PACE Financing Opportunities in the Affordable Housing Sector

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Executive Summary

Affordable housing properties across the country have the opportunity to save money, increase bottom-line profitability, and improve quality of life for low-income communities by taking advantage of an underutilized financial tool: the Property Assessed Clean Energy (PACE) Program.

As an innovative, market-based financing program, PACE enables property owners to obtain low-cost, long-term financing for energy and water efficiency, as well as on-site generation improvements to commercial, industrial, and multifamily properties. Municipalities and counties work with private sector lenders to fund clean energy projects, using a property assessment that ties the financing obligation to the property itself. In Texas, this voluntary program is completely free of government mandates and public funding, allowing the private sector great flexibility.

PACE was enacted in Texas in June 2013 with support from Republicans and Democrats. Many Texas cities and counties, including the City of Dallas, City of Houston, and El Paso County, have since adopted PACE to authorize its use within their jurisdiction.

PACE for Affordable Housing

The lack of energy and water efficient solutions in affordable multifamily housing properties has great implications for tenants, as well as landlords and property owners. High energy and water bills can force families to choose between keeping the lights on and other daily necessities. Simultaneously, property owners face rising operational costs due to high utility bills.

Fortunately, since PACE allows property owners to finance up to 100 percent of upfront costs related to energy and water saving measures, the affordable housing sector can leverage PACE as a financing tool for improving efficiency. These investments provide a myriad of benefits, including the potential to:

- Reduce a property's operating costs,
- Increase housing affordability by reducing residents' utility costs,
- Free up capital that could be used in other upgrades and/or other properties,
- Reduce the subsidy per unit required to make a project financially viable,
- Reduce pollution and energy and water waste, and
- Improve the living conditions of tenants.

Resources and Key Findings

Based on conversations with officials and program administrators from over 30 public, for-profit, and non-profit entities, this paper:

1. Introduces PACE as a financing tool for energy and water efficiency retrofits and distributed generation investments,

2. Provides a guide for stakeholders in the affordable, multifamily housing sector for incorporating PACE financing in the capital structure of rehabilitation projects, and

3. Identifies potential pilot projects in Central Texas that serve as example of how PACE financing may be used within the affordable housing sector.

The paper finds there are significant opportunities in Texas and nationwide for the affordable housing sector to leverage PACE as a financing tool for energy and water saving projects.

The greatest opportunity lies in Public Housing Authorities (PHA) participating in the U.S. Department of Housing and Urban Development's (HUD) Rental Assistance Demonstration (RAD) program. Properties undergoing RAD conversions have the opportunity to leverage private debt and equity to make property-wide improvements, including efficiency retrofits. This is a nationwide initiative by HUD, and the transition presents a prime opportunity to ensure affordable housing properties take advantage of PACE.[i] In Texas, there are over 6,500 units in this stage, including over 1,400 units in the City of Austin.[ii]

Additionally, properties that are funded by the U.S. Department of Agriculture Rural Development (USDA RD) programs can utilize PACE financing. Currently, there are 22 affordable housing properties funded by the USDA RD located in PACE-eligible jurisdictions in rural Texas, or 50 properties including counties and cities where PACE will be established within the coming months.[iii] According to Local Area Directors, many of these properties are in great need of repair. Texas PACE Authority, the PACE program administrator in the state, has been in conversations with the USDA RD Multifamily Housing Director at the state level and with Local Area Directors, who strongly support the use of PACE financing in the capital structure of rehabilitation projects of USDA RD-funded properties.

The RAD conversion program and USDA RD properties are just two of the many funding structures that could take advantage of PACE financing.

Recommendations

In order to help the housing industry overcome barriers to using PACE, policymakers can be key resources by:

- **Leading by example:** Private developers are often skeptical of new funding mechanisms, particularly when consent from public agencies is required. Local governments looking to increase housing affordability and preserve the existing stock of affordable housing can include innovative financing tools, such as PACE, in the funding structure of properties in RAD conversion.

- **Combining efforts and funds:** Public and private organizations promoting energy and water efficiency in the affordable housing sector through incentives and other initiatives should collaborate to facilitate awareness and use. Given the extensive research and knowledge that already exists in the marketplace regarding affordability gaps and energy and water-efficient solutions, public-private partnerships are highly beneficial in seizing opportunities.

- **Amending the Texas PACE Act:** Texas policy makers should amend the Texas PACE Act to make government-owned affordable housing properties, as well as new development of affordable housing properties, eligible for PACE financing.
- **Utility allowance reform:** HUD's formulas for determining utility allowances should be adjusted to create the necessary economic incentives to invest in energy and water efficiency. The methodology to set utility allowances for properties using Section 8 rental assistance often does not allow property owners or tenants to capture cost savings from efficiency upgrades. Instead, HUD accrues the monetary benefits from these investments, so property owners have no economic incentive to invest in energy and water efficiency.
- **Establishing FHFA guidelines:** The Federal Housing Finance Agency (FHFA) should establish and publish guidance for obtaining FHFA consent to PACE investments on large multifamily housing properties for which it is the mortgagee.

PACE financing provides a unique opportunity for the affordable housing sector. By investing in distributed generation and energy and water efficiency, property owners not only increase their bottom-line profitability, but also help low-income communities save money on their electric and water bills. Armed with the right tools and information, governments, property owners, and PACE administrators across the country can maximize the potential of PACE, leading to cleaner, more affordable housing for all.

Glossary

ACC: Annual Contributions Contract

AHFC: Austin Housing Finance Corporation

AMFI: Area Median Family Income

CDBG: Community Development Block Grant

CHAP: Commitments of Housing Assistance Payments

DCHA: D.C. Housing Authority

DHCD: D.C. Department of Housing and Community Development

DOE: Department of Energy

ECAD: Energy Conservation Audit and Disclosure

EDF: Environmental Defense Fund

EEBUA: Energy Efficiency Based Utility Allowance

EPC: Energy Performance Contract

ESCO: Energy Service Companies

EUI: Energy Use Intensity

FHA: Federal Housing Administration

FHFA: Federal Housing Finance Agency

GNDC: Guadalupe Neighborhood Development Corporation

HACA: Housing Authority of the City of Austin

HCV: Housing Choice Voucher

HTC: Housing Tax Credit

HTF: Housing Trust Fund

HUD: U.S. Department of Housing and Urban Development

HVAC: Heating, Ventilation and Air Conditioning

ITPR: Independent Third Party Reviewer

KPT: Keeping PACE in Texas

LED: Light-Emitting Diode

LIHEAP: Low-Income Home Energy Assistance Program

LIHTC: Low Income Housing Tax Credits

MSA: Austin Metropolitan Statistical Area

NHCD: Neighborhood Housing and Community Development

NHTF: National Housing Trust Fund

NOI: Net Operating Income

PACE: Property Assessed Clean Energy

PBCA: Performance Based Contract Administrator

PBRA: Project-Based Rental Assistance

PBV: Project-Based Voucher

PCA: Physical Conditions Assessment

PHA: Public Housing Authority

RAD: Rental Assistance Demonstration

REAP: Rural Energy for America Program

SIR: Savings-to-Investment Ratio

TBV: Tenant-Based Voucher

TDHCA: Texas Department of Housing and Community Affairs

TPA: Texas PACE Authority

USDA RD: U.S. Department of Agriculture Rural Development

YWCA: Young Women's Christian Association

Introduction

The City of Austin, like many other metropolitan cities, is experiencing an increasing demand for affordable housing. Austin Mayor Steve Adler highlighted the City's affordable housing crisis in his first "State of Our City" speech shortly after taking office in January 2015.[iv] As part of his housing preservation strategy, Mayor Adler urged the use of PACE – which was adopted in Austin's Travis County in early 2015– to preserve affordability.[v]

In Texas and around the country, the affordable housing sector has yet to leverage PACE as a financing tool for retrofit and rehabilitation projects. One critical barrier has been the lack of information and experience with new PACE programs. The affordable housing sector contains complex layers of funding – from local, to state and federal subsidies, and private capital – which can make adding new financial mechanisms appear difficult or cumbersome.

> *"Lowering households' costs by increasing energy and water efficiency is a great example of how Austin can become more affordable. By finding innovative, creative ways of financing these investments, we can improve the living conditions of countless families and hold onto our environment."*
>
> ***Steve Adler, Mayor of Austin***
> ***July 19th, 2016***

In order to address these barriers, Mayor Adler created a committee of housing experts in June 2016. Composed of property owners and developers, advisory and legal firms, government representatives at the state and local level, nonprofits fighting homelessness, Texas PACE Authority, and Environmental Defense Fund (EDF), the committee explored using the PACE financing tool in affordable multifamily housing properties.

This paper aims to serve as a resource for increasing the use of PACE in the affordable housing sector,[vi] and contains the following components:

- The Opportunities for PACE to Improve Affordable Housing, including:

1. The benefits of investing in energy and water efficiency measures in the affordable housing sector: "Energy and Water Efficiency Challenges in the Affordable Housing Sector"

2. PACE as a financing mechanism to fund 100% of the cost of energy and water efficiency retrofits and distributed generation investments, where reduced utility costs more than offset the PACE assessment repayment obligations: "PACE Financing"

3. The opportunities for governmental entities to leverage PACE financing – particularly properties in the Rental Assistance Demonstration (RAD) program and USDA Rural Development (USDA RD) funded properties: "Findings and Opportunities"

4. Two multifamily housing projects in the City of Austin that may be used to serve as pilots for PACE financing: “Findings – Potential Pilot Projects in Central Texas”

5. Various challenges in the marketplace regarding the implementation of PACE and investments in energy and water efficiency in general: “Challenges”

6. Recommendations to various levels of governments on how PACE may be effectively utilized in the affordable housing sector: “Recommendations”

- Manuals and Appendices: Guidance for Property Managers and Developers to Leverage PACE in their Properties, including:

1. The approval process of a PACE assessment when public subsidies in the form of rental assistance or direct capital are involved, and two precedent affordable housing projects that included a PACE assessment in their rehabilitation capital structure: Manual 1- PACE Approval in Affordable Multifamily Housing Structures

2. How to identify affordable housing properties that could leverage PACE financing: Manual 2- How to Identify Potential Projects

3. Explains who receives utility savings resulting from retrofits to properties with utility allowances: Manual 3-Why Utility Allowances Matter

Energy and Water Efficiency Challenges in the Affordable Housing Sector

The lack of energy and water efficiency solutions in affordable housing properties has great implications for tenants, landlords, and property owners. High energy and water bills have the potential to leave families without their utility services or even displace them from their homes.[vii] From the property owner's perspective, even when buildings are tenant-metered, high bills drive buildings' operating expenses up through higher maintenance and turnover costs – the cost of making the property rent ready after a tenant leaves.[viii]

AFFORDABILITY
HUD defines affordable housing as "Housing for which the occupant(s) is/are paying no more than 30 percent of his or her income for gross housing costs, including utilities." The USDA RD uses a similar methodology, while the Texas Department of Housing and Community Affairs (TDHCA), the low-income housing tax credit (LIHTC) provider in Texas, employs the income-restricted affordable housing methodology based on IRS Section 42 standards, which use a percentage of the Area Median Family Income (AMFI) with adjustments based on family size to specify tenants' eligibility for the units receiving capital. Regardless of how the various government programs define their targeted population, using 30% of households' gross income has become the standard to aspire.[ix]

MULTIFAMILY HOUSING
Multifamily housing refers to housing buildings with five or more dwelling units.[x]

HOUSEHOLD
"All the people who occupy a housing unit".[xi]

The incentives to invest in energy and water efficiency measures and distributed generation vary depending on whether the property owner is a for-profit or a mission-driven (non-profit) organization. Regardless, investing in affordable housing energy and water saving solutions, particularly in times of volatile utility costs and more frequent extreme weather conditions, improves the living conditions of tenants, makes housing more affordable by reducing energy and water costs, and increases property owners' net operating income by reducing operating costs – especially when dealing with an inventory of old properties.

Developers of affordable housing face significant costs in building and rehabilitating properties. Usually, available capital is used for property acquisition, project construction, developer fees and design fees, construction loan interests, permanent financing, reserves, and project management. Sources of funds include tax credits, grants, and debt.[xii] However, there is a caveat for tax credits and grants: there is only a limited amount of funds available,[xiii] making applications significantly competitive and exhaustive. In terms of debt a project can take, "the size of the loan a bank will make depends on the project's net operating income (NOI), or the amount of money it expects to bring in from rent after accounting for operating expenses."[xiv]

Investments in energy and water efficiency generate bottom-line savings by reducing utility costs, benefiting both tenants and property owners. Property owners can leverage programs like PACE to finance 100 percent of the costs related to energy and water efficiency retrofits and distributed generation investments, which have the potential to free up capital that could be used for other upgrades or properties, and/or reduce the subsidy per unit required to make a project financially viable by increasing the project's NOI.

This is particularly relevant to the City of Austin, given the increasing demand for affordable housing,[xv] the aging inventory of the existing affordable housing options,[xvi] and the lower cost of rehabilitating existing properties compared to new construction.[xvii] According to the "2014 Comprehensive Housing Market Analysis", using 2012 income levels and rental prices, the City of Austin had an affordable housing gap of 40,925 units for households earning less than $25,000 per year. It is estimated this housing gap increased to approximately 47,700 units in 2014.[xviii] Additional background information regarding the City of Austin's demographics and housing market is provided in Appendix 1.

Rehabilitation projects generally include exterior and interior improvements, additional modernizations, and energy and water related improvements.[xix] While there are federal, state, and local programs available for the rehabilitation of affordable housing properties, industry experts indicate funds such as Low-Income Housing Tax Credits (LIHTCs) normally cover 60-75 percent of the necessary investment when 9.0 percent tax credits are used to finance improvements, or 30-40 percent if 4.0 percent tax credits are used.[xx] As a result, developers have to seek additional capital to cover the remaining cost of an investment, or reduce project costs to reflect available funding. Because of these factors, energy and water saving measures are often eliminated from the rehabilitation proposal, and opportunities to lower future operating costs are lost. This is especially unfortunate since the increasing burden of high utility costs is a lose-lose proposition for tenants, property owners, and public agencies providing rental assistance programs.

> *"Increasing the energy efficiency of rental housing saves energy, improves residents' health and comfort, and maintains reasonable rents. This helps families, communities, and affordable building owners."*[xxi]
> ***Energy Efficiency for All***
>
> *"The energy savings potential is important not only because it implies potential to reduce carbon and other emissions, but also because energy savings produce better quality, more affordable homes, which is particularly important for low- to moderate-income Americans who reside in these buildings."*[xxii]
> ***The Energy Programs Consortium***

PACE Financing

Property Assessed Clean Energy (PACE) is an innovative financing mechanism that enables owners of commercial, industrial, and residential properties with five or more dwelling units to obtain long-term financing for 100 percent of the cost of energy and water efficiency retrofits and distributed generation investments.

PACE is not a traditional loan. PACE is a voluntary obligation (assessment) equal to the cost of the energy and water investment that is placed on the property and secured with a senior lien. Because the assessment is placed on the property, water and energy efficiency costs are owed to the local government and repaid in installments over time. In Texas, the PACE statute authorizes municipalities and counties to work with private sector lenders to provide the upfront financing for the cost of qualified projects, and collect the repayment through voluntary annual assessments.[xxiii]

PACE is not the only tool in the marketplace to fund such improvements. It has, however, unique characteristics that make it particularly valuable to property owners of affordable housing properties looking to rehabilitate their buildings for several reasons:

- PACE is available on demand and does not involve a competitive application process, unlike public funds available for rehabilitation projects, such as LIHTCs, which often involve complex application forms that require developers to expend significant funds to engage tax financing experts.
- PACE covers 100 percent of the necessary investment and the assessments can be amortized for 20-25 years or more. Further, PACE improvements usually have a savings-to-investment ratio (SIR) that is above one. This means reduced utility costs more than offset the PACE assessment repayment obligations, enabling property owners to improve their bottom-line profitability. Typical commercial loans normally require a 15-20 percent down payment and are of short duration, and the resulting retrofits generate payback periods of 10-12 years. In comparison, PACE assessment result in an immediate positive cash flow.
- PACE assessments attach to and follow title to the property. If the property changes hands before the PACE assessment is fully repaid, the assessment remains in place and the repayment obligation automatically transfers to the next owner. Traditional commercial loans require collateral to secure the loan, are recourse to property owners, and accelerate upon sale, default or foreclosure, whereas PACE assessments do not.

For more information about the Texas PACE Statute, how it differs from other states' statutes, and how it works, see Appendix 2.

Findings and Opportunities

There are significant opportunities in Texas and across the country for PACE financing to assist affordable housing properties to fund the upfront costs related to energy and water efficiency retrofits and distributed generation investments, particularly properties in RAD conversion and USDA RD-funded properties.

Properties in RAD Conversion

In 2012, HUD launched the Rental Assistance Demonstration (RAD) program to address the $26 billion nationwide backlog of deferred maintenance in public and assisted multifamily housing projects [xxiv]. RAD allows Public Housing Authorities (PHAs) to leverage public and private debt and equity by shifting units from the federal public housing program into the Section 8 program, which involves the conversion of public housing subsidies into rental assistance contracts, either in the form Project-Based Vouchers (PBVs) or Project-Based Rental Assistance (PBRA)[xxv]. Additional information regarding these assistance programs are further discussed in Appendix 3 – Mixed-Finance Structures, Public Agencies & Programs. In order to access private capital, the ownership of the assets or properties is transferred to third-party, non-governmental entities, which makes properties in RAD conversion eligible for PACE.[xxvi]

During the conversion process, projects must secure financing from multiple sources to fund property-wide improvements, including energy efficient retrofits. In Texas, as of July 2016, 20 projects (~ 2k units) had already been converted, 79 projects (+ 6k units) had received Commitments of Housing Assistance Payments (CHAP) awards, and approximately 6,500 units had received Multiphase and Portfolio awards.[xxvii] The classification represents simply the timing at which projects finalize the conversion.

Properties that have been granted multiphase and portfolio awards are currently in the process of identifying needed improvements and sources of funding. Accordingly, the introduction of PACE as a complementary funding tool for energy and water efficiency retrofits could be particularly attractive.

It is important to note that given the cap of 185,000 units that can be converted nationwide,[xxviii] PHAs have a limited window of time to secure the capital needed to fund the improvements. Figure 1 shows the multiphase and portfolio awardees in Texas by PHA, which represent potential candidates for PACE financing.

Figure 1 – Multiphase and Portfolio Awardees in Texas by PHA

Public Housing Authority	Projects	Units
Multiphase Awardees:		
Housing Authority of Port Arthur	1	151
Housing Authority of the City of Brenham	1	140
Housing Authority of the City of Killeen	1	70
Total Multiphase Awardees	**3**	**361**
Portfolio Awardees:		
Austin Housing Authority	NA	1,476
Brownsville Housing Authority	NA	329
Corpus Christi Housing Authority	NA	1216
Housing Authority of Fort Worth	NA	632
Housing Authority of Port Arthur	NA	39
Housing Authority of Texarkana	NA	164
Housing Authority of the City of El Paso TX	NA	2312
Total Portfolio Awardees	**NA**	**6,168**

Source: HUD List of Units Reservations, July 2016.

At the local level, the Housing Authority of the City of Austin (HACA), the local PHA, owns and operates 18 properties that account for approximately 1,900 units of conventional public housing throughout the city.[xxix] HACA estimates a backlog of deferred maintenance of $90 million related to these properties. The PHA completed Phase 1 of RAD conversions in the fall of 2016, which involves the conversion of nine of its properties (682 units). While these projects are finalized, in 2017 and early 2018, HACA expects to complete Phase 2 of RAD conversions. This phase includes the remaining nine properties that the PHA owns, which include more than 1,450 units.[xxx]

USDA Rural Development (USDA RD) Funded Properties

PACE financing may also be used to finance energy and water saving measures, as well as distributed energy, in multifamily housing developments in Texas funded under the United States Department of Agriculture's Rural Development (USDA RD) Program. The State of Michigan has utilized this approach, and currently there are six USDARD housing projects using PACE to underwrite energy efficiency improvements.[xxxi]

The Texas PACE Authority, the state PACE program administrator, has initiated a dialogue with the State Director of the USDA RD Multifamily Housing Director as well as USDA Local Area Directors on how PACE may be used to finance efficiency improvements. These officials strongly support the use of PACE financing in the capital structure of rehabilitation projects of USDA RD-funded properties. There are currently 22 properties located in PACE eligible jurisdictions in the state, or 50 properties if we include counties/cities where PACE will be established within the next couple of months.[xxxii] In Central Texas, there are 12 USDA RD properties located in Travis and Williamson Counties.[xxxiii] Although some of these properties have already gone through rehabilitation, according to Local Area Directors, many more properties are in great need of repair.

Potential PACE Pilot Projects in Austin

The Texas PACE Authority and EDF have consulted with Austin Energy and the Travis County Housing Services to identify affordable housing projects that are ideal candidates for PACE financing. The use of the Travis County's PACE program to secure financing for on-site generation and energy and water saving measures is being developed by two properties in the City of Austin: La Vista de Guadalupe and La Reunion Cooperative Housing.

Pilot Project 1 – La Vista de Guadalupe

General Details

Property: La Vista de Guadalupe, a 22-unit property built in 2008 and located in East Austin
Property Owner: Guadalupe Neighborhood Development Corporation (GNDC), a non-profit organization

Existing Funding Structure (when built)

- *LIHTCs with tax-credit equity provided by the Royal Bank of Canada*
- *Forgivable loan from the Austin Housing Finance Corporation (AHFC)*
- *Permanent loan financed by Well Fargo & Company*

La Vista de Guadalupe is a sub-metered building that uses the PHA's utility allowance schedule. Tenants pay for electricity and GNDC pays for water and trash collection. The use of PACE is being evaluated to cover the installation of a 25 kW solar PV system that is expected to cover the electricity bill of the building's common areas and provide a credit sufficient to cover the water bill, increasing GNDC's NOI. GNDC is currently in conversations with Greenworks Lending, a PACE lender.

Pilot Project 2 – La Reunion Cooperative Housing

General Details

Property: La Reunion, a 22-unit property built in the 1960s and located in North Austin
Property Manager: NASCO Properties, a non-profit organization

Existing Funding Structure (when built)

- *Permanent loan financed by Well Fargo & Company*

La Reunion Cooperative Housing is a sub-metered building that has no utility allowance. NASCO is currently in conversations with ICAST, a nonprofit organization that is evaluating the potential improvements in the property. As a direct result of this research, the Travis County Housing Services agency is evaluating granting a weatherization grant to this property.

Challenges

Despite the many benefits of PACE financing to property owners and tenants, barriers to the widespread use of PACE within the affordable housing sector remain, such as:

- **Lack of information and experience with new PACE programs:** In spite of the well-known benefits that investments in energy and water efficiency measures entail, property owners of affordable housing properties are somewhat reluctant to use innovative sources of capital, such as PACE, due to the, in many cases, unknown approval process created by the various public agencies subsidizing this market.

- **Energy and water efficiency measures are often eliminated from a rehabilitation proposal:** Despite the various low-cost funding mechanisms available for the rehabilitation of affordable housing properties, and the resulting benefits of future operating cost reductions and avoidance, energy and water efficiency measures are often eliminated from a rehabilitation proposal in order to reduce project costs to reflect available funding and/or to meet debt coverage ratios.

- **Many stakeholders are unaware of the dynamics of investing in energy and water saving retrofits in properties with utility allowances:** Many believe that in tenant-metered buildings, tenants receive the cost savings from reduced utility bills. However, in tenant and sub-metered buildings, savings can sometimes transfer to or be shared with property owners. This depends on the public agency providing assistance and the program in place.

- **Federal Housing Finance Agency (FHFA) guidelines:** Nationwide, the FHFA expressed concern regarding the first lien position that a PACE assessment creates. In 2011, it issued a directive prohibiting Fannie Mae and Freddie Mac from purchasing homes with a PACE senior lien. While the ban applies to residential properties with four or fewer units only, the agency has not granted consent as the mortgagee of large multifamily properties not included in the directive – properties with five or more units. According to industry experts, approximately 75 percent of the multifamily housing stock is insured by the FHFA.[xxxiv] These properties could be potential PACE candidates only after the federal government provides the necessary guidelines.

- **Conflicting incentives to pursue energy and water efficiency investments:** PACE Financing has the potential to increase properties' values, which creates a conflict of interests between for-profit property owners and cities looking to preserve affordability. For some for-profit affordable housing owners, increased property values could provide an additional incentive to exit a subsidy program and flip the property to a market-rate structure (also called unsubsidized housing).

Although the economic incentives to pursue these investments are somewhat dependent upon the utility allowance, if any, and how properties are metered, the environmental benefits and potential savings provide sufficient motive for property owners to invest in energy and water efficiency retrofits even when there is no direct monetary benefit to property owners. Moreover, the improved quality of the property and living conditions benefits the entire community.

Property Owners should refer to the Manual 2 – How to Identify Potential Projects, which outlines how to utilize PACE financing for energy and water saving and distributed energy investments in their properties.

Recommendations

- **Leverage PACE Financing in Non-FHFA-Insured Properties**: The public and private sector should leverage PACE financing in properties that have no FHFA involvement. While the vast majority of multifamily properties have mortgages insured by the FHFA, properties insured by HUD, through the Federal Housing Administration (FHA), and USDA RD, that have no permanent debt, are potential candidates for PACE today.

- **Education and Outreach**: Community-wide education and outreach to increase awareness and understanding of PACE financing should be undertaken. Given that the vast majority of subsidies provided to affordable housing come from state and local agencies, the approval process of a PACE assessment, when required, goes from a local office to the state and federal level and requires knowledge and experience at every level.

- **Collaboration between governmental entities, the affordable housing sector, and PACE program administrators:** Greater collaboration among these groups has the potential to reach a niche market that is in great need of innovative funding mechanisms for energy and water efficiency retrofits. In interviews conducted with housing administrators, many property owners showed significant interest in PACE once they understood the opportunities of a PACE assessment. This would have not been possible without the collaboration between the City of Austin, EDF, and the Texas PACE Authority. Governmental entities looking to leverage tools like PACE financing in order to preserve housing affordability can collaborate with for-profit and nonprofit organizations to focus resources (human and capital) and time to educate stakeholders in the affordable housing sector (including but not limited to property owners, developers, advisory firms, lenders, and public agencies) on PACE.

- **Federal agencies should create the necessary economic incentives to facilitate energy and water retrofits using PACE**: Formulas for determining utility allowances need to be adjusted to incentivize investment in energy and water efficiency. Section 8 is one of HUD's main programs. Yet, the methodology used to calculate utility allowances does not provide the economic incentive for property owner investments in energy and water efficiency. While efficiency is a nationwide goal and HUD has begun to make changes to address this concern, further change is required to incentivize property owners with PBVs and PBRA contracts. Specifically, 1) utility allowances should use engineering-based estimates and project-specific energy consumption data, and 2) savings from investments in energy and water retrofits should be shared with property owners to provide the necessary economic incentive for such investments.

- **Issue FHFA Guidance:** The FHFA should promptly establish and publish guidance for obtaining FHFA consent to PACE investments on large multifamily housing properties for which Freddie Mac or Fannie Mae is the mortgagee. As previously mentioned, the FHFA issued a directive prohibiting Fannie Mae and Freddie Mac from purchasing homes with a PACE senior lien. While the ban applies to residential properties with four or fewer units only, the FHFA has not granted consent as the mortgagee of large multifamily properties not included in the directive. President Obama indicated in August 2015 that FHFA guidance would be forthcoming and laid out general parameters on what to expect.[xxxv] Given that the vast majority of affordable housing properties' mortgages are insured through this agency, FHFA guidance for obtaining consent is crucial.

- **Modify the Texas PACE Act:** The Texas legislature should amend the Texas PACE Act to make government-owned affordable housing property and new development of affordable housing properties eligible for PACE financing. The current PACE Act applies to existing privately-owned properties. Government-owned properties and new developments are ineligible. However, HUD estimates a $26 billion nationwide backlog of deferred maintenance in government owned public housing. Although HUD does not provide a state-by state analysis, HACA, for example, estimates a backlog of deferred maintenance of $90 million in its jurisdiction alone. Local PACE programs that can cover 100 percent of the cost of energy and water-related investments without the use of taxpayer dollars could help governments address this backlog.

- **Lead By Example:** Local governments looking to preserve the existing stock of affordable housing inventory should facilitate the use of innovative financing tools, such as PACE. Private developers are often skeptical of new funding mechanisms, particularly when consent from public agencies such as HUD, PHAs, USDA RD, and/or the LIHTC provider is required. Studies suggest that often the private sector acts only after the government has made the initial investment. As the Urban Institute recently highlighted in "The cost of affordable housing: Does it pencil out?" tool no single subsidy can solve the affordable housing crisis; rather, a combination of programs, funding mechanisms, public policies, and collaboration among groups.[xxxvi] The current stock of properties under RAD conversion represents a major opportunity for local governments to leverage innovative funding mechanisms such as PACE and entice the private sector.

- **Combine Efforts and Funds:** Public and private organizations promoting energy and water efficiency through incentives and other initiatives should collaborate to facilitate awareness and use of PACE. In Austin, organizations such as Austin Energy and the Travis County Housing Services agency offer grants and rebates for the rehabilitation or weatherization of affordable housing properties. Although each program has its respective eligibility criteria, a PACE assessment can complement weatherization programs covering improvements that do not qualify for the grants or rebates, such as HVAC systems in the case of Austin Energy's weatherization program[xxxvii] or distributed generation investments in the case of the programs offered by the Travis County Housing Services agency.[xxxviii]

These type of grants and rebates can be used to lower the initial costs of a PACE project in areas such as the Independent Third Party Reviewer (ITPR) analysis and the final inspection.[xxxix] Whether it is a mixed-finance structure or market-rate housing, property owners of tenant-metered buildings can use city funds to cover eligible improvements, and can use a PACE assessment to cover all other energy and water-related improvements.

Further, there are academic groups and entities that can help narrow the universe of buildings that should be prioritized for preservation. Some examples include: University of Texas' "Green and Inclusive Corridors" project[xl], as well as an application that will be integrated into Envision Tomorrow's Scenario Builder Software program that allows cities to assess the likelihood of energy loss in aging affordable housing in particular zones, and provides a platform for integrating planning for the preservation of this housing into its corridor plans. The NHCD and HousingWorks[xli] Austin have identified the areas in greater need, the socioeconomic groups most cost burdened, and the aging stock of properties.

Accordingly, local governments should allocate human resources to identify relevant work in the marketplace and combine efforts in prioritizing projects and identifying grants and programs available – including innovative and complementary financing tools such as PACE.

- **Seize the opportunity:** Local governments should leverage the EDF Climate Corps Program[xlii] to support efforts to preserve affordable housing through energy and water efficiency and onsite generation improvements. EDF Climate Corps Fellows can analyze PACE markets and perform an initial energy audit for properties under the RAD conversion program, as well as the stock of subsidized housing (mixed-finance structures) to help gauge the opportunity and viability of PACE financing. Fellows could use the strategies in this report to help other communities identify affordable housing properties that could benefit from PACE financing.

Manuals and Appendices

This section includes three manuals for developers, governments, and PACE program administrators looking to leverage PACE as a means to preserve housing affordability. Manual 1 clarifies the approval process of a PACE assessment when public subsidies in the form of rental assistance or direct capital are involved, and details two precedent affordable housing projects that included a PACE assessment in their rehabilitation capital structure. Manual 2 lists the steps to identify affordable housing properties that could leverage PACE financing. Manual 3 discusses utility allowances and its role in determining whether property owners, tenants or HUD receive cost savings from efficiency improvements.

As detailed in Part I of this report, PACE is a voluntary obligation (assessment) equal to the cost of the retrofit that is placed on the property and secured with a senior lien. Because the assessment is place on the property, the entity insuring or funding the property is required to provide lender consent to a PACE assessment. The following table specifies who would be required to approve PACE, how to do it, and the implications of such investment in properties with utility allowances.

HIGHLEVEL TAKEAWAYS

HUD-Funded Properties

- In HUD-insured properties, HUD consent is required. Developers would work with the PACE program administrator, the PACE lender, and the Account Executive within HUD's Asset Management division.
- In HUD-assisted properties, PHA/PBCA consent is required. Developers would work with the PACE program administrator, the PACE lender, and the PHA or PBCA, who would seek approval from the Account Executive within HUD's Asset Management division.
    - Tenant-metered properties receiving PBVs use the PHAs' utility allowance schedule. Post rehabilitation, tenants receive the utility cost savings.
    - Tenant-metered properties receiving PBRA use actual consumption data to calculate the utility allowance. Post rehabilitation, HUD accrues the utility cost savings.
    - Properties in RAD conversion can share the utility savings with property owners.

USDA RD-Funded Properties

- USDA RD offers direct loans, mortgage guarantees, and rental assistance. In any USDA RD-funded property, USDA RD consent is required. Developers would work with the PACE program administrator, the PACE lender, and the local USDA RD agency. Local agencies would review the application and submit it to the state USDA RD office, which would seek approval from the national office.
    - USDA RD-funded properties use actual consumption data. Post rehabilitation, tenants receive the utility cost savings. Upon documentation, the USDA RD allows the transfer of the utility savings to property owners.

TDHCA-Funded Properties (State Agency)

- If the TDHCA holds the mortgage of the property, TDHCA consent is required. Developers would work with the PACE program administrator, the PACE lender, and the Multifamily Loan Program Administrator.
- If the TDHCA provides or has provided LIHTCs, TDHCA consent is not required. However, advisory firms would work with the PACE program administrator, the PACE lender, and the HTC Program Administrator to ensure that the TDHCA is comfortable with the PACE assessment.
    - The TDHCA allows for different calculations of utility allowances; whether utility savings go to tenants, the public agency providing rental assistance, or property owners, depend upon the utility allowance used.

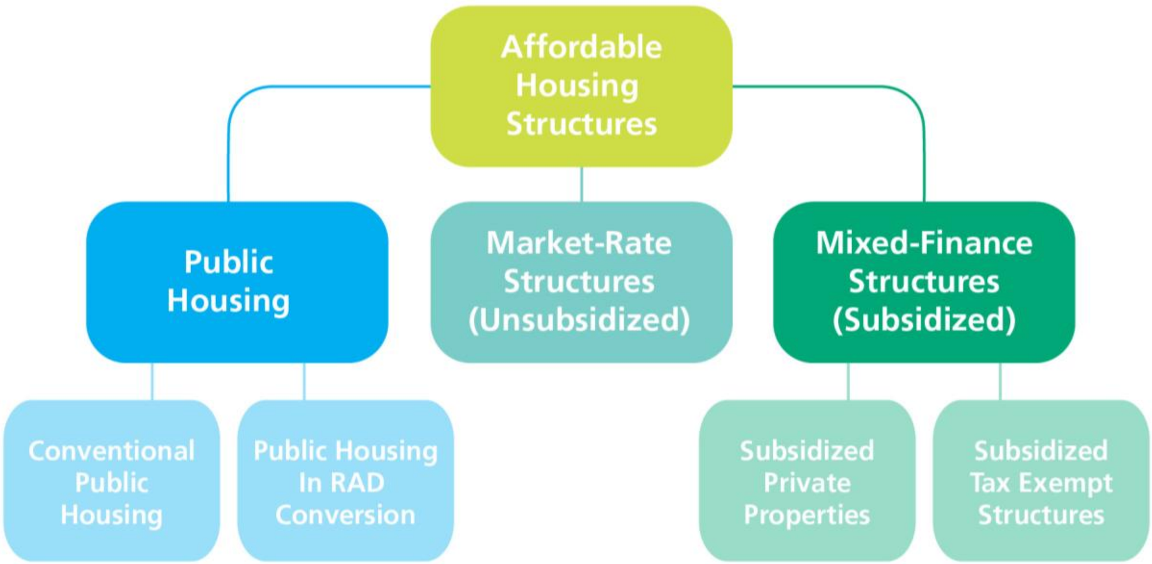
City-Funded Properties

- If the city is the mortgagee, or has provided funding through bonds issuance, the city’s consent is required. Developers would work with the PACE program administrator, the PACE lender, and the city agency providing funding.

Manual 1-PACE Approval in Affordable Multifamily Housing Structures

This manual offers three sections, each intended for different stakeholders: the “Public Housing” section of this manual is useful to governments looking to leverage PACE financing, the “Mixed-Finance Structures” section is relevant to private developers or owners of properties that receive public subsidies, and the “Market-Rate Structures” section pertains to owners of unsubsidized housing properties.

Figure 2 – Affordable Housing Structures



Public Housing

HUD administers federal funds to PHAs that manage housing for low-income families, the elderly, and persons with disabilities.[xliii] Conventional public housing (also called Section 9) is owned by the PHAs and in most cases managed by the PHAs as well. Currently, these structures are ineligible for PACE in Texas given that they are government-owned properties.

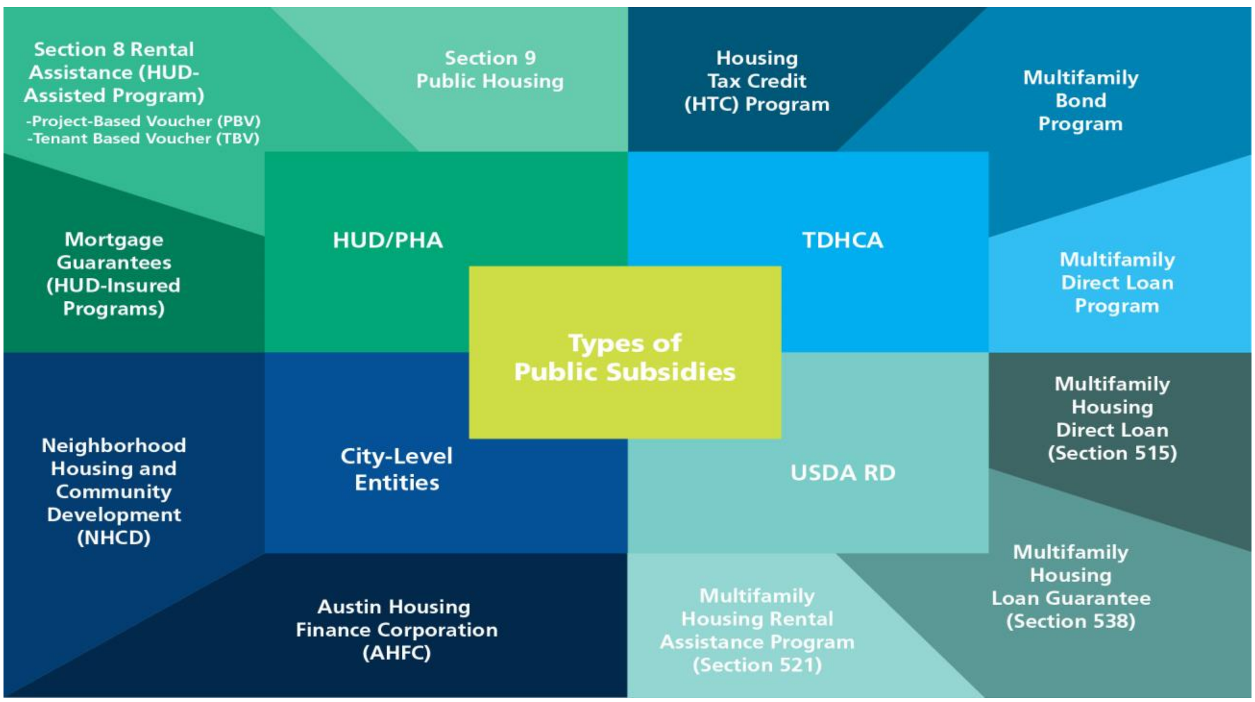
However, properties under the RAD conversion are eligible for PACE if the ownership of the asset is transferred to third-party entities, making private capital accessible. Multiphase or portfolio awardees, as well as the properties on waitlist, are, or will be, in the process of securing financing to fund the required improvements. Once converted, these properties become eligible for PACE mixed-financing. The approval process of a PACE assessment for these properties is covered in the next section.

Mixed-Financed Structures

The increased demand for affordable housing, and HUD's budget constraints, led to the development of mixed-finance structures, also called subsidized housing. These privately owned or tax-exempt properties receive additional federal, state, and/or local government funding sources and private capital, intended to stimulate neighborhood revitalization and economic development. In exchange, property owners commit to build and preserve affordable housing in the long-term.

Based on a 2014 inventory of rental stock in the City of Austin, there are approximately 18,500 units that are publicly subsidized through HUD, PHAs, the TDHCA, and/or the City.[xliv] The Austin Tenants' Council published its annual "Guide to Affordable Housing in the Greater Austin Area", which provides details about existing subsidized housing options and highlights over three dwelling units in the area receiving project-based assistance. This guide also includes properties funded by the USDA RD.[xlv]

Figure 3 – Types of Public Subsidies



Note: For details about each program, refer to Appendix 3- Mixed Financing Structures, Public Agencies & Programs

HUD Approval of PACE Financing

Three encouraging precedents signal a continued effort to make PACE financing a viable option for HUD properties: 1) In July 2016, HUD published PACE financing approval guidelines for FHA authorization of a new mortgage on a single-family residential property that already had a PACE assessment.[xlvi] 2) In November 2015, the PACE program administrator in the District of Columbia, Urban Ingenuity, worked in conjunction with the local PHA, the City and other entities to include PACE financed efficiency retrofits in the capital stack of a $17 million multifamily housing rehabilitation project.[xlvii] 3) In June 2015, HUD published PACE financing approval guidelines for multifamily housing properties in the state of California.[xlviii]

HUD-assisted properties—those within the Section 8 program, as well HUD insured properties by the FHA—can leverage PACE funds for rehabilitation projects.

There are two possible scenarios:

1. **HUD-Insured Properties:** When the FHA insures the mortgage to the private lender, lender consent for a PACE assessment is required from HUD. Developers interested in undertaking a PACE assessment for a rehabilitation project would work closely with the PACE program administrator, the PACE lender, and the Account Executive within HUD's Asset Management division.[xlix]

2. **HUD-Assisted Properties:** A PACE assessment requires lender consent from the PHA or the PBCA. Developers interested in undertaking a PACE assessment for a rehabilitation project would work closely with the PACE program administrator, the PACE lender, and the PHA or PBCA, who would seek approval from the Account Executive within HUD's Asset Management division.[l] These involve properties where HUD provides Section 8 rental assistance. In the case of PBVs, HUD rental assistance passes through a PHA. In the case of the PBRA program, HUD rental assistance passes through a Performance Based Contract Administrator (PBCA).

Figure 4 shows the first HUD-assisted multifamily housing property in the country using PACE financing. Further, Lean & Green Michigan, the PACE administrator in Michigan, and Petros PACE Finance, a PACE lender, are currently working on a HUD-assisted deal totaling $1.2 million.[li]

Figure 4 – Case Study 1

PHYLLIS WHEATLEY YWCA CASE STUDY, WAHINGTON D.C.

Property: Phyllis Wheatley Young Women's Christian Association (YWCA), an 84-unit building constructed in 1920
Property Type: Non-Profit – 501(c)(3)
Real Estate Developer: Dantes Partners
Total Investment: $17 million

Capital Stack

1. 9% LIHTCs with Wells Fargo & Company providing tax-credit equity
2. Replacement Housing Factor funds from the D.C. Housing Authority (DCHA)
3. An Annual Contributions Contract (ACC) operating subsidy, notes, and a local rent subsidy from the D.C. Department of Housing and Community Development (DHCD)
4. A grant from the D.C. Department of Behavioral Health
5. A PACE assessment financed by Amalgamated Bank
6. A deferred fee and a solar equity contribution provided by the developer, Dantes Partners

Lender Consent

1. The PHA (DCHA)
2. The City (DHCD)

Urban Ingenuity, the D.C. PACE program administrator, worked with the LIHTC provider and Wells Fargo & Company, the tax-credit equity provider, to ensure that they were comfortable with PACE financing. Further, HUD required a technical, PACE subordination, giving HUD the legal authority to choose the new property owner in the case of default as a means to ensure the project's affordability.

Legal Documents

1. Inter-Creditor Agreement
2. Declaration of Trust
3. Mixed Finance ACC Amendment
4. Rental Term Sheet

PACE Financing

PACE Program Administrator: Urban Ingenuity
Financing: $635,000
Term: 15 Years
PACE Lender: Amalgamated Bank
Efficiency Measures: Solar/photovoltaic cells, Efficient HVAC systems, Heat recovery system, LED lighting, Energy Star appliances, Low-flow water fixtures
Expected Savings:

- $73,000 annual savings from 24% reduced energy use and 47% reduced water use
- $7,000 average annual cash flow increase
- 114 metric tons reduction in CO_2 emissions

Economic Incentives

The YWCA building is a master-metered, and the property owner receives the cost savings.

Source: Urban Ingenuity

USDA RD Approval of PACE Financing

Any property funded through USDA RD's direct loans, mortgage guarantees, or rental assistance programs interested in leveraging PACE financing must obtain consent from the USDA RD national office. Developers would work closely with the PACE program administrator, the PACE lender, and the local USDA RD agency.[lii] The local agency would review the paperwork (sources and uses of capital) and submit it to the state office, located in Temple in the case of Texas, and the state office would work with the national office to obtain written consent.[liii]

National, state, and local directors at USDA RD are significantly supportive of PACE. There is a precedent of USDA RD working with PACE in the state of Michigan. This project represented the first USDA RD-funded project in the country using PACE financing, and the second multifamily housing project overall. See Figure 5 (below). Lean & Green Michigan, the PACE administrator in Michigan, and Petros PACE Finance, a PACE lender, are currently working on six additional USDA RD-funded properties, totaling $1.7 million.[liv]

Figure 5 – Case Study 2

CAMBRIDGE COURT CASE STUDY, MICHIGAN

Property: PK Housing & Management, a family-owned company
Property Type: Private
Contractor: Parker-Arntz
Total Investment: $125,000

Capital Stack

1. Rural Energy for America Program (REAP) grant from USDA RD
2. PACE assessment from Petros PACE Finance

Lender Consent

1. USDA RD

Legal Documents

1. Lender Consent Form

PACE Financing
PACE Program Administrator: Lean & Green Michigan
Financing: $117,580
Term: 20 years
PACE Lender: Petros PACE Finance
Efficiency Measures: 20 kW solar system, LED lighting, low-flow plumbing fixtures, high-efficiency appliances, and upgrades to the heating and cooling systems
Expected Savings:

- $17,000 annual savings from 40% reduction in electricity and natural gas consumption and 29% reduction in water use
- $6,500 average annual cash flow increase

Economic Incentives
The Cambridge Court complex is tenant-metered for electric installations but master-metered on the gas supply. Further, the property owner covers the utilities in the common areas. Accordingly, both tenants and the property owner accrue the energy savings.

Source: Lean & Green Michigan; Petros PACE Finance.

TDHCA Approval of PACE Financing

Many affordable rental developments use LIHTCs, grants, and bonds issued by the TDHCA to fund rehabilitation projects. However, the TDHCA becomes the mortgage holder of a property only when it provides multifamily direct loans. Regardless, there are two scenarios where the TDHCA would be involved in the approval process of a PACE assessment:

1. **TDHCA Holds the Mortgage:** Owners of properties with TDHCA mortgages interested in undertaking a PACE assessment for a rehabilitation project must obtain lender consent from the TDHCA. The developer, the PACE program administrator, the PACE lender, and the Multifamily

Loan Programs Administrator would work together in obtaining approval from the TDHCA Executive Director.[lv]

2. **TDHCA Awards LIHTCs:** The use of LIHTCs in the capital structure of a rehabilitation project using PACE does not require the written consent of the TDHCA. However, the TDHCA would review the financing structure when assessing projects for competitive 9% LIHTCs to verify that the different capital layers are reliable sources of funds. Normally, developers rely on consultant/advisory firms to deal directly with the TDHCA. Advisory firms would work with the PACE program administrator, the PACE lender, and the Housing Tax Credit Manager to ensure that they are comfortable with the PACE assessment.[lvi]

The investor providing tax-credit equity is also involved in the approval process of a PACE assessment when there are LIHTCs in the capital structure, either in the funding structure of the rehabilitation plan or in the funding structure when the building was initially built. Whether or not the investor would need to provide consent depends on the project, though likely in most projects. In the Washington D.C. case, because the capital stack of the rehabilitation included 9% LIHTCs, the D.C. PACE program administrator worked with the LIHTC provider. The program administrator also worked with Wells Fargo & Company, the tax-credit equity investor, to ensure that they were comfortable with PACE, although their written consent was not required.[lvii] However, in non-affordable housing projects involving other types of tax credits, consent from investors providing tax-credit equity has been required.

LIHTCs FUNDING STAKEHOLDERS

- ***Property owners/developers*** *use an* ***advisory/consultant firm****, including* ***legal experts****, to structure the deal and apply to the HTC program.*
- *Developers also use a* ***syndicator*** *to convert the tax credits into up-front equity. The syndicator finds an* ***investor*** *that buys the tax credits.*
- *A* ***construction lender*** *provides short-term debt to fund the completion of the project. There could also be other funding tools such as City bonds, rebates, and/or grants.*
- *Once the project is finalized, a* ***permanent lender*** *takes on the debt and, if necessary, refinances an existing mortgage.*
- *In the vast majority of cases,* ***mortgage insurance entities*** *such as the FHFA, FHA, or USDA RD guarantee the mortgages to private sector lenders.*

The PACE program administrator in Michigan is currently working on multiple affordable housing projects that involve LIHTCs. One of the pilot projects in the City of Austin used LIHTCs when it was developed in 2008. Refer to “Findings and Opportunities” for details.

City Approval of PACE Financing

Most funds allocated by entities at the city-level are in the form of grants or rebates. These entities are not required to provide lender consent to a PACE assessment but they would review the financing structure of a rehabilitation project to verify that the different capital layers are reliable sources of funds.[lviii]

If a city owns a property through entities, such as the AHFC in the case of the City of Austin, or has provided funding through the issuance of bonds, it must give lender consent to a PACE assessment. According to conversations with the NHCD and AHFC, if the property is required to undertake additional sources of capital, the AHFC will likely subordinate its lien position. Owners of properties funded by the City of Austin that are interested in PACE financing would work closely with the PACE program administrator, the PACE lender and the AHFC in obtaining the necessary approval.[lix]

The PACE program administrator in the District of Columbia worked with the local PHA, the City and other entities in a $17 million multifamily housing rehabilitation project (Figure 4). In this project, the capital structure included six different funding sources. However, only two entities were required to provide lender consent: the PHA (DCHA) and the City (DHCD).[lx]

Market-Rate Structures

Market rate structures are naturally occurring affordable housing units. These privately owned properties do not receive public subsidies but nevertheless, have modest rents. The low- and moderate-income population, those earning more than 30% AMFI, is typically served by market-rate structures.[lxi] According to Housing Works Austin, there were over 62,000 market-rate affordable units for households earning below 60% AMFI as of 2013.[lxii]

Approximately 62% of the unsubsidized housing stock in the City was built prior to 1990, "making it ripe for redevelopment or significant capital improvements and expenditures."[lxiii] These privately owned properties have no involvement with public entities (unless there is a permanent loan guaranteed by a government-sponsored entity such as Fannie Mae). The approval process of a PACE assessment resembles that of a commercial project, in which the PACE program administrator and the PACE lender would work closely with the developer and mortgagee, if any, in obtaining lender consent.

Manual 2-How to Identify Potential Projects

This manual lists the steps for identifying affordable housing properties that are available to leverage PACE financing.

Properties in RAD Conversion

Nationwide, 50-70% of the 3,300 PHAs are using the RAD conversion program. Many of these housing authorities convert 100% of their stock.[lxiv] As previously mentioned in this report, projects need to secure financing during the conversion to fund property-wide improvements, including energy efficiency retrofits. Whether or not projects shift into PBVs or PBRA contracts will determine how much of the utility savings can transfer to, or be shared with, property owners, and how tenants will benefit.

HUD publishes the list of projects in conversion by state, housing authority, and conversion type (PBV or PBRA) on its website as the "List of Unit Reservations."[lxv] As mentioned in the "Findings and Opportunities" section of this report, the opportunity for PACE financing is in the multiphase or portfolio awardees, as well as in the properties on waitlist. These properties are or will be in the process of securing financing to fund the required improvements. Given the cap of 185,000 units that can be converted nationwide, PHAs have a limited window for securing the capital needed to fund the improvements.[lxvi]

Country-wide, there are over 40,000 units in the multiphase and portfolio phase. Appendix 4 shows units, by state, that have received multiphase and portfolio awards as of July 2016. Refer to the source to see the information by housing authority.

Mixed-Finance Structures

Federal and state level listing of properties receiving federal rental assistance or direct capital include:

- The "National Housing Preservation Database"
- HUD's "Picture of Subsidized Households"
- The "LIHTC Database Access"
- USDA RD "Multifamily Housing Rentals"

PACE stakeholders can use these databases to identify PACE eligible projects their jurisdiction. At the City level, various tools can help interested parties narrow the results. These are some examples for the City of Austin:

- The City of Austin publishes the "Affordable Housing Inventory" in the Open Data Portal with data provided by the NHCD. Included, are properties funded through the City. This database is particularly helpful given that it lists project types (multifamily vs. single family, duplex, or other type), units per AMFI, affordability restrictions, program amount, and other. This can be crossreferenced with the “Energy Conservation Audit and Disclosure (ECAD) Multifamily Audit and EUI Data”, also available in the Open Data Portal and provided by Austin Energy, which provides details such as year of construction, utility type, and Energy Use Intensity[lxvii] (EUI).

- The Austin Tenants’ Council publishes an annual “Guide to Affordable Housing in the Greater Austin Area” that provides details about existing housing options in the area with 3 or more dwelling units receiving project-based assistance and/or direct capital. This is a useful guide offers details to the type of subsidy that each project receives (from HUD, USDA RD, the TDHCA, and/or the City), which helps determine the entities involved in the approval process of PACE.

How to Narrow Results?

There are different approaches that can be used to scope down the inventory of properties:

1. Focus on the jurisdictions where PACE is established. See “PACE Financing” for details.
2. Look at older properties and those with high EUI.
3. In the City of Austin, identify properties that have not complied with ECAD, the local energy conservation standards.
4. Focus on simple structures. Focus on properties receiving subsidies from one public entity only, cities, and on naturally occurring affordable properties.
5. Reach out to mission-driven (non-profit) owners of affordable housing properties that are sometimes more willing to invest in energy and water efficiency measures.
6. Avoid properties with mortgages insured by Freddie Mac or Fannie Mae until the FHFA publishes guidance for obtaining FHFA consent to PACE investments on large multifamily housing properties for which Freddie Mac or Fannie Mae is the mortgagee.[lxviii] See the “Findings and Opportunities” section for further details.

Manual 3- Why Utility Allowances Matter

UTILITY ALLOWANCE DEFINITION
"[An] estimate of the average monthly utility bills (except telephone) for an energy-conscious household. This estimate considers only utilities paid directly by the tenant. If all utilities are included in the rent, there is not a utility allowance."[lxix]

In mixed-finance structures, privately owned properties receiving rental assistance or subsidies in the form of direct capital enter into a contract with the public agency in which the property owner commits to comply with long-term rent and income restrictions. These subsidies also create a utility allowance if tenants pay part or all of the utilities. **Many stakeholders believe that tenants in tenant-metered buildings receive the monetary savings from reduced utility bills. However, in tenant- and sub-metered buildings, the savings from energy and water efficiency retrofits can sometimes transfer to, or be shared with, property owners if the retrofits result in a lowered utility allowance.** Ultimately, the ability to share savings depends on both the public agency providing subsidies and the type of rental assistance program.

Building Types[lxx]

Master-Metered: *A master meter measures consumption for the building as a whole, rather than for individual dwelling units or households. Utilities are included in the rent and there are no utility allowances. The public agency providing assistance, in the case of HUD-assisted properties, pays the local utility company for the utilities used.*
Check- or Sub-Metered: *Sub-meters installed by public agencies in addition to existing master-meters allow agencies to set a utility allowance with the maximum energy consumption households can consume without a surcharge.*
Individually- or Tenant-Metered: *Each household receives a utility bill from the utility company and pays the account directly to the utility provider. Public agencies providing assistance calculate a utility allowance that results in a corresponding reduction in the portion of the rent paid by the tenant.*

Utility allowances are deducted from the total payment made by tenants towards housing costs.[lxxi] In other words, tenant households keep the amount that corresponds to the utility allowance to pay for the utility bills, given that they receive the bills directly from the utilities provider. In properties with rental assistance programs, the difference between what tenants can pay in housing costs (normally no more than 30% of a household's monthly-adjusted income) and the utility allowance is the amount paid by tenants towards rent. Public agencies providing rental assistance pay property owners the difference between the rent and the amount paid by tenants.

Example of a property receiving rental assistance:

A. *Rent: $800*
B. *Thirty percent of a household's monthly adjusted income: $400*
C. *Utility allowance: $100 (the household keeps this in his/her pocket)*
D. *Household's payment towards rent to the property owner (B-C): $300*
E. *Rental assistance provided by a public agency to the property owner (A-D): $500*

HUD & PHA Methodology

Refer to Appendix 3 for details about the different programs subsidized by HUD.

Section 8 – Project-Based Voucher (PBV) Program
Tenant-metered properties receiving PBVs use the PHAs' utility allowance schedule. PHAs estimate utility allowances based on normal communities' consumption patterns, using PHAs' jurisdictions or specific municipalities. This methodology categorizes buildings with similar characteristics and calculates utility allowances per category.[lxxii] [lxxiii] Essentially, this method is not based on the actual energy consumption at the property.

Who receives the savings from energy and water efficiency retrofits? – If a project receiving PBVs goes through rehabilitation, tenants receive the utility cost savings. Even though utility allowances are reviewed annually, given that they are calculated based on aggregated samples of buildings, the rehabilitation of one project does not translate into a 1:1 reduction in the utility allowance of the overall sample. Tenants therefore accrue most of the savings.[lxxiv]

Using the previous example, a household keeps $100 to pay for its own utility bill, which corresponds to the utility allowance that is calculated based on a sample of properties, not site-specific. Post a rehabilitation project the utility bill drops to $50.

Because the utility allowance is not site-specific, the $50 reduction in the utility bill does not translate into a $50 reduction in the utility allowance. The utility allowance experiences a minor change, if any, and tenants continue to keep an amount close to $100 to pay for utility costs but actual utility bills are closer to $50 on average. Tenants keep the savings.

Implications for investments in energy and water saving retrofits – Under this model, tenants receive the monetary savings because the allowance is not based on the energy consumption of the specific building.[lxxv] Thus, property owners may be discouraged from investing in efficiency retrofits. While some PHAs are using Energy Efficiency Based Utility Allowances (EEBUA) for newer buildings that meet certain code and energy standards,[lxxvi] this methodology is based on a sample of properties, not site-specific.

However, mission driven non-profits may be more inclined to undertake a rehabilitation project due to the improved living conditions of tenants and quality of life that monetary savings may provide.

Properties in RAD Conversion – PBV

Properties in RAD Conversion—shifting units from federal owned public housing (Section 9 program) into the PBV program—capable of demonstrating that rehabilitation projects will reduce utility costs can request a waiver from HUD for site-specific utility allowances.[lxxvii] This allows energy and water efficiency improvements to be reflected in the utility allowance upon revision. In addition, savings are transferred to property owners, providing the necessary economic incentives for property owners to pursue energy and water efficiency improvements.[lxxviii] At the time of this writing, two projects nationwide requested and received this type of waiver. [lxxix]

Section 8 – Project-Based Rental Assistance (PBRA) Program

Properties receiving PBRA use actual consumption data. These are project-specific utility allowances, calculated based on billing data, and updated annually.

Who receives the savings from energy and water efficiency retrofits? – HUD accrues the financial benefit from the utility cost savings when a project receiving PBRA goes through rehabilitation. While utility allowances are calculated based on buildings' actual energy consumption data,[lxxx] reductions to utility allowances reduce the rental assistance payment made by HUD to the property owner. [lxxxi]

Example of a property receiving PBRA; pre- and post-PACE assessment:

	Pre-PACE	*Post-PACE*
A. Monthly Rent Received by Landlords	*$800*	*$800*
B. 30% of a household's monthly adjusted income	*$400*	*$400*
C. Utility allowance	*$100*	*$50*
D. Average utility bill	*$100*	*$50*
E. Household's payment towards rent (B-C)	*$300*	*$350*
F. Total household's housing costs (D+E)	*$400*	*$400*
G. Rental assistance provided by public agency (A-E)	*$500*	***$450***

As the example demonstrates, a PACE assessment can result in $50 per unit reduction in the utility allowance. HUD accrues the cost savings, not the property owner.

Implications for investments in energy and water saving retrofits – As with the PBV program, given that property owners do not receive the direct monetary savings from energy and water efficiency retrofits, this program provides no direct economic incentive to pursue this type of investments.

Properties in RAD Conversion – PBRA

Properties shifting units from federal owned public housing into the PBRA program able to document that the rehabilitation reduces utility costs may transfer 75% of the savings to the new property owners after RAD Conversion.[lxxxii] This allows property owners to capture the cost savings from energy and water efficiency retrofits.

USDA RD Methodology

USDA RD-funded properties use site-specific actual consumption data to determine utility allowances based on expected costs and reviewed annually supported by documentation.[lxxxiii]

Who receives the savings from energy and water efficiency retrofits? – In the short-term, tenants receive the energy and water savings. The USDA RD allows transfers of the utility savings from tenants to property owners, keeping the rent paid by tenants consistent with USDA RD's specified guidelines if property owners can document the following three conditions at the time of annual assessment.[lxxxiv]

1. Actual utility costs are lower than the existing utility allowance.
2. The tenant is paying a rent that is less than the specified rent according to the agency's income guidelines given the energy and water savings.
3. The property underwent a rehabilitation project that drove the energy and water savings; as a result, the property has a senior lien tied to the property's real estate tax bill, the PACE assessment.

Example of a property receiving USDA RD rental assistance; pre- and post-PACE assessment:

	Pre-PACE	*Post-PACE*
A. Monthly Rent Received by Landlords	*$800*	***$850***
B. 30% of a household's monthly adjusted income	*$400*	*$400*
C. Utility allowance	*$100*	*$50*
D. Average utility bill	*$100*	*$50*
E. Household's payment towards rent (B-C)	*$300*	*$350*
F. Total household's housing costs (D+E)	*$400*	*$400*
G. Rental assistance provided by public agency (A-E)	*$500*	*$500*

As the example demonstrates, a PACE assessment can result in $50 per unit additional NOI to the landlord. The increased share of rent per unit going toward operations and maintenance reduces the amount of subsidy per unit required to make projects financially viable.

Implications for investments in energy and water saving retrofits –Property owners receive the savings from energy and water efficiency retrofits and distributed generation investments upon presentation of the required documentation. Because the calculation of the utility allowance is based on actual data of the respective building, any rehabilitation including energy and water retrofits translates into reductions in the utility allowance, providing the necessary economic incentives to property owners.

TDHCA Methodology

The TDHCA allows for different calculations of utility allowances:[lxxxv]

- USDA RD-assisted properties must use the method prescribed by the USDA RD
- HUD-assisted properties must use the method prescribed by HUD or the PHA, depending on the assistance program
- Other buildings (non USDA-RD and non-HUD assisted) can use:
    - PHA's Schedule (PBV program)
    - HUD's Utility Schedule Model (PBRA program)
    - Written Local Estimate, also called Local Utility Company Allowance (estimate calculated by the local utilities provider based on similar units/properties in the area)
    - Energy Consumption Model (project-specific, engineering-based estimate performed by a licensed mechanical engineer)
    - Actual Use Method (allowance based on actual consumption data of a sample population with similar characteristics)

Who receives the savings from energy and water efficiency retrofits? – When there is no rental assistance from HUD or USDA RD, changes in utility costs directly impact property owners.[lxxxvi] When there are rental assistance programs, the savings from lower utility costs go to tenants (PBV case), the public agency providing assistance (PBRA case), or property owners upon presentation of the required documentation (USDA RD case). For properties under RAD conversion, in some cases, savings can be shared with property owners, as noted earlier.

Implications for investments in energy and water saving retrofits – The implications depend upon the methodology used. For USDA RD, HUD, and PHAs methodologies, refer to the previous two subsections. The other methodologies, available for projects that are non-USDA RD and non-HUD assisted, provide the economic incentives to property owners to invest in energy and water efficiency solutions by using engineering-based calculations, site-specific data, current utility rates, or other mechanisms that make property owners profit from such investments.

Appendices

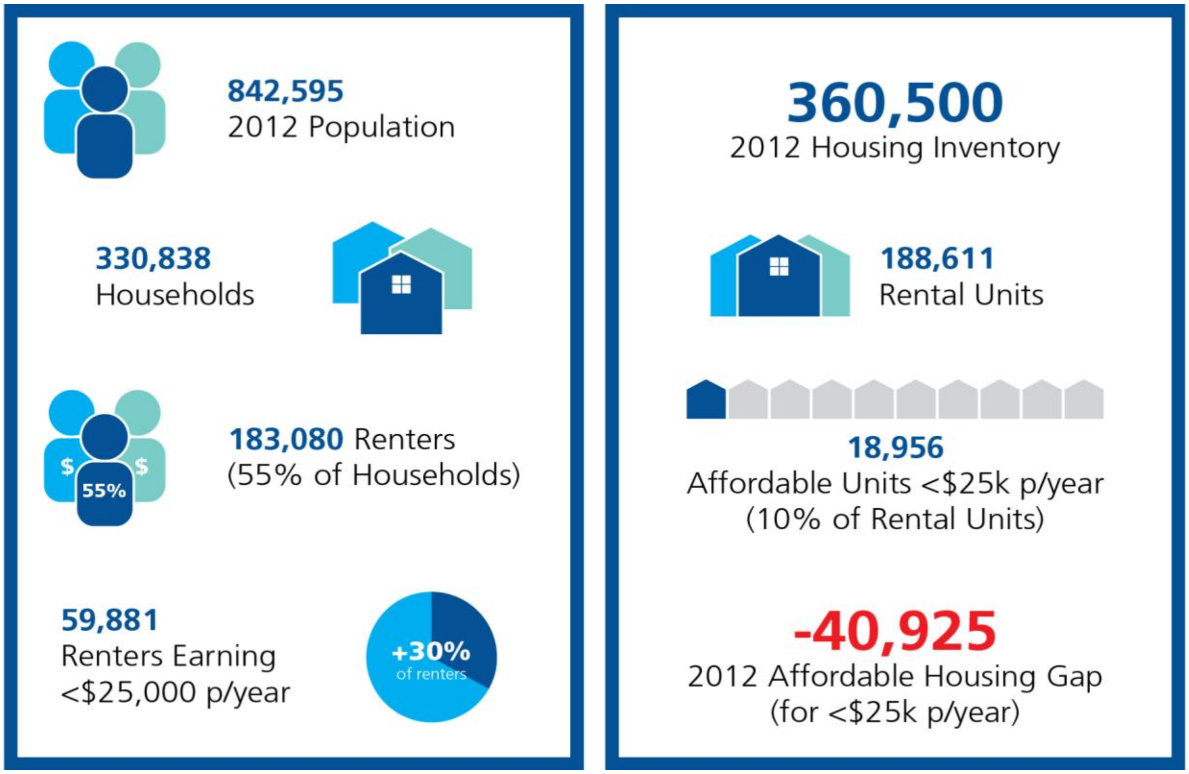
Appendix 1 –Demographics & Housing Market Snapshot

During the past decade, the growth in the population of Central Texas[lxxxvii] and particularly of Greater Austin, also called the Austin Metropolitan Statistical Area (MSA),[lxxxviii] surpassed that of the 50 largest metropolitan areas in the country. Greater Austin gains 157 new residents daily, with 70% representing net migration and 30% natural growth.[lxxxix] These figures compare to 46% and 54% for the total country, respectively.[xc]

As of July 2015, Central Texas had a population of 2.9 million, growing at an average annual rate of 2.4% during the preceding five years. Greater Austin's population totaled 2 million, growing at a faster pace of 3% on average. The average annual growth of the largest 50 metropolitan areas in the nation was 1.1%, while the total population of the U.S. saw an average increase of only 0.8%.[xci] The "Austin Strategic Housing Plan" draft report, published by the NHCD in June 2016 states that *"Austin's population is projected to continue to increase at a rate of nearly 3% per year, with 400,000 additional people expected to live in Austin by 2045, necessitating the production of 200,000 housing units for those households over the next thirty years to meet demand."*[xcii]

According to the City of Austin's "2014 Comprehensive Housing Market Study", 55% of households are renters and 45% homeowners. This compares to 35% and 65% nationwide, respectively.[xciii] Between 2007 and 2012, high-income renters (those earning above $75,000 per year) grew by 15,000, while low-income renters (those earning less than $25,000 per year, which corresponds to approximately 30% AMFI) grew by 1,000.[xciv] The imbalance between high-income renters' growth and that of low-income renters contributes to the development of market-rate housing and higher priced rentals. Yet, in the past decade, moderate to low-paying jobs saw the strongest employment growth in the area.[xcv]

Figure 6 – Austin's Demographic and Housing Snapshot



Data taken from BBC Research & Consulting 2014 Comprehensive Housing Market Analysis. July 2014.

The City Observatory, a think-tank specializing in data-driven analysis of cities, ranked the 40 major metropolitan areas in the county according to the growth in concentration of urban core employment. Austin ranked first at 29%, compared to the sample average of 16%.[xcvi] **The City's population growth, coupled with its employment concentration ratio, directly impacts the area's demographics and housing market: fewer rental options available for moderate and low-paying workers will displace residents, the low-income population in particular, to either distant neighborhoods inside the City or outside the City limits.** In fact, approximately 60% of workers live outside Austin, but are commuting into the City, of which 82% drive alone.[xcvii] The population growth will not only affect the City's transportation infrastructure, but also the area's water supply and natural resources.[xcviii]

Over the past two decades, many private and public organizations have quantified the affordable housing crisis in the City of Austin. While federal, state, and local governments have increased the supply of affordable housing through various forms of public investment including tax tools, zoning, land use policies, regulatory tools, and public-private partnerships, the increased supply has not kept pace with the growing demand.[xcix]

In addition to the growing population pushing real estate prices up and displacing the low-income population, the City of Austin faces other challenges in the affordable housing market. Approximately 13% of the privately-owned subsidized housing is under affordability restrictions that will expire in less than 10 years.[c] These buildings are at risk of being converted into market-rate housing (gentrification), threatening to worsen the affordable housing gap of over 40,000 units for households earning less than $25,000 per year.[ci]

Figure 7 – Rental Gap Analysis by Income Level

Gaps by Income Range								
Income Range	Number and % of Renters		Maximum Affordable Rent+Utilities	Number of rental units, 2012 ACS	% of rental units	Rental Gap	Cumulative Gap
Less than $5,000	12,677	7%	$125	635	0%	(12,042)	(12,042)
$5,000 to $9,999	10,967	6%	$250	2,774	1%	(8,193)	(20,235)
$10,000 to $14,999	11,770	7%	$375	1,947	1%	(9,822)	(30,057)
$15,000 to $19,999	12,430	7%	$500	3,054	2%	(9,376)	(39,433)
$20,000 to $24,999	12,037	7%	$625	10,546	6%	(1,491)	(40,924)
$25,000 to $34,999	22,275	12%	$875	52,540	28%	30,264	(10,660)
$35,000 to $49,999	31,948	18%	$1,250	67,815	36%	35,867	25,207
$50,000 to $74,999	28,717	16%	$1,875	37,497	20%	8,780	33,988
$75,000 to $99,999	16,897	9%	$2,500	11,802	6%	(5,095)	28,893
$100,000 to $149,999	12,961	7%	$3,750	-	0%	(12,961)	15,932
$150,000 or more	6,527	4%		-	0%	(6,527)	9,406
Total	**179,205**	**100%**		**188,611**	**100%**	**9,406**	

Note: Excludes renters who do not pay rent but instead receive boarding for exchange of goods or services. Affordability is based on HUD's criteria. Source: BBC Research & Consulting 2014 Comprehensive Housing Market Analysis. July 2014.

Based on 2014 rental prices, the affordable housing gap increased by more than 7,000 units from 2012 to 47,700, which explains why the proportion of cost burdened households – when households pay more than 30% of their gross household income in housing costs, including rent, mortgage payment, basic utilities, property taxes, and homeowners insurance – continues to increase.[cii]

Another challenge is the aging housing inventory. Sixty-two percent of the market-rate housing was built prior to 1990.[ciii] National and local studies estimate preservation and rehabilitation projects to cost between one-half to two-thirds the cost of new construction, which is estimated at $125,000 to $175,000 per unit.[civ]

Appendix 2 – PACE Financing

What is PACE?[cv]

PACE is a financing program that enables owners of commercial, industrial, and residential properties to obtain low-cost, long-term funds for 100% of the cost of energy and water efficiency retrofits and distributed generation investments.

PACE assessments help property owners overcome financial barriers that typically discourage this type of investment, such as extended payback periods and lack of access to capital for the large upfront cost of utility saving retrofits. The improvements usually reduce utility costs more than enough to cover PACE repayment obligations turning investments cash-flow positive and enabling property owners to improve their bottom-line profitability.

PACE assessments are paid through a property assessment voluntarily imposed on the property by its owner with the written consent of existing mortgage holders and secured by a senior lien. The assessments attach to and follow title to the property, and are not subject to acceleration upon sale, default, or foreclosure. If the property changes hands before the PACE assessment is fully repaid, the assessment remains in place and the repayment obligation automatically transfers to the next owner.

Currently, 32 states and the District of Columbia have enacted some form of a PACE legislation.[cvi]

Nationwide, PACE has funded 104,000 residential upgrades totaling $2,237 billion and generating 22,000 jobs. In the commercial space, PACE has funded 795 commercial upgrades totaling $292 million and generating 3,500 jobs.[cvii]

PACE in Texas[cviii]

The Texas PACE Act, led by a non-partisan, non-profit organization called Keeping PACE in Texas (KPT), was enacted in June 2013. The PACE program in Texas has three main differences when compared to commercial PACE programs operating in other states.

First, its uniformity –KPT assembled a stakeholder coalition to support the passage of the PACE Act and the design of “PACE in a Box”: a low cost, market-based, turnkey program with best practices, uniform guidelines, and model documents for communities that want to establish a sound PACE program. At the time of publication, Brazos County (Bryan), Cameron County (Brownsville), El Paso County (El Paso), Fort Bend (Katy), Hidalgo County(McAllen), Travis County (Austin), Willacy County (Raymondville), and Williamson County (Georgetown), the City of Dallas, and the City of Houston have operational PACE programs in Texas. Several other counties are in the process of establishing PACE programs.

Second, it is an open-market model – While the statute permits the use of non-general revenue (non-general obligation) bonds for PACE financing, the coalition encouraged developing a competitive market for capital as the initial and preferred source for PACE funding. Property owners select their own contractor and lender, and negotiate the terms of the project and financing in the market place.

The Texas PACE statute authorizes municipalities and counties to work with private sector lenders to provide the upfront financing for the cost of qualified projects, and to collect the repayment through voluntary annual assessments during an amortization period of up to 20 years or more—not to exceed the projected useful life of the improvements.

Texas PACE Authority (TPA), the non-profit organization created in 2015 with the express goal of streamlining the implementation of PACE-funded projects in the state, ensures that the proposals meet the statutory and best practices requirements of the PACE in a Box model. The TPA does not endorse any particular lenders. There are 5 lenders interested in financing PACE projects, which are listed on TPA's website.[cix]

Third, in the residential sector, only properties with five or more dwelling units are eligible for PACE – Given that the FHFA policy was in litigation and subject to a proposed rulemaking, in 2013 when the Texas legislature passed its PACE statute, the legislature decided to focus on commercial and residential properties with five or more dwelling units, and postpone addressing the residential sector affected by the FHFA directive until federal guidance becomes available.[cx]

How it Works[cxi]

Once PACE has been established in a county or municipality, property owners, developers, contractors, lenders, and other stakeholders can work together to create PACE projects and apply to TPA, the non-profit, program administrator in Texas. While a PACE deal does not always follow the same structure, five steps occur:

Step 1: PACE Validation – Once the property owner and contractor have selected a project, an application can be filed with the TPA. The TPA issues a letter indicating the project is a valid PACE project based on the information in the application and provided the information be validated at closing.

Step 2: Independent Third Party Reviewer (ITPR) Analysis—The statute requires that an independent professional engineer, an ITPR, review the baseline analysis of the property and the contractor's projected utility savings using the TPA's Technical Standards Manual.[cxii]

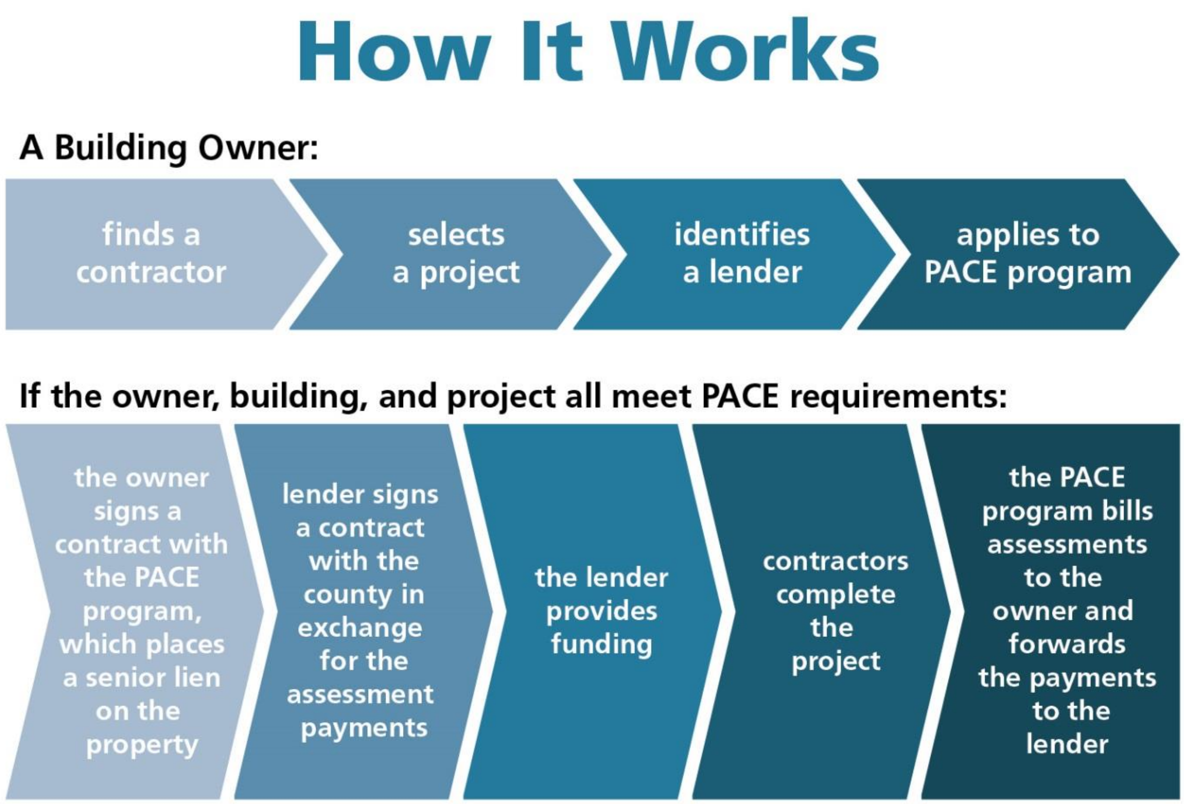
Step 3: Securing Funds – Property owners can work with developers or directly with lenders to negotiate PACE financing terms, including the interest rates and the length of the assessment. The assessment term must be long enough to result in utility savings that exceed the cost of the assessment over the life of the assessment, and may not exceed the projected useful life of the improvement.[cxiii]

Step 4: Review Process – Once the underlying terms are agreed upon, the project closing is prepared. The TPA reviews the engineering report from the ITPR and the underwriting documents are prepared by the lender to ensure that the statutory and local program requirements are satisfied.

Step 5: Closing – At closing, the property owner signs a contract with the local government in which the property owner voluntarily requests an assessment on the property equal to the cost of the PACE project, a senior lien to secure the assessment, and promises to pay the assessments to the local government as they come due. This "owner contract" establishes the security for the financing. Further, the lender signs a "lender contract" with the local government, in which the local government, in exchange for the project funding, agrees to give the lender the right to the stream of assessment payments as they come due and agrees to enforce collection of past due assessments on behalf of the lender in the same manner as past due property taxes are collected. Only past-due assessments can be collected in this manner. Future assessments stay with the land. The property is ultimately liable for the assessment rather than the local government or the PACE administrator.

Concurrent with a project closing, notice of the PACE assessment is filed with the county clerk and added to the property records until the assessment is paid in full. Closings can occur prior to or after the installation of the PACE project. Once the project is installed, an ITPR must confirm that the project was properly installed and is operating as intended.

Figure 8 - How PACE Works in Texas



Source: Keeping PACE in Texas.

Appendix 3- Mixed Financing Structures, Public Agencies & Programs

Prior to the 1970s, HUD was the single government entity subsidizing housing. Over the years, given the increased demand, other public agencies started offering rental assistance programs, home loans, grants, and other funding tools. The affordable housing sector is now ample and complex, with varied funding structures and the involvement of federal, state, and local entities, as well as private stakeholders.

This appendix lists the most common funding tools available to multifamily housing projects. Visit each organization's website for a detailed list of their programs. Also, the Texas Low Income Housing Information Service (TXLIHIS) provides information on federal and state housing programs offered in the state in their "Texas Housing Counselor" site.

HUD Funding

In addition to providing Section 9 housing – conventional public housing – HUD administers the Section 8 rental assistance program, which includes the Housing Choice Voucher (HCV) program (both the Tenant Based Voucher and the Project Based Voucher) and the Project Based Rental Assistance (PBRA) program. HUD also provides mortgage guarantees through the Federal Housing Administration (FHA).

Tenant Based Vouchers (TBVs) cover the difference between 30% of the household's monthly-adjusted household income and the PHA determined payment standard or the gross rent for the unit, whichever is lower. The voucher is linked to the tenant and can be used anywhere in the U.S. where there is a PHA that administers a TBV program,[cxiv] meaning that the family selects a unit of its choice. "If the family moves out of the unit, the contract with the owner ends and the family can move with continued assistance to another unit."[cxv]

Project Based Vouchers (PBVs) are attached to the properties, not tenants. PBVs cover the difference between 30% of the household's monthly-adjusted household income and the gross rent for the unit. Under PBVs, PHAs enter into a Housing Assistance Payment (HAP) contract with the property owner; if the family moves out of the unit, the assistance remains with the unit.[cxvi]

The **Project Based Rental Assistance (PBRA)** program is similar to the PBV program. It was developed to provide rental subsidies to multifamily properties with FHA-insured mortgages. Properties receiving PBRAs also have different utility allowances than those receiving PBVs.[cxvii] Figure 9 illustrates who owns, manages, and administers the Section 8 and 9 programs, both overseen by HUD.

Figure 9 – HUD's Section 8 and Section 9 Programs

	Program	Own	Manage	Administer
Section 9	**Public Housing**	PHA	PHA or Private Mgmt. Company	HUD PIH
Section 8	**Tenant Based Voucher (TBV)**	Private	Private	HUD PIH through PHAs
	Project Based Voucher (PBV)	Private or PHA	Private or PHA	HUD PIH through PHAs
	Project Based Rental Assistance (PBRA)	Private or PHA	Private	HUD Office of Housing through PBCAs

USDA RD Funding

The USDA RD provides loans, grants, mortgage guarantees, and rental assistance programs to support housing, economic development, health care, first responder services and equipment, and water, electric and communications infrastructure in rural America.[cxviii]

The **Multifamily Housing Direct Loan (Section 515)** provides competitive financing for affordable rental housing.[cxix] This enables borrowers to set rents that are affordable to low- and moderate-income households. Rents are calculated and reviewed based on each project budget, which reflects the project debt service, reasonable project operating expenses, and a return to the property owner. The tenant contribution to the rent must not exceed the highest of: 30% of the household's monthly-adjusted household income, with an adjustment for any utility allowance; 10% of gross monthly income, with an adjustment for any utility allowance; the portion paid by the tenant specified by a public agency providing rental assistance; or the basic rent, unless the USDA RD is proving rental assistance.[cxx]

The **Multifamily Housing Loan Guarantee Program (Section 538)** insures mortgages originated in the private sector as a means to increase the availability of financing to qualified borrowers that look to develop affordable rental housing. Guarantees cover up to 90% of the loan.[cxxi]

The **Multifamily Housing Rental Assistance Program (Section 521)** "Multifamily Housing Rental Assistance, Rural Rental Housing or Farm Labor Housing projects on behalf of low-income tenants unable to pay their full rent.[cxxii] The program covers the difference between the highest of 30% of the household's monthly-adjusted household income, with an adjustment for any utility allowance, or 10% of gross monthly income, with an adjustment for any utility allowance, and the gross rent for the unit.[cxxiii]

TDHCA Funding

The TDHCA is the state's conduit for federal grant funds for housing and community services in Texas. It provides financial and administrative resources to residents that qualify for affordable housing assistance based on their income level.[cxxiv] The TDHCA manages a variety of programs including those that target multifamily rental housing development and rehabilitation such as Housing Tax Credits (HTC), Multifamily Mortgage Revenue Bonds, and Multifamily Direct Loans.[cxxv] In exchange, property owners enter into a contract where they commit to comply with long-term rent and income restrictions.

The **HTC Program** provides equity to support the development of affordable rental properties or the rehabilitation of existing properties willing to maintain affordable rents for an extended period of time, normally 30 years in Texas.[cxxvi] HTC equity allows property owners to charge lower rents to tenants. Rents and income levels vary from county to county and are calculated based on the AMFI.[cxxvii]

> *"Developers of low-income rental housing use the tax credit to offset a portion of their federal tax liability in exchange for the production of affordable rental housing. To qualify for the tax credit, either 20 percent or more of the project's units must be rent-restricted and occupied by individuals whose income is 50 percent or less of the median family income; or 40 percent or more of the units must be rent-restricted and occupied by individuals whose income is 60 percent or less of the median family income".* [cxxviii]

There are two types of low-income housing tax credits (LIHTCs): the competitive 9% and the non-competitive 4% LIHTC.[cxxix] These funds only partially cover the cost of the investment. Developers using 9% LIHTCs seek either private capital or other public funds in the amount of 25-40% of the cost of the investment; while developers using 4% LIHTCs, seek approximately 60-70% in additional private capital or public funds.[cxxx] In either case, given that the equity is received over time, the funding process involves advisory/consultant firms, legal experts, syndicators/investors, construction and permanent lenders.

STAKEHOLDERS INVOLVED WITH LIHTCs FUNDING

- ***Property owners/developers** use an **advisory/consultant firm**, including **legal experts**, to structure the deal and apply to the HTC program.*
- *Developers also use a **syndicator** to convert the tax credits into up-front equity. The syndicator finds an **investor** that buys the tax credits.*
- *A **construction lender** provides short-term debt to fund the completion of the project. Other short term funding tools include city bonds, rebates, and grants.*
- *Once the project is finalized, a **permanent lender** takes on the debt and if necessary, refinances an existing mortgage.*
- *In the vast majority of cases, **mortgage insurance entities** such as the FHFA, FHA, or USDA RD guarantee the mortgages to private sector lenders.*

The **Multifamily Bond Program** includes tax-exempt and taxable bonds that are "used to fund loans to for-profit and nonprofit developers for the acquisition and rehabilitation or new construction of affordable rental developments."[cxxxi] These bonds are coupled with non-competitive 4% LIHTCs when the bonds finance at least 50% of the cost of the land and buildings in the development.[cxxxii]

The **Multifamily Direct Loan Program** conduits funds from the National Housing Trust Fund (NHTF), overseen by HUD, to nonprofit and for-profit entities for the new construction or rehabilitation of affordable rental developments. This is a repayable low-interest construction-to-permanent loan.[cxxxiii]

Local Funding

There are several entities at the City-level that assist affordable housing properties through grants, loans, bonds, and/or other funding mechanisms.

The City of Austin's **Neighborhood Housing and Community Development (NHCD)** is one of the main entities allocating federal and local funds to the construction and rehabilitation of affordable housing options in the City. Federal funds include capital allocated to the City by HUD, such as the HOME Investment Partnerships program (HOME) and the Community Development Block Grant (CDBG) program. Local funds include the issuance of General Obligation bonds and funds from the Housing Trust Fund (HTF).[cxxxiv]

The **Austin Housing Finance Corporation (AHFC)** is a non-profit affiliated with the City of Austin that has the authority to issue private activity bonds for the financing of decent, safe, sanitary, and reasonably priced housing. It assists the City in the delivery of affordable housing programs using federal and local funds, and may become the mortgage holder and/or owner of a property in some instances.[cxxxv]

During the research process involved in this paper, several entities at the City-level, with funding available in the form of grants or rebates for weatherization investments, contacted EDF's Climate Corps Fellow to combine efforts in increasing the energy efficiency of affordable housing properties:

- **Austin Energy** offers a Multifamily Program that provides cash incentives to owners, developers, and property managers of multifamily properties for making energy efficiency improvements.[cxxxvi]
- The **Travis County Housing Services** agency conduits state funds to the county as well as funds from the Austin Energy Department. It offers grants from the Low-Income Home Energy Assistance Program (LIHEAP) and the Department of Energy (DOE) weatherization program. Each program has different income eligibility criteria and a set of improvements that qualify.[cxxxvii]

Appendix 4 – RAD Multiphase and Portfolio Awardees by State

	Multiphase Units	Portfolio Units	Total Units
Alabama	556	2,672	3,228
Arizona	-	120	120
Arkansas	200	403	603
California	134	889	1,023
Colorado	225	-	225
Connecticut	158	918	1,076
District of Columbia	-	878	878
Florida	76	1,676	1,752
Georgia	625	222	847
Illinois	402	5,239	5,641
Indiana	350	1,006	1,356
Louisiana	132	134	266
Maine	50	-	50
Maryland	-	584	584
Massachusetts	72	-	72
Michigan	45	-	45
Missouri	10	-	10
New Jersey	415	264	679
New York	126	488	614
North Carolina	299	1,732	2,031
North Dakota	210	327	537
Ohio	-	21	21
Oregon	-	631	631
Pennsylvania	331	309	640
Rhode Island	191	-	191
South Carolina	-	1,173	1,173
Tennessee	-	4,879	4,879
Texas	361	6,168	6,529
Utah	-	100	100
Virginia	912	2,748	3,660
Washington	-	292	292
Wisconsin	-	2,113	2,113
Total	**5,880**	**35,986**	**41,866**

Source: Data taken from HUD's List of Units Reservations. July 2016.

Appendix 5- List of Collaborators

Name	Organization
Ann Gass	Housing Authority of the City of Austin (HACA)
Ashley Richardson	Council Member Sabino Renteria, District 3
Betsy Spencer	Neighborhood Housing and Community Development (NHCD)
Bracken Hendricks	Urban Ingenuity
Brandi Burton	Office of Mayor Steve Adler, City of Austin
Charlie Duncan	Texas Low Income Housing Information Service (TLIHIS)
Cory Connolly	Lean & Green Michigan
Daniel Miller	La Reunion Cooperative Housing
David Danenfelzer	Texas State Affordable Housing Corporation (TSAHC)
David Fournier	ARA Newmark
David Potter	Austin Housing Finance Corporation (AHFC)
Doug Misenheimer	Travis County Health & Human Services & Veteran Services
Ellis Morgan	Austin Housing Finance Corporation (AHFC)
Erica Leak	Neighborhood Housing and Community Development (NHCD)
Frank Jackson	Texas Affiliation of Affordable Housing Providers (TAAHP)
Jake Wegmann	University of Texas, School of Architecture
Janine Sisak	Diana McIver & Associates, Inc. (DMA)
Jonathan Bell	USDA Rural Development (USDA RD)
Karen Paup	Texas Low Income Housing Information Service (TLIHIS)
Kathy Tyler	Motivation Education & Training (MET)
Kyle Peczynski	Petros PACE Finance
Letitia Brown-Moore	Neighborhood Housing and Community Development (NHCD)
Elizabeth Mueller	University of Texas, School of Architecture
Mandy De Mayo	HousingWorks Austin
Mansoor Ghori	Petros PACE Finance
Mark Rogers	Guadalupe Neighborhood Development Corporation (GNDC)
Megan Shannon	Momark Development
Michael DeYoung	Texas Department of Housing and Community Affairs (TDHCA)
Michael Gerber	Housing Authority of the City of Austin (HACA)
Mike Sugrue	Stoneleaf Companies

Paul Cauduro	Austin Apartment Association
Rachel Stone	Int'l Center for Appropriate and Sustainable Tech. (ICAST)
Rick Florence	USDA Rural Development (USDA RD)
Sarah Anderson	Sarah Anderson Consulting
Scott Marks	Coats	Rose
Sharon Gamble	Texas Department of Housing and Community Affairs (TDHCA)
Sherri Greenberg	University of Texas, LBJ School
Susan Peterson	Foundation Communities
Terry Mitchell	Momark Development
Tim Irvine	Texas Department of Housing and Community Affairs (TDHCA)
Tom Dixon	Boston Capital
Upasana Kaku	Urban Ingenuity
William A. Lavy	U.S. Department of Housing and Urban Development (HUD)

Notes

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[vii] *Energy Equity*. Retrieved November 05, 2016, from http://energyefficiencyforall.org/issues/energy-equity
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