SAN FRANCISCO—Sergio Martinez spent many sleepless nights after learning the rent-controlled apartment complex where he lived with his family would be sold.

In the rapidly gentrifying Mission District, he had watched as scores of other families had been priced out, and he feared his family’s turn had come, he said.

Then a neighbor tipped him off to a potential lifeline: a local nonprofit was purchasing private buildings to help keep low-income tenants like him in the neighborhood.

Similar efforts are popping up in New York, Philadelphia, Portland, Ore., and other high-cost cities as low-income residents increasingly struggle to remain in gentrifying neighborhoods.

The measures, some public and some private, include offering down-payment assistance on homes to people with historic ties to neighborhoods, passing ordinances aimed at restricting gentrification and assisting nonprofits that are buying buildings where long-term tenants are at risk of eviction.

Policy makers say they are uncertain about the best remedies but feel a responsibility to try new ideas as rents in most cities across the country march higher. Still, many debate whether such efforts drive up rents for others, by making development more expensive, or whether the moves are too little, too late.
“Sometimes the rhetoric is about stopping gentrification,” said Vicki Been, a New York University law professor. “In a market system you’re limited in your ability to do that.”

Ms. Been was head of the New York City Housing Preservation and Development Department when the city rezoned East New York, a historically poor, predominantly African-American and Hispanic neighborhood just a subway stop or two from areas with quickly rising rents. The goal was to spur new affordable housing construction, but residents protested the new units would be too costly.

In Philadelphia, the city council passed a policy allowing people below a certain income who have lived in their homes for a decade to limit their property-tax increase if their home values triple in the span of a year. The measure was passed after the city did its first property-tax reassessment in three decades and thousands of homeowners who lived in gentrifying neighborhoods were at risk of their taxes skyrocketing.

“Where a person lives shouldn't be determined by their checkbook,” said Councilman Kenyatta Johnson, who represents a swath of South Philadelphia.

In Portland, a policy aimed at bringing back residents displaced by city redevelopment efforts includes subsidized apartments and down-payment assistance for newly purchased homes.

While the Portland areas targeted are historically African-American ones that experienced redlining and other forms of housing discrimination, officials say access is based on a race-neutral system that awards points to those who can prove ties to the targeted north and northeast neighborhoods.

San Francisco’s Mission District, historically a center of Latino activism and culture transformed in recent years by an influx of affluent residents, has been a contentious gentrification battleground. The area lost 26% of its Latino population from 2000 to 2016, as that same population over that period increased citywide, according to Veritas Urbis Economics, a consulting firm.

Most people rent in the Mission, making the population there especially vulnerable to the 49% citywide increase in rents over the past eight years, according to property tracker RealPage Inc.

rents low when units—often occupied by the elderly and immigrants—suddenly become desirable.

The nonprofit began buying buildings in 2016 through San Francisco’s small sites program, which allows private buildings to be converted to affordable housing units if enough income-eligible tenants agree to the change. The group’s efforts are supported by city funds as well as donations from charitable organizations, including the Citi Foundation, which recently provided MEDA with a $500,000 grant.

Nonprofits increasingly are experimenting with buying up land and buildings but often struggle in already pricey neighborhoods like the Mission District where investors are willing to pay a premium, betting that rents will keep rising.

Karoleen Feng, director of community real estate for MEDA, said for these reasons she often targets buildings with deferred maintenance, those requiring expensive retrofits to meet San Francisco’s rigorous earthquake standards and homes where landlords and tenants both want to work out a deal that won’t result in displacement.

Through its purchase of small buildings, the organization also has been able to acquire commercial spaces such as the one used by The Jelly Donut restaurant, owned by a family of Cambodian immigrants, and keep those businesses from being priced out.

Mr. Martinez, 51 years old, came to the U.S. from Mexico in 1994, and his wife, Ana Lopez, 54, arrived from Peru the following year. The couple met in the Mission and had a son and twin daughters. In 2003, the family moved into the two-and-a-half bedroom apartment after considering the place for years.

The family credits the spacious flat with providing the stability that has allowed them to succeed. Their son Sergio is attending Princeton University this year, they said.

In the case of the Martinez building, three higher-income tenants living in one of the building’s three flats agreed to a rent increase, allowing the numbers to work.

The family members were relieved when MEDA closed on the building last year, as they had few other options to stay in the city.

“We really didn’t have time to think about anything else,” Ms. Lopez said. “We thought in God, and little else.”

Write to Alejandro Lazo at alejandro.lazo@wsj.com and Laura Kusisto at laura.kusisto@wsj.com