Local Solutions to Flood Insurance Affordability: Portland’s Flood Insurance Savings Program

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OVERVIEW

Flood insurance, required for mortgages in high risk areas, is a critical part of recovery for flood victims. Government disaster aid is often insufficient and delayed. Flood insurance is especially critical for low- and middle-income families who may not have enough savings to fund their rebuilding or are not in a position to take on more debt post-disaster. Despite these benefits, the cost of flood insurance can be prohibitive for the very families that need it most. This has become especially true for older homes after pricing changes to the federal National Flood Insurance Program (NFIP) were adopted in 2012 and 2014.

Further, the flood insurance program can be difficult to navigate due to the complexities of the system. Homeowners are not often offered the assistance they need to help them choose an appropriate policy that is tailored to their unique flood risk and financial position. There may even be errors in their rating. This can leave them with unnecessarily high premiums.

Portland, Oregon saw flood insurance becoming a destabilizing force in some neighborhoods. Absent federal policy, the city developed a three-part program that lowered the costs of flood insurance for residents in older homes by funding elevation certificates for risk-based rating, providing them with expert consultation to guarantee they had the right policy and to fix rating errors, and to identify any risk reducing measures that could lower damages.

KEY FINDINGS

• The price of flood insurance can be a cost burden for lower income families, particularly those in older homes losing premium discounts through the National Flood Insurance Program.

• Absent federal policy to address flood insurance affordability for lower income families, Portland, Oregon adopted a program that lowered the cost of flood insurance for residents by fixing errors, submitting elevation certificates, and better matching coverages to needs.

• By combining low-cost elevation certificates with insurance consultations and home audits, the Flood Insurance Savings Program helped property owners save an average of $720 annually.

• Many insurance agents do not fully understand the flood insurance market and may provide poor advice, increasing consumer costs unnecessarily.

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THE CHALLENGE OF FLOOD INSURANCE AFFORDABILITY NATIONALLY

For the last fifty years, residential flood insurance has been available almost exclusively through the NFIP, administered by the Federal Emergency Management Agency (FEMA). Homeowners with a mortgage from a federally-backed or regulated lender are required to purchase flood insurance if they live in a FEMA-mapped 100-year floodplain. Residential policyholders can purchase up to $250,000 of building coverage and $100,000 of contents coverage. Currently, there are over 5 million policies in force nationwide with 27,300 in the state of Oregon and over 1,800 in the city of Portland.

Since the program’s inception there has always been a tension between charging premiums that are risk based to ensure financial stability and the desire to keep prices affordable in order to encourage widespread purchase of disaster insurance. Recent price changes have further highlighted the tension between take-up rates and the cost of insurance.

Currently, over 80% of NFIP policies are what FEMA refers to as “full risk rates,” which means these properties pay insurance premiums commensurate to the structure’s risk of flooding. There are two classes of policyholders, however, that receive discounts on the price of flood insurance. The largest group of properties with discounted premiums are pre-FIRM structures, those built before FEMA had mapped flood risk in a community on a Flood Insurance Rate Map (FIRM). Pre-FIRM discounts are not means-tested; pre-FIRM property owners receive the discount regardless of their income or wealth. As of fall 2015, these properties accounted for roughly 17 percent of policies. Pre-FIRM properties sustain more damage and have higher claims than post-FIRM properties because they were constructed before floodplain management regulations were in place, requiring more flood resilient building. Due to this higher risk and the financial drain on the program, the price discounts became a target for program reform to better align price and risk.

In 2012 and 2014, Congress passed legislation to phase out pre-FIRM price discounts over time. Pre-FIRM policyholders are now seeing yearly increases in their premiums. For single-family residences, the premium increase must be a minimum of 5 percent but cannot exceed 18 percent per year. For these pre-FIRM properties, FEMA is continuing to increase their rates until the property owner submits an elevation certificate for full-risk, or “post-FIRM” rating. This is because full-risk rates are based on elevation—specifically, the difference in elevation between the first floor of the structure and the estimated height of waters in a 100-year flood, or the base flood elevation (BFE). To date, pre-FIRM properties were not required to have an elevation certificate (EC). Without an elevation certificate, FEMA cannot determine the property’s full risk rate and will therefore continue to raise rates until the homeowner obtains one. Property owners and agents may not realize that premiums will continue to rise without an elevation certificate and that some properties may see a cost savings immediately once an EC is submitted.

For properties whose lowest floor is below the BFE, also referred to as negatively elevated structures, pre-FIRM prices have been a large cost savings, providing discounts to property owners whose homes were built before flood risks were fully understood. For older pre-FIRM properties whose lowest floor is above BFE, it is actually cheaper in most cases for these homes to pay the full risk rates. A barrier, however, is the cost of obtaining an EC.

The price increases on pre-FIRM properties have raised policy concerns over the affordability of flood insurance. There are some low- and middle-income families for whom the cost of flood insurance is a true financial burden to the household. While pre-FIRM discounts are not means-tested, some low-income households benefit financially from them and the loss of these discounts would make flood insurance unaffordable. A recent report from FEMA indicated that

lower income households may be less likely to purchase flood insurance because of the financial burden. Several reports and papers have proposed and examined possible federal policy solutions to this affordability challenge. They generally coalesce around the notion of means-tested assistance for both insurance premiums and hazard mitigation investments (since the riskiest properties are the ones for whom flood insurance is costly). To date, however, Congress has failed to adopt any assistance program to help lower income families afford flood insurance.

A LOCAL SOLUTION: PORTLAND’S FLOOD INSURANCE SAVINGS PROGRAM

BACKGROUND

The cost of flood insurance became a difficult issue for residents in Portland’s Johnson Creek floodplain as price changes to the program began to be rolled out following the 2012 and 2014 laws. Residents began to bring these concerns to local officials. In 2016, Oregon Governor Kate Brown directed state agencies to collaborate with the City of Portland and other stakeholders to holistically address the interconnected issues of housing affordability, economic development, and environmental restoration in Johnson Creek’s 100-year floodplain.

As part of those efforts, the Portland Housing Bureau (PHB) grew concerned that rising flood insurance premiums could negatively impact low-income property owners in a neighborhood where approximately 90 percent of homes were pre-FIRM properties. Based on Census data, the city knew that residents in areas of the Johnson Creek floodplain were twice as likely to be foreign-born or have limited English proficiency compared to the average across the city. Only one in five had a Bachelor’s degree or higher. More than half of all households were low income, earning less than 80% of the area’s median family income.

The PHB partnered with Portland State University and a local non-profit to survey residents of this area—the Lents and Powellhurst-Gilbert neighborhoods—to better understand how flood insurance prices impacted them. PHB discovered that many low- to moderate-income homeowners reported struggling to afford a flood insurance policy. This increased the city’s concerns that rising flood insurance costs could contribute to the displacement of vulnerable communities, like communities of color and seniors living on a fixed income.

PHB next began to research the issue of flood insurance affordability as well as possible solutions. PHB quickly discovered the Center for NYC Neighborhoods’ outreach campaign around flood insurance and their Home Resiliency Audit program (see box). Learning about this program, combined with discussions with state and local officials and experts, inspired the creation of the Flood Insurance Savings Program (FISP).

New York City and Flood Insurance Affordability
Recognizing the need to educate homeowners about their current and future flood risk, the City of New York partnered with the Center for New York City Neighborhoods (CNYCN) and the design firm IDEO to develop an easy-to-use website, FloodHelpNY.org. FloodHelpNY.org allows users to enter their address on a google-map-like interface. Users can toggle between a view of their current and potential future flood zone and base flood elevation. The website conveys risk in clear, large-font, plain language.

With an infusion of money from the NY State Governor’s Office of Storm Recovery, the updated version of the website includes a flood insurance rate estimator (in beta) to provide users with current and future premium quotes due to changing insurance prices from rising pre-FIRM rates and future climate changes. Further, low- and middle-income homeowners can check their eligibility for a free resiliency audit to determine feasible mitigation steps a homeowner could take to lower their flood insurance premium.

New York City launched the Home Resiliency Audit program using surveyors, engineers, plumbers, and technical counselors to provide property owners with accurate flood insurance quotes and strategies to retrofit their homes to reduce insurance costs. In some flood zones, property owners may also be eligible for a free backwater valve installation. The program is explained further at https://www.floodhelpny.org/en/homeowners.

* Thanks to Katherine Greig for information on the New York City programs.

The City of Portland’s FISP began as a pilot with the non-profit Enhabit to help floodplain property owners obtain lower flood insurance prices and lower their risk. FISP was an innovative approach that integrated three different services:

1. free or low-cost elevation certificates,
2. home assessments, and
3. flood insurance counseling with an expert insurance agent.

These three components of the program worked together to save residents money on their flood insurance and stay in their homes. Participants were recruited through several rounds of outreach. Floodplain property owners completed an application that provided Enhabit information about the structure, the cost of flood insurance, household demographics and household income. For those that income-qualified, there was no cost to participate in the program. Non-qualifying participants were charged a fee of $399 that covered Enhabit’s time and the EC. The City of Portland spent approximately $135,000 on the program; the average cost per homeowner was estimated at $1,600. From 2017-2018, the Flood Insurance Savings Program helped 86 low- and moderate-income homeowners save an average of nearly $720 annually on their flood insurance costs. This had many other critical, but harder to quantify benefits, such as reducing displacement pressures and providing these households with resources to pay off debt, save for a rainy day, or spend in their local community.

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7 This included multi-lingual direct marketing that involved mailing postcards and letters, running email campaigns, social media advertising, hiring a professional canvassing crew to sign people up at their door, and advertising at community events. Outreach also included indirect methods like word of mouth, lawn signs, referrals through community partners, advertising in a community newspaper, and earned media.

8 They were also given the name of the insurance agent to contact if they chose, but were made aware she could try to sell them her services.

9 This estimate does not include staff time.
**HOW IT WORKS**

The Flood Insurance Savings Program combined three program elements: providing elevation certificates, conducting home audits, and providing insurance counseling. We discuss how each of these operated and how they worked together to provide a holistic approach to flood insurance affordability.

**Elevation Certificates**

Nearly 90 percent of the properties in the Johnson Creek floodplain were built before the City’s first Flood Insurance Rate Map went into effect in October 1980—they were pre-FIRM. Some of the homes were paying more than their risk and could benefit from lower prices simply by submitting an EC to their insurance agent. However, not a single homeowner knew this when the city launched the FISP, and many lacked the extra funds to pay the costs of obtaining an EC. Further, without being certain that it would lower their rates, many viewed obtaining one as a gamble and didn’t want to spend the money.

To get an elevation certificate, a surveyor takes detailed measurements of the structure, including the size and location of foundation vents, utility locations, attached features like decks or garages, and the lowest and highest adjacent spots next to the structure. The lowest point inside the structure is also measured (i.e. bottom of a basement or crawlspace) and photographs are taken. This data is then used to complete FEMA’s elevation certificate form, which compares the structure’s features to the BFE. In addition, the EC also provides data that can be used to inform mitigation options, such as where to relocate utilities to make them safe from flood waters.

The City and its implementation partner, Enhabit, took several unique approaches to reduce the cost of elevation certificates. First, the City leveraged its purchasing power to procure elevation certificate services in bulk. Second, the city negotiated a reduced rate because Enhabit geographically clustered the homes, making sure houses located near one another had surveys scheduled on the same day. Third, the surveyor took advantage of the fact that Enhabit’s staff were already inside the houses to conduct home assessments and so they trained Enhabit staff to take the home’s interior measurements. With Enhabit completing the interior measurements, the surveyor could then efficiently survey the home’s exterior, measure the floor at the front door, and simply tie all the measurements together—without needing to meet the homeowner or physically go inside the home. Together, this created efficiencies that enabled the surveyor to reduce its costs while maintaining a profit, bringing the price for an elevation certificate down from more than $1,000 to $300-$550 per unit. The city covered the full costs of the program for the lowest income households and Enhabit offered the service at the reduced price of $399 for others.

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10 FEMA’s EC instructions and form are available here: [https://www.fema.gov/media-library/assets/documents/160](https://www.fema.gov/media-library/assets/documents/160)
**Home Assessments**

One element of the Portland Housing Bureau’s work involves funding non-profits to make critical home repairs that help low-income property owners remain in their homes. The first step in the home repair process is to conduct an assessment that determines what health, life, and safety repairs may be necessary to stabilize someone in their home. As part of the FISP, PHB partnered with Enhabit to conduct home assessments while also assessing the feasibility of home improvements that could mitigate flooding.

After Enhabit recruited and determined that participants were income-qualified, they scheduled appointments for this broadened home audit. Enhabit visited each property, meeting with the homeowner to discuss their deferred maintenance and any flooding concerns. Staff then conducted a technical assessment of the home, documenting hazards, safety issues, and flood mitigation improvements. For the flood mitigation component of the audit, Enhabit examined the vents in a home’s foundation to see if they could be replaced with an engineered flood vent and explored the feasibility of elevating utilities above BFE, or replacing them with more energy efficient options, like tankless water heaters. When staff returned to the office, Enhabit prepared a short report with recommendations for each property owner. Details from the home assessments were also used to refer property owners to PHB’s other non-profit housing partners for home repair services. Finally, the home assessments were provided to the program’s flood insurance expert to review as part of the third part of the program, the insurance consultation.

**Flood Insurance Consultation**

The Portland Housing Bureau discovered that flood insurance is confusing for many residents. This is particularly true for low-income households who are more likely to have less education, speak languages other than English, or be elders with limited social connections and support.

Most people turn to their insurance agent for guidance about flood insurance and they trust their agent will provide sound advice. Unfortunately, many insurance agents are not well-informed about the National Flood Insurance Program. The NFIP is a complex and dynamic program. FEMA generally makes pricing and rule changes every six months and Congress has made major reforms at periodic intervals since the program’s inception. A recent report of the FEMA Flood Insurance Advocate found that lack of insurance agent education was a problem, and one that was directly impacting the price families were being charged.11 Supporting this finding, **Enhabit found that approximately 25% of participants in the City of Portland’s Flood Insurance Savings Program had errors on their flood insurance policies, causing these households to be under- or over-charged.**

Recognizing the critical role that insurance agents play, the City of Portland and Enhabit hired an insurance agent with expertise in flood insurance to consult on the Flood Insurance Savings Program. The agent, Gail Moldovan-Trujillo, was referred to the city by Oregon’s State NFIP Coordinator as she had previous experience working with cities during FEMA floodplain remapping projects. Enhabit hired Gail to do individual consultations with participants in the program. She was paid a flat fee for every property reviewed, a compensation model designed to prevent potential conflicts of interest that could arise in an industry where compensation is driven by sales.

Her role was seemingly straightforward: review the elevation certificate and home assessment and create a tailored recommendation for what each homeowner could do to save money on their flood insurance (see Figure 1 for an example). This involved quoting new premiums through both the NFIP and private insurance providers. She would then create a short property profile and recommendation that was shared with the participant during a 30-minute phone call.

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consult, which was scheduled by Enhabit. The phone consult also afforded the property owner an opportunity to get
their questions answered about flood insurance.

**Figure 1. Excerpt From Insurance Consultation Report**

| Structural profile: | Home is Pre-FIRM in an AH zone with a below grade crawlspace -1 to BFE; next highest floor is +1 to the BFE. |
| Current Insurance: | Current policy is an NFIP policy coverage amount of $225,000 with a $10,000 deductible. The policy is rated incorrect as a slab on grade. Annual Premium $802.00. |
| NFIP with EC: | The annual rate with the EC would be $343.00. |
| Mitigation Options: | Not Needed. |
| Alternative flood insurance: | We looked at two markets; one offered a premium of $792.00 and the other was $1576. Each offer a lower deductible because they don’t offer the $10,000 deductible. |
| Recommendation: | The client should provide their insurance agent a copy of EC for re-rating. At renewal, they should consider lowering their deductible to a more affordable deductible as the savings will still be lower than the current rated policy. |

While flood insurance consulting seemed straightforward, in reality, explaining and following through on
recommendations was more complex. Since the insurance agent was not writing policies, she often had to coach
property owners on how to best convey information to their current insurance agent to make the needed changes to
their policy. This was complicated by the fact that some of these agents didn’t have a strong grasp of the NFIP in the first
place. For example, they often did not understand how to get an elevation certificate applied and the policy rerated. This
required a lot of back-and-forth between the insurance consultant and program participants, and sometimes the
consultant ended up speaking with the other insurance agents to advise them directly.

The program faced another challenge that stemmed from the fact that NFIP regulations at the time only allowed
policyholders to change their policy or switch insurance providers at the time of their annual renewals, not mid-policy.12
Participants who had policies that needed changes to obtain savings became extremely frustrated when they learned that
FEMA regulations prevented them from making adjustments mid-policy, such as reducing their coverage or switching to
a more affordable private provider. At the extreme, the city had one participant whose annual renewal date was still
several weeks away, but their lender had already pre-paid the flood insurance policy for the upcoming year. FEMA
regulations state that once a policy is paid it cannot be changed, which meant the consumer was locked into their $6,921
NFIP policy, although a significantly more affordable option of $1,062 was available in the private market. Fortunately,
after intense advocacy—including assistance from a Senator’s staff—the NFIP insurance company agreed to refund the
policyholder and the lender allowed her to switch to the more affordable policy. The NFIP has now made it possible to
switch to private carriers mid-term.

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12 Homeowners could have switched to a private policy, but FEMA would not provide prorated premium refunds. As of October 2018, FEMA will provide such refunds if a policyholder switches to a private carrier.
RESULTS

Between 2017 and 2018, the Flood Insurance Savings Program served 86 homeowners. Of the participants, 85% were low-income (i.e. <80% area median income) and 30% self-identified as being from a community of color. 91% of FISP participants experienced premium reductions. The savings experienced by participants ranged from $0 to $5,858 each year, with an average savings of nearly $720 annually. The average participant is estimated to save $11,346 (net present value) over 30 years. In addition, the program had a payback period of 26½ months for the average participant. Of the eight participants (9%) who did not experience any savings, seven entered the program with premiums that already cost less than $500 year. In addition, the program identified 17 structures on natural high ground above the estimated height of a 100-year flood (BFE), which were then issued Letters of Map Amendment (LOMAs), eliminating FEMA’s requirement to carry flood insurance. In total, it is estimated that FISP helped these 86 households save more than $60,000 annually, which is more than $1 million (net present value) over the life of a traditional 30-year mortgage. Over this time period, the Flood Insurance Savings Program has a benefit-cost ratio of 8.84, which means that for each $1 of investment, the program is estimated to generate $8.84 of benefits. It is worth noting that these savings all came from guaranteeing that the correct insurance premiums were being paid by households. These are families that had been overpaying for their flood insurance based on their actual risk and insurance needs. For low- and moderate-income households, these savings translate into the increased capacity to pay off debt, save for a rainy day, or spend in the local community.

LESSONS LEARNED

The Flood Insurance Savings Program was a highly effective local policy solution to the nationwide challenge of flood insurance affordability. While national level policy makers still grapple with some type of means-tested assistance program to help lower income families afford flood insurance, Portland began to address the issue locally for its residents. Of note, Portland was able to lower, sometimes dramatically, the cost of flood insurance for residents simply by fixing errors, submitting elevation certificates for risk-based rating, and better matching insurance coverage to property-owners’ needs. There was no taxpayer grant or voucher to cover or subsidize insurance premiums.

The program helped identify several challenges with flood insurance that no doubt impact communities across the country. First, due to lack of insurance agent education on flood insurance, many residents had policies that were inappropriate for them. The errors varied. For example, a policyholder may have had coverage in excess of the value of their structure or it could have been that attributes that mattered for pricing (such as presence of a basement) were entered incorrectly. Other times policies were rated incorrectly as non-primary homes, or it could have been that a private provider offered lower premiums. In response to this, the City of Portland and State Representative Jeff Reardon worked with the state of Oregon to create continuing education requirements for flood insurance – the fifth state to do so. This should improve agent knowledge and thus minimize costly errors for consumers.

Second, the program found that many pre-FIRM properties could be receiving lower rates if they simply submitted an elevation certificate. It should be noted, however, that this was an area prone to shallow-flooding and due to differences in NFIP rating, the same benefit from ECs may not be obtained in other flood zones. The homes that did not benefit from an elevation certificate were homes with basements. They had “negative elevation,” according to

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13 We used a discount rate of 3.58%.
the NFIP and are thus not offered favorable rates. In some cases, these properties were able to obtain more affordable, comprehensive coverage in the private market. As noted above, for properties that would benefit from an EC, the upfront cost was a significant barrier. Many households simply did not have the funds. Even when the city was covering the expense, many property owners were wary that an EC would yield insurance savings, viewing it as more of a gamble than a calculated investment. The city was able to dramatically lower the cost of elevation certificates by using the power of bulk purchasing and coordinated surveys. This speaks to the need for financial assistance for obtaining such certificates in other similar neighborhoods, as well as educating consumers about the benefits of ECs. Financial assistance could come from cities, counties, states, or FEMA replicating the program. It also highlights the need for accelerating an investigation into whether cheaper technology, such as mobile LiDAR, could be done by FEMA everywhere, preventing the need to pay for expensive site-specific surveys.

Third, the program identified several administrative policies of the NFIP that could be usefully reformed to eliminate undue hardships for families. For example, the inability to make changes to a policy mid-term, even when critical new information, such as an elevation certificate, was obtained, locked families into paying rates that were too high for them. As noted above, FEMA has recently allowed policyholders to be given mid-year refunds if they move to a private carrier (Bulletin w-18008)\textsuperscript{15} but more flexibility for other policy adjustments mid-term may be warranted.

Finally, this program highlighted the need to better match insurance to need and risk. Flood risk varies considerably. The risk from storm surge is quite different from a levee failing, which is different again from a major river overflowing its banks, and again different from the shallow flooding in Portland's Lents and Powellhurst-Gilbert neighborhoods. A greater variety of products with different types of coverages might help those in risk prone areas get the financial protection they need, at a price point they can afford, which might lead more people to voluntarily choose to insure.

Even with the improvements made from the Flood Insurance Savings Program, there is still justification for a federal assistance program for low income families to help with the costs of flood insurance. During outreach for the FISP, many low- to moderate-income homeowners reported struggling to afford a flood insurance policy. Some even told the city of Portland that their only choice was to use high-interest credit cards to pay their flood insurance, while others went without insurance altogether. Low income families that are required to insure may struggle to make the payments and work has shown that having flood insurance can be critical to enabling families to make a full recovery post-disaster.\textsuperscript{16}

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\textsuperscript{15} See \url{https://bsa.nfipstat.fema.gov/wyobull/2018/w-18008.pdf}