$5,801	\$5,855	\$5,897	\$5,903	\$5,664	\$5,559	\$6,299	\$5,703	\$4,248	\$5,540			\$56,469
Savings (kWh)	-914	444	-1,150	-231	-68	-316	-3,428	-270	-1,662	-1,547			-9,142
kWh % change	10%	-5%	15%	3%	1%	4%	37%	3%	17%	18%			9%

City of Duncanville---Fire Station 2

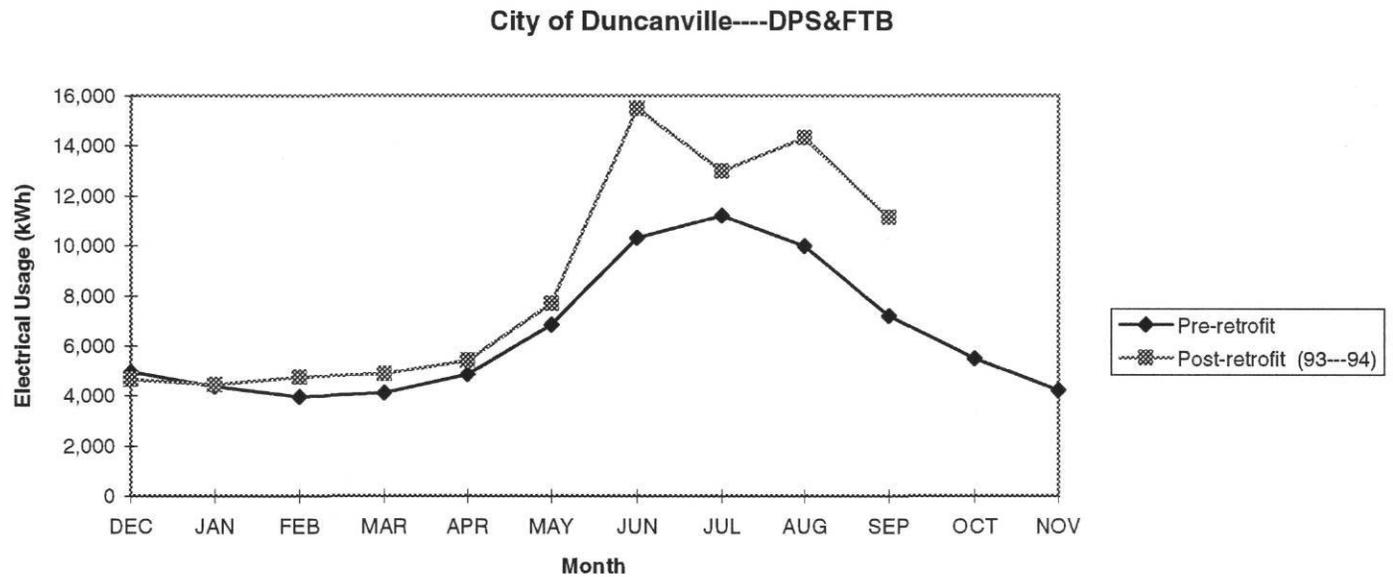


City of Duncanville----Fire Station 2 Gas Usage

ECRM Description	1.Fixture relamping												
	2.Programmable thermostats												
Approved Loan Amount	\$112,327(Includes Library,Service center,Senior center,Central fire station,Fire station #2,DPS&FTB,City hall)												
Expected Savings													
Pre-retrofit	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	Total
Mcf Used	51.9	39.8	24.1	19.2	4.4	3.8	3	2.5	2.8	3.9	19.7	38.8	213.9
Cost	\$ 293	\$ 229	\$ 140	\$ 113	\$ 34	\$ 27	\$ 20	\$ 20	\$ 22	\$ 27	\$ 118	\$ 223	\$ 1,266
Post-retrofit (93---94)													
Mcf Used	73.5	77.9	43.7	20.4	8.2	3.4	4	3.8	4	3.4			242.3
Cost	\$ 394	\$ 421	\$ 246	\$ 123	\$ 56	\$ 24	\$ 29	\$ 27	\$ 29	\$ 25			\$ 1,374
Savings (Mcf)	-21.6	-38.1	-19.6	-1.2	-3.8	0.4	-1	-1.3	-1.2	0.5			-86.9
Mcf % change	42%	96%	81%	6%	86%	-11%	33%	52%	43%	-13%			41%



ECRM Description	1.Fixture relamping												
Approved Loan Amount	\$112,327(Includes Library,Service center,Senior center,Central fire station,Fire station #2,DPS&FTB,City hall)												
Expected Savings													
Pre-retrofit	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	Total
kWh Used	4,957	4,356	3,952	4,109	4,849	6,850	10,314	11,208	9,988	7,198	5,475	4,203	73,256
Cost	\$ 321	\$ 284	\$ 259	\$ 269	\$ 314	\$ 522	\$ 780	\$ 664	\$ 752	\$ 549	\$ 355	\$ 263	\$ 5,332
Post-retrofit (93---94)													
kWh Used	4,644	4,446	4,752	4,878	5,400	7,686	15,480	12,996	14,310	11,124			85,716
Cost	\$ 390	\$ 374	\$ 398	\$ 409	\$ 449	\$ 699	\$1,394	\$1,173	\$ 709	\$1,007			\$ 7,002
Savings (kWh)	313	-90	-800	-769	-551	-836	-5,166	-1,788	-4,322	-3,926			-12,460
kWh % change	-6%	2%	20%	19%	11%	12%	50%	16%	43%	55%			17%

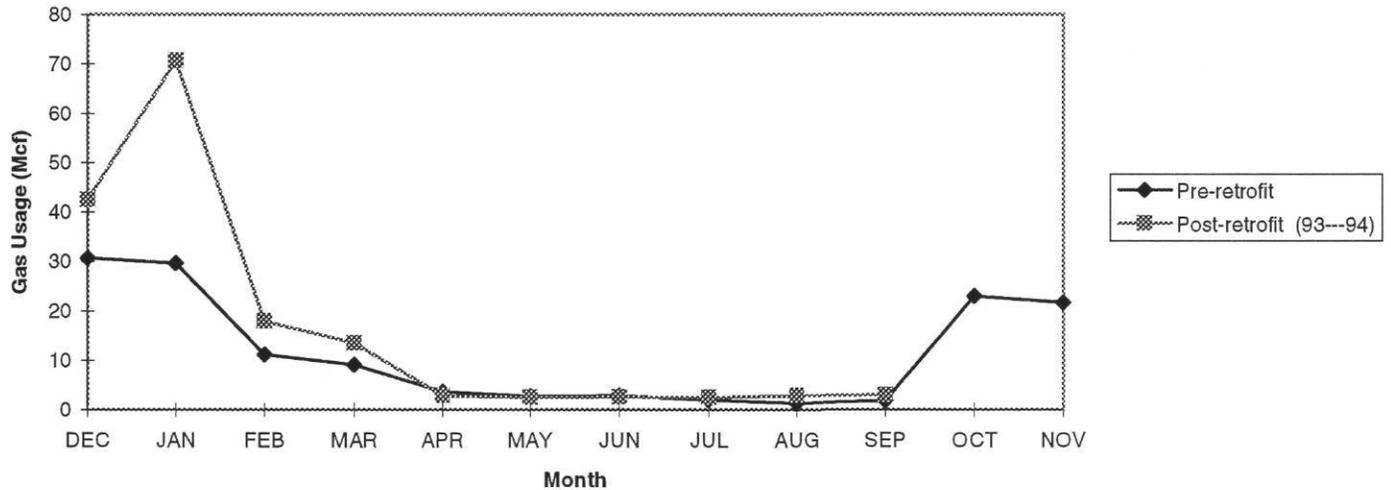


City of Duncanville-----DPS and FTB

Gas Usage

ECRM Description	1.Fixture relamping												
Approved Loan Amount	\$112,327(Includes Library,Service center,Senior center,Central fire station,Fire station #2,DPS&FTB,City hall)												
Expected Savings													
Pre-retrofit	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	Total
Mcf Used	30.7	29.6	11.1	9	3.6	2.7	2.8	1.9	1.3	1.8	22.9	21.6	139
Cost	\$ 177	\$ 173	\$ 69	\$ 60	\$ 30	\$ 21	\$ 21	\$ 17	\$ 13	\$ 16	\$ 137	\$ 129	\$ 863
Post-retrofit (93---94)													
Mcf Used	42.5	70.7	17.9	13.5	2.9	2.5	2.6	2.4	2.8	3			160.8
Cost	\$ 232	\$ 383	\$ 107	\$ 85	\$ 27	\$ 19	\$ 21	\$ 20	\$ 22	\$ 23			\$ 939
Savings (Mcf)	-11.8	-41.1	-6.8	-4.5	0.7	0.2	0.2	-0.5	-1.5	-1.2			-66.3
Mcf % change	38%	139%	61%	50%	-19%	-7%	-7%	26%	115%	67%			48%

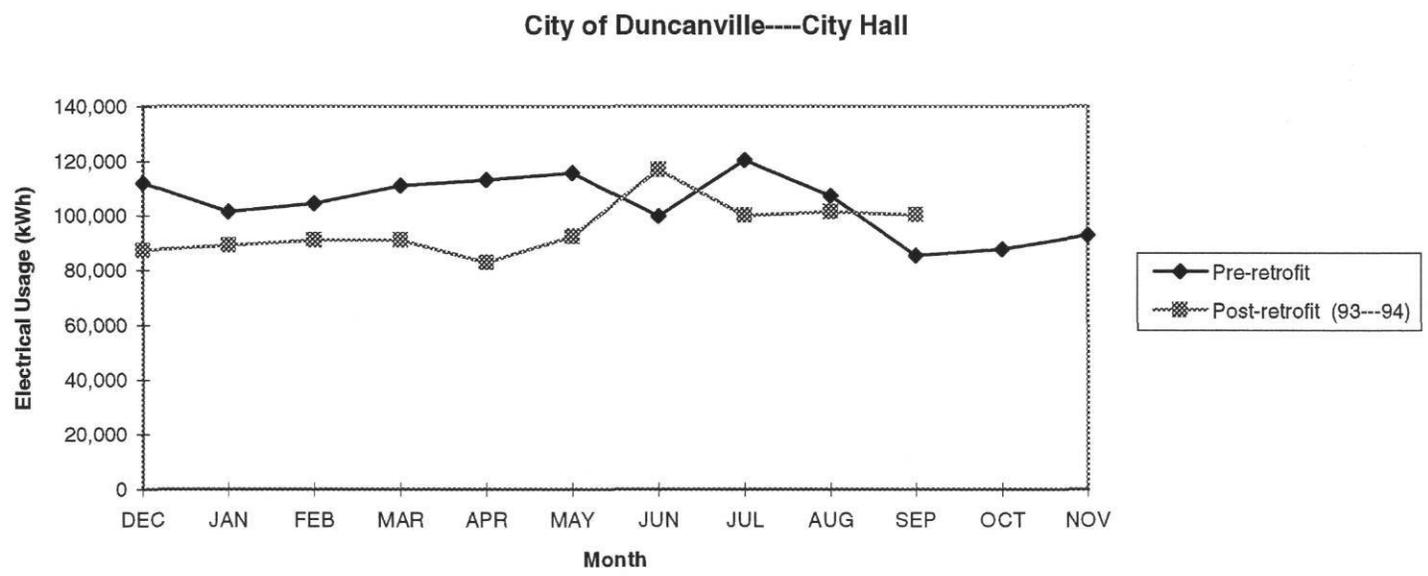
City of Duncanville----DPS&FTB



City of Duncanville---City Hall

Electrical Usage

ECRM Description	1.Fixture relamping												
Approved Loan Amount	\$112,327(Includes Library,Service center,Senior center,Central fire station,Fire station #2,DPS&FTB,City hall)												
Expected Savings													
Pre-retrofit	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	Total
kWh Used	111,965	101,482	104,521	111,019	113,237	115,760	99,757	120,358	107,296	85,488	87,649	92,901	1,251,433
Cost	\$5,705	\$5,443	\$5,531	\$5,739	\$5,892	\$6,142	\$5,357	\$6,457	\$6,294	\$4,964	\$4,716	\$5,197	\$ 67,437
Post-retrofit (93---94)													
kWh Used	87,210	89,190	90,945	91,035	82,800	92,430	116,910	100,080	101,520	100,260			952,380
Cost	\$5,801	\$5,855	\$5,897	\$5,903	\$5,664	\$5,559	\$6,299	\$5,703	\$4,248	\$5,540			\$ 56,469
Savings (kWh)	24,755	12,292	13,576	19,984	30,437	23,330	-17,153	20,278	5,776	-14,772			118,503
kWh % change	-22%	-12%	-13%	-18%	-27%	-20%	17%	-17%	-5%	17%			-9%



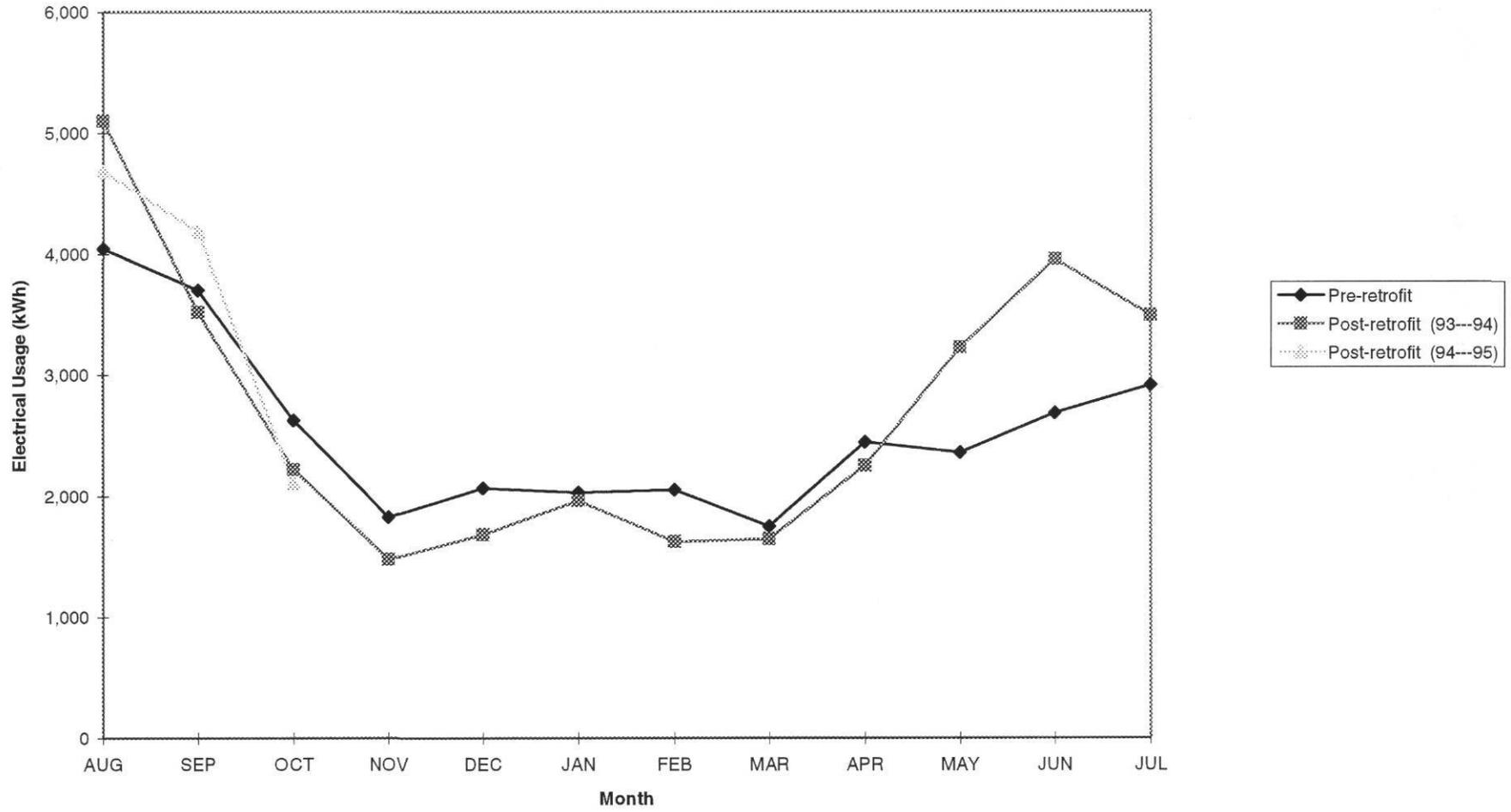
Nocona ISD---Administration Building

Electrical Usage

ECRM Description	1.Fixture relamping												
Approved Loan Amount	\$77,996 (Includes Administration Building,Elementary School,Middle School and High School)												
Expected Savings	\$17,249/yr												
Pre-retrofit	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	Total
kWh Used	4,045	3,702	2,629	1,828	2,066	2,031	2,053	1,750	2,445	2,361	2,684	2,916	30,510
Cost	\$ 419	\$ 367	\$ 273	\$ 204	\$ 224	\$ 229	\$ 219	\$ 194	\$ 260	\$ 245	\$ 280	\$ 315	\$ 3,229
Post-retrofit (93---94)													
kWh Used	5,098	3,521	2,221	1,479	1,680	1,961	1,623	1,646	2,250	3,229	3,958	3,494	32,160
Cost	\$ 512	\$ 372	\$ 248	\$ 163	\$ 184	\$ 207	\$ 176	\$ 192	\$ 246	\$ 338	\$ 403	\$ 369	\$ 3,410
Savings (kWh)	-1,053	181	408	349	386	70	430	104	195	-868	-1,274	-578	-1,650
kWh % change	26%	-5%	-16%	-19%	-19%	-3%	-21%	-6%	-8%	37%	47%	20%	5%
Post-retrofit (94---95)													
kWh Used	4,685	4,188	2,109										
Cost	\$ 468	\$ 448	\$ 232										
Savings (kWh)	-640	-486	520										
kWh % change	16%	13%	-20%										

Nocona ISD---Administration Building

Electrical Usage

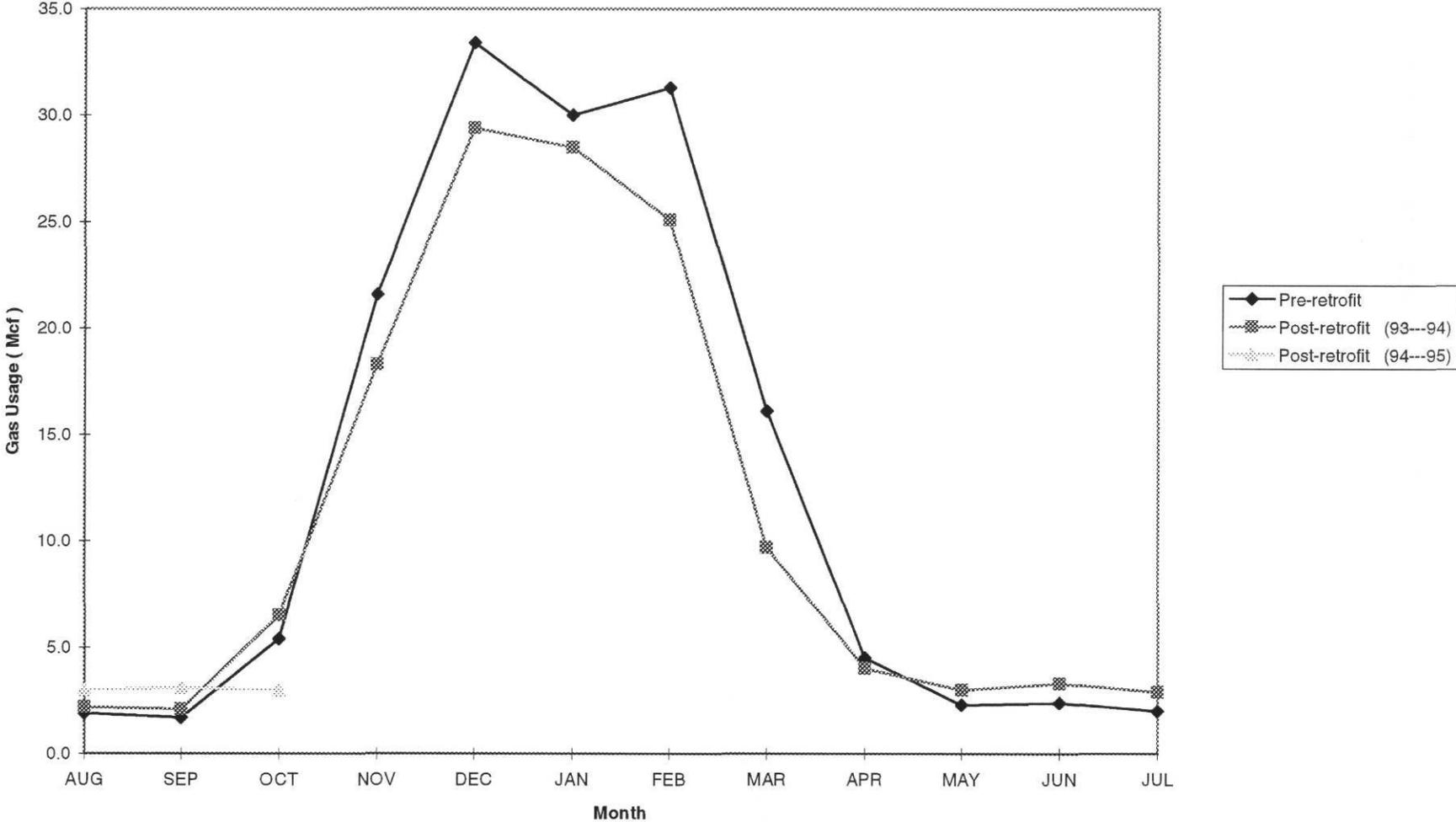


Nocona ISD-----Administration Building

Gas Usage

ECRM Description	1.Fixture relamping												
Approved Loan Amount	\$77,996 (Includes Administration Building,Elementary School,Middle School and High School)												
Expected Savings	\$17,249/yr												
Pre-retrofit	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	Total
Mcf Used	1.9	1.7	5.4	21.6	33.4	30.0	31.3	16.1	4.5	2.3	2.4	2.0	152.6
Cost	\$ 17	\$ 16	\$ 42	\$ 136	\$ 205	\$ 184	\$ 185	\$ 99	\$ 36	\$ 19	\$ 20	\$ 18	\$ 977
Post-retrofit (93---94)													
Mcf Used	2.2	2.1	6.5	18.3	29.4	28.5	25.1	9.7	4.0	3.0	3.3	2.9	135.0
Cost	\$ 19	\$ 19	\$ 49	\$ 113	\$ 170	\$ 166	\$ 151	\$ 66	\$ 34	\$ 23	\$ 26	\$ 23	\$ 859
Savings (Mcf)	0	0	-1	3	4	2	6	6	1	-1	-1	-1	18
Mcf % change	16%	24%	20%	-15%	-12%	-5%	-20%	-40%	-11%	30%	38%	45%	-12%
Post-retrofit (94---95)													
Mcf Used	3.0	3.1	3.0										
Cost	\$ 24	\$ 24	\$ 29										
Savings (Mcf)	-1	-1	2										
Mcf % change	58%	82%	-44%										

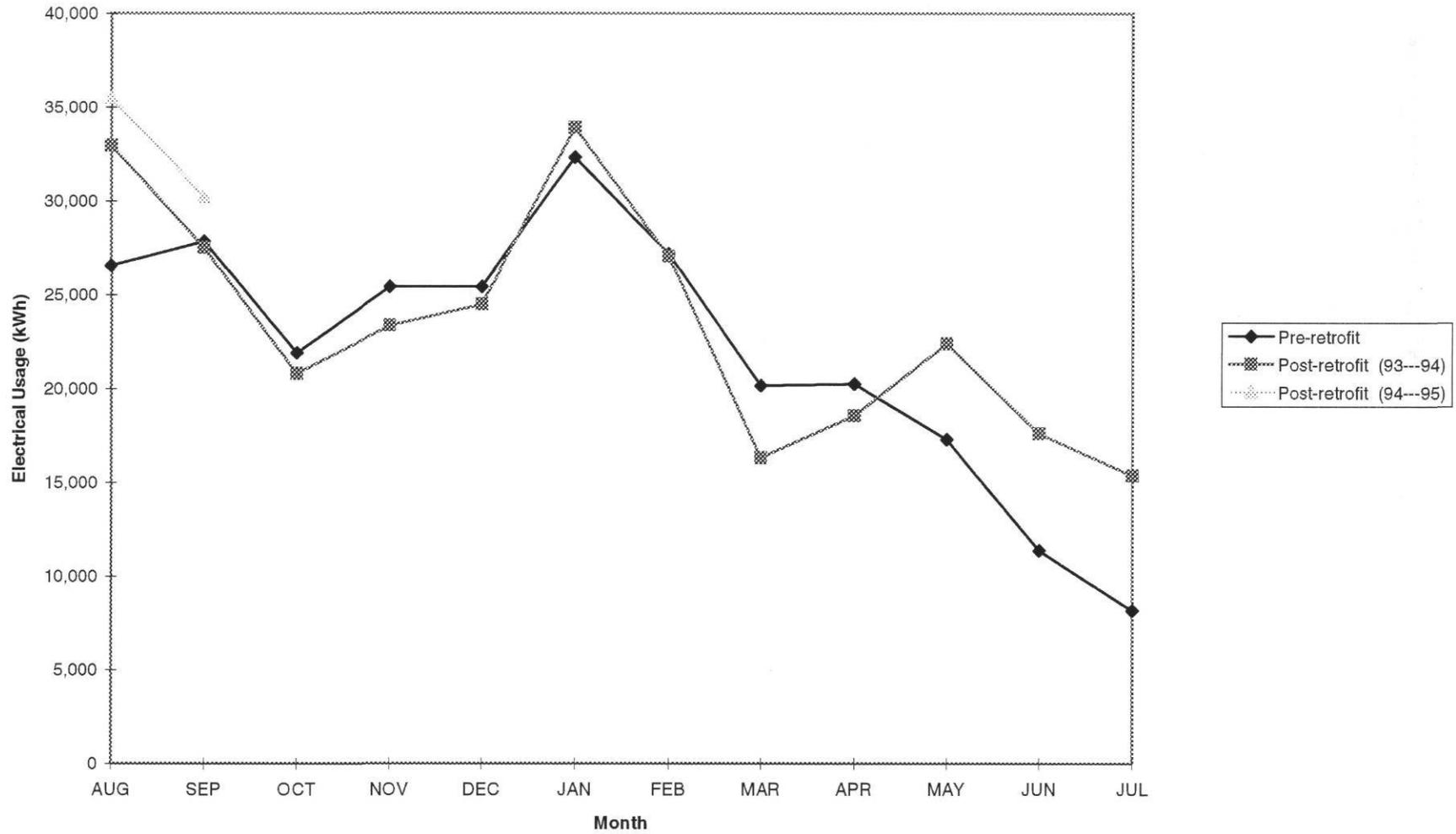
Nocona ISD-----Administration Building Gas Usage



ECRM Description	1.Fixture relamping												
	2.Exterior lighting control												
	3.Interior lighting control												
	4.Window solar gain control												
	5.Window infiltration reduction												
	6.Enhance wall insulation												
Approved Loan Amount	\$77,996 (Includes Administration Building,Elementary School,Middle School and High School)												
Expected Savings	\$17,249/yr												
Pre-retrofit	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	Total
kWh Used	26,560	27,840	21,920	25,440	25,440	32,320	27,200	20,160	20,240	17,280	11,360	8,160	263,920
Cost	\$2,757	\$2,902	\$2,304	\$2,753	\$2,738	\$3,449	\$2,805	\$2,115	\$2,102	\$1,755	\$1,170	\$ 840	\$27,690
Post-retrofit (93---94)													
kWh Used	32,960	27,520	20,800	23,360	24,480	33,920	27,040	16,320	18,560	22,400	17,600	15,360	280,320
Cost	\$3,355	\$2,837	\$2,216	\$2,438	\$2,548	\$3,530	\$2,801	\$1,733	\$1,923	\$2,312	\$1,787	\$1,591	\$29,071
Savings (kWh)	-6,400	320	1,120	2,080	960	-1,600	160	3,840	1,680	-5,120	-6,240	-7,200	-16,400
kWh % change	24%	-1%	-5%	-8%	-4%	5%	-1%	-19%	-8%	30%	55%	88%	6%
Post-retrofit (94---95)													
kWh Used	35,520	30,240											
Cost	\$3,458	\$3,088											
Savings (kWh)	-8,960	-2,400											
kWh % change	34%	9%											

Nocona ISD---Elementary School

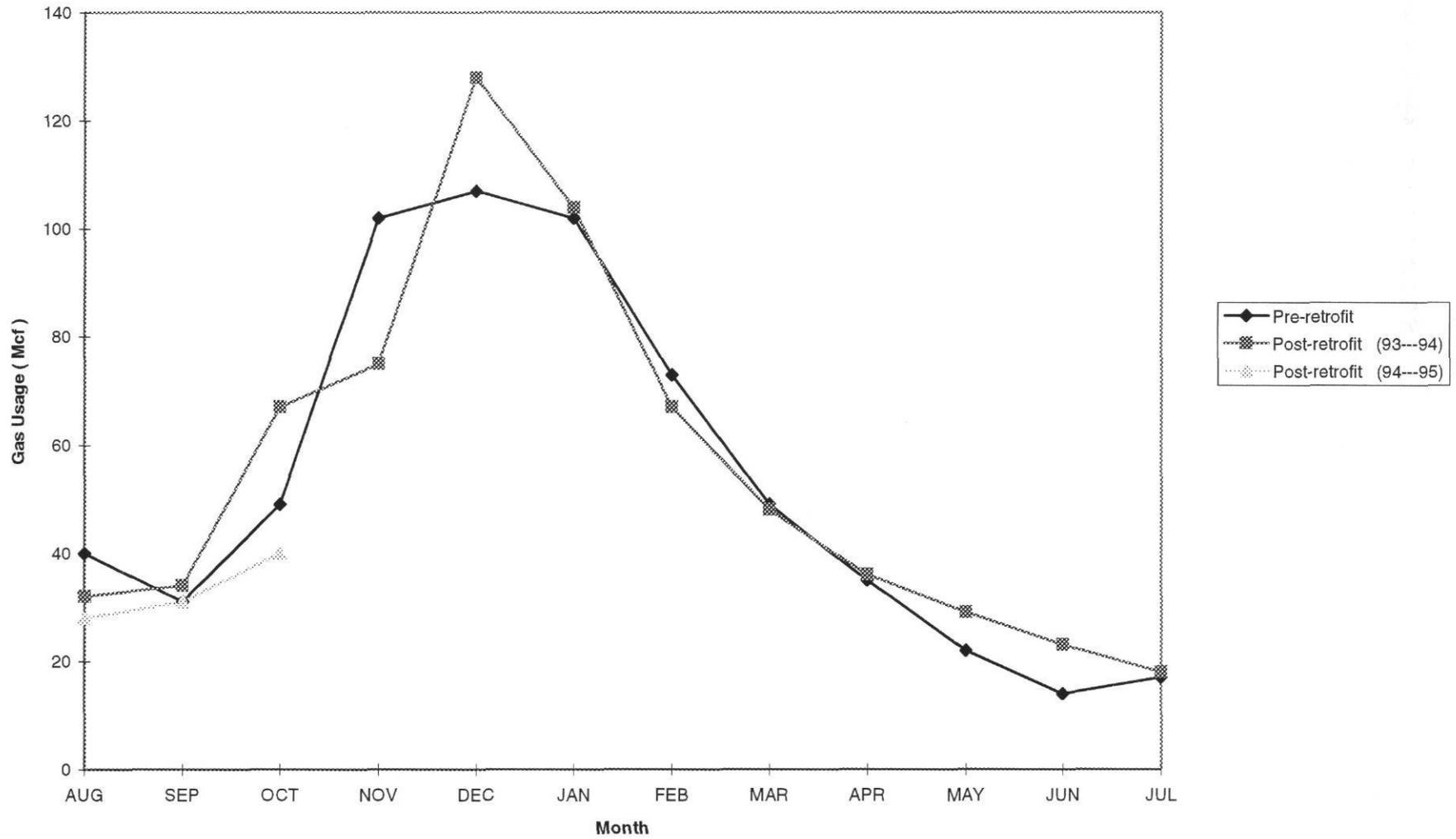
Electrical Usage



Nocona ISD----Elementary School Gas Usage

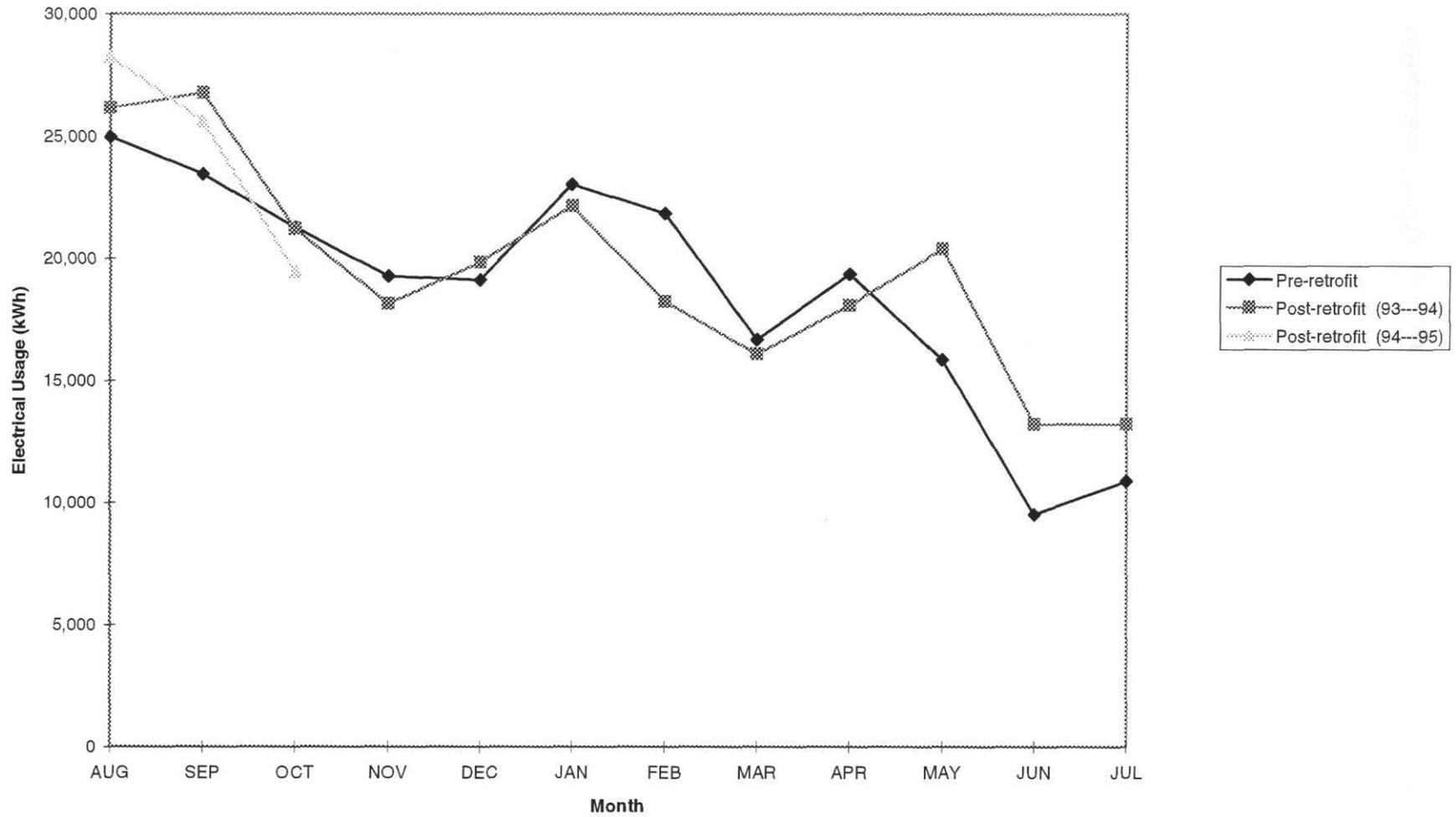
ECRM Description	1.Fixture relamping												
	2.Exterior lighting control												
	3.Interior lighting control												
	4.Window solar gain control												
	5.Window infiltration reduction												
	6.Enhance wall insulation												
Approved Loan Amount	\$77,996 (Includes Administration Building,Elementary School,Middle School and High School)												
Expected Savings	\$17,249/yr												
Pre-retrofit	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	Total
Mcf Used	40	31	49	102	107	102	73	49	35	22	14	17	641
Post-retrofit (93---94)													
Mcf Used	32	34	67	75	128	104	67	48	36	29	23	18	661
Savings (Mcf)	8	-3	-18	27	-21	-2	6	1	-1	-7	-9	-1	-20
Mcf % change	-20%	10%	37%	-26%	20%	2%	-8%	-2%	3%	32%	64%	6%	3%
Post-retrofit (94---95)													
Mcf Used	28	31	40										
Savings (Mcf)	12	0	9										
Mcf % change	-30%	0%	-18%										

Nocona ISD-----Elementary School Gas Usage



ECRM Description	1.Fixture relamping												
	2.Exterior lighting control												
	3.Interior lighting control												
Approved Loan Amount	\$77,996 (Includes Administration Building,Elementary School,Middle School and High School)												
Expected Savings	\$17,249/yr												
Pre-retrofit	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	Total
kWh Used	24,960	23,440	21,280	19,280	19,120	23,040	21,840	16,680	19,360	15,840	9,520	10,880	225,240
Cost	\$2,419	\$2,379	\$2,048	\$1,979	\$2,014	\$2,463	\$2,208	\$1,663	\$1,957	\$1,609	\$ 967	\$1,105	\$22,811
Post-retrofit (93---94)													
kWh Used	26,160	26,800	21,200	18,160	19,840	22,160	18,240	16,080	18,080	20,400	13,200	13,200	233,520
Cost	\$2,304	\$2,535	\$1,949	\$1,910	\$2,076	\$2,289	\$1,872	\$1,654	\$1,809	\$2,009	\$1,316	\$1,316	\$23,039
Savings (kWh)	-1,200	-3,360	80	1,120	-720	880	3,600	600	1,280	-4,560	-3,680	-2,320	-8,280
kWh % change	5%	14%	0%	-6%	4%	-4%	-16%	-4%	-7%	29%	39%	21%	4%
Post-retrofit (94---95)													
kWh Used	28,240	25,600	19,440										
Cost	\$1,376	\$2,552	\$1,822										
Savings (kWh)	-3,280	-2,160	1,840										
KWh % change	13%	9%	-9%										

Nocona ISD---Middle School Electrical Usage

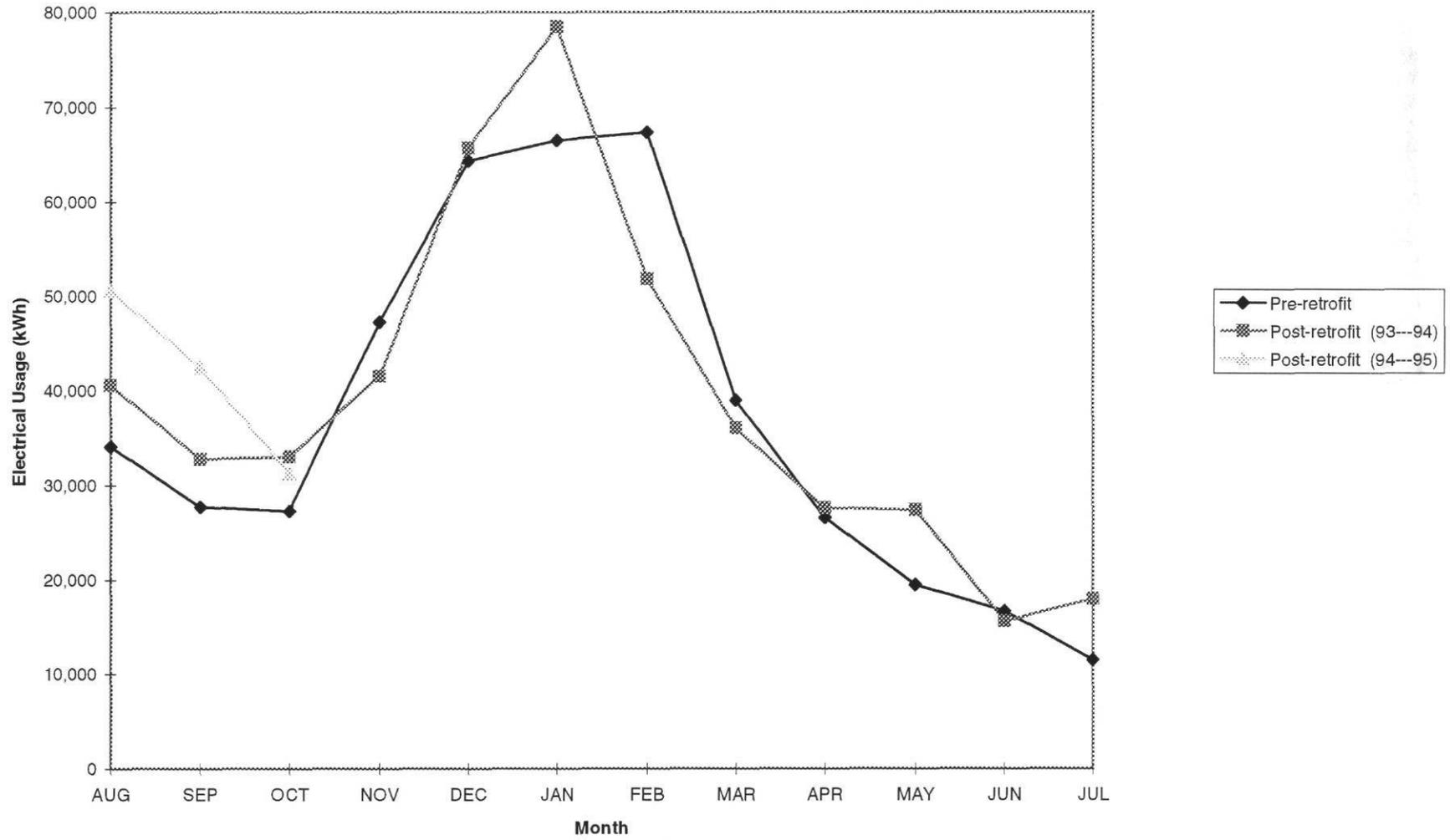


Nocona ISD----High School Electrical Usage

ECRM Description	1.Fixture relamping												
	2.Exterior lighting control												
	3.Interior lighting control												
Approved Loan Amount	\$77,996 (Includes Administration Building,Elementary School,Middle School and High School)												
Expected Savings	\$17,249/yr												
Pre-retrofit	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	Total
kWh Used	34,080	27,720	27,240	47,280	64,320	66,480	67,320	39,000	26,580	19,440	16,680	11,520	447,660
Cost	\$3,493	\$2,934	\$2,858	\$4,538	\$5,570	\$6,021	\$6,009	\$3,693	\$2,774	\$2,013	\$1,694	\$1,169	\$42,766
Post-retrofit (93---94)													
kWh Used	40,560	32,760	33,000	41,520	65,640	78,480	51,840	36,000	27,600	27,360	15,600	18,000	468,360
Cost	\$3,552	\$3,260	\$3,196	\$3,858	\$5,752	\$6,805	\$4,978	\$3,675	\$2,844	\$2,670	\$1,586	\$1,862	\$44,038
Savings (kWh)	-6,480	-5,040	-5,760	5,760	-1,320	-12,000	15,480	3,000	-1,020	-7,920	1,080	-6,480	-20,700
kWh % change	19%	18%	21%	-12%	2%	18%	-23%	-8%	4%	41%	-6%	56%	5%
Post-retrofit (94---95)													
kWh Used	50,520	42,480	31,240										
Cost	\$4,569	\$4,118	\$2,868										
Savings (kWh)	-16,440	-14,760	-4,000										
kWh % change	48%	53%	15%										

Nocona ISD---High School

Electrical Usage



Nocona ISD----Middle and High School Electrical Usage

ECRM Description	1.Fixture relamping												
	2.Exterior lighting control												
	3.Interior lighting control												
Approved Loan Amount	\$77,996 (Includes Administration Building,Elementary School,Middle School and High School)												
Expected Savings	\$17,249/yr												
Pre-retrofit	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	Total
Mcf Used	43	45	108	377	419	406	258	160	54	28	17	21	1,936
Post-retrofit (93---94)													
Mcf Used	45	46	247	294	445	399	284	164	64	51	18	23	2,080
Savings (Mcf)	-2	-1	-139	83	-26	7	-26	-4	-10	-23	-1	-2	-144
Mcf % change	5%	2%	129%	-22%	6%	-2%	10%	3%	19%	82%	6%	10%	7%
Post-retrofit (94---95)													
Mcf Used	42	48	146										
Savings (Mcf)	1	-3	-38										
Mcf % change	-2%	7%	35%										

Nocona ISD-----High School and Middle School Gas Usage

