



CPACE for Seismic STRENGTHENING

CPACE Primer for Seismic Mitigation in the Western U.S.

*Prepared by the Cascadia Region Earthquake Workgroup ([CREW](#))
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Contents

- Introduction2
- What Is CPACE?2
 - What Kinds of Buildings Are Eligible?3
 - Points to Consider3
- How Is a CPACE Program Created?4
 - First Step4
 - Second Step4
 - Motivation4
 - Points to Consider5
 - Models for CPACE Programs.....5
- CPACE for Seismic Retrofits & Construction6
 - Points to Consider6
 - Current Trends.....7
- How Does CPACE Work?7
- Appendix 1: Seismic Case Studies8
- Appendix 2: Information & Resources Online9
 - National9
 - By State9
 - Alaska9
 - Arizona9
 - California9
 - Hawaii10
 - Idaho10
 - Montana10
 - Nevada10
 - Oregon10
 - Utah10
 - Washington.....11
 - Wyoming.....11
- Appendix 3: Example of a Capital Stack12
- Acknowledgments.....13

Introduction

Disaster preparedness professionals know well that there is a pressing need for seismic mitigation of the building stock in communities at risk for earthquakes. A significant hurdle is finding funding to cover the cost of the mitigation, particularly in the case of commercial and large multi-family residential structures. While hazard mitigation professionals are likely aware of the various publicly-funded grants that may be used for strengthening buildings, they may be less familiar with CPACE's potential as an instrument for using private financing to fund seismic mitigation.

The following primer presents an overview of this relatively new tool in the seismic mitigation toolbox, including an outline of the steps involved in instituting CPACE programs. It is hoped that this information will assist disaster preparedness professionals to raise awareness of the CPACE option when discussing seismic mitigation with property owners, decision makers, and other stakeholders in their communities.

What Is CPACE?

CSPACE stands for Commercial Property Assessed Clean Energy financing.

CSPACE financing is a way for owners of commercial property to finance new construction or upgrades that increase the building's energy efficiency and enable use of clean and renewable energy. Depending on the particular state's PACE legislation, structure-hardening projects, such as construction projects that improve seismic resilience, may also be eligible.

Like a conventional loan, CSPACE financing is most often supplied by a private lender; no government funding is used to finance the construction or retrofit projects. Unlike a traditional loan, the financing is tied to the building and the repayment terms are long. For example, the repayment period for a CSPACE loan is typically around 20 to 30 years, as compared to a conventional 5- to 7-year bank loan. CSPACE financing is also set at a fixed rate of interest for the duration of the loan. These terms work because CSPACE financing is legally recognized as a property assessment (a lien on the property), so the repayment obligation stays with the property if it is sold. In other words, each time the building changes ownership, the new owner assumes responsibility for making the payments.

About the Abbreviation

The "C" at the beginning of CSPACE stands for "commercial." A few states offer residential PACE (RSPACE) as well.

In Washington state, an "R" for "resilience" was added to the end of the original abbreviation to make "C-PACER."

A growing number of states now authorize disaster resilience projects in their PACE legislation, although most continue to use the original abbreviation, "CSPACE."

Local governments have long used assessments on property as a tool to pay for projects that have public benefit. PACE is an extension of this tool into the private market: it applies to projects in the private sphere that are deemed to have public benefit, such as those that result in conversion to clean energy, water conservation, or improved seismic safety and resilience.

What Kinds of Buildings Are Eligible?

As the "C" in the abbreviation indicates, this type of PACE financing is for commercial structures. Eligible properties may be either existing structures, or new construction projects. They may be commercial, industrial, agricultural, or non-profit structures, including retail, office, medical, or hospitality buildings, as well as multi-family residential buildings above a certain size (for example, with more than four living units).

The types of properties that are eligible for CPACE financing will be defined in each state's authorizing statutes.

What makes CPACE financing attractive to...

Property Owners & Developers	PACE Lenders
<ul style="list-style-type: none"> ■ It fills in a gap in the project's <u>capital stack</u> where other financing is hard to get. ■ Repayment terms are long (e.g., 15-30 years), at a fixed rate. ■ The debt is tied to the property, so the repayment obligation passes to the new owner if the building is sold. ■ When CPACE is used to finance energy upgrades, the energy savings that result can offset all or a portion of the annual cost of repaying the CPACE loan. ■ For certain retrofits, CPACE can finance up to 100% of a project's costs; building owners can capitalize all of their closing costs into their loan. ■ CPACE enables improvements that increase the market appeal of the building. ■ Depending on the terms of the lease, all or a portion of the cost of repaying the CPACE financing can be passed on to the building's tenants. 	<p>A PACE loan is legally recognized as a property assessment lien. For capital providers, this lien structure lowers the level of risk (as compared to a conventional bank loan) and is in effect what makes it possible for them to supply the financing and offer better terms.</p>

Points to Consider

- Building owners who might otherwise hesitate to invest in substantial resilience and mitigation measures due to uncertainty about how long they will own the building can, with CPACE, feel more secure making the investment, because the debt for the improvements remains with the building.

- CPACE financing can be more complex than a conventional bank loan, and owners should be prepared for additional legal costs when setting up a CPACE loan. In light of this, CPACE may be more cost effective for building owners with large projects, such as a gut rehab for a change of use, than for those planning more modest endeavors.

How Is a CPACE Program Created?

First Step

The state legislature must pass legislation that authorizes the creation of CPACE programs. The legislation may authorize a state agency, county, or city (or both counties and cities) to establish such programs. In order for seismic hardening projects to be eligible for CPACE financing, this use must be specifically included in the legislation.

Second Step

The county, city, or other jurisdiction authorized by the state's CPACE statute must pass legislation, usually an ordinance or resolution, and adopt guidelines to set up a CPACE program. The program may then be administered by the authorizing jurisdiction (e.g., the county or city), or that role may be delegated to an administrator by means of a contract or intergovernmental agreement (for example, Prosper Portland is the designated administrator in Multnomah County, OR).

Statutes for PACE financing differ between states; there may also be variation among county ordinances within the same state. As a result, PACE programs and procedures differ from place to place.

Motivation

Once the state legislature has passed CPACE legislation, it is often a building owner—one who is aware of CPACE and has a project in need of financing—who motivates the local county or city to adopt a CPACE program. It may take a couple of months (or longer), particularly in a large, populous county, for a council to pass an ordinance and for a CPACE program to be set up. That's a long time to wait if you're a building owner with a project in need of financing. Building owners are more likely to think of using CPACE for projects if the CPACE program already exists.

What makes CPACE financing attractive to...

County and City Governments

- It encourages investment in the county and funnels outside investment dollars into the county.
 - It creates and supports local jobs.
 - It is a financial product that local lenders can also offer.
 - It facilitates improvements that increase the value of buildings, which positively affects the tax base.
 - It uses no government funds for loans and involves no government guarantee of the loans; the county/municipality assumes no liability.
 - It supports sustainability and resilience objectives.
-

Points to Consider

- Before approaching a county or city council about instituting a CPACE program, it is a good idea to first identify what kind of program design will be needed in order to align the program with the state's CPACE legislation. It also helps to enlist the assistance of a political champion, such as a county councilor, to support the proposal.
- Unless following an existing model, counties and cities may need real estate finance expertise to set up a CPACE program.
- The cost of administering a CPACE program varies depending on how it is set up, but counties and cities need enough volume of CPACE projects to cover any administrative costs.
- One of the downsides to having every county and municipality adopt its own program guidelines is lack of consistency. Among other issues, it can create market confusion and discourage wider uptake of the CPACE financing option. Potentially easier for all involved—counties and cities, property owners, and capital providers—is adoption of the same program model by all counties within the state.

Models for CPACE Programs

In some states, an organization (such as the Shift Zero C-PACER task force in Washington state) creates model documents (templates) for counties to use in order to set up comparable CPACE programs. Another approach has been for a coalition of CPACE stakeholders to hire a firm to create templates for a given state (for example, Tennessee). Model documents/templates must be designed to accord with the particular state's CPACE legislation. In other words, counties and states shouldn't adopt another state's model documents without modifying them to align with their own state's legislation.

CPACE for Seismic Retrofits & Construction

In the western United States, state legislation permits the use of CPACE financing for seismic hardening in Alaska, California, Hawaii, Nevada, Oregon, Utah, and Washington (see [Appendix 2](#)).

In order for a property owner to take advantage of CPACE financing, the county, city, or other authorized jurisdiction in which the building is located must likewise have passed the necessary ordinance to set up a local CPACE program.

What makes CPACE financing for seismic hardening attractive to:

Property Owners & Developers	States, Counties & Municipalities
<ul style="list-style-type: none"> ■ It can finance the seismic upgrades that some local building codes require when owners undertake structural work or a change of use. ■ Seismic retrofits and seismic improvements in new construction tend to be a large percentage of a project’s budget; CPACE makes the debt for seismic hardening more manageable by fixing a low interest rate and spreading repayment over a longer period (e.g., 30 years). ■ Using CPACE to bundle mitigation and resilience measures can save time and money. ■ Depending on the terms of the lease, all or a portion of the cost of repaying the CPACE financing can be passed on to the building’s tenants. ■ CPACE fills in a gap in the project’s capital stack when other financing is hard to get. ■ The debt is tied to the property, so the repayment obligation passes to the new owner if the building is sold. ■ The resulting mitigation provides long-term value by reducing earthquake damage and losses and increasing the security of the building’s occupants. ■ CPACE-enabled mitigation may improve the market appeal of a building located in an earthquake-prone area. 	<p>CPACE supports resilience objectives—in particular, strengthening buildings to improve public safety, reduce damage, and speed recovery in the event of an earthquake.</p>

Points to Consider

- As part of the CPACE application process, a qualified engineer reviews the design and budget for the seismic hardening features of the proposed project before the capital provider approves the CPACE loan.
- Seismic retrofits are typically more expensive than energy efficiency retrofits.

- A major attraction of PACE financing for energy efficiency upgrades is the way the subsequent energy savings and reduced expenditure will offset all or a portion of the annual cost of paying the CPACE assessment (loan). There is no similar offset for seismic hardening projects. Whether CPACE financing is a good choice depends a lot on how much revenue the building is generating and whether it is sufficient to cover the cost of the new debt.
- In states that have made seismic resilience projects eligible for CPACE financing, the PACE legislation may only require that construction for seismic hardening meet code. In other words, whether seismic strengthening projects must meet or exceed code to qualify is another aspect of CPACE that can vary from place to place.

Current Trends

- ◆ Currently, the use of CPACE for seismic projects is less common than for energy efficiency projects.
- ◆ Use of CPACE for seismic upgrades of existing buildings occurs more often in California than in other states because of requirements in California's building codes.

How Does CPACE Work?

The process of applying for and securing CPACE-financing varies according to the particular jurisdiction's program and guidelines. To discover the details, a useful starting point is the online resources for each state and locality (see [Appendix 2](#)). In a typical scenario:

1. A building owner seeks CPACE financing for a retrofit or new construction project located within a county or city that has passed a CPACE ordinance.
2. To determine whether the project is eligible, and to obtain assistance with the application process, the building owner may consult the county/city's designated program staff or administrator, or a PACE capital provider.
3. The building owner applies to a capital provider; the capital provider agrees to finance the project.
4. The building owner or the capital provider submits the required documentation to the program administrator. If the project meets statutory requirements, the administrator issues a determination of eligibility.
5. The building owner, capital provider, and program administrator coordinate to draft and execute the necessary legal documents. The property assessment lien is then filed against the property.
6. The building owner hires qualified contractors to implement the project.
7. The building owner makes periodic payments in accordance with the terms of the loan/assessment.

Appendix 1: Seismic Case Studies

- Seismic upgrade at [Verity Health's Seton Medical Center Campus](#) (Daly City, CA)
- [Premier Gear Seismic Upgrade](#) (PropertyFit, Multnomah County, OR)
- [KEX Hostel Energy and Seismic Upgrade](#) (PropertyFit, Multnomah County, OR. See also PACE Loan Group [projects page](#).)
- [Neil Kelly Building Energy and Seismic Makeover](#) (PropertyFit, Multnomah County, OR)

Appendix 2: Information & Resources Online

National

The following selection of sites and resources offer basic descriptions and explanations of how CPACE financing works.

- ◆ U.S. Department of Energy: Office of Energy Efficiency & Renewable Energy, [Property Assessed Clean Energy Programs](#)
- ◆ U.S. Department of Energy: [CPACE for Resiliency](#) (slide deck)
- ◆ U.S. Department of Energy: Better Buildings [CPACE webpage and toolkit](#)
- ◆ PACENation (nonprofit association): [website](#)

By State

The following list conveys the status of CPACE in the [NEHRP-Funded States of the Western U.S.](#)

Alaska

- ◆ CPACE is administered on a per borough basis; the primary program is run by the [Municipality of Anchorage](#).
- ◆ Additional information: article on [Energy.gov](#) (Office of Energy Efficiency & Renewable Energy); [Alaska CPACE at Alaska Energy Authority](#); [storymap](#).
- ◆ CPACE is **enabled for seismic hardening**.

Arizona

There is no CPACE law; a bill was introduced in the 2022 legislative session, but was not passed.

California

- ◆ CPACE is administered through various joint development authorities (JDAs) that partner with individual CPACE lenders; the program is well-developed and covers a large portion of the state.
- ◆ Building owners with prospective seismic projects should reach out to a lender who is authorized by the relevant JDA/municipality to provide PACE financing. (A list of authorized providers can usually be found on the JDA/municipality's website.)
- ◆ CPACE is **enabled for seismic hardening**.

Hawaii

CPACE legislation ([HB 2088](#)) was passed during the 2022 legislative session and signed into law by the governor; it includes resilience among the qualifying improvements.

Idaho

There is no CPACE law.

Montana

- ◆ CPACE is administered on a statewide basis by the [Montana Finance Facility Administration](#).
- ◆ Resiliency/seismic financing is not allowed by statute.

Nevada

- ◆ CPACE is administered on a per municipality basis (city or county); Clark County, [Las Vegas](#), [Reno](#), [Fernley](#), and [Henderson](#) currently offer CPACE.
- ◆ There is no official statewide administrator; however, Sustainable Real Estate Solutions (SRS) administers most of the programs.
- ◆ Additional information: Nevada Office of Energy, [PACE webpage](#)
- ◆ CPACE is **enabled for seismic hardening**.

Oregon

- ◆ CPACE is administered on a per municipality basis (city or county); currently, Multnomah County offers CPACE: to learn more, see the [PropertyFit website](#). Deschutes County passed a CPACE ordinance in April of 2022. Washington County is now researching CPACE and may develop a program.
- ◆ CPACE is **enabled for seismic hardening**.

Utah

- ◆ CPACE is administered on a per municipality basis (city or county); municipalities that currently offer CPACE include [Salt Lake City](#) and [Park City](#); see [other participating areas](#).
- ◆ There is no official statewide administrator; however, Sustainable Real Estate Solutions (SRS) administers most of the programs (SRS's [Utah website](#)).
- ◆ CPACE is **enabled for seismic hardening**.

Washington

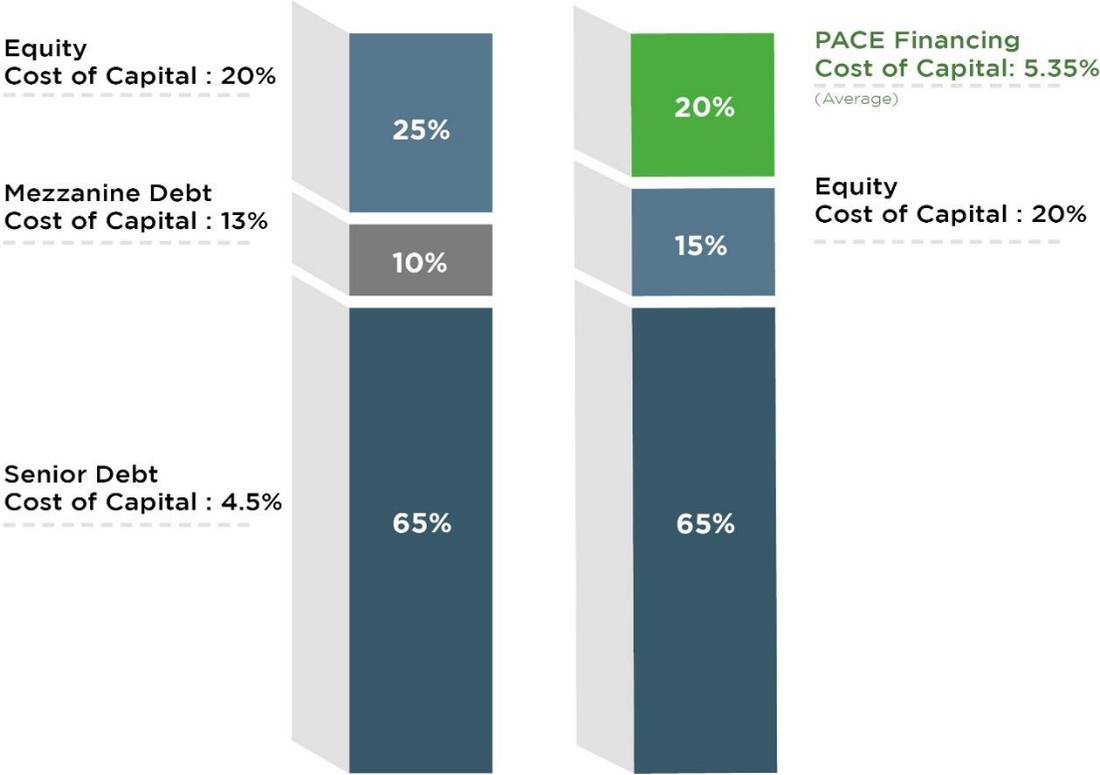
- ◆ C-PACER is administered on a per county basis; a suite of model C-PACER program documents was created by the Shift Zero C-PACER task force (Shift Zero [website](#)); several counties have, or are in the process of establishing, C-PACER programs: [Clark](#), [King](#), Thurston, Snohomish, [Whatcom](#), and Pierce counties.
- ◆ CPACE is **enabled for seismic hardening**.

Wyoming

There is no CPACE law.

Appendix 3: Example of a Capital Stack

The following graphic compares two versions of a capital stack for a project. The stack on the left includes only traditional sources of financing; the stack on the right incorporates PACE. PACE provides an alternative to costlier forms of financing, such as mezzanine debt, thereby reducing the overall expense of the project.



Graphic courtesy of [PACE Loan Group](#)

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