



**Helping Cities Nationwide**

**City of Pflugerville**



# AGENDA

-  **Linc Services**
-  **City of Pflugerville Key Initiatives**
-  **Linc Service's Fiscal Planning Advantage**
-  **Viability of Program for City**
-  **Solution Timeline**

# The Linc Advantage

## THE Linc Group



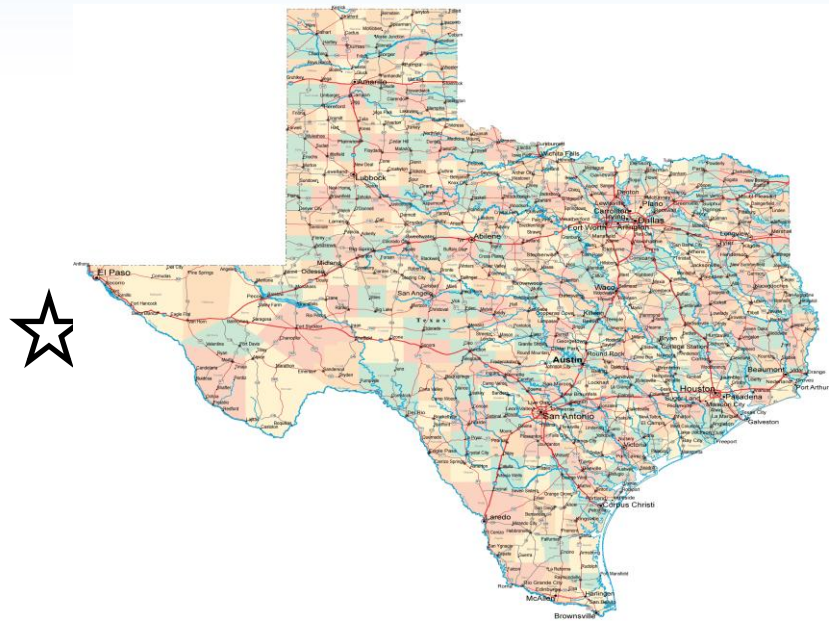
- ✓ Over 16,000 customers nationwide
- ✓ Over 1 Billion Square Feet of Space Managed
- ✓ Utilize local in-house personnel for projects & service
- ✓ Over 300 Locations
- ✓ *Low Overhead/Cost Effective Solutions*

- ✓ We are not a Product Manufacturer
- ✓ Best Solutions
- ✓ Unparalleled technical capabilities
- ✓ Our Core Business is Facilities
- ✓ Shared Expertise and Best Practices

**Renovate - Operate – Maintain**

## Local Organization

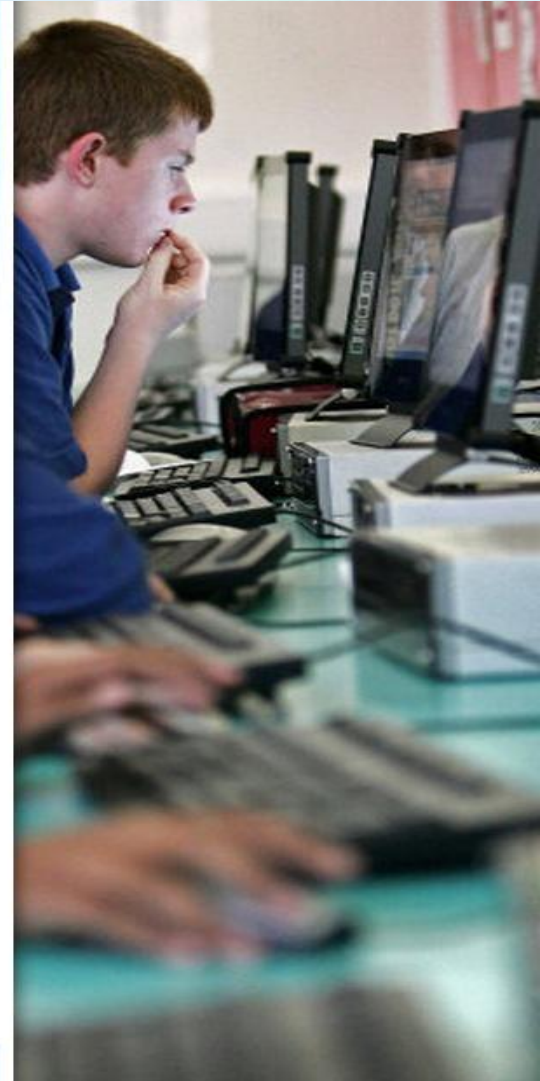
- ✓ Offices in Houston, Dallas, Austin, San Antonio, Lubbock, Odessa, Midland, Amarillo, El Paso, and Brownsville
- ✓ TX employees exceed 600
- ✓ 470 TX clients
- ✓ In-house capabilities
- ✓ 1968 opened our first office in Texas
- ✓ Over 43 years of service to the TX marketplace.





## How We Help Our Customers

- ✓ Provide Capital Improvement Funding through your existing Operating Budgets
- ✓ Strategic Equipment Asset Management
- ✓ Create Lower Operating Profiles
- ✓ Provide Sustainability to our Customers Portfolio – **“Going Green”**



## City of Pflugerville Key Initiatives

- Review and recommend street lighting updates with Oncor and electric supplier
- Analysis city facilities for energy efficiency, lighting, HVAC, water, gas, rates, maintenance, IAQ
- Review city parks for lighting, security, pumps
- Review existing solar applications for efficiency

- **Budgets**
- **Annual City Utility Records**
- **Financial Records**
- **Facility Improvement Needs/Plans**
- **Capital Improvement Plans**
- **Unfunded Needs**
- **Utility Contracts**
- **Access To Facilities/Personnel**
- **And More...**

## City Parks

- **Lighting Retrofits**
- **HVAC Replacements**
- **Controls**
- **VFDs**
- **Retrocommissioning**
- **EV Station**





## Justice Center

- **Lighting Retrofits**
- **Boiler Replacement**
- **Controls**
- **Retrocommissioning**
- **EV Stations**



## City Hall Complex

- **Occ Sensors/Lighting**
- **HVAC replacements**
- **Controls**
- **Retrocommissioning**
- **EV Stations**



## Library

- **Lighting Retrofits**
- **Ciralites**
- **Retrocommissioning**
- **EV Stations**





## Recreation Center

- **Min. Lighting Retrofits**
- **Controls**
- **HVAC replacements**
- **Retrocommissioning**
- **EV Stations**





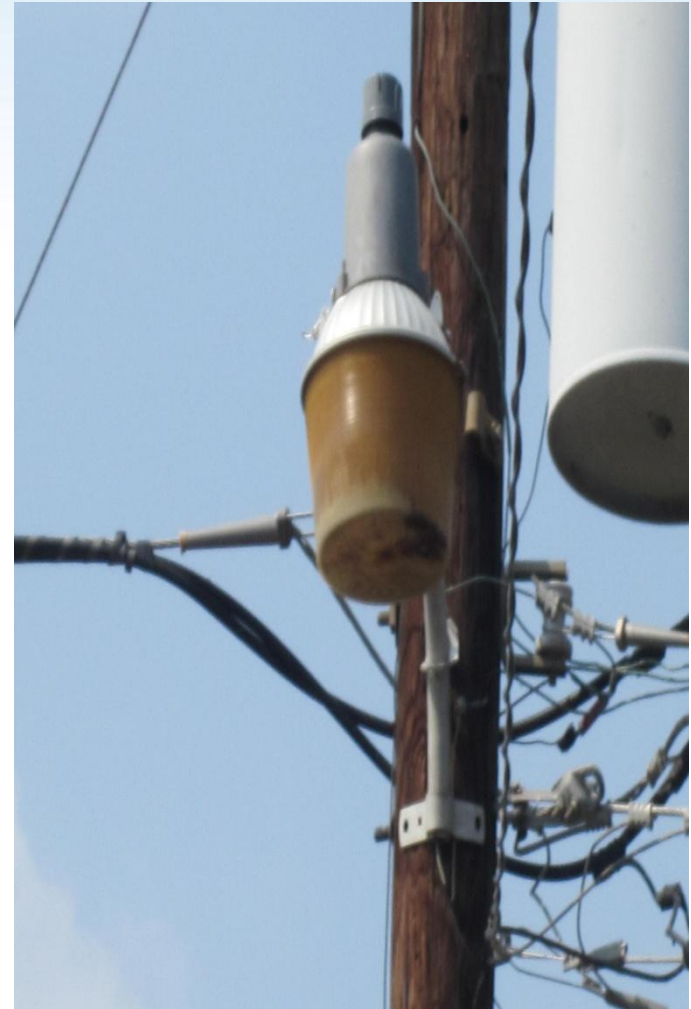
## Wastewater/Water Treatment

- **Lighting Retrofits**
- **Retrocommissioning**
- **HVAC Replacement**
- **Controls**



## Streetlights *Phase II*

- **Owned by Oncor**
- **Change all streetlights to same wattage/class**
- **Add streetlights to dark areas/security areas**





# The Linc Advantage

Location	Measure	Energy Savings (MMBtu/yr)	Energy Savings (kWh/yr)	Fuel Rate (\$/MMBTU)	Electric Rate (\$/kwh +TDSP)	Energy Cost Savings (\$/yr) (calculated)	Source	Notes
Suite 100, Utility Billing and Finance	ECM-1: Lighting Retrofit		2567	\$ -	0.13	345	DKO	Rebates not included, assuming 30% savings from Occupancy Sensors, see lighting usage check.xls. Also assumed 50% of lighting load is in the office space., 6 occ sensors
Suite 100, Utility Billing and Finance	ECM-2: Retrocommissioning		2140	\$ -	0.13	288	DKO	Existing split systems, heat pumps, 12 years
Suite 100, Utility Billing and Finance	ECM-3: Controls Upgrade		13091	\$ -	0.13	1,762	DKO	Linc Mechanical Honeywell Control, Start/Stop
Suite 100, Utility Billing and Finance	ECM-5: HVAC Replacement		2864	\$ -	0.13	385	DKO	Linc Mechanical, replacement of (1) 4 ton unit, SEER 15.7
Suite 100, Utility Billing and Finance	ECM-19: EV Charging stations		-8640	\$ -	0.13	-1,163	DKO/MJ	Michael Jones, Coulomb, 3 EV charging stations on Main street at City Hall
Suite 200, Building Inspection	ECM-1: Lighting Retrofit		5709	\$ -	0.11	633	DKO	Rebates not included, assuming 30% savings from Occupancy Sensors, see lighting usage check.xls. Also assumed 50% of lighting load is in the office space., 9 occ sensors
Suite 200, Building Inspection	ECM-2: Retrocommissioning		4758	\$ -	0.11	528	DKO	Existing split systems, heat pumps, 12 years
Suite 200, Building Inspection	ECM-3: Controls Upgrade		17766	\$ -	0.11	1,971	DKO	Linc Mechanical Honeywell Control, Start/Stop
Suite 200, Building Inspection	ECM-5: HVAC Replacement		7026	\$ -	0.11	779	DKO	Linc Mechanical, replacement of (2) 3 ton units, SEER 15.7
Suite 300/400, City Manager/Planning	ECM-1: Lighting Retrofit		3572	\$ -	0.15	526	DKO	Rebates not included, assuming 30% savings from Occupancy Sensors, see lighting usage check.xls. Also assumed 50% of lighting load is in the office space., 14 occ sensors
Suite 300/400, City Manager/Planning	ECM-2: Retrocommissioning		2977	\$ -	0.15	438	DKO	Existing split systems, heat pumps, 12 years
Suite 300/400, City Manager/Planning	ECM-3: Controls Upgrade		10779	\$ -	0.15	1,588	DKO	Linc Mechanical Honeywell Control, Start/Stop
Suite 300/400, City Manager/Planning	ECM-5: HVAC Replacement		3983	\$ -	0.15	587	DKO	Linc Mechanical, replacement of (1) 3 ton unit and (1) 4 ton unit, SEER 15.7, replacing 2.5 and 3.5 ton unit
Suite 500 City Council Chambers, Training Bldg	ECM-1: Lighting Retrofit		1192	\$ -	0.13	161	DKO	Rebates not included, assuming 30% savings from Occupancy Sensors, see lighting usage check.xls. Also assumed 50% of lighting load is in the office space., 2 occ sensors



# The Linc Advantage

Suite 500 City Council Chambers, Training Bldg	ECM-1: Lighting Retrofit		1192	\$ -	0.13	161	DKO	Rebates not included, assuming 30% savings from Occupancy Sensors, see lighting usage check.xls. Also assumed 50% of lighting load is in the office space., 2 occ sensors
Suite 500 City Council Chambers, Training Bldg	ECM-2: Retrocommissioning		0	\$ -	0.13	0	DKO	replacement of both HVAC units, no RCX
Suite 500 City Council Chambers, Training Bldg	ECM-3: Controls Upgrade		1493	\$ -	0.13	201	DKO	Linc Mechanical Honeywell Control, Start/Stop
Suite 500 City Council Chambers, Training Bldg	ECM-5: HVAC Replacement		2341	\$ -	0.13	316	DKO	Linc Mechanical, replacement of (1) 2 ton 16.5 SEER unit and (1) 5 ton SEER 15.7 unit
Library	ECM-1: Lighting Retrofit		73012	\$ -	0.10	7,283	LLE	Rebates included, new addition breaking ground in July 2011, limited HVAC involvement, Ciralight skylight possibility at Library,
Library	ECM-2: Retrocommissioning		0	\$ -	0.10	0	DKO	no RCX, demo of existing HVAC units, new addition
Library	ECM-18: Skylight		17105		0.10	1,706	DKO	\$2,800-3,000 per unit installed, per Cliff Keddie, assume 15 skylights, 90,117-73,012=17,105, reduced annual burn time to 1,456 hrs
Library	ECM-19: EV Charging stations		-3600	\$ -	0.10	-359	DKO	2 EV charging stations
Recreation Center	ECM-1: Lighting Retrofit		61821	\$ -	0.10	6,164	LLE	Rebates not included
Recreation Center	ECM-2: Retrocommissioning			\$ -	0.10	0	DKO	no RCX, proposing replacement of existing HVAC units
Recreation Center	ECM-3: Controls Upgrade		8587	\$ -	0.10	856	DKO	Linc Mechanical Honeywell Control, Start/Stop, economizer, demand control ventilation
Recreation Center	ECM-5: HVAC Replacement		22294	\$ -	0.10	2,223	DKO	Linc Mechanical, replacement of 80.5 Tons to SEER 13 units
Recreation Center	ECM-19: EV Charging stations		-8760	\$ -	0.10	-873	DKO	2 EV charging stations
Justice Center/Police Department	ECM-1: Lighting Retrofit		154872	\$ 6.73	0.09	14,170	LLE	Rebates not included
Justice Center/Police Department	ECM-2: Retrocommissioning		58607	\$ 6.73	0.09	5,362	DKO	Existing split systems, heat pumps, 12 years
Justice Center/Police Department	ECM-3: Controls Upgrade		197120	\$ 6.73	0.09	18,036	DKO	Linc Mechanical Honeywell Control, Start/Stop
Justice Center/Police Department	ECM-4: Boiler Retrofit	527		\$ 6.73	0.09	3,546	DKO	Current 85 % boiler, 12 yrs old (assumed currently at 80% efficiency), to new boiler assuming 80% to 95% new boiler efficiency
Justice Center/Police Department	ECM-19: EV Charging stations		-2880	\$ 6.73	0.09	-264	DKO	2 EV charging station





# The Linc Advantage

Windermere Pool, VFD, HOA	ECM-1: Lighting Retrofit		22469	\$ -	0.10	2,247	LLE	Rebates not included
Windermere Pool, VFD, HOA	ECM-2: Retrocommissioning		960	\$ -	0.13	120	DKO	2 (3) ton
Windermere Pool, VFD, HOA	ECM-3: Controls Upgrade		1280	\$ -	0.13	160	DKO	Linc Mechanical Honeywell Control, Start/Stop
Gilleland Creek Pool/Park, open all year, 20 HP	ECM-1: Lighting Retrofit		22469	\$ 7.18	0.10	2,247	LLE	Rebates not included
Gilleland Creek Pool/Park, open all year, 20 HP	ECM-2: Retrocommissioning		0	\$ 7.18	0.10	0	DKO	no RCX, proposing replacement of existing HVAC units
Gilleland Creek Pool/Park, open all year, 20 HP	ECM-3: Controls Upgrade		41214	\$ 7.18	0.10	3,961	DKO	VFD on 20 hp pump, assumed 1/3 of annual pump energy usage at 120,000 kWh/yr, assuming 80% estimated average flow and 168 hrs/wk; <a href="http://www.alliantenergy.com/UtilityServices/ForYourBusiness/EnergyExpertise/EnergySafety/010794">http://www.alliantenergy.com/UtilityServices/ForYourBusiness/EnergyExpertise/EnergySafety/010794</a> ; also included is StartStop for office HVAC 4 ton unit, 1214 kWh/yr
Gilleland Creek Pool/Park, open all year, 20 HP	ECM-5: HVAC Replacement		2610	\$ 7.18	0.10	251	DKO	Linc Mechanical, replacement of (1) 4 ton unit, SEER 15.7
Menzter Pool, water feature, 30 HP, 7.5 HP 24/7	ECM-1: Lighting Retrofit		22469	\$ -	0.10	2,247	LLE	Rebates not included
Menzter Pool, water feature, 30 HP, 7.5 HP 24/7	ECM-3: Controls Upgrade		8586	\$ -	0.13	1,147	DKO	VFD on 7.5 hp pump, assumed 1/3 of annual pump energy usage at 24,000 kWh/yr. Also verified with website: assuming 90% estimated average flow and 168 hrs/wk; see website <a href="http://www.alliantenergy.com/UtilityServices/ForYourBusiness/EnergyExpertise/EnergySafety/010794">http://www.alliantenergy.com/UtilityServices/ForYourBusiness/EnergyExpertise/EnergySafety/010794</a> ; also included is StartStop for office HVAC 2.5 ton unit, 540 kWh/yr
Menzter Pool, water feature, 30 HP, 7.5 HP 24/7	ECM-19: EV Charging stations		-3600	\$ -	0.13	-481	DKO	2 EV charging stations
Heritage Red Barn	ECM-1: Lighting Retrofit		1	\$ -	0.14	0	LLE	Rebates not included
Pflugler Park	ECM-1: Lighting Retrofit		1000	\$ -	0.10	100	LLE	Rebates not included
North Shore Park, Restrooms, rental pavillion	ECM-1: Lighting Retrofit		1000	\$ -	0.10	100	LLE	Rebates not included



# The Linc Advantage

Streetlights	ECM-1: Lighting Retrofit		98033	\$ -	0.074	72,312	LLE	Rebates not included
Wastewater Treatment Plant, Bio Building/Offices	ECM-1: Lighting Retrofit		67842	\$ -	0.11	7,741	LLE	Rebates not included
Wastewater Treatment Plant, Bio Building/Offices	ECM-2: Retrocommissioning		2016	\$ -	0.11	230	DKO	Existing split systems, heat pumps, 12 years
Wastewater Treatment Plant, Bio Building/Offices	ECM-3: Controls Upgrade		2560	\$ -	0.11	292	DKO	Linc Mechanical Honeywell Control, Start/Stop
Wastewater Treatment Plant, Bio Building/Offices	ECM-5: HVAC Replacement		1958	\$ -	0.11	223	DKO	Linc Mechanical, replacement of (1) 3 ton unit, SEER 15.7
Water Treatment Plant Membrane/Offices	ECM-1: Lighting Retrofit		46423	\$ -	0.10	4,529	LLE	Rebates not included
Water Treatment Plant Membrane/Offices	ECM-2: Retrocommissioning		4992	\$ -	0.10	487	DKO	Existing split systems, 2 and 4 ton
Water Treatment Plant Membrane/Offices	ECM-3: Controls Upgrade		4160	\$ -	0.10	406	DKO	Linc Mechanical Honeywell Control, Start/Stop
Fire Department	ECM-19: EV Charging stations		-3600	\$ -	0.10	-360	DKO	2 EV charging stations
<b>TOTALS</b>		<b>527</b>	<b>1,878,637</b>			<b>165,155.80</b>	-	



City of Pflugerville  
Cash Flow

<b>Total Project Cost:</b>	<b>\$1,044,970</b>
<b>Total Savings Over Term:</b>	<b>\$1,722,037</b>
<b>Rate of Financing:</b>	<b>4.30%</b>
<b>Term of Financing:</b>	<b>10</b>
<b>Annual Utility Rate Increase:</b>	<b>0.00%</b>
<b>Annual Operation Rate Increase:</b>	<b>2.00%</b>
<b>Annual Service Cost Increase:</b>	<b>2.00%</b>
<b>Total Cash Flow:</b>	<b>\$1,722,037</b>
<b>Simple Payback:</b>	<b>4.48</b>

	Savings From	Savings From	Total Program	Annual Project	Monitor and	Total Program	Annual Cash	Accumulative
YEAR	Electric Eff.	Operations	Savings	Cost	Verification	Cost	Flow	Flow
0	\$25,100	\$22,000	\$47,100	\$0	\$0	\$0	\$47,100	\$47,100
1	\$101,183	\$131,929	\$233,112	\$129,840	\$0	\$129,840	\$103,272	\$150,372
2	\$103,207	\$77,727	\$180,734	\$129,840	\$0	\$129,840	\$50,894	\$201,266
3	\$105,271	\$79,078	\$184,348	\$129,840	\$10,000	\$139,840	\$44,508	\$245,774
4	\$107,376	\$80,659	\$188,035	\$129,840	\$10,200	\$140,040	\$47,995	\$293,769
5	\$109,524	\$82,272	\$191,796	\$129,840	\$10,404	\$140,244	\$51,552	\$345,321
6	\$111,714	\$83,918	\$195,632	\$129,840	\$10,612	\$140,452	\$55,180	\$400,501
7	\$113,948	\$85,596	\$199,545	\$129,840	\$10,824	\$140,664	\$58,880	\$459,381
8	\$116,227	\$87,308	\$203,535	\$129,840	\$11,041	\$140,881	\$62,655	\$522,036
9	\$118,552	\$89,054	\$207,606	\$129,840	\$11,262	\$141,102	\$66,505	\$588,541
10	\$120,923	\$90,835	\$211,758	\$129,840	\$11,487	\$141,327	\$70,431	\$658,972
11	\$123,342	\$92,652	\$215,993	\$0	\$11,717	\$11,717	\$204,277	\$863,249
12	\$125,808	\$94,505	\$220,313	\$0	\$11,951	\$11,951	\$208,362	\$1,071,611
13	\$128,325	\$96,395	\$224,720	\$0	\$12,190	\$12,190	\$212,530	\$1,284,141
14	\$130,891	\$98,323	\$229,214	\$0	\$12,434	\$12,434	\$216,780	\$1,500,921
15	\$133,509	\$100,289	\$233,798	\$0	\$12,682	\$12,682	\$221,116	\$1,722,037
<b>Totals</b>	<b>\$1,774,900</b>	<b>\$1,392,341</b>	<b>\$3,167,240</b>	<b>\$1,298,400</b>	<b>\$146,803</b>	<b>\$1,445,203</b>	<b>\$1,722,037</b>	<b>\$1,722,037</b>

- **Provides Long Term Strategic Asset Management Plan**
- **Provides IMMEDIATE funding for critical facility upgrades**
- **Utilizes existing budget as the funding source**
- **Average Annual Savings**
  - **5% to 10% Reduction in Annual Utility Spend**
  - **10% to 20% Savings in Operations and Maintenance**
- **Produces a cash flow based on your needs**
- **Project is recommended**
- **Results are guaranteed!!!**



- **Concept to City Staff** **March 2011**
- **Preliminary Engineering Study to Staff** **July 2011**
- **Present Study To City Council** **August 2011**
- **City Council Approval** **August 2011**
- **Contract Award** **August 2011**
- **Project Begins** **September 2011**
- **Completion of Project** **4 to 6 Months**