Occasional Studies

The Effectiveness and Efficiency of DC's Property Tax Circuit Breaker in Reducing the Property Tax Burden of Low-income Homeowners

A Policy Analysis

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I. Introduction

The objective of property tax circuit breaker policies is to prevent annual property tax liabilities for the lowest-income households from consuming a disproportionately large share of their household income. The manner in which these policies are designed and enacted varies among states and jurisdictions. In 2019, 18 states and the District of Columbia were identified providing targeted property tax reductions for their lowest-income households. Additionally, another 13 states provided property tax credits to certain low-income families but without imposing a requirement for the property taxes to surpass a specified percentage of income in order to be eligible for the credit.[1]

Many jurisdictions with such policies concentrate their programs on the elderly and disabled population, largely owing to the common perception that these taxpayers generally possess low and stagnant annual incomes in the face of rising home values and resultant property tax bills. And, nearly three-quarters of states with property tax credits also extend them to low-income renters.[2]

The District of Columbia's Schedule H Homeowner and Renter Property Tax Credit is a circuit breaker policy that allows low-income homeowners and renters to claim a refundable tax credit on their city income tax return form if their property tax exceeds a certain percentage of their income. One noteworthy aspect of the program is the distribution of its benefits between renters and owners. In 2018, most Schedule H claimants were renters, homeowners made up only 19.1 percent (6,593) of the beneficiaries. And over the years, renters have consistently accounted for the majority of the program claimants. However, according to the 2018 American Community Survey, 41.8 percent of the city's 281,322 occupied housing units were owner-occupied, with the remaining 58.2 percent being renter-occupied.[3] Hence, demographics of the claimants in the Schedule H program, which is approximately split 80/20 between renters and owners does not reflect the District's demographics. Furthermore, of the elderly or disabled homeowners that received another property tax exemption known as the senior citizen homestead property tax credit in 2018, 54.3 percent of them reported income of $62,600 or less (the maximum income for the Schedule H property tax credit for that year). When we consider there may be thousands of low-income homeowners in the city that are not senior citizens, it appears that the city's circuit breaker policy may not be effectively benefiting or reaching all of city's eligible low-income homeowners.

This study presents an extensive analysis of property tax burdens of homeowners in DC as well as a distributional analysis of circuit breaker tax benefits for low-income households. Analyzing many of the intricacies of the city's residential property taxation, property tax relief and their implications for economically vulnerable homeowners, we seek to identify key features of the Schedule H policy design that may be impeding higher levels of efficiency, effectiveness, and equity in property taxation of low-income households.

At the outset, this study examines the evolution of the District of Columbia's circuit breaker tax policy design since the 1990s and seeks to answer three questions concerning owner claimants: 1) To what extent has the tax policy succeeded in alleviating the property tax burden for the city's lowest-income homeowners? 2) How efficient has the policy been in reducing property tax burdens for eligible low-

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[1] Property Tax Circuit Breakers in 2019, The Institute on Taxation and Economic Policy. 092619-Property-Tax-Circuit-Breakers.pdf (itep.sfo2.digitaloceanspaces.com)

[2] Ibid.

[3] 2018 ACS 5-Year Estimates, https://data.census.gov/table?tid=ACSDP5Y2018.DP04&g=0400000US11

income homeowners? And, 3) why have low-income homeowners continuously made up a relatively small proportion of the program's beneficiaries?

Ultimately, the study finds that 1) Schedule H owner claimants tend to have a net property tax burden that is about twice that of all other homestead owners in the city, and 2) Schedule H renters claimants appear to receive a disproportionately larger share of Schedule H tax relief dollars (relative to their actual real property tax liabilities) than owner claimants, who tend to be senior citizens with higher property tax liabilities and earn less income. Via this comprehensive examination of property tax burdens and circuit breaker benefits, this study offers insights into how the city might provide more effective and equitable support for low-income homeowners.

II. Data

The District of Columbia's property tax circuit breaker policy has been well-studied by the 1998 DC Tax Revision Commission[4], the 2013 DC Tax Revision Commission[5], and the 2015 District of Columbia Housing Tax Expenditure Review.[6] But because of the lack of detailed electronic data these studies were unable to analyze the distributional impact of the program. With the recent implementation of a new tax administration IT system by the Office of Tax and Revenue (OTR) we now have the data to complete such an analysis. The availability of new, higher quality data from the new IT system allowed us to match the 2018 homestead property tax roll with the 2018 individual income tax roll. Unlike previous studies, we can now analyze various components of the tax burdens on homestead owners and Schedule H claimants. This analysis seeks to provide valuable insights into the effectiveness and efficiency of the circuit breaker policy in reducing property tax burdens for low-income homeowners and renters in the District of Columbia.

In 2018, there were over 360,000 income tax filers and over 180,000 residential properties in the city. Of the over 180,000 residential property tax records, nearly 100,000 were registered homesteads.[7] We were able to match 47,779 homestead records with each owner's respective income tax return. This amounts to a 47 percent match rate. However, only 68 percent of the Schedule H owner claimants were able to be matched to their respective property tax records. The matched income and property tax dataset allows for the answering of the three central questions put forth in the introduction. And while not ideal, we contend the tax record match rate in this study is meaningful and the consequent findings can be generalized to the entire population of all homesteaders and Schedule H claimants in the city.[8]

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[4] https://cfo.dc.gov/page/dc-tax-revision-commission-1998

[5] https://web.archive.org/web/20220915172837/https://www.dctaxrevisioncommission.org/home

[6] District of Columbia Housing Tax Expenditure Review, 2015 https://ora cfo.dc.gov/sites/default/files/dc/sites/ocfo/publication/attachments/2015%20DC%20Housing%20Tax%20Expenditure%20Review.pdf

[7] In the District of Columbia, a homestead property is a single-family residence occupied by the owner and is the owner's principal residence. The owner of a homestead property has registered his residence with the Office of Tax and Revenue and subsequently receives the annual homestead deduction (and assessment cap credit if applicable). Homestead properties are eligible for the senior credit if the owners are over the age of 65 and earn below a certain income level.

[8] It was observed that 32.0 percent of the homesteads in the matched dataset received the senior credit, mirroring the proportion of 32.8 percent found across all homesteads within the city. The distributional pattern of homesteads across the city's eight wards was also very similar between the matched dataset and all city homesteads. Specifically, approximately 35 percent of homesteads in both datasets were attributed to wards 3 and 6, while around 12 percent were attributed to wards 7 and 8.

This study also used income tax returns for all city residents from 2001 to 2019, property tax records for all city residential properties beginning from 2003 to 2022 and newly collected information from a digitized homestead application form. Another important dataset used in this study is the Real Property Tax Administration (RPTA) Income & Expense dataset for 2018. In the District of Columbia, owners of all medium and large rental properties are required to submit annual Income & Expense Reports (I&E Report) for each of their properties to RPTA for annual property valuation purposes. An I&E Report is a detailed annual record of a rental property's expenses and all sources of income. The report for each rental property documents the total rental income, other sources of income and annual depreciation. It also itemizes all types of expenses such as property management fees, advertising costs, maintenance/repairs, insurance, utilities, property taxes etc. Using this data for 2018 for over 1,600 medium and large privately-owned rental properties in the city, we analyzed the real property tax liabilities and total rents collected for each property. This data was useful in examining the Schedule H provision for rental claimants that states "20 percent of rent paid is equivalent to property taxes."[9] Thus, for the first time, this study utilizes micro level tax administrative data to analyze and evaluate the effectiveness and efficiency of Schedule H Property Tax Credit policy with particular focus on owner claimants.

III. The Case for Circuit Breaker Policies

How income varies over a person's life cycle

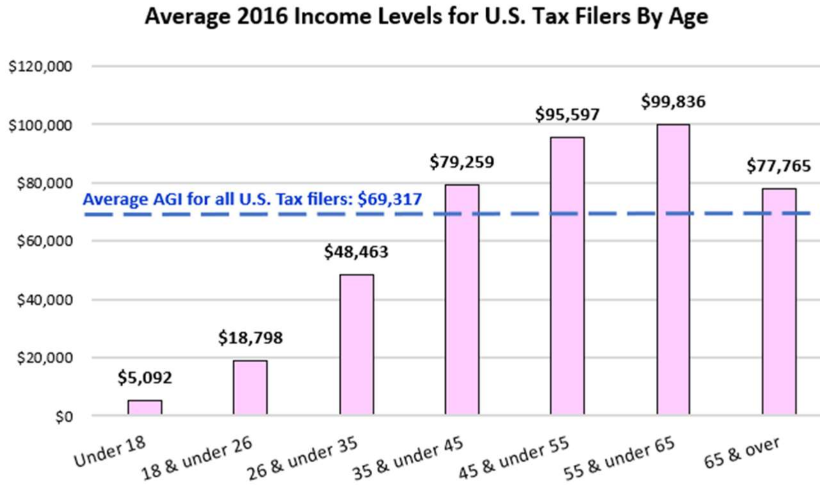
American workers tend to experience relatively low income in early adulthood, their highest levels of income in their late fifties, and then a decline in income in the years following retirement age (Figure 1). According to the life cycle hypothesis, individuals tend to balance their lifetime resources between consumption and capital accumulation over the course of their lives. This often means taking on debt early in their life (e.g. for college and to buy a car and home), saving during their prime earning years, and drawing down savings to support their consumption during retirement.[10] Some studies have cast doubt on the simplistic assumptions of this hypothesis, but empirical evidence increasingly suggests that retirees rely on a combination of investment/retirement income, reduced expenditures, and even some continued wage earnings to support their consumption.

However, a t-test revealed a statistically significant distinction in the mean home value between all homesteads in the city and the matched dataset. This divergence might be attributed to the fact that the city-wide homestead data comprises a considerable number of properties valued well above $1 million. Consequently, the average home value for the matched dataset was $674,455, 3.9 percent less than the average home value of all homesteads in the city.

[9] Owner claimants report their actual real property tax bill amount on the Schedule H Tax form, and this amount is verified by OTR tax administrators. But, renters typically do not know and are not likely to reliably obtain the actual share of their annual apartment rent that is devoted to the real property tax liability for their respective apartment building from the apartment building owner or management company. As a remedy for this, the Schedule H Tax form states that "20 percent of rent paid is equivalent to property taxes". Hence, renter claimants only need to report their total annual rent payments on the Schedule H Tax form and tax officials automatically assume "20 percent of rent paid is equivalent to property taxes".

[10] Life Cycle Hypothesis, Tim Sablik, Federal Reserve Bank of Richmond, 2016. https://www.richmondfed.org/publications/research/econ_focus/2016/q3-4/jargon_alert

Figure 1



Source: Tax Foundation, Internal Revenue Service
"Table 1.5 All Returns: Sources of Income, Adjustments, and Tax Items, by Age, Tax Years 2016"

Table 1 presents the income profile of 4,170 Schedule H claimants in 2018 who were also city residents in 2001 and 2009.[11] Federal adjusted gross income (AGI) is a broad measure of income for federal income tax purposes, primarily comprising wage and salary income for most workers. The table shows that half of the owner claimants were over 69 years old in 2018, and Figure 2 illustrates their income profile. While not obvious in Figure 1, Figure 2 illustrates the fact that some Americans, even though they are homeowners, do not achieve very high-income levels in their early fifties (renters and owners in Figure 2), and some workers in this age cohort experience a considerable decline in income during their retirement years (owners in Figure 2). While Figure 1 indicates an average 22 percent decline in income post-retirement, Figure 2 shows a 42.3 percent drop in income for owner claimants in 2018 (before adjusting for inflation) compared to when they were in their early fifties. Moreover, while the share of renters receiving the circuit breaker that were married increased from 5.9 percent in 2001 to 6.9 percent in 2018, the share of homeowners receiving the circuit breaker that were married decreased from 17.2 to 15.6 percent during the same period. These outcomes are presented simply to illustrate how the income situation of many homeowners during their retirement years can be precarious[12] even as they face perennially increasing property tax bills for their homes.

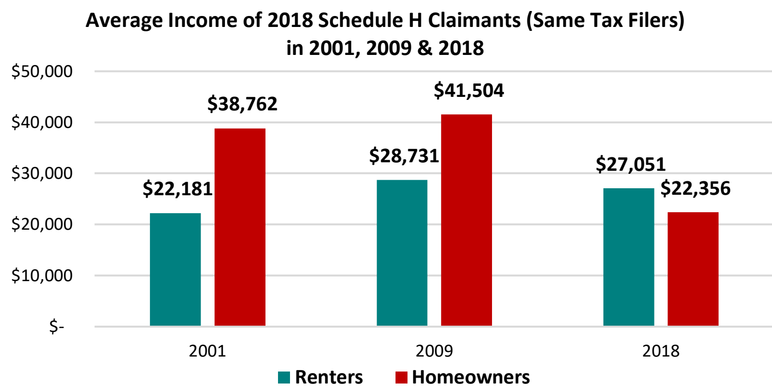
[11] Tax year 2001 is the first year income tax data is available. Tax year 2009 was selected in Table 1 to help illustrate the change in the levels of income for the target group both before and after the Great Recession of 2008/2009.

[12] Owing to factors such as, but not limited to, being a low-skilled worker, the death of a spouse, major health problems, divorce.

Table 1

Income and Ages of 2018 Schedule H Claimants that were also City Income Tax Filers (Residents) in 2001 & 2009				
			Type of Schedule H Claimant in 2018	
			Renter	Homeowner
2001	AGI	Mean	$ 22,181	$ 38,762
		Median	$ 19,483	$ 32,465
	Wage/ Salary Income	Mean	$ 20,479	$ 30,822
		Median	$ 17,485	$ 25,452
2009	AGI	Mean	$ 28,731	$ 41,504
		Median	$ 26,712	$ 33,927
	Wage/ Salary Income	Mean	$ 23,755	$ 28,161
		Median	$ 23,346	$ 18,596
2018	AGI	Mean	$ 27,051	$ 22,356
		Median	$ 27,859	$ 22,061
	Wage/ Salary Income	Mean	$ 20,444	$ 8,932
		Median	$ 22,050	$ 0
Claimaints' Age in 2018		Mean	59.5	68.7
		Median	59.7	69.2
# of Claimants		Total	4,170	3,283

Figure 2



<u>Property taxes tend to be regressive</u>

Unlike federal and state income taxes, property taxes tend to be regressive. This simply means that lower income taxpayers pay a greater share of their income in property taxes than higher income taxpayers. This is both because real property assessments are not necessarily correlated with income and statutory property tax rates do not vary with a property owners' income.

Property tax regressivity may exacerbate over time if income fails to keep pace with the growing economy and inflation, but their home values and consequently property taxes continue to rise. In such cases, the property tax becomes a growing share of the property owner's income and may reach a point where the homeowner can no longer afford the annual cost of maintaining the home. For example, the District of Columbia's economy (Gross Domestic Product) experienced an average annual growth rate of 4.3 percent from 2003 to 2018,[13] but the average Schedule H owner claimant property tax bill (before the Schedule H tax credit was applied) grew from $1,119 to $3,089 (an average annual growth rate of 7.0 percent) over the same period. And while the annual income of Schedule H owner claimants grew from

[13] U.S. Bureau of Economic Analysis

$7,685 to $22,533 (an average annual growth rate of 7.4 percent),[14] these owner claimants still devoted about 13.7 percent ($3,089/$22,533) of their income to their property tax bill (before adjusting for the Schedule H credit) over the same period. And even when these claimants applied their Schedule H tax credit, their net 2018 property tax bill still tended to be about 9.2 percent ($3,089-$1,025)/$22,533) of their income.

The very low-income homeowners tend to have very high property tax burdens (greater than 5 percent). This class of homeowners tends to have owned their homes for well over 25 years, and they tend to be elderly, retired or near retirement, and have fixed if not declining annual incomes.[15] Circuit breaker policies are designed to assist this class of homeowners. And for a broader context, this result occurs in a city where 67.2 percent of all homeowners devote less than 3 percent of their income to their property tax bill.

IV. The District' s Property Tax Circuit Breaker in the 1990s

Since the city's Schedule H Property Tax Credit was enacted into law in 1977, circuit breaker tax relief has been made available through a tax credit applied to the personal income tax. Hence, it is an indirect property tax relief because the relief mechanism lies outside of the property tax administration and the property tax policy structure. Additionally, as noted in the 1998 DC Tax Revision Commission Report, the District's Schedule H program is made up of two circuit breakers: the standard circuit breaker, and the senior and disabled circuit breaker. The standard circuit breaker was available to claimants under the age of 62 and consisted of six income tax brackets with thresholds that ranged from 1.5 to 4.0 percent of income (Table 2). The standard circuit breaker also had a percentage of property tax over thresholds that could be credited, either 95 percent or 75 percent.

The second circuit breaker was for claimants aged 62 years and older and disabled. This senior citizen circuit breaker had only four income brackets with percentage thresholds that ranged from 1.5 to 2.5 percent of income (Table 3). One hundred percent of the property tax over thresholds could be credited. For both standard and senior citizen circuit breakers in 1998, the maximum eligible income was $20,000, the maximum credit was $750, and 15 percent of rent payments were assumed to be property tax for renter claimants.

[14] The vast majority of the total income of resident tax filers in their 20s and 30s tends to stem from wage & salary employment. Conversely, income from wage & salary employment tends to account for a diminishing share of the total income of tax filers in their late 50s or 60s. So, although to a lesser extent than low-income resident workers in their 20s and 30s, the relatively rapid increase in income of these homeowners as of 2018 might also have been positively affected by the city's increasing minimum wage rate. The city's minimum wage rate increased 60.6 percent, from $8.25/hr. in 2014 to $13.25/hr. in 2018. https://journals.sagepub.com/doi/abs/10.1177/0891242419880269?journalCode=edqa

[15] Property Tax Circuit Breakers in 2019, The Institute on Taxation and Economic Policy. 092619-Property-Tax-Circuit-Breakers.pdf (itep.sfo2.digitaloceanspaces.com)

Table 2

Provisions of General Property Tax Circuit Breaker

Household Gross Income (HGI) Bracket	Threshold Percentage of HGI: Property Tax Over This Threshold Eligible for Relief	Percentage of Property Tax Over Threshold That Is Credited	Maximum Relief (Credit)
Under $2,999	1.5%	95%	$750
3,000–4,999	2.0	75	750
5,000–6,999	2.5	75	750
7,000–9,999	3.0	75	750
10,000–14,999	3.5	75	750
15,000–20,000	4.0	75	750

Note: Renters treat 15% of rent as property tax equivalent.
Source: D.C. Code 47-1806.6.

Source: 1998 DC Tax Revision Commission Report

Table 3

Provisions of Property Tax Circuit Breaker Credit for Persons at Least 62 Years Old, or Blind or Disabled

Household Gross Income (HGI) Bracket	Threshold Percentage of HGI: Property Tax Over This Threshold Eligible for Relief	Percentage of Property Tax Over Threshold That Is Credited	Maximum Relief (Credit)
Under $4,999	1.0%	100%	$750
$5,000–9,999	1.5	100	750
$10,000–14,999	2.0	100	750
$15,000–20,000	2.5	100	750

Note: Renters treat 15% of rent as property tax equivalent.
Source: D.C. Code 47-1806.6.

Source: 1998 DC Tax Revision Commission Report

<u>Initial Program Strengths</u>

The 1998 DC Tax Revision Commission recognized the regressive nature of the city's property tax and produced a tabular analysis (Table 4) to illustrate this point. However, it appears that at that time, neither the commission, city leaders nor property tax administrators had meaningful access to micro-level data on property tax burdens for all claimants. Nevertheless, the commission estimated "the average level of taxes relative to the broad measure of money income is less than 4.7 percent".[16] Presumably, this estimate was derived from aggregated property tax data, personal income data (using 1994 data), and other city and federal data sources.

Table 4

Tax as Percentage of Income for Nonelderly Class I Residential Property Owners
After Current $30,000 Homestead Exemption With No Property Tax Relief Other Than Classification

	Home Value						
Income	$40,000	$60,000	$80,000	$100,000	$140,000	$200,000	$500,000
$5,000	1.92%	5.76%	9.60%	13.44%	21.12%	32.64%	90.24%
10,000	0.96	2.88	4.80	6.72	10.56	16.32	45.12
15,000	0.64	1.92	3.20	4.48	7.04	10.88	30.08
20,000	0.48	1.44	2.40	3.36	5.28	8.16	22.56
25,000	0.38	1.15	1.92	2.69	4.22	6.53	18.05
30,000	0.32	0.96	1.60	2.24	3.52	5.44	15.04
35,000	0.27	0.82	1.37	1.92	3.02	4.66	12.89
40,000	0.24	0.72	1.20	1.68	2.64	4.08	11.28
45,000	0.21	0.64	1.07	1.49	2.35	3.63	10.03
50,000	0.19	0.58	0.96	1.34	2.11	3.26	9.02
55,000	0.17	0.52	0.87	1.22	1.92	2.97	8.20
60,000	0.16	0.48	0.80	1.12	1.76	2.72	7.52
65,000	0.15	0.44	0.74	1.03	1.62	2.51	6.94
70,000	0.14	0.41	0.69	0.96	1.51	2.33	6.45
75,000	0.13	0.38	0.64	0.90	1.41	2.18	6.02
80,000	0.12	0.36	0.60	0.84	1.32	2.04	5.64
85,000	0.11	0.34	0.56	0.79	1.24	1.92	5.31
90,000	0.11	0.32	0.53	0.75	1.17	1.81	5.01
95,000	0.10	0.30	0.51	0.71	1.11	1.72	4.75
100,000	0.10	0.29	0.48	0.67	1.06	1.63	4.51
	Net Tax						
	$96	$288	$480	$672	$1,056	$1,632	$4,512
	Effective Tax Rates as Percentage of Home Value						
	0.24	0.48	0.60	0.67	0.75	0.82	0.90

Note: Data are based on tax rate of 0.96 percent, the current Class 1 rate.

Source: 1998 DC Tax Revision Commission Report

[16] The 1998 DC Tax Revision Commission. https://cfo.dc.gov/page/dc-tax-revision-commission-1998

One of the primary strengths of the Schedule H policy at the time was, apparently, to reduce the property tax burdens of low-income homeowners and renters well below that estimated citywide average of all homeowners of 4.7 percent. The policy intended to achieve this by implementing statutory minimum net property tax burdens ranging from 1 to 4 percent for the two circuit breakers. However, the program's other requirements and conditions, seemed somewhat unnecessary and prevented many claimants from benefiting from very low net property burdens since only 75 percent to 95 percent of the property tax over the threshold could be credited (for the standard circuit breaker).

The second major strength of the policy during that period was the relatively generous maximum credit it offered. For properties valued at less than $100,000, the annual real property tax (only adjusting for the homestead deduction) was only $675 or less, as seen in Table 4. This means that for some of the city's lowest-income homeowners, depending on how the Schedule H formula applied to each homeowners' individual circumstance, they may have been eligible for a complete tax exemption. In essence, the maximum credit of $750 provided by Schedule H was substantial enough (conceptually) to fully eliminate their total real property tax liability.

Initial Program Shortcomings

In the Commission's Final Report, it stated that,

> "the complexity of these circuit breakers no doubt contributes to the low number of taxpayers who use them. In 1996, 115,633 District taxpayers, or 43 percent of the total, had incomes below the $20,000 ceiling for use of the circuit breaker. Among these relatively low-income taxpayers, only 14,450, or 12.5 percent of all low-income taxpayers claimed this exemption".

So even then, the relatively low level of participation seemed curious and was questioned.

The commission argued that the policy's complexity was the main culprit in the low level of participation by the city's low-income taxpayers. Several features of the program contributed to its complexity. First, the city had (and still has) two circuit breakers. The two circuit breakers had the same maximum eligible income and the same maximum credit. And the income brackets are only marginally different for the two circuit breakers. For Schedule H claimants, very low-income renters and homeowners are a relatively small subpopulation of residents in the city that likely numbered several thousand in 1998.[17] There is no apparent reason (beyond a likely smaller fiscal/budgetary cost) why the senior circuit breaker could not have sufficed as the city's one circuit breaker for all ages.

Second, there were six income brackets between $0 and $20,000 of income for the standard circuit breaker and four brackets for the senior circuit breaker. The many income brackets had relatively narrow income ranges and were intended to minimize notch effects that would occur if there were two- or three-income brackets with relatively wide income ranges. The Commission stated that the "use of a relatively large number of brackets with relatively small differences in the relief percentages will avoid large "notch" problems in effective tax rates with respect to income." Typically, the notch effect in tax policy is when, for example, it would be possible for a $1 increase in income to result in a considerably larger tax liability, thus disincentivizing earning that additional dollar. The use of so many income brackets (on the

[17] District of Columbia Housing Tax Expenditure Review, 2015 https://ora-cfo.dc.gov/sites/default/files/dc/sites/ocfo/publication/attachments/2015%20DC%20Housing%20Tax%20Expenditure%20Review.pdf

Schedule H tax form) may be a carryover from the personal income tax, which typically uses income brackets to add a degree of progressivity.

Third, for the standard circuit breaker, the credit was limited to either 95 or 75 percent of the amount of tax over the threshold. It seems that the intent was to minimize full property tax abatement and/or contain the cost. Thus, while a relatively large maximum credit and very low statutory minimum net effective tax rates (for given income ranges) worked to produce very low actual net effective tax rates, this 95 or 75 percent of the amount of tax over the threshold provision seems to counter that intent.

Fourth, the policy extended the enhanced circuit breaker to blind and disabled claimants irrespective of age. John Bowman, author of the real property tax chapter of the 1998 Commission Final Report, opined on these proxies for lack of ability to pay and deemed them inappropriate and ineffective.

> "…Nor are disabilities necessarily good proxies for need. Even those with the same sort of disability — e.g., blindness — may experience different degrees of impairment in their earning abilities. More importantly, in attempting to define disabilities that might serve as proxies for need, it is necessary to enumerate those disabilities, and the disability percentages, that will qualify individuals for tax relief. Any such attempt almost certainly will omit some people who are at least as needy as many who would qualify, because they are unfortunate enough to have the "wrong" form of disability. There also may be significant administrative and compliance costs attending use of such proxies. Consider, for example, the definition of blindness in the District's circuit breaker (D.C. Code 47-1806.6(b))
>
> > (6) The term "blind claimant" means a claimant whose central visual acuity does not exceed 20/200 in the better eye with correcting lenses or whose visual acuity is greater than 20/200 but is accompanied by a limitation in the field of vision such that the widest diameter of the visual field subtends an angle no greater than 20 degrees.
>
> In the case of blindness, those falling short of the 20/200 standard, for example, by even a little bit, are to be denied relief, while those meeting that criterion qualify. Such sharp cutoffs, or notches, may be necessary in spelling out qualifications for such programs. It is highly doubtful, however, that they accurately reflect the debilitating effects of the disability, which probably occur more gradually. But why use proxies for need, when income can be measured? Reduced income-earning ability, whether due to a particular degree of vision impairment, a "medically determinable physical or mental impairment," or some other circumstance or combination of circumstances, will show up in income…And not all persons with a given disability, such as blindness, are equally diminished in their ability to earn a living. Thus, consideration of personal financial circumstance is preferable to reliance upon flawed proxies. In other words, if relief is undertaken to improve equity under the ability-to-pay rationale, it should be targeted based upon a measure of ability. Income is the basic measure of ability."

And lastly, given that residential real property taxation tends to be regressive, the District's circuit breakers (like in many other jurisdictions) provide relief in amounts that decrease as claimants' income increases causing Schedule H claimants with the highest incomes to have progressively higher net property tax burdens, even though this subpopulation of residents are among the lowest income households in the city and only numbered in the thousands. For example, let's assume an owner claimant had a home valued at $60,000 in 1998 and an income of $7,000. As Table 2 shows, this claimant would have an effective property tax rate as low as 3.0 percent. Let's also assume another owner claimant also had a home valued at $60,000 but an income of $20,000. The effective property tax rate for this claimant could be as low as 4.0 percent. However, Table 4 shows that it is possible for a third homeowner with a home valued at $100,000 but an income of $60,000 (a more expensive home and considerably more income) to have an effective property tax rate of about 1.12 percent, which is lower than both Schedule H owner claimants. Certainly, the intent of this "imposed tax progressivity only for Schedule H claimants" (i.e. vertical equity) was to provide less tax relief to relatively higher income claimants and more tax relief to the lowest income claimants. But from the example given, where imposing the principle of less relief to relatively higher income claimants, the program is also producing perverse effects. That is, some program claimants likely had higher property tax burdens that are multiple times higher than the property tax burdens of most other homeowners in the city.

It seems like the above noted provisions included on the 1998 Schedule H Property Tax Credit tax form were well-intended but ended up having perverse effects on claimants, relative to all other homeowners in the city. So, while the Schedule H Property Tax Credit does provide property tax relief, the way the policy has been designed in terms of equity has caused claimants to have higher property tax burdens than most other homeowners in the city.

V. Recommendations from the Two Previous Tax Commissions

The 1998 DC Tax Revision Commission

The 1998 Commission recommended that the city replace its major property tax relief measures (the homestead credit and the senior credit) with one more generous circuit breaker that was a highly targeted low-income tax credit, thus preventing very high-income homeowners from receiving arguably, unneeded property tax relief.

> "The District currently provides lower property taxes to homeowners for a variety of reasons, including age, physical condition, and owner occupancy of residences. The Commission believes, however, that all residents of the District receive the benefits of government services and are entitled to equal treatment, regardless of whether they rent or own or are old or young. Therefore, the Commission recommends repealing the $288 homestead exemption, which is based solely on home ownership, and the senior citizen reduction, which is based on age. Reduction of property taxes should go only to those who need the most help paying their taxes.
>
> It should be noted that the Commission supports home ownership, but concludes that other incentives — the ability to deduct property taxes and home mortgage interest from personal income taxes, and the first-time federal homebuyer credit of $5,000 — are more appropriate than property tax incentives to encourage homeownership…
>
> The two existing circuit breakers, which the Commission recommends consolidating into one, are specifically designed to provide relief through the personal income tax to both renters and homeowners based on the relationship between income and the amount of property tax liability. They provide relief in hardship cases without providing relief to high income homeowners…. The Commission therefore recommends a single relief measure in the form of a generous, revised circuit breaker. This revised circuit breaker should be simple and have only one criterion for eligibility: ability to pay."

After the report was issued, the city did not make any changes to the city's property tax relief policies, including Schedule H Property Tax Credit.

The 2013 DC Tax Revision Commission

The 2013 DC Tax Revision Commission discussed how providing property tax relief via the individual income tax adds unnecessary complexity to the tax system. The Commission also noted that the policy was problematic for taxpayers who need assistance when their biannual property tax bill is due in March and September but who only receive relief after filing their income tax form the next year. In deliberations, it was suggested to replace Schedule H with more directed tax relief. The replacement was to either be a different form of low-income tax relief through the individual income tax (such as a higher standard deduction) or relief that is directly tied to the property tax bill. But ultimately, the Commission did not propose any modifications to the city's property tax laws or property tax relief programs.

It appears that the Commission did not conduct a detailed property tax burden analysis for the Schedule H program to examine how the policy affected claimants tax burdens or evaluate past outcomes. This was very likely because at the time there was no way to link income data to property tax data. Nevertheless, District policymakers expanded the circuit breaker program to provide tax relief to more low-income residents in the face of a growing housing affordability crisis in the city.

Beginning in 2014, new legislation increased the maximum income for the standard circuit breaker from \$20,000 to \$40,000 (with fewer income brackets), increased the maximum income for the senior citizen circuit breakers from \$20,000 to \$60,000 (with fewer income brackets), increased the minimum age for the enhanced circuit breaker from 62 to 70 years of age, and increased the maximum credit for both circuit breakers from \$750 to \$1,000. Also, for renter claimants, the share of the Schedule H rents assumed to be equal to property taxes was increased from 15 to 20 percent.

The effort to increase the number of claimants was successful. The number of total claimants increased more than fivefold, from 6,016 (of which 1,220 (20.3 percent) were owner claimants) in 2013 to 34,495 (of which 6,593 or 19.1 percent were owner claimants) in 2018.

VI. Property Tax Burdens for Homestead Properties in 2018

District law states that the Schedule H Property Tax Credit is available only to city residents that are full year residents that either rented or owned and live in a home, apartment, or condominium for the entire prior calendar year. Owners of homestead properties where the property is the principal place of residence are also eligible for the annual homestead deduction, the assessment cap credit and, if they are 65 years or older, the senior citizen credit. As this paper focuses on the homeowners benefiting from the circuit breaker program, this section describes the age, income, and tenure profile of homestead owners as well as the distributions of their income and property tax burdens in 2018. This group serves as a reference point for analyzing the net property tax burdens and tax relief for Schedule H owner claimants in later sections. Property tax burdens in this section do not include adjustments for the Schedule H property tax credit.

In 2018, the median age of homestead owners was 49.3 years. Most homesteaders were between the ages of 35 and 45, while 34.5 percent were older than 55 years of age (Figure 3). The median tenure of homestead owners in their homes was 9.0 years, with nearly three-quarters of the homestead properties purchased from 2000 and 2015. For many of the 2018 homesteaders that purchased their homes between the years 2000 and 2005, the median home purchase price was \$196,000 during those years.

Figure 3

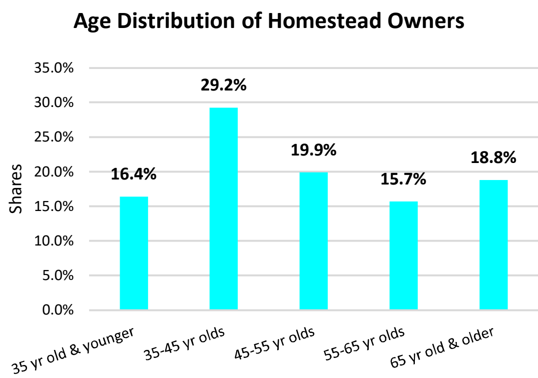
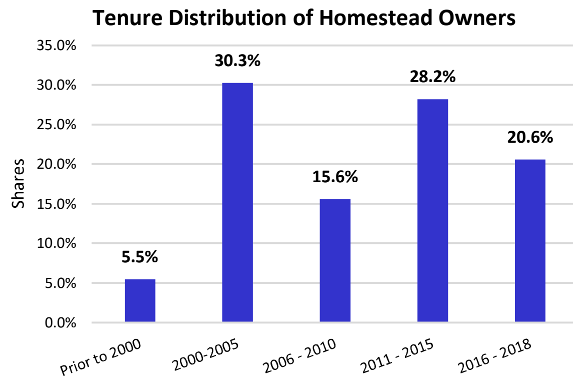


Figure 4



In 2018, the median income of homestead owners was $134,357. Figure 5 shows that 55.1 percent of homesteaders had income less than $150,000. The median homestead value was $548,820, and Figure 6 shows that 56.1 percent of such properties had a value of $600,000 or less. Thus, the median 2018 homestead owner in the city was 49 years old, purchased her home in 2008, earned $134,357 in income and had a home value of $548,820.

Figure 5

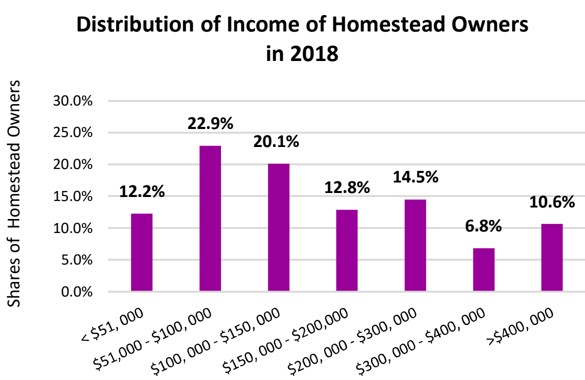
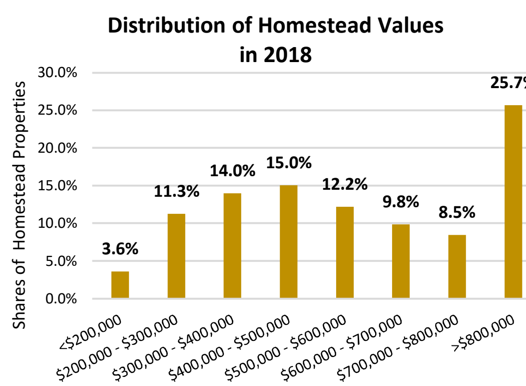


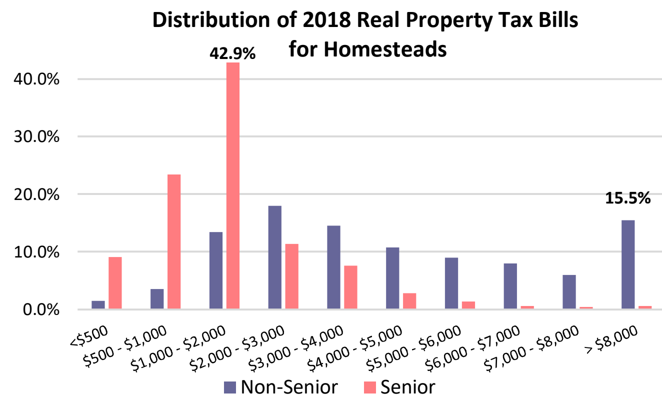
Figure 6



Furthermore, a portion of registered homesteads in the city are classified as senior (or disabled) homesteads. These are homestead properties that receive the senior or disabled homeownership credit, which is an automatic 50 percent annual reduction in their real property tax bills. To be eligible for the senior credit, homesteaders must be 65 years or older (or disabled) and apply for the credit with OTR's Real Property Tax Administration (RPTA). In 2018, 19.5 percent of the city's homesteads were senior/disabled homesteads. The real property tax bill for senior homesteads was much lower than that of non-senior homesteads, having a median property tax bill of $1,276, compared to $3,926 for non-senior homesteads.

Figure 7 shows that a significant proportion of senior homesteads had a property tax bill between $1,000 and $2,000, whereas non-senior homesteads had a more evenly distributed tax bill between $1,000 and $5,000. This difference in the level of taxation is primarily due to the large reduction in the tax bill from the senior credit as well as the assessment cap credit.

Figure 7



In 2018, the median income tax burden[18] was 5.0 percent, and 55.7 percent of all homesteaders paid between 4 percent and 7 percent of their income in income taxes (Figure 8). The median homestead property tax burden was 2.3 percent with 67.2 percent of homesteaders paying less than 3 percent of their income in property taxes (Figure 9). At the other end of the spectrum, however, 12.5 percent (approximately 12,000) homesteaders paid more than 5 percent of their income in property taxes.

Figure 8

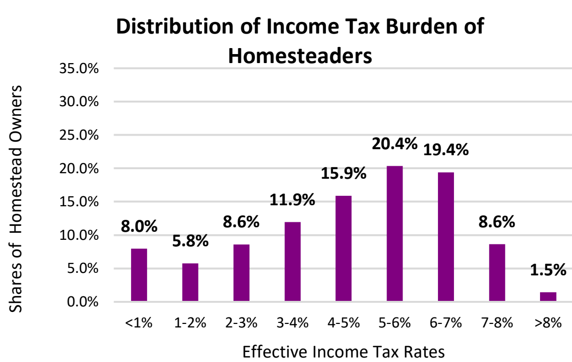
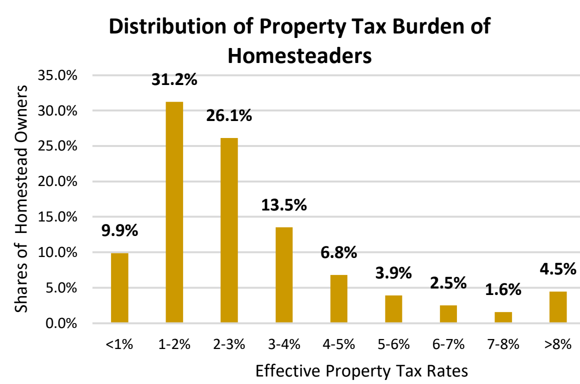


Figure 9



The primary revenue sources for the city government come from property and local income taxes, which are largely borne by District households. According to Figure 10, the city's income tax is progressive, whereas the property tax is regressive. Nearly 75 percent of the combined tax burden of the lowest-income homeowners comes from property tax, whereas about 80 percent of the combined tax burden of the highest-income homeowners comes from income tax. Apparently, the income tax's progressivity offsets to some extent the regressivity of the property tax. As a result, both the lowest- and highest-income homeowners pay approximately the same percentage of their household income in combined taxes for city government services. (Figure 11).

[18] The income tax burden is the total income tax liability divided by the adjusted gross income (AGI).

Figure 10

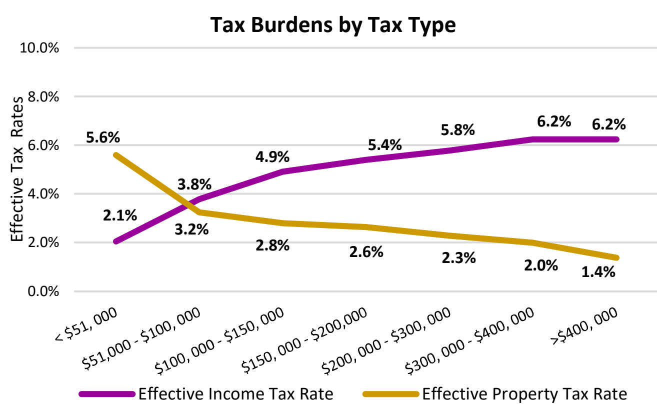


Figure 11

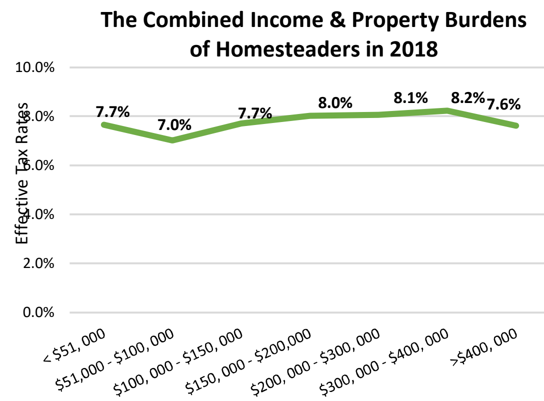


Figure 11 shows that for the combined income and property, the lowest and highest income households pay approximately 7.6 of their income in local taxes. This violates the vertical equity principle of taxation, which advocates more progressive taxation. It is evident that the high total tax burden on the city's lowest income earners (even with the city's considerable senior credit) is caused by the real property tax, where household income is not factored into how much a household pays. The city's circuit breaker policies are expressly designed to assist this group of homeowners. This study seeks to evaluate how well the current circuit breaker program and its design achieve the policy objective of preventing property tax liabilities for the lowest-income households in consuming a disproportionately large share of their household income.

VII. Property Tax Circuit Breakers Claimants

Of the 34,495 circuit breaker claimants in 2018 renters accounted for 81 percent and homeowners accounted for 19 percent. Also, 57 percent of all claimants received the maximum credit. Of claimants who did not receive the maximum amount the average credit was $600 for renters, and $497, for homeowners. The program cost a total of $28.7 million in 2018, 81 percent of which went to renters.

Table 5

Key Policy Statistics for Tax Year 2018				
		Renter Claimants	Owner Claimants	Total
Received Maximum Credit				
	# Claimants	15,967	3,717	19,684
	Total Credit	$16.4 mil	$3.8 mil	$20.2 mil
	Mean Credit	$1,025	$1,025	
Received Less than Maximum Credit				
	# Claimants	11,935	2,876	14,811
	Total Credit	$7.2 mil	$1.4 mil	$8.6 mil
	Mean Credit	$600	$497	
Total Claimants		**27,902**	**6,593**	**34,495**
As a %		80.9%	19.1%	100.0%
Total Credit Amounts		**$23.5 mil**	**$5.2 mil**	**$28.7 mil**
As a %		81.9%	18.1%	100.0%

Figure 12 shows that in terms of age, the renters and owners are markedly different. Renters are typically below 35 years old, and have earnings between $25,000 and $51,000, whereas owners are predominantly senior citizens with earnings below $25,000 (Figures 13). The average income was $22,533 for homeowners and $30,484 for renters, and the average tenure for the homeowners was 17 years. Renters' primary source of income is wages, whereas owners generally do not have wage earnings. This is shown in Figure 15 where the median wage earnings of owners were zero, while median wage earnings of renters were $29,851. Not unexpectantly, owner claimants, who are often senior citizens, primary sources of income tend to be nonwage sources such as social security benefits, pensions, annuities, IRA distributions, taxable interest, and other dividends. Both renters and owners are also largely unmarried female claimants (Figures 16 and 17).

Figure 12

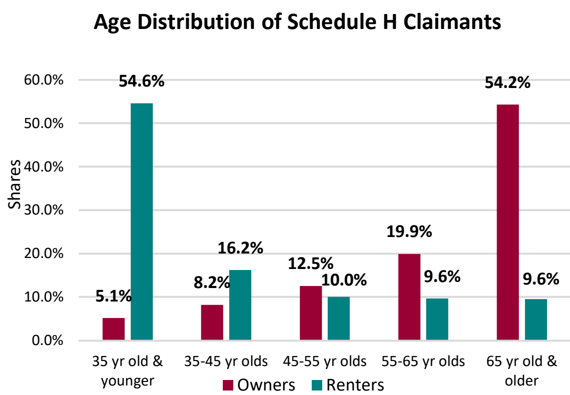


Figure 13

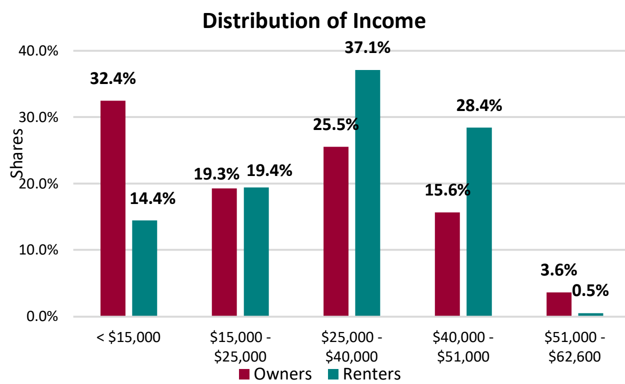


Figure 14

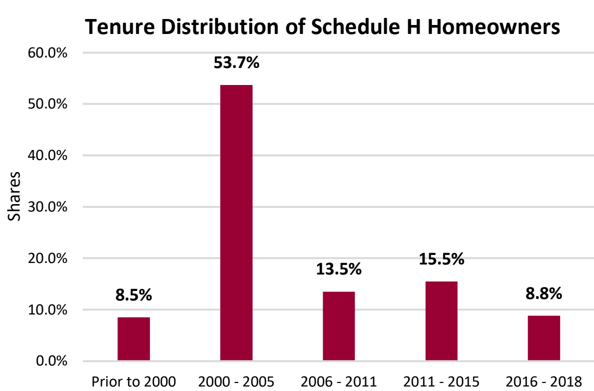


Figure 15

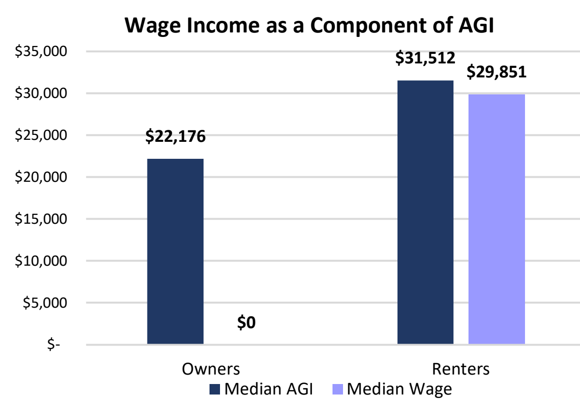


Figure 16

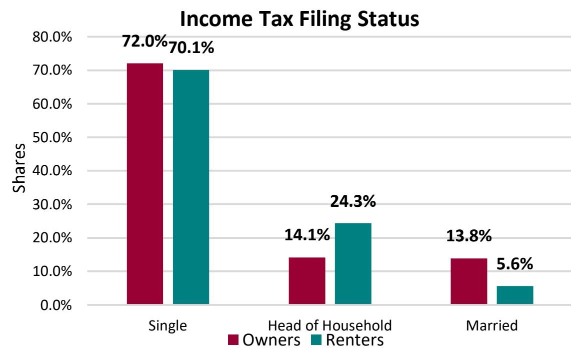
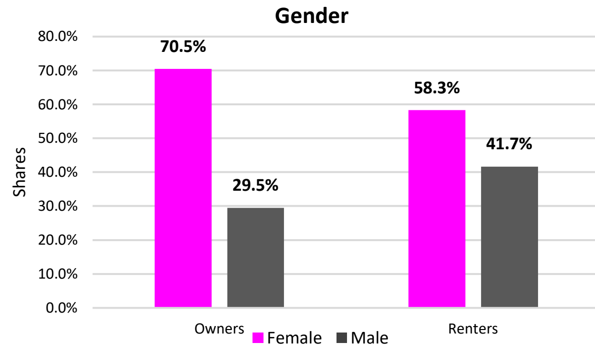


Figure 17



The median annual rent renter claimants paid in 2018 was $12,000 with nearly half of all of them paying between $10,000 and $15,000 in annual rent, as shown in Figure 18. This translates into a median monthly rent of $1,000 for renter claimants.[19] Figure 19 shows that most owner claimants had home values between $400,000 and $500,000, just as for the city in general (see Figure 6). Owner claimants had a median home value of $463,040, and a consequent median property liability before the Schedule H tax credit was $2,084.

Figure 18

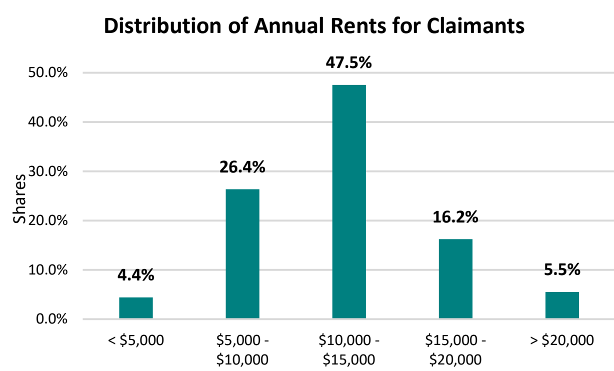
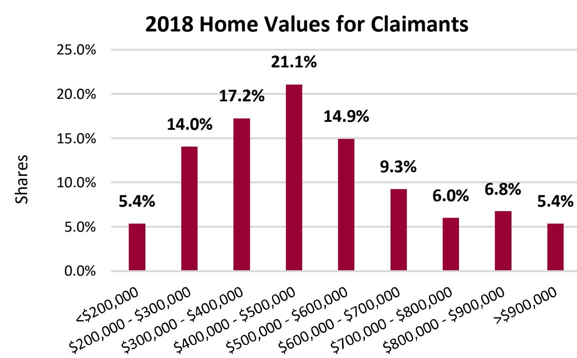
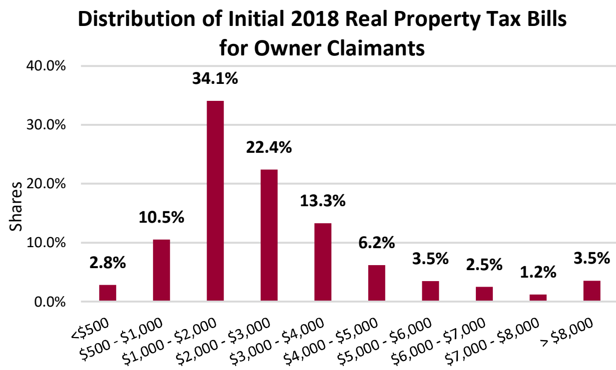


Figure 19



[19] A monthly rent of about $1,000 seems typical for very low-income households in the city given that $1,070 is the maximum allowable rent for a one-bedroom unit reserved for a household earning only 50 percent of metro area's median family income (MFI) as part of the city's Inclusionary Zoning housing program in 2018. https://dhcd.dc.gov/sites/default/files/dc/sites/dhcd/publication/attachments/IZ%20Income%20Schedule%20as%20of%20October%202018.pdf

Figure 20



Both renter and owner claimants are predominantly unmarried women without dependents. However, renters tend to be under 35 years of age, earning mostly between $25,000 and $51,000 from wage earnings, with a monthly rent payment of $1,023. Their annual rent payments, before accounting for the Schedule H tax credit, was 40.3 percent of their annual income ($12,278/$30,484). On the other hand, owners had an average income of $22,533 (with most of that coming from non-wage income), tended to be over the age of 65, and have been in their homes since 2001. They had an average home value of $789,864, and their consequent mean property tax liability before the Schedule H tax credit was $3,089, which was about 13.7 percent of their income.

VIII. The Interaction of the Circuit Breaker, Homestead & Senior Credit Property Tax Relief Programs

Table 6 shows the effect of the Schedule H Property Tax Credit on three different types of owner claimants' net real property tax liability, and it shows claimants' net real property tax burden compared to the real property tax burden of the District's 100,000 homestead properties. Homestead properties will serve as a reference for analyzing the net property tax burdens and tax relief for Schedule H owner claimants for this and the following sections.

Schedule H owner claimants in 2018 fell into one of three broad categories: a non-homestead, a non-senior homestead or a senior homestead. In 2018, 14.1 percent of the 6,593 claimants were found not to be homesteads. Therefore, they were excluded from receiving the homestead deduction, assessment cap credit and senior credit. In table 6, for claimants that were not registered homesteaders, their median real property tax liability was $3,561, and their property tax burden was 16.4 percent prior to applying the circuit breaker. When the circuit breaker tax credit was applied, their net property tax burden was still 11.7 percent of their income, more than four times greater than the 2.6 percent for District non-senior homesteaders not receiving the circuit breaker.

Of all the owner claimants, 37.4 percent of them were non-senior homesteads. They received the homestead deduction and the assessment cap credit (if applicable), with a median property tax burden of 11.2 percent prior to applying the circuit breaker. When the circuit breaker tax credit was applied, their net property tax burden was reduced to 6.8 percent, more than 2.5 times higher than the 2.6 percent tac burden for non-senior homesteaders outside of the circuit breaker program. For non-senior homesteaders claiming the Schedule H tax credit, the circuit breaker program does not reduce tax burden sufficiently to be on par with the tax burden for other District non-senior homesteaders.

The largest group of owner claimants (48.5 percent) were senior homesteads. They received the homestead deduction, the assessment cap credit, and the 50 percent senior credit, and their tax burden prior to applying the circuit breaker was 7.4 percent. When their circuit breaker tax credit was applied, their net property tax burden was reduced to 1.8 percent, which is comparable to the 2.3 percent tax burden of senior homesteaders District-wide. This lower property tax burden is primarily due to the substantial senior tax credit.

As Table 6 shows, for senior homesteaders the Schedule H program ultimately reduces real property tax burden to be on par with that of other District senior homesteaders. But whereas, senior homestead Schedule H claimants received around 72 percent of their total property tax relief from the Schedule H credit. This is only after the tax relief through the property tax system in the form of the homestead deduction, an assessment cap, and the senior credit already lowered their liability to $1,362 Thus, even for the Schedule H claimants with the lowest net property tax burdens, the Schedule H credit arguably plays a modest role in aligning their property tax burdens with those of the majority of other homesteaders in the city.[20]

Table 6

The Effect of the Schedule H Property Tax Credit on Claimants' 2018 Real Property Tax Liability

		All Homesteads in City		Schedule H Claimants		
		Non-Senior	Senior	Not a Homestead	Non-Senior Homestead	Senior Homestead
1	Median AGI	$ 154,332	$ 58,771	$ 21,736	$ 23,560	$ 18,297
2	Median IIT Liability	$ 8,071	$ 1,434	$ 119	$ 160	$ -
3	IIT ETR (IIT Liability/AGI)	5.2%	2.4%	0.5%	0.7%	0.0%
4						
5	Median Home Assessment Value	$ 577,190	$ 457,755	$ 411,570	$ 459,735	$ 473,290
6	Median RPT Liability	$ 3,959	$ 1,348	$ 3,561	$ 2,631	$ 1,362
7	RPT Liability/ Home Assessment Value	0.69%	0.29%	0.87%	0.57%	0.29%
8						
9	Initial RPT ETR (Initial RPT Liability/AGI)	2.6%	2.3%	16.4%	11.2%	7.4%
10						
11	Median Schedule H Credit	-	-	$ 1,025	$ 1,025	$ 1,025
12						
13	RPT Liability Adjusted for Schedule H Credit	-	-	$ 2,536	$ 1,606	$ 337
14						
15	% Reduction in RPT due to Schedule H Credit	-	-	-28.8%	-39.0%	-75.3%
16						
17	**Median Net RPT ETR (Adjusted RPT Liab/AGI)**	**2.6%**	**2.3%**	**11.7%**	**6.8%**	**1.8%**

IX. Homeowners and renters' relationship with their real property tax

This research underscores several important distinctions between low-income homeowners and low-income renters regarding their real property taxes. One important distinction is homeowners and renters' relationship with their real property tax.

Homeowners have a more direct connection to their property tax and interact directly with the property tax administration. They receive annual home assessment values and real property tax bills in the mail and pay their taxes directly to OTR. Homeowners can contest the assessed values of their homes if they

[20] See Appendix 1 for how the $1,025 Schedule H tax credit tends to lower their property tax liabilities, which averages $3,004, by about one-third on average.

believe OTR has overvalued their property for the upcoming year.[21] In contrast, renters tend to have a more indirect relationship with their property tax and no direct communication with the property tax administration. Renters typically do not see either their prorated real property tax bill for their apartment unit or the actual real property tax bill for their apartment building. As a result, renters usually have no reason to engage with property tax administrators. This lack of information and direct engagement on the part of renters (and policymakers) may contribute to an overestimation of the property tax burden of renters by policymakers.[22]

As discussed in Section III, when buying a home, most buyers tend to assume the long-term cost of homeownership would be manageable. However, affordability problems may arise decades after the closing date of the new home purchase (i.e. after the bank loan used to purchase the home is fully paid). In contrast, the 2018 national median homeowner's property tax burden was about 3.3 percent of household income[23], while in the District of Columbia, it was 2.3 percent. The 2018 median tax burden for Schedule H owner claimants in the city was as low as 11.2 percent before the application of their Schedule H tax credit but still only as low as 6.8 percent with the credit applied (See Table 6).

Circuit breaker policies are specifically designed to assist homeowners who face economic hardship and/or have a deteriorating ability to pay property taxes. When a homeowner becomes delinquent for her real property taxes in a given year, the OTR may record a tax lien (within months after the close of the tax year) against their property to secure the debt for the outstanding taxes.[24] At this point, OTR can sell the lien at tax sale in the following months.[25] So, high levels of property taxes for economically vulnerable homeowners can be an existential concern for many low income homeowners.

Renters, on the other hand, are less directly affected by their property tax liabilities. Instead, their share of the property tax expenses is included in their monthly rent payments. Renters are more directly confronted with overall housing affordability issues monthly when the rent is due, where property taxes represent a minor component of the amount. Nevertheless, the semi-annual payment of property taxes or the consequences of missing a payment can be particularly distressing for low-income homeowners. That said, lowering property tax burdens improves housing affordability for both low-income renters and homeowners.

X. Renter Claimants: The "20 Percent of Rent Paid" – Property Tax Equivalency

In the general absence of key information on actual property tax burdens for renters, policymakers require the Schedule H tax form to include a requirement for renter claimants to report "20% of rent paid" for the previous year.[26] Policymakers instruct OTR officials to conclude that the "20% of rent paid" (i.e. 20

[21] These new assessment values serve as the basis for the subsequent year's real property tax.

[22] The Schedule H tax form includes a requirement for renter claimants to report "20% of rent paid" in order to receive the Schedule H credit. One could assume that "20% of rent paid" is equivalent to their real property tax liability.

[23] Tax Rates and Tax Burdens 2018: A Nationwide Comparison. https://ora-cfo.dc.gov/sites/default/files/dc/sites/ocfo/publication/attachments/2018%2051City%20Study_June%202020.pdf

[24] D.C. Code § 47–1331, § 47-1332, and § 47-1346

[25] By law, the OTR has the authority to auction off tax liens in an effort to collect delinquent taxes. A tax lien sale is a public auction to sell these liens to buyers/investors in exchange for paying the past due taxes, these buyers/investors of the property. If the owner wants to get their property back, she must pay back the investor–including interest. These liens remain on the property until the owner pays off the tax liens in full. If the owner continues to fail to pay the taxes after the lien is recorded, then OTR may initiate a process that can result in the foreclosure and sale of the property.

[26] In contrast, the Schedule H tax form requires owner claimants to report their actual property taxes liabilities for the previous year.

percent of their rental housing costs) of renter claimants is equivalent to the property taxes they have paid. This provision appears to simplify data collection for renter claimants and OTR, recognizing that it would be challenging for claimants to accurately and consistently identify the portion of their rent that closely corresponds to property taxes passed on to them by the property owner/management company on an annual basis.[27]

In the District of Columbia, private owners of all medium and large residential rental properties are required to submit an annual Income & Expense Reports (I&E Reports) for each of their properties to the Real Property Tax Administration (RPTA) for property assessments purposes. An I&E Report is a comprehensive annual record documenting all expenses and income sources associated with each taxable multifamily residential rental property in the city. The report also itemizes all types of expenses such as property management fees, advertising costs, cleaning, maintenance, repairs, insurance, utilities, property taxes, depreciation, and more.

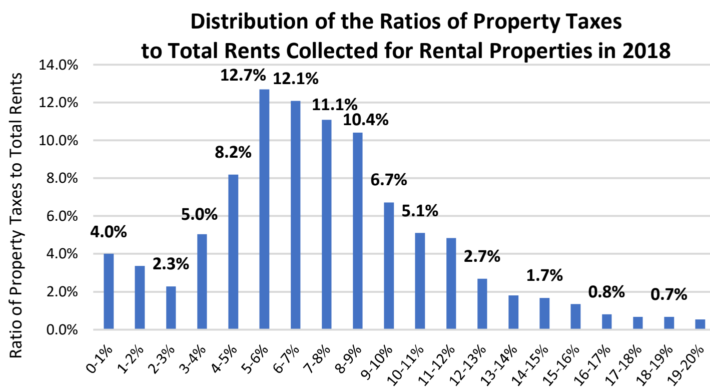
Using the 2018 I&E data for over 1,600 medium and large privately-owned multifamily rental properties in the city, we obtain the total annual rents collected for each multifamily rental property in the city. We then obtain the actual 2018 real property tax liability for each property to produce the citywide median ratio of real property taxes to total rents of 6.85 percent as shown in Table 7. Figure 21 shows that 53.0 percent of the multifamily properties in the city had a ratio between 5 and 10 percent.[28]

Table 7

Ratios of Real Property Taxes to Total Rents Collected for Rental Properties in the District of Columbia in 2018

Rental Property Type	Median Ratio	Property Type as a Share
Six units or more, walk up only	6.53%	68.91%
Twelve units or more, with Elevator	8.05%	21.16%
All Other Types	6.42%	9.94%
Total	**6.85%**	**100.00%**

Figure 21



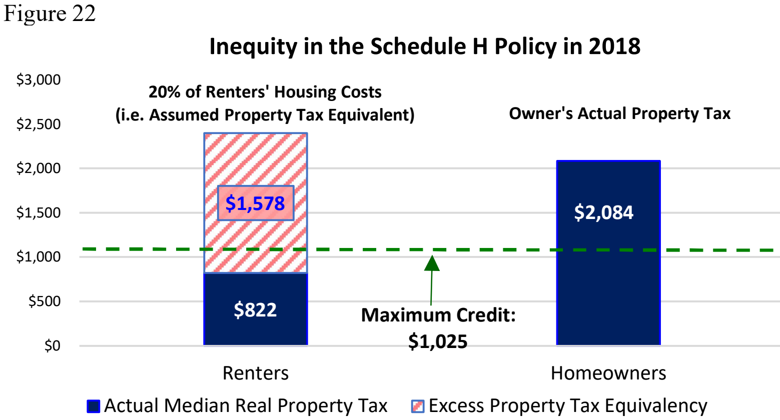
[27] This provision also appears to be a standardized approach that attempts to equalizes the formulas for calculating the Schedule H property tax credit for both renters and homeowners.

[28] For this exercise, we assume the short-term demand for affordable city apartments by DC low-income renters is relatively inelastic. Thus, allowing the current property tax burdens for rental units to be borne largely by the renters without a significant short-term reduction in the demand for affordable rental housing in the city. We assume one of the reasons for this is that low-income renters tend not to have the financial flexibility to quickly adjust their housing-type and/or metro area residential location choice solely because of how the current level of property tax taxation is affecting rent levels.

Although '20% of rent paid' by renter claimants is determined by policymakers and tax administrators to represent their actual real property tax, Table 7 and Figure 21 reveal the portion of the claimants' rent allocated for real property taxes tends to be closer to 7 percent. This means that when that median total annual rent paid by renter claimants is $12,000 (see Figure 18), the share that is devoted to property taxes for the median renter is approximately $822 for the year.[29] In this case, the median claimant's more accurately estimated property tax of $822 is actually only 2.6 percent of her income reported on her income tax form and therefore would not qualify for the tax credit.[30] But, when the "20% of rent paid" provision is used instead, this claimant's officially recognized property tax estimate is $2,400.[31] Since the 2018 tax credit was limited to $1,025, she received the full tax credit amount, which exceeded her more accurate property tax estimate of $822 by $203.[32] This suggests that without the '20% of rent paid' provision, many renter claimants would not have qualified for the tax credit in 2018.[33]

This situation is illustrated in Figure 22. The first problematic issue is that the policy qualifies her for the credit, even though she would not be qualified if "actual" property taxes were considered. The second issue is that not only does she receive a tax credit of $1,025, but the credit is also 125 percent ($1,025/$822) of her more accurately estimated property tax for the year.[34] And the third issue is that the program's median owner claimant, in comparison, with access to her actual property tax bill for the prior year only receives 49.2 percent ($1,025/$2,084) in Schedule H tax relief with her lower income of $22,176 (from Figure 15). We contend that this "20% of rent paid" provision for renters produces considerable systematic inequities in the amount of property tax relief allocated to owner and renter claimants.

Figure 22



On the individual taxpayer level, this feature tends to abate all the actual property taxes of many renters, while tending to abate only a fraction (less than half) of the real property tax liability for the owner claimants, who tend to earn less income. Looking at the larger picture, the tax records indicate that all renter claimants collectively paid $342.6 million in rents in 2018. If we consider, instead, approximately 7 percent of their rents were attributed to their real property taxes, this amounts to $24.0 million. In 2018, all renter claimants actually received $23.5 million in Schedule H tax credits or 98 percent of property taxes paid. But in contrast and according to tax records, all owner claimants paid $20.4 million real

[29] $822 = (12,000*0.0685) per month in 2018

[30] The 2018 tax form states that for claimants with incomes between $25,000 and $51,000, their property tax must exceed 4 percent to be eligible for the credit. Figure 15 indicates that the median income of renter claimants in 2018 was $31,512.

[31] $24,000= ($12,000*0.20)

[32] $203 = ($1,025- $822)

[33] Table 5 shows that 57.2 percent of all renter claimants received the maximum credit of $1,025 in 2018.

[34] Consequently, the policy entitles her to a small rental housing subsidy.

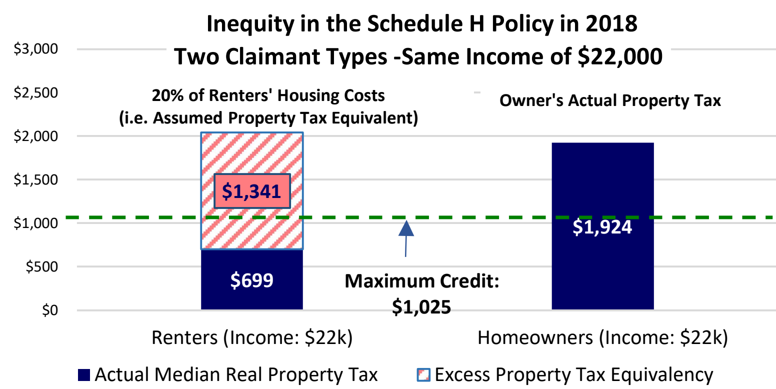
property taxes but received only $5.2 million in Schedule H tax credits or 25.7 percent of property taxes paid. The existing policy appears to allocate a disproportionate amount of tax benefits to renter claimants in comparison to owner claimants, relative to actual property taxes paid by both groups.

Figure 22 illustrates the policy-induced inequity between the typical renter and owner claimant in the program. However, an alternative evaluation of this issue involves comparing the impact of the tax policy on tax filers in similar economic situations. Figure 23 shows how the Schedule H policy affects both renters and homeowners who both earn an annual income of $22,000 in 2018. [35] Per the tax form, the tax credit for claimants with incomes between $0 and $24,999 is determined by the portion of property tax that exceeds 3.0 percent of their adjusted gross income (AGI), with a maximum credit of $1,025.

The renter claimants in this income cohort had a median total annual rent of $10,200. The share that is likely devoted to actual property taxes is approximately $699 ($10,200*0.0685) for the year. Interestingly, the median renter claimant's more accurately estimated property tax of $699 is 3.2 percent ($699/$22,000) of their income and still makes her eligible for the tax credit under the "20% of rent paid" provision of the current policy. But if the property tax amount of $699 is used, she would receive a tax credit of only $39.00.[36] This suggests that without the '20% of rent paid' provision, many renter claimants would not receive the maximum credit.

This situation also illustrates how a renter claimant, under the current policy, would receive a tax credit of $1,025, that would amount to 147 percent ($1,025/$699) of her property taxes for the year, producing a small rental housing subsidy amount of $326 ($1,025- $699). But, an owner claimant in the same income situation would only receive a 53.3 percent ($1,025/$1,924) tax abatement by way of Schedule H.

Figure 23



At the outset, one would assume this policy treats all claimants equitably. But in practice, the policy appears to systematically treat renters and owners inequitably, with Schedule H tax benefits (relative to actual property taxes) being appreciably skewed towards renters.[37]

[35] This figure contains data for 102 owner claimants and 576 renter claimants. They all had 2018 incomes ranging from $21,500 to $22,500.

[36] In this scenario, 3 percent of $22,000 is $660.00 per the tax form, and her property tax is $699. The form states that when there is an excess of property tax over the 3 percent of income, the claimant will receive the lower of two amounts: the excess amount or $1,025. This case demonstrates how under current policy the claimant receives the maximum credit, but she would only receive a mere fraction of that amount if her actual property taxes were used in the calculation.

[37] Figure 22 illustrates how a renter claimant qualifies for a credit, even though she would not be qualified if "actual" property taxes were considered. Figure 23 illustrates how a renter claimant qualifies for the maximum credit, even though she would have received an appreciably lower credit amount if "actual" property taxes were considered. These results can seem plausible given that the share of the Schedule H rents assumed to be equal to property taxes was increased from 15 to 20 percent in 2014.

Why are the real property tax bills for renters and owners so dissimilar?

With the property tax paid by the median owner claimant in 2018 being $2,084 and the median property tax estimate paid by renter claimants being $822, why is the tax paid by the median owner claimant almost 3 times greater than the actual property taxes paid by the median renter claimants?

The reason for the significant difference in property tax bills is that square footage for the living area of renters (particularly low-income renters) tends to be notably smaller than the square footage living area of single-family homes.[38] The median-sized apartment in the District of Columbia is only 692 square feet,[39] whereas the median-sized single-family home is 1,218 square feet.[40] Whereas total costs (including taxes) of common spaces in multifamily buildings such as lobbies, green spaces, recreation areas etc. are prorated to all rental units, this does not equate to single-family homes whose owners bare the total costs of the property frontage (land between the front of the structure and the street), backyard space, and possibly a second level and/or a below-grade[41] level (i.e. basement). The typical total gross living area and land area of rental units tends to be a fraction of the typical total gross living area and land area of single-family homes, causing the median property tax liability for owners in Figures 22 and 23 is more than 2.5 times than of renters. But even after adjusting for gross living area, owner claimants still tended to face a property tax burden of $1.71 per square foot, which is 44 percent higher than the $1.19 per square foot paid by renter claimants.

XI. The Schedule H Tax Credit Used as a Retired Homeowner's Tax Credit

Table 8 reveals that 705 Schedule H owner claimants in 2018 had real property tax bills greater than $5,000 before the application of their $1,025 Schedule H property tax credit. These claimants had an average annual income of approximately $22,000, collectively received a total of $722,625 in Schedule H property tax credits, and all received the maximum credit of $1,025.

Table 8

Property Tax Bill & Income Statistics for All Schedule H Owner Claimants 2018

Real Property Tax Bill Amounts (All Schedule H Owner Claimants)	N	N as a Share	Real Property Tax Bill Amounts (Excluding Schedule H Credit)				Adjusted Gross Income of Schedule H Claimants			Schedule H Credit Amounts			
			Sum	Sum as a Share	Mean Amount	Median Amount	Sum	Mean Amount	Median Amount	Sum	Sum as a Share	Mean Amount	Median Amount
Less Than $5,000	5,888	89.31	$ 12,378,150	60.8	$ 2,102	$ 1,906	$133,148,895	$ 22,614	$ 21,695	$ 4,517,319	86.2	$ 767	$ 1,025
Between $5,000 - $6,000	229	3.47	$ 1,244,718	6.1	$ 5,435	$ 5,402	$ 4,719,911	$ 20,611	$ 27,655	$ 234,725	4.5	$ 1,025	$ 1,025
Between $6,000 - $7,000	163	2.47	$ 1,052,450	5.2	$ 6,457	$ 6,469	$ 3,969,637	$ 24,354	$ 26,896	$ 167,075	3.2	$ 1,025	$ 1,025
Between $7,000 - $8,000	80	1.21	$ 596,021	2.9	$ 7,450	$ 7,415	$ 2,002,333	$ 25,029	$ 20,028	$ 82,000	1.6	$ 1,025	$ 1,025
Between $8,000 - $9,000	57	0.86	$ 481,470	2.4	$ 8,447	$ 8,425	$ 1,438,438	$ 25,236	$ 25,829	$ 58,425	1.1	$ 1,025	$ 1,025
Between $9,000 - $10,000	48	0.73	$ 453,596	2.2	$ 9,450	$ 9,399	$ 1,340,179	$ 27,920	$ 34,986	$ 49,200	0.9	$ 1,025	$ 1,025
Greater Than $10,000	128	1.94	$ 4,162,224	20.4	$ 32,517	$ 12,905	$ 1,939,263	$ 15,150	$ 26,144	$ 131,200	2.5	$ 1,025	$ 1,025
Total (ALL)	**6,593**	**100.00**	**$ 20,368,629**	**100.0**	**$ 3,089**	**$ 2,084**	**$148,558,656**	**$ 22,533**	**$ 22,176**	**$ 5,239,944**	**100.0**	**$ 795**	**$ 1,025**

Apparently, one reason for this policy change was to significantly increase the number of renter claimants in the program and the level of tax benefits, irrespective of actual property tax burden of renter claimants (See Section V).

[38] In 2018, owner claimants had a median home value of $463,040. (See Figure 19)

[39] Income & Expense Database for all Multifamily Properties in the District of Columbia for CY 2021, OTR- RPTA.

[40] Who Lives Largest? The Growth of Urban American Homes in the Last 100 years. https://www.propertyshark.com/Real-Estate-Reports/2016/09/08/the-growth-of-urban-american-homes-in-the-last-100-years/

[41] Below grade living areas are not typically included in the reported gross square footage area of housing units.

For example, Table 8 shows that there were 57 owner claimants with property tax bills (only adjusted for the homestead deduction, assessment cap credit and senior credit) that ranged between $8,000 and $9,000. The median property tax bill for this cohort was $8,425, and their median income was $25,829. Table 8 is based on income tax records of Schedule H claimants. But since these data do not contain the home values of claimants, we applied the same real property tax bill cohort definitions from Table 8 to the matched homestead and income tax database to obtain the home values and household incomes that typically (not just Schedule H claimants) correspond to the respective real property tax bills in Table 8.

Table 9 tells us that households in the city with property tax bills that ranged between $8,000 and $9,000 were typically valued over $1 million and by and large had annual household incomes of around $300,000. These households tended to have a property tax burden of about 2.2 to 3.1 percent. But in contrast, the property tax burden of Schedule H owner claimants with the same level of property tax bills tended to be about 32.6 percent. Together, Tables 8 and 9 highlight that there were several hundred Schedule H owner claimants that had million-dollar homes, low-income levels and consequently, substantively high property tax burdens, when households with similarly valued homes typically would have very low property tax burdens (because of their much higher incomes).[42]

Table 9

Property Tax Bill & Income Statistics for All Homesteads 2018

Real Property Tax Bill Amounts (All Homesteads)	N	N as a Share	Real Property Tax Bill Amounts (Does Not Include Schedule H Credit)			Assessment Value		Adjusted Gross Income	
			Sum	Mean Amount	Median Amount	Mean Amount	Median Amount	Mean Amount	Median Amount
Less Than $5,000	68,399	68.60	$ 163,589,541	$ 2,392	$ 2,286	$ 445,737	$ 434,340	$ 111,516	$ 91,729
Between $5,000 - $6,000	7,472	7.49	$ 41,038,062	$ 5,492	$ 5,487	$ 763,369	$ 734,055	$ 236,903	$ 186,644
Between $6,000 - $7,000	6,506	6.53	$ 42,196,909	$ 6,486	$ 6,484	$ 862,158	$ 844,255	$ 264,577	$ 212,223
Between $7,000 - $8,000	4,849	4.86	$ 36,205,998	$ 7,467	$ 7,451	$ 974,656	$ 956,380	$ 317,847	$ 249,941
Between $8,000 - $9,000	3,031	3.04	$ 25,654,809	$ 8,464	$ 8,446	$ 1,092,410	$ 1,075,410	$ 385,828	$ 271,678
Between $9,000 - $10,000	2,117	2.12	$ 20,044,939	$ 9,469	$ 9,449	$ 1,205,940	$ 1,190,250	$ 397,389	$ 284,730
Greater Than $10,000	7,331	7.35	$ 110,285,796	$ 15,044	$ 12,887	$ 1,864,150	$ 1,601,030	$ 818,353	$ 438,865
Total (ALL)	**99,705**	**100.00**	**$ 439,016,055**	**$ 4,403**	**$ 3,252**	**$ 662,528**	**$ 544,590**	**$ 196,452**	**$ 115,029**

XII. A Discussion: The Effectiveness of the City's Circuit Breaker Policy

Policy effectiveness denotes the extent to which desired policy objectives are accomplished. Policy efficiency refers to relatively optimal utilization of available resources in program operations. Like in other jurisdictions across the country, the objective of the city's property tax circuit breaker policy is to prevent disproportionately high property tax liabilities from excessively burdening households with the lowest incomes. The policy assumes that escalating property tax liabilities significantly strain household budgets. And according to the 2015 District of Columbia Housing Tax Expenditure Review, the purpose

[42] Tables 8 and 9 provide insights into the 10 percent of Schedule H owner claimants that have markedly higher home values than most other owner claimants but also received the maximum $1,025 tax credit in 2018. See Appendix 2 for a discussion on how these owner claimants with exceptionally high property tax liabilities practically ensures these property owners receive the maximum credit.

of the policy is to "enhance income security for residents whose property taxes are high relative to their income, such as elderly residents on fixed incomes".[43]

Ultimately, the Schedule H policy provides a tax credit to low-income households to reduce their property liabilities. In this regard, the program's effectiveness could be considered a success in 2018, as it provided $28.7 million in refundable income tax credits to lower the property tax burdens for 34,495 low-income households in the city with over 56 percent of the claimants having received the maximum credit of $1,025.

The city's policy objective is to help prevent the property taxes for the lowest low-income households in the city with a deteriorating ability to pay their annual property tax liabilities from consuming a disproportionately large share of their household income. We assume the city aims to achieve this policy objective for as many low-income households as its limited resources would allow, while also ensuring relative fairness and equity in the implementation of the policy. However, this study identifies the following four aspects of the current Schedule H policy that might be inhibiting a greater degree of effectiveness, efficiency, and equity in the program.

1. <u>"The 20% of Rent Paid" property tax equivalency</u>

   The current Schedule H policy inaccurately considers 20 percent of claimants' rental payments to be equivalent to their actual property tax liability. We find the current policy overstates renters' property tax liabilities, presuming them to be nearly three times higher than their actual amounts. This inaccuracy results in some renters either receiving a tax credit and/or receiving the maximum credit when their actual property liabilities does not warrant it.[44] Consequently, it appears the policy systematically treats renter claimants and owner claimants differently causing a disproportionately large amount of Schedule H tax relief dollars (relative to actual property taxes paid) being directed to renter claimants who tend to have lower property tax liabilities, higher incomes, and not be senior citizens. (See Section X)

2. <u>Despite reducing the property tax liability, the circuit breaker policy still leaves many owner claimants with relatively high tax burdens</u>

   The Schedule H policy aims to ensure all low-income owner claimants have a net property tax burden of approximately 3, 4 or 5 percent, depending on their income level (see the Schedule H Tax Form). But, this causes many claimants to have a net property tax burden well above most homeowners in the city. The median homestead property tax burden was 2.3 percent in 2018 with 67.2 percent of homesteaders in the city paying less than 3 percent of their income in property taxes (Figure 9).

[43] District of Columbia Housing Tax Expenditure Review, 2015 https://ora cfo.dc.gov/sites/default/files/dc/sites/ocfo/publication/attachments/2015%20DC%20Housing%20Tax%20Expenditure%20Review.pdf

[44] As discussed in Section V, as a reaction to the escalating housing affordability crisis, city policymakers took numerous steps to broaden the circuit breaker program's reach in order to provide Schedule H tax benefits to more low-income renters. One of the many recently enacted policy adjustments was the adjustment of the presumed portion of Schedule H rents considered to be property taxes was raised from 15 to 20 percent. The overall effort to widen the program's scope resulted in an increase in claimants from 6,016 in 2013 to 34,495 in 2018.

3. Having separate circuit breakers based on age rather than property type (homeowners & renters)

   This study reveals that the fundamental distinction among most program claimants lies not in their age but rather in a more significant differentiation: owner claimants and renter claimants.[45] [46] Attempting to have the circuit breaker policy treat renter claimants and owner claimants equally, actually appears to be contributing to reduced levels of effectiveness, efficiency and equity of the program. (See Sections IX and X)

4. Having a higher qualifying age for the senior Schedule H credit of 70 years of age or older

   The qualifying age for the senior Schedule H credit is 70 years of age or older, while the qualifying age for the senior homestead credit is 65 years of age or older. Both programs have similar policy goals of reducing property tax burdens for senior citizens because they are typically an economically vulnerable subpopulation of homeowners. Our review of the data reveals that there were approximately 844 senior homesteaders in 2018 between the ages of 65 and 69, earned under $62,600 and had a real property tax bill greater than 3 percent of their income. It appears these seniors could have likely also been beneficiaries of the senior circuit breaker but for the current Schedule H higher age requirement.

In sum, it appears the above features of the current Schedule H policy maybe contributing to reduced levels of effectiveness and efficiency of the policy and is leading to significant systematic disparities in net property tax burdens for Schedule H owner claimants vis-vis all other homesteads in the city as well as among the program's owner claimants and renter claimants.

XVI. Conclusion

This study presents an extensive analysis of property tax burdens of homeowners in DC as well as a distributional analysis of circuit breaker tax benefits for low-income households. Analyzing many of the intricacies of the city's residential property taxation, property tax relief and their implications for economically vulnerable homeowners, we aimed to measure the extent and reach to which the Schedule H policy has lowered the property tax burden the city's lowest-income households. We also sought to identify major aspects of the Schedule H policy design that may be impeding higher levels of program efficiency, program effectiveness, and equity for its claimants.

This study finds that the Schedule H policy provided $28.7 million in refundable income tax credits to lower the property tax burdens for 34,495 low-income households in the city with over 56 percent of the claimants having received the maximum credit of $1,025. However, we also find the current Schedule H policy causes 1) owner claimants to have a net property tax burden that is about twice that of all other homesteads in the city, and 2) renters claimants to receive a disproportionately larger share of Schedule H tax relief dollars (relative to their actual real property tax liabilities) than owner claimants, who tend to be senior citizens with higher property tax liabilities and earn less income. Because nearly all renter claimants appear to receive a Schedule H tax credit amount greater than their actual real property taxes, they, effectively, benefit from a subsidy for their annual rental housing expenses.

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[45] This discrepancy may have been unintentional, stemming from the fact that the programs were implemented in different years. The Schedule H Property Tax Credit was instituted in 1977 (District Code § 47-1806.06), while the Senior Credit was instituted in 1986 (District Code § 47-863). District of Columbia Housing Tax Expenditure Review, 2015

[46] Currently, 54.2 percent of all owner claimants are 65 or older. (See Figure 12).

This research underscores the significant role of micro-level analyses of property tax burdens using administrative tax data for city homeowners. We contend such analyses are indispensable to advancing the city's circuit breaker policy.

Appendix 1
The Distribution of Circuit Breaker Tax Relief among Owner Claimants

Like all homeowners in the city, the income tax burden for Schedule H owner claimants is progressive, and the property tax burden is regressive. On average, these claimants bear a 1.45 percent income tax burden, although some individuals may pay as high as 3.7 percent of their income in income taxes. But, they face an average property tax burden of 13.7 percent (excluding the Schedule H property tax credit), with a few claimants expected to pay up to 18.2 percent of their income in property taxes (illustrated by the yellow line in Figure A1).

The Schedule H property tax credit reduces claimants' property tax liability by an average of 29.7 percent. For claimants earning less than $15,000 in income, the circuit breaker program reduces their property tax burden from 18.2 percent of income to 9.8 percent, a 45.5 percent reduction in their overall net property tax liability. For claimants earning between $15,000 and $25,000 in income experience, the circuit breaker program reduces their property tax burden from 12.4 percent to 7.0, a 43.5 percent reduction in their overall net property tax liability.

Figure A2 illustrates that in 2018 the Schedule H Property Tax Credit effectively reduces the range of the combined income and property tax burden for claimants from 6.4 percent to 18.2 percent to 5.2 to 9.9 percent.

Figure A1

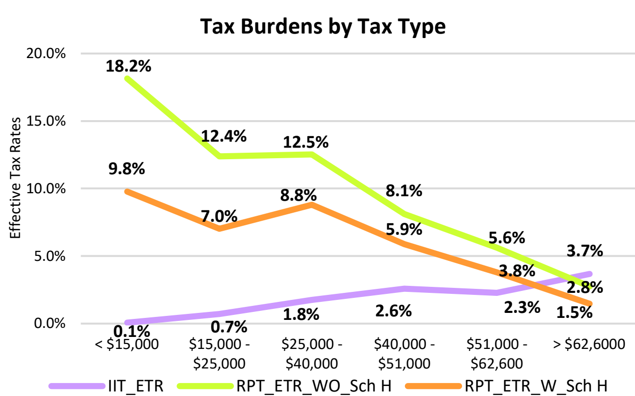


Figure A2

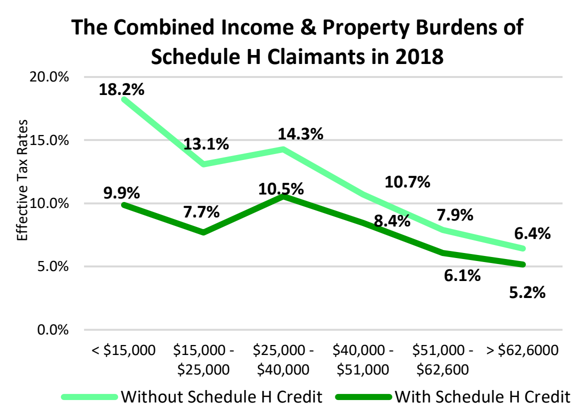
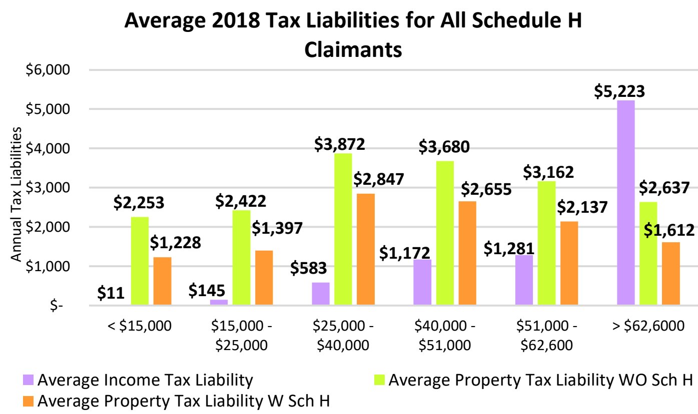


Figure A3 shows that the current Schedule H policy lowers the property tax burdens of all owner claimants proportionally to their pre-tax credit levels but does not alter the distributional profile of property taxes for claimants.[47] While the average property tax liability (before the Schedule H tax credit) for owner claimants was $3,004 in 2018, the $1,025 Schedule H tax credit, which most owner claimants receive, tended to lower their property tax liability by about one-third (Figure A3).

[47] The large spike in income taxes stems from a higher marginal tax rate. For Tax Year 2018, IRS federal income tax rate for income below $38,701 was 12 percent or less and 22 percent for income between $38,701 and $82,500.

Figure A3


Average 2018 Tax Liabilities for All Schedule H Claimants
Annual Tax Liabilities
$6,000
$5,000
$4,000
$3,000
$2,000
$1,000
$-
$11
$2,253
$1,228
$145
$2,422
$1,397
$583
$3,872
$2,847
$1,172
$3,680
$2,655
$1,281
$3,162
$2,137
$5,223
$2,637
$1,612
< $15,000
$15,000 - $25,000
$25,000 - $40,000
$40,000 - $51,000
$51,000 - $62,600
> $62,6000
Average Income Tax Liability
Average Property Tax Liability WO Sch H
Average Property Tax Liability W Sch H

Appendix 2

A Distribution of Actual Property Taxes and the "20% of rent paid" Provision Amounts

Figure A4 shows the sorting of all "property taxes paid" for owner claimants (in red) before the Schedule H tax credit and all "20% of rent paid" amounts for renter claimants (in green) from lowest values to the highest values and then grouping them into deciles. The median property tax liability for owner claimants, before considering the Schedule H tax credit, was $2,084. The figure shows that for the 1st through the sixth deciles the average "20% of rent paid" amounts for renters is higher than the average actual real property taxes for owners. This appears to contribute to these renters being more likely than owners to receive a credit and/or more likely to receive the maximum credit, hence increasing the share of renter claimants in the program relative to owner claimants.

Figure A4

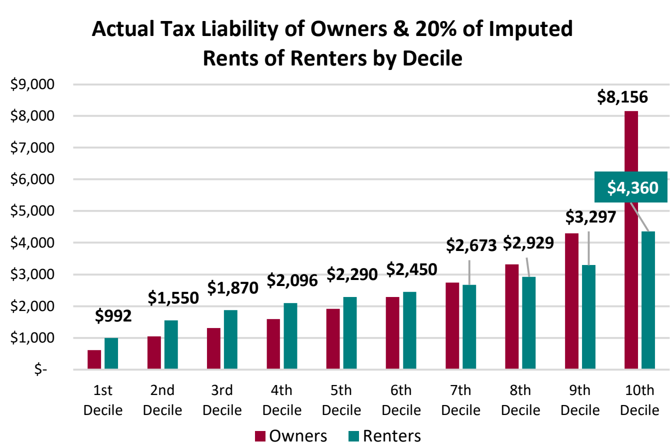
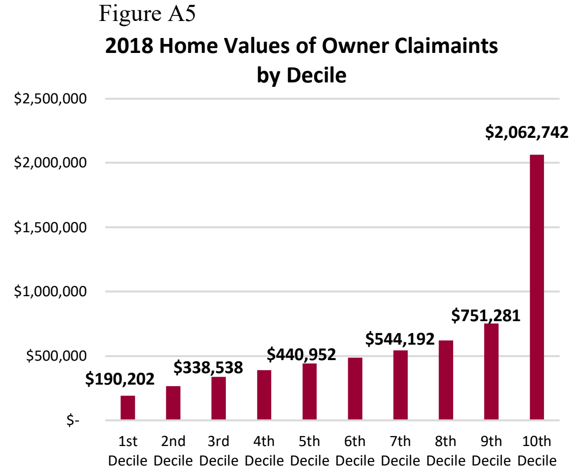


Figure A5



However, when we look at the 8th, 9th and 10th deciles in Figure A4, we observe that the real property taxes paid by owners were higher than the corresponding "20% of rent paid" by renters. This difference is attributed to 705 owner claimants whose homes were valued at more than $700,000.[48] Figures A4 and A5 illustrate how the "20% of rent paid" provision for the lowest income renters and exceptionally high annual property tax liabilities (in the 8th, 9th, and 10th deciles) practically ensure these particular claimants receive the maximum tax credit, in contrast to owner claimants who the majority are senior citizens who tend to have been DC homeowners for over 20 years and are now experiencing a combination of growing property tax liabilities, declining income (see Section III) and lower levels of income than most renter claimants.[49]

[48] This analysis also finds there were over 300 property owners that received the tax credit but with home values over $1 million.

[49] Utilizing the circuit breaker policy to reduce the property tax burden of homeowners with million-dollar homes to single-digit figures is not only impossible but also may not be the most efficient utilization of the city's limited funds for property tax relief.