CELC Webinar-
Reinvesting in Communities and Preserving the Environment with PACE

May 25th 2022

CELC
City Efficiency Leadership Council
About SPEER:

SPEAR’s mission is to accelerate the adoption of advanced building systems and energy efficient products and services in the South-central US.

Our Work
• Policy
• Building Codes
• High Performance Buildings
• Local Government

Our Members
• Advocacy Orgs
• Cities
• ESCOs
• Manufacturers
• Trade Associations
• Utilities
What is the City Efficiency Leadership Council (CELC)?
A collaborative network of Texas cities, school districts, and other government entities engaged in partnership and resource exchange in an effort to expand the adoption of energy management best practices in the public sector.

How can CELC support energy management in my city?
Regional Roundtable Luncheons, Webinars, City Best Practices Case Studies, City Efficiency Toolkit, Local Government Energy Reporting Assistance, Portfolio Baselining and Benchmarking, Technical Support

How can my city get involved?
Contact SPEER to set up a brief intake interview OR Attend a regional roundtable luncheon

Who can join CELC?
Open to staff of any public jurisdiction including city and county governments, public school districts, and other publically funded entities.
Speaker: Dub Taylor, Chief Operating Officer
Texas PACE Authority
REINVESTING IN COMMUNITIES AND PRESERVING THE ENVIRONMENT WITH PACE
DUB TAYLOR – COO, TEXAS PACE AUTHORITY

- Joined the Texas PACE Authority in February 2020, after 21 years as the director of the Texas State Energy Conservation Office (SECO) – part of the Texas Comptroller of Public Accounts
- Managed engineering, technical assistance and energy/water efficiency loan programs for public entities
- Prior to public service, private sector experience was focused on commercial real estate, property appraisal and property tax consulting
Business owners know they can save money over the long haul by investing in energy/water saving upgrades to their properties
- Even modest upgrades can be expensive
- Hard to pay those upfront costs given all their other expenses

- Failing equipment is replaced on emergency, piecemeal basis at a premium cost with no systems optimization

- New construction “value” engineering – targets less visible MEP

- Results in higher operating costs, lower building performance, lower asset valuation, indoor comfort challenges, lower productivity
A SOLUTION…

PACE = Property Assessed Clean Energy

Innovative financing tool that provides long term, low cost, 100% funding for energy efficiency, water conservation and distributed generation projects

- Private financing secured by a special property assessment in place over the financing term/useful life of the improvements
  - State Authorized – Local Gov’t Code 399 (2013)
  - Local Government Enabled
  - Voluntary & Open Market

Eligible Property

- Commercial (including non-profit)
- Multi-family (5+ units)
- Industrial (manufacturing/agricultural)
PACE-ELIGIBLE IMPROVEMENTS

Projects that reduce energy or water usage or generate energy onsite

**Energy**
- High efficiency HVAC (AC/chillers, boilers, furnaces, air handlers)
- High efficiency lighting upgrades
- Energy management systems and controls
- Building envelope improvements
- Renewable/DG energy systems
- Mechanical system modernization
- Air cooled systems to water or geothermal cooled systems
- Fuel switching
- Combustion and burner upgrades
- Heat recovery and steam traps

**Water**
- High efficiency water heating systems
- Water conservation systems
- Wastewater recovery and reuse systems
- Alternate, on-site sources of water (A/C condensate, rainwater, RO reject water, foundation drain water, etc.)
- On-site improvements to accommodate reclaimed water use
- Water management systems and controls (indoor and outdoor)
- High efficiency irrigation equipment
TEXAS PACE BY THE NUMBERS

➢ $223 million of investment to date

MEASURE TYPE
Energy Efficiency: 55% / Water Conservation: 33% / Distributed Gen: 12%

Annual PACE Financing in Texas

Commercial Retail 32%
Commercial Office 14%
Nonprofit 12%
Industrial 2%
Hotel 15%
Mixed Use 10%
Multifamily 10%
Education 5%
WHY PACE?

- Improves assets – budget neutral/cashflow positive
- Lowers utility usage/costs
- Increases net operating income

Diagram:
- Conventional: Repayment vs. Utility Savings over Time
- PACE: Repayment vs. Utility Savings over Time with Increased NOI.
## PACE HELPS OVERCOME INVESTMENT BARRIERS

<table>
<thead>
<tr>
<th>Investment Barrier</th>
<th>TX-PACE Solution</th>
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<tbody>
<tr>
<td>Upfront capital</td>
<td>No upfront capital needed</td>
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<tr>
<td>Short financing term / long ROI</td>
<td>Funded up to life of equipment (20 years+)</td>
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<td>Lack of funding</td>
<td>100% financing – not a personal or business loan</td>
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<td>Landlord / tenant split incentives</td>
<td>Can be passed to tenants</td>
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<td>Short-term ownership</td>
<td>Stays with the land - is transferred upon sale</td>
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THE GROWING TEXAS PACE MARKET

78 local PACE programs  72% of Texas population covered

CITIES THAT HAVE ADOPTED PACE PROGRAMS

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<td>Houston</td>
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<td>Johnson City</td>
<td>Laredo</td>
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<td>Lubbock</td>
<td>Mabank</td>
<td>Panhandle</td>
<td>Paris</td>
<td>Poteet</td>
<td>Port Lavaca</td>
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<td>Princeton</td>
<td>Prosper</td>
<td>Red Oak</td>
<td>Rockdale</td>
<td>Rowlett</td>
<td>San Antonio</td>
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<td>Snyder</td>
<td>Universal City</td>
<td>Victoria</td>
<td>Wharton</td>
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LOCAL GOVERNMENT ADOPTION
MUNICIPALITY OR COUNTY

1) Public briefing/discussion (optional)

2) Post Report on how PACE program will work

3) Pass Resolution of Intent to establish PACE program

4) Public hearing (required)

5) Pass Resolution to Establish PACE program

6) Select administrator
PACE – LOCAL GOVERNMENT BENEFITS

- Workforce and economic development
- Improve building stock
- Business retention support
- No local government obligation
- Minimal staff support
How It Works

A Building Owner:
- finds a contractor
- selects a project
- identifies a capital provider
- applies to PACE program

If the owner, building, and project all meet PACE requirements:
- the owner signs a contract with the PACE program, which places a senior lien on the property
- capital provider signs a contract with the county in exchange for the assessment payments
- the capital provider supplies funding
- contractors complete the project
- the owner sends installment payments directly to the lender
TPA PROGRAM GUIDE
UPDATES TO 2018-VERSION 3.0

Texas PACE Authority Program Guide

(Copyright info as footer) Version 4.0
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SECTION I - TPA’s PROJECT

Step 1: Determine Eligibility
- Property Type
- Improvement Type

Step 2: Determine Project Scope
- Calculate project costs compared to associated savings
- PACE in a BOX

Step 3: Determine PACE Capital Provider
- Choose provider
- Benefit choosing one with PACE experience

Step 4: Determine PACE Contractor
- Choose qualified contractor / service provider

Step 5: Prepare Application
- Gather required Documents
- Underwrite in 30-60 days

Step 6: Obtain Mortgagee Consent (if applicable)
- Mortgage holder provides consent in writing

Step 7: Engage TPR for Project Verification
- Validates projected savings
- Chosen by property owner

Step 8: Close on PACE Financing
- Negotiate loan/notes
- Provide contracts and other documents

Step 9: Construct/Install Project
- Flexible
- Pre-construction financing available

Step 10: Verify Installation
- Engage TPR for project compliance
SECTION I - TPA’s PROJECT DEVELOPMENT PROCESS

- Key Updates
  - Redevelopment
  - Lookback
  - LTV now 25%
  - SIR >50% savings energy/water related
TECHNICAL STANDARDS

• Based on Nationally Accepted Standards
  • American Society for Testing and Materials (ASTM)
  • International Performance Measurement and Verification Protocol (IPMVP)
  • American National Standards Institute / Building Owners and Managers Association (ANSI / BOMA)
  • American Society of Heating, Refrigerating & Air-Conditioning Engineers (ASHRAE)
  • National Institute of Standards and Technology (NIST)

• Independent Third Party Reviewer (ITPR) - Qualifications
  • Texas-licensed Professional Engineer with energy/water efficiency experience
  • Preferred certifications: ASHRAE, AEE, Building Commissioning Association

https://www.texaspaceauthority.org/Documents/Program%20Guide.pdf?dl=0
THE PACE PROCESS – PROJECTS

*Owner-selects Contractor and ITPR
SERIVCE PROVIDER TRAINING - Preview

➤ Online Training Modules

1) About PACE
2) Standards and Guidance
3) Assembling a Project

➤ Recorded Video for Each Module

➤ Training Quiz – 25 questions

➤ 80% = Passing

➤ Trained Service Provider Listing and Logo/Badge
TX-PACE PROJECT DIVERSITY

- Urban and rural
- Office, mixed-use, non-profit, hospitality, multi-family, parking garage, retail
- Energy efficiency, water conservation, distributed generation & demand reduction/resiliency projects
- Project sizes: $68,000 - $24,000,000
- All received 100% financing
CONGREGATION BETH ISRAEL
Austin / Travis County

**Measures:**
- HVAC
- BAS controls
- Window film

**Utility Incentives:**
$11,000

**Assessment Total:**
$452,105

**Utility Savings:**
20% Annually
1225 NORTH LOOP WEST
Houston

**Measures:**
- HVAC
- BAS
- LED lighting

**Utility Incentives:**
$30,000

**Assessment Total:**
$1,304,352

**Utility Savings:**
38% Annually
BUTLER BROTHERS BUILDING - DALLAS

Measures:
- HVAC
- Lighting
- Insulation, roof
- Windows
- Plumbing fixtures

Incentives:
$21 million
Historic Tax Credits

Assessment Total:
$23.9 million

Annual Utility Savings: 40%
Electric: 6.6 million kWh
Water: 700K gallons
PEARL POINT APARTMENT HOMES
Rockport / Aransas County

Measures:
Above-code
- Lighting
- Plumbing fixtures
- Building envelope
  - Windows
  - Wall insulation
  - Roof insulation

Assessment Total:
$2.75 million

Annual Utility Savings:
Electric: 926,000 kWh
Water: 3.2 million gallons
BARFIELD BUILDING
City of Amarillo

Measures:
- Ductless VRF HVAC
- Low voltage LED lighting
- Building envelope
- Water efficiency
- Domestic water heating

Historic Tax Credit financing:
$9,050,551

Assessment Total:
$6,471,443

Total Savings:
Electric: 73%
Gas: 79%
Water: 60%
PACE is a WIN-WIN-WIN (WIN-WIN-WIN)

- **Property Owners** – lower utility bills, energy independence, energy efficiency, property value increase
- **Contractors** – source of increase in business, more local hiring, best practices, keeping up with technology advancements
- **Lenders** – new loans, steady & stable process, fully collateralized, Tax Assessment lien position, improved asset value
- **State of Texas** – reduced peak demand, enhanced grid reliability, distributed generation as resilient power source, improved air quality, water resource conservation
- **Communities** – increased economic development and jobs, improved building infrastructure, more appealing building stock and plants
RESOURCES

- Texas PACE Authority: www.texaspaceauthority.com
- TX-PACE Program Guide and Technical Standards
  www.texaspaceauthority.org/Documents/Program%20Guide.pdf?dl=0
- Events and Training – (Online Contractor Training Soon!)
  www.texaspaceauthority.org/event-directory
- Case Studies
  www.texaspaceauthority.org/resources/case-studies-marketing/
- Service Provider Directory
  https://www.texaspaceauthority.org/service-provider-directory/
QUESTIONS?

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www.texaspaceauthority.org
Questions

• Shaun Auckland,
  – Local Government Program Manager, SPEER
  – sauckland@eepartnership.org
Resources

• SPEER YouTube Channel

• CELC Upcoming Events
  www.eepartnership.org