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# DURHAM CAFFE REPORT



*City of Durham*

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City of Durham  
CAFFE Project Team

**SUPPORTED BY:**

The National League of Cities (NLC)  
JPMorgan Chase & Co.

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## Executive Summary

Last year the City of Durham received a grant from the National League of Cities (NLC) to study and address inequitable outcomes that are created by fines and fees. In addition to receiving this grant Durham is part of a six city cohort called CAFFE, Cities Addressing Fines and Fees Equitably. The cohort receives technical assistance from NLC, works to address fines and fees in our respective municipalities with the help of community partners, and shares key learnings and insights. Durham's Office of Performance and Innovation is collaborating with the Water Department to study cutoff and late fees and their impact on Durham residents.

The CAFFE project has three primary objectives.

1. Assess their fines and fees structures within at least one of their municipal collections entities.
2. Learn new ways to reduce inequities in how fines and fees are imposed.
3. Make program or policy changes that lead to a new collections model for the city, connecting residents in debt with services that improve their financial health.

In order to complete these objectives Durham mobilized a collaborative team from various city departments and community partners. The project work was split into three primary phases, understanding, solution brainstorming, and solution implementation.

## Findings

Over a three year period, the City of Durham collected \$2,151,354 from late utility fees and disconnections combined. Disconnections totaled \$1,449,917 over the same period, resulting in an average collection of \$480,000 per year. For accounts with at least one disconnection, the average number of disconnections over the three year period was 2.34. Of the residents who paid to have their water turned back on, 51% of those residents paid within one day of their water cutoff.

The project team worked to visually map water cutoffs across the city and came to the following conclusions.

1. Cutoffs are concentrated predominantly near the center of the city and east of downtown.
2. Cutoffs are more likely to occur in lower income areas.
3. Cutoffs are more likely to occur in areas that have larger concentrations of people of color.
4. The impacts of water cutoffs are inequitable. African-Americans, Hispanics, and lower income residents are more likely to bear the financial, mental, and emotional burdens that come with water cutoffs in Durham.

## **Interventions**

In order to address the conclusions reached by the project team several solutions have been conceptualized, some of which have already been implemented. Below is a high level list of solutions the project team have developed.

- Improved the water hardship fund process.
- Implementing a financial assistance and counseling program called LIFT-UP.
- Collaborating with NIS to refer major leaks through the code enforcement process.
- Testing a reformatted disconnection letter to improve resident response rates.
- Exploring the feasibility of eliminating the \$50 cutoff fee.

## **Project Initiation**

In the Spring of 2019, at the request of City Manager Bonfield, the City of Durham's Office of Performance and Innovation applied to join a select cohort of municipalities to work with the National League of Cities (NLC) to help assess the negative impacts of municipal fines and fees on residents' financial health; and implement equitable collections strategies that help reduce debt.

NLC's Cities Addressing Fines and Fees Equitably (CAFFE) project provided grants and technical assistance to six cohort cities - Aurora, Colorado, Baton Rouge, Louisiana, Durham, North Carolina, Lansing Michigan, Nashville, Tennessee, and Saint Paul, Minnesota - and incorporated lessons from NLC's LIFT-UP program model which combines utility debt collection processes with financial empowerment strategies to improve overall financial well-being.

The CAFFE project required the City of Durham to select one area of municipal fines and fees to address over the course one year. The Durham team reviewed several areas and ultimately selected water-related fines and fees as our project focus. NLC asked our team to:

1. Assess the fines and fees structures within at least one of their municipal collections entities.
2. Identify new ways to reduce inequities in how fines and fees are imposed.
3. Make program or policy changes that lead to a new collections model for the city, connecting residents in debt with services that improve their financial health.

## **Approach**

Cross departmental and community collaboration have been key to our approach throughout this project. The Office of Performance and Innovation formed a core team that included employees from BMS and Water Management. This team engaged employees across other city departments, including Technology Solutions, NIS, and built partnerships with external organizations, including Durham County DSS, Duke University's Center for Advanced Hindsight, Spirit House, and the Community Empowerment Fund to advance key aspects of the project.

The project team drew upon quantitative and qualitative data collection and analysis, GIS mapping, resident-centered research and interviews, human centered design, and behavioral science to understand the challenges and identify potential solutions. One key to our approach was meaningfully engaging those directly impacted by water cutoffs in understanding the problem through surveys and community-based research led by residents who have experienced water cutoffs. These residents were compensated for their time and expertise. We divided the work into three phases: understanding, solution identification, and implementation.

## Understandings

An important first deliverable in our understanding phase was to study the national context of water debt, cutoff policies, and local programs to address inequities for customers who struggle to pay their water bills. The City of Durham collaborated with the Center for Advanced Hindsight (CAH) to conduct a literature review to meet this deliverable. Below is a summary of CAH's findings.

### Literature Review

According to the EPA, affordable water bills (including drinking water, stormwater, and sewage) should be no more than 3% of a household's income. However, water is getting more expensive for utilities, and they pass some of those costs onto their customers. Much of the nation's water infrastructure is reaching the end of its planned use, and fewer federal funds are available than they were in the mid-70s, when most of our current infrastructure was built. This leaves many utilities reliant on customer bills to pay for upgrades, repairs, and new infrastructure. Many also are considering raising rates on their customers, but higher rates also disproportionately affect low-income residents, who have to spend a higher percentage of their income on their water bill. In practically every city, the water utility shuts off water service to a residence that is late on its water bill in an attempt to ensure payment.

The criteria for a cutoff is different in different cities. According to Circle of Blue, Seattle Public Utilities' thresholds are \$300 past due and 52 days, while Phoenix Water's is \$75 and 30 days, and Denver Water's is \$125 and 50 days. Utilities also use different techniques to contact and warn residents before cutting off the water. Philadelphia requires two written notices before a cutoff can happen, while San Francisco's Public Utilities Commission has staff contact the residents to understand the situation more clearly, determining if there was a medical emergency or a leak. In San Antonio, the utility sends out automated calls, and if a household contacts the department, the cutoff is delayed for 4-6 weeks while they work out a payment plan. However, this strategy assumes that resident phone numbers stay consistent.

A Duke study on Washington, DC has found that cities can become incentivized by fines and penalties, which goes against the purposes of the services. The fines and penalties provide a fast, apolitical stream of income, and so local governments can get sucked into relying on them. It is very important that Durham work towards ensuring that *race should not be a predictor of the likelihood that someone will have to pay a government mandated fee.*

Not having access to water can have lasting effects on health, and can make other conditions worse. It can impact hygiene, nutrition since water is needed to prepare healthier foods. Not having access to regular bathing for example can have significant impacts on mental health, especially for children, and can lead to "lasting feelings of shame and negatively affect people's sense of self-worth." The effects combine to further toxic stress, which contributes to disparate

health outcomes for people—in particular poor people and people of color. ([Berkeley Haas Institute](#))

Most cities in the United States address issues of affordability and shut-offs through two types of tools: Customer Assistance Programs (or a similar name), a form of discounts for residential customers usually pegged to median household income, and Emergency/Hardship Funds, which are single-use lump sum grants that residents can use to pay off bills and are administered/funded either by the utility itself or by community organization.

Philadelphia has tied payments to income, creating three tiers of assistance: fixing water bills to 2-3% of household income when that income is 150% of FPL, a 2-3% discount for seniors, and fixing water bills at 4% of household income for families at 150-250% of FPL who have had some sort of special hardship, including job loss, birth of a child, domestic violence, or injury. Cities like Seattle are not allowed to offer differing rates, but are running pilot programs that offer different *discounts*. North Carolina has some rate restrictions, and cities in the state can not offer income-based discounts at this time. A study from Great Lakes Today and American Public Media finds that in Cleveland, less than 1% of cutoffs went to residents who receive discounts, meaning that discounts help residents keep the water on consistently, and that the sewer department gets paid on time. ([WCPN](#))

The nature of one-time emergency funds vary from city to city. They can be funded by the utility itself, donations from other customers, or private donations, and are facilitated by the utility, social services, or community organizations. For instance, in Carrboro-Chapel Hill, the Orange Water and Sewer Authority (OWASA) offers a “Care to Share” Fund that customers can pay into, and is administered by the Inter-Faith Council, which also makes up the difference in bill payments.

There are parallel federal assistance programs for energy, [Low Income Energy Assistance](#) and LIHEAP. Both are administered at the state level. According to federal guidelines, “You may also automatically qualify if you or a family member participates in certain other benefit programs, such as the Supplemental Nutrition Assistance Program (SNAP), Supplemental Security Income (SSI), Temporary Assistance for Needy Families (TANF) or certain needs-tested Veterans benefits.”

However, emergency funds can be both underused and underfunded. In Detroit, the Berkeley Haas Institute points out that emergency assistance programs can lack the funds they need to be effective. Water cutoffs are seen by the residents as a tool to speed up displacement and gentrification. Local non-profits dismiss the CAPs as “small pots of money” and many residents avoid applying for the funds because they believe that doing so will force the Water Authority to report to Child & Family Services that the home has no water, and CFS will take the resident’s children away.

Instead of emergency funds, Haas recommends a Comprehensive Water Affordability Plan, like Philadelphia’s to address water affordability through rates, and Basic Consumer Protection,

lowering or eliminating late fees for low-income residents and allowing accounts in arrears to have negotiated payment plans.

Utilities are thinking about other behavioral interventions outside of affordability programs. Some cities are considering starting cutoffs earlier to keep costs from getting out of control. Kathryn Sorensen, the director of the Phoenix Water Department says “there’s something to be said about doing a cutoff before the balances become overwhelming,” and Emi Hogue, a customer service analyst for the San Antonio Water System told Circle of Blue “if you get turned off after 10 days late, it’s going to encourage you to stay on top of your bill.” In Cleveland, the local sewer district is experimenting with developing a “Water Champions” program, where six to ten “champions” from neighborhoods throughout the city can help to listen to residents’ concerns, challenges, and perceptions on water, and can help with education about water and water conservation. ([WCPN](#))

## **Current State**

It is important to note that Durham cannot implement a water affordability plan as mentioned in the literature review. By North Carolina general statute, municipal water utilities must treat all customers equally. For example, Durham residents cannot be charged different water rates based on income. Because of this restriction, the project team had to largely focus on interventions that will indirectly address the inequitable impacts of water fines and fees.

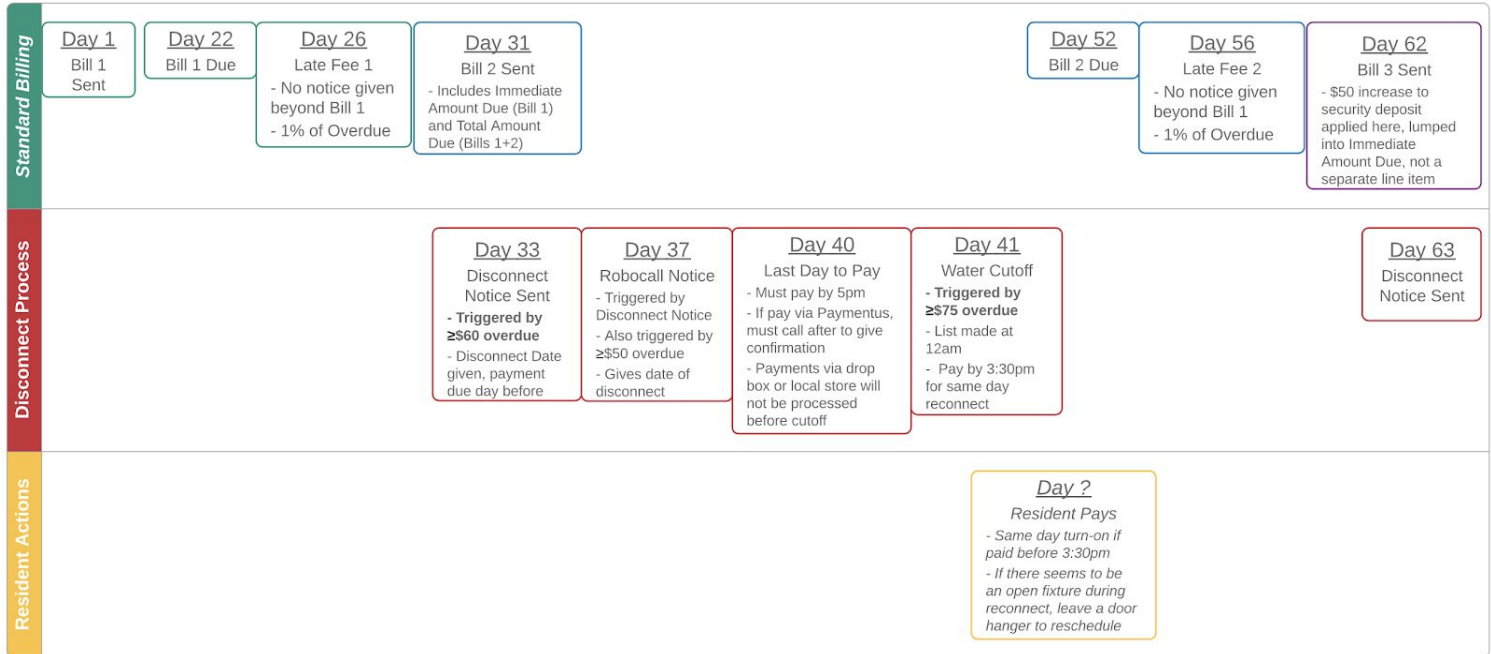
The project team conducted extensive quantitative and qualitative research and review of City of Durham water data, customer billing processes, interviews with employees and residents to understand the current state of water fines and fees, and their impact on Durham residents. The project team’s research findings can be found below.

## **Water Billing Process**

The literature review conducted by CAH determined that cutoff criteria varies across municipalities. Predominantly, criteria is based on two dimensions, amount owed and number of days past due. The City of Durham has a current cutoff criteria of \$75 past due and 40 days. Additionally, the city bills customers every 30 days. This was an important understanding for the project team to have because it means that a customer who may not be able to pay their initial water bill, will receive a second bill 9 days prior to being cutoff. If a customer’s water is cutoff, then an additional \$50 cutoff fee is imposed.

This can create a difficult debt spiral for a resident to overcome. While the resident is working to come up with the funds to pay the initial water bill, late fee, \$50 cutoff fee, their second bill is due 11 days after cutoff and is 21 days away from receiving a third water bill. As the project team moved into the second phase of solution identification it became clear that solutions geared towards early intervention before a resident has their water cutoff would be most effective. A map of the current customer billing process can be found below.

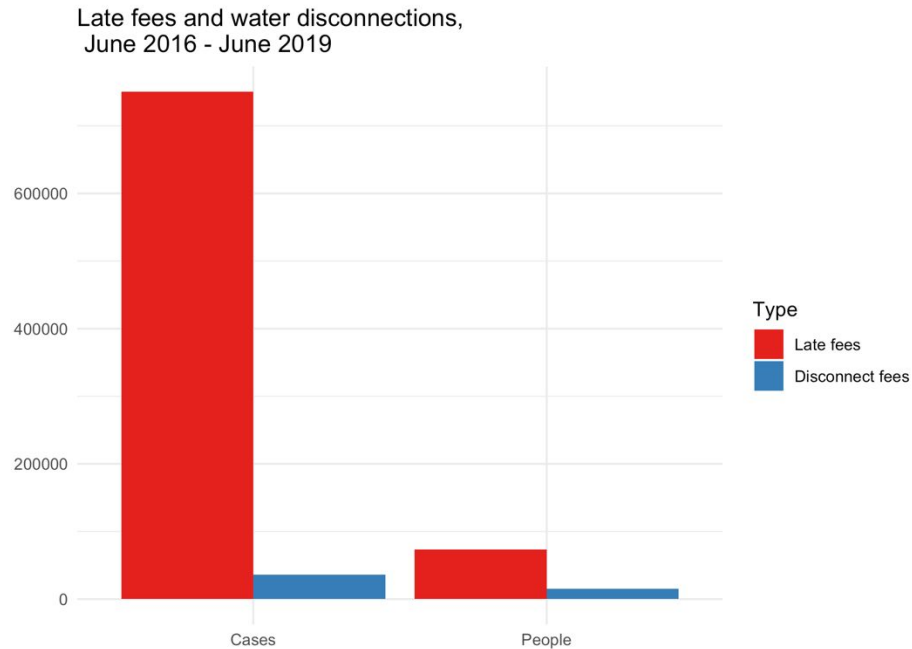
## Current Water Billing Process Map



### Data Collection and Analysis

The project team worked with project member Heidi Hackett and her customer billing team to collect data on late fees and cutoff fees between June 2016 - June 2019 to understand the financial outcomes of the city's current water billing policies. The project team worked in collaboration with CAH to analyze the data.

Our data findings are based on data collected between June 13, 2016 to June 12, 2019. Over that period, there were a total of **750,138 individual late fees** assessed on **73,325 accounts**, about 250,000 late fees per year. There were **36,376 disconnections** on **15,562 accounts**, about 12,100 disconnections per year.



The city collected a total of **\$2,151,354 from late fees and disconnections combined**, the majority coming from disconnections. Payments remedying **disconnections totaled \$1,449,917**, or about \$480,000 per year. Payments of **late fees totaled \$701,437**, about \$230,000 per year. The disparity comes from the difference in the size of the fine. All disconnections are \$50 fees. The average late fee was \$1.09, and even this number is unrealistically large and skewed by the presence of institutional accounts. **The median late fee was \$0.57, and 80% of late fees were \$1.00 or less.**

Conditional on an account being assessed at least one late fee during the period, the average account accrued **10.2 late fees over the three years**, about **3.4 per year**. The average person with at least one late fee would pay \$10.40 in late fees over the three-year period. This, again, is skewed by a few institutional customers with very large assessed fees; **the median total amount paid per person was \$3.59**, which is more representative of the typical consumer, over the three years. The maximum paid in late fees was \$7,220; the minimum, \$0.01.

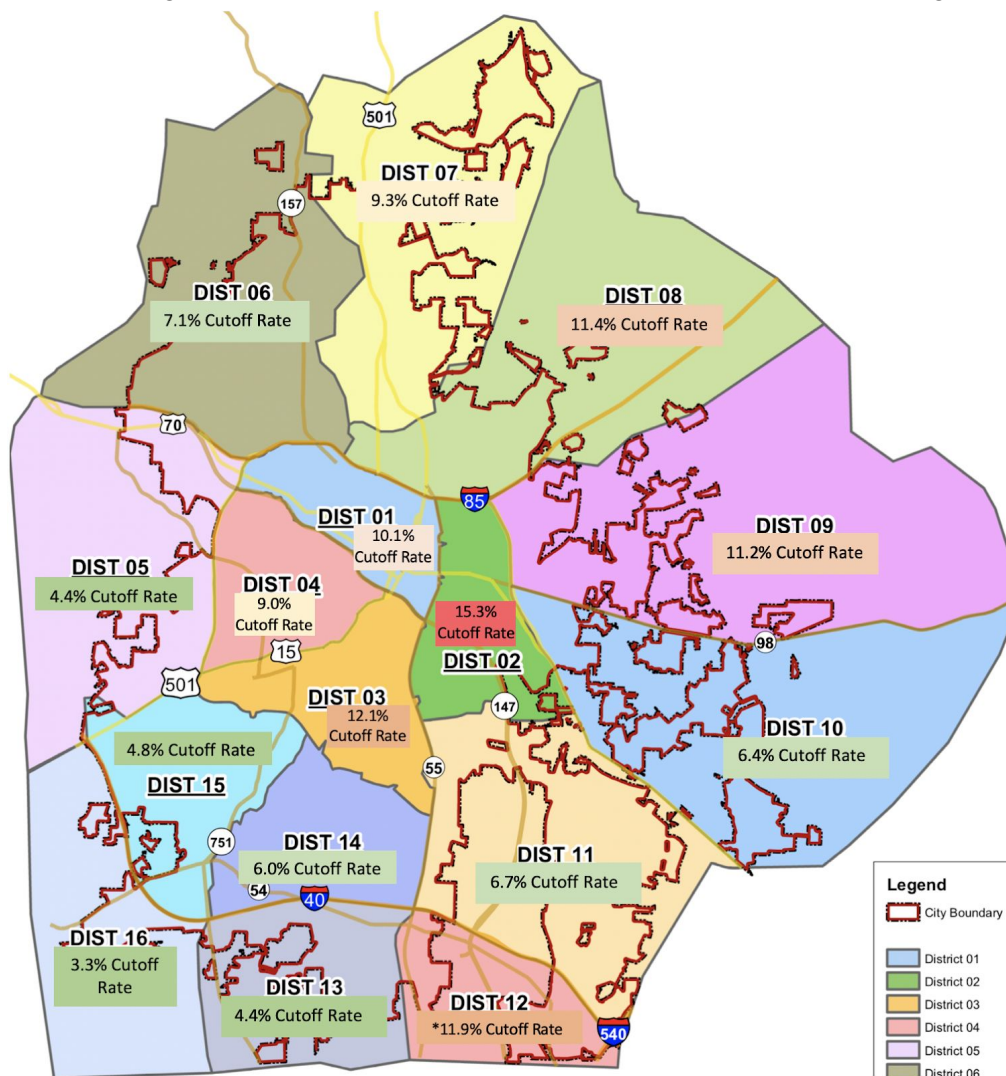
For accounts with at least one disconnection, **the average number of disconnections was 2.34**. For disconnections that are eventually paid, **most people (51%) pay within one day of water being cutoff**, though **the average amount of time is 20 days after disconnection**.

## Maps

In order to better understand how water related fines and fees impact Durham residents across race and income the project team worked with the Water Department, CAH, and our GIS team to map cutoffs from our data pull and to overlay it with existing data sets.

The first maps that were created overlay water cutoff data by City of Durham water districts. The first map below indicates the average percent of unique accounts cutoff per year, using the number of unique accounts cutoff in each district and the total number of accounts in each district.

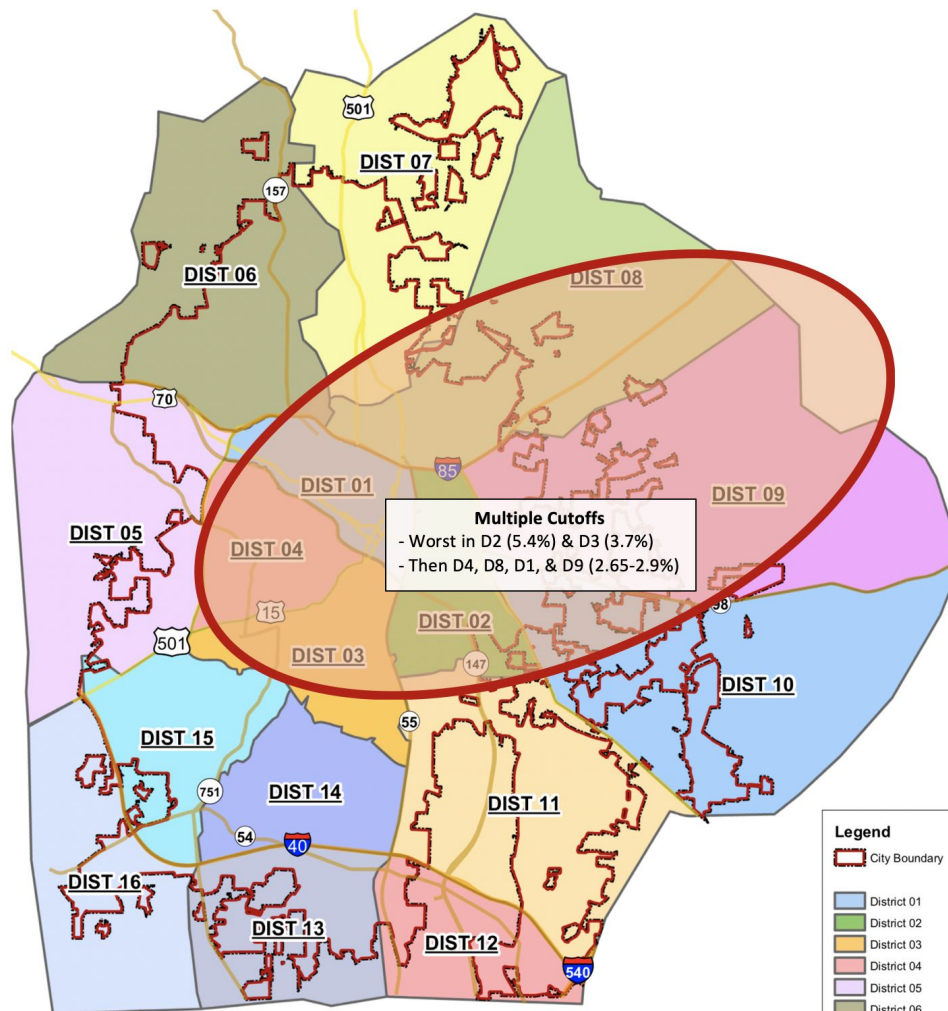
Percentage of Unique Accounts Cutoff at Least Once - 3 Year Averages



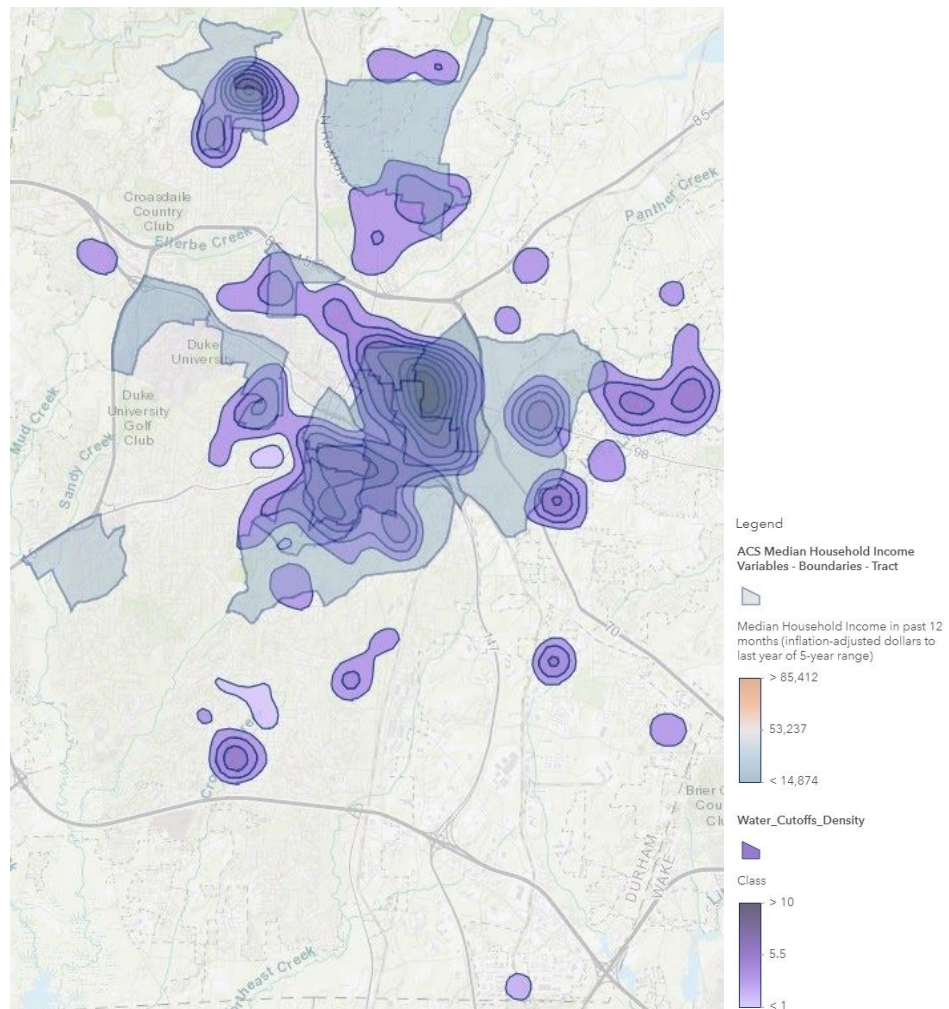
If district 12 is excluded, on account of only having 500 residential accounts, the clear problem areas are the center of the city and the north-eastern districts. Districts 2 and 3 are the strongest outliers, followed by districts 8 and 9.

The rate at which accounts suffer multiple cutoffs over the three-year period follows the same pattern as unique cutoffs (see map below). The center of the city and northeastern districts have the highest rates of multiple cutoffs.

Percentage of Unique Accounts Cutoff Multiple Times - Over 3 Years

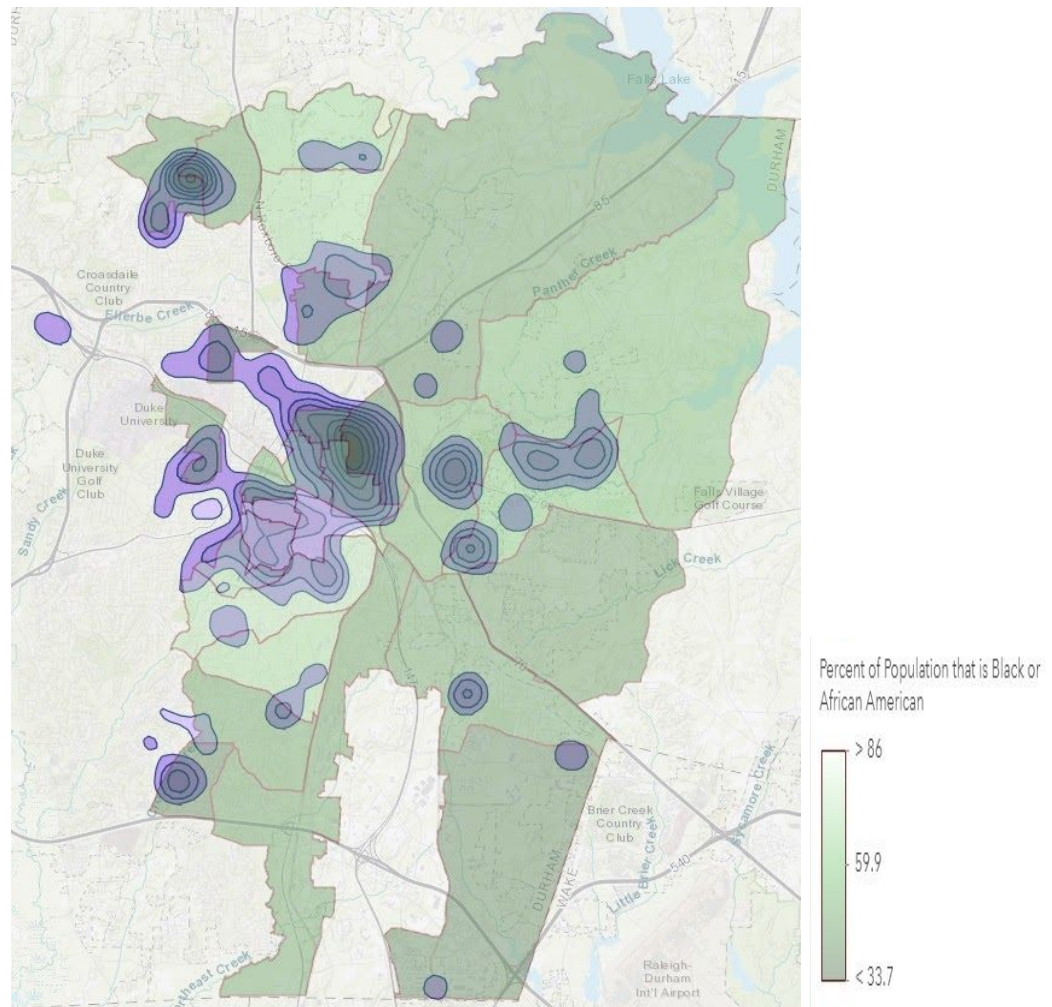


## Resident Income vs Water Cutoff Density



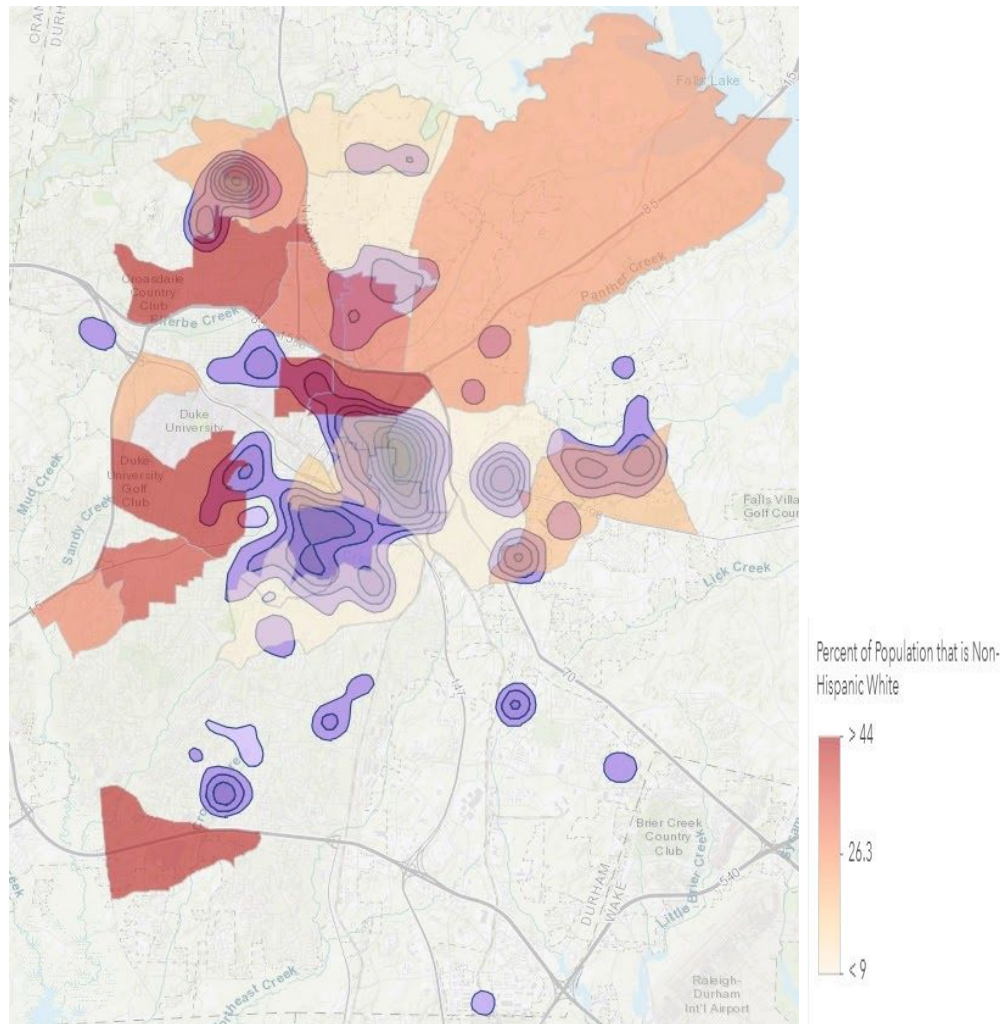
The map above indicates that the census tracts with the lowest median household incomes also have the highest density of water cutoffs per square mile. This conclusion is in line with the project team's initial assumptions that our lowest earning residents would be more likely to struggle paying their water bills. The following maps overlay the same cutoff density data with demographic data by census tract.

## African-American Population vs Water Cutoff Density



The map above indicates that not only are the highest concentrations of water cutoffs occurring in census tracts with relatively low median incomes, but also in census tracts where African-Americans are strongly represented.

## Hispanic Population vs Water Cutoff Density



Similar to the previous map, the lighter shaded areas indicate census tracts that have a higher percentage of Hispanic residents relative to other demographic groups. The map above also indicates that higher concentrations of cutoffs correlate with census tracts that have more Hispanic residents.

Based on the maps above, the project team developed the following conclusions:

1. Cutoffs are concentrated predominantly near the center of the city and east of downtown.
2. Cutoffs are more likely to occur in lower income areas.
3. Cutoffs are more likely to occur in areas that have larger concentrations of people of color.
4. The impacts of water cutoffs are inequitable. African-Americans, Hispanics, and lower income residents are more likely to bear the financial, mental, and emotional burdens that come with water cutoffs in Durham.

It is important to note that the conclusions the project team developed are not unique to Durham. Municipalities all across the country are managing utilities that result in inequitable outcomes for their citizens. These outcomes are a byproduct of decades of systemic economic and racial injustice. It is imperative that we acknowledge our current state in order to envision and take action towards a more equitable future for our Durham residents.

It is also important to note that these inequities persist despite multiple good faith efforts by city staff and leadership to reduce the number of households who experience water cutoffs, including investing between \$150,000 - \$200,000 per year in a water hardship fund.

## **Resident Interviews**

The project team collaborated with Spirit House to identify and interview residents who have experienced a water cutoff. These interviews provided a rich, qualitative context to the data analysis that was conducted for this project. Residents were compensated for their time via a \$50 gift card. NLC generously provided a \$10,000 grant in order to fund our resident interviews.

The project team is conducting interviews throughout the entire project life cycle in order to deepen our understanding of our residents' lived experience with water cutoffs. To date, the team has conducted 20 resident interviews. Below are key thematic insights that the project team has observed throughout multiple interviews.

### **Feelings of Diminishment and Shame**

Residents who discovered their water was cutoff, often felt negative feelings of shame, embarrassment, belittlement, and anger.

"I was sick to death! Water is essential to bathe, brush teeth. I was embarrassed and panicked. Had no help and no other choices because I was trying to make it on my own."  
- *Durham Resident 14*

"I had the privilege of being able to fix the problem [water cutoff] relatively quickly. I was sitting in my dying father's hospital room. I understand no one knew that - and my [original]

payment didn't go through, and that's on me, but it was very traumatic. It had a huge impact on me emotionally. I got the water turned on that day, so we were ok. It was a difficult moment for our family, to have someone have absolutely no compassion for what I was going through - which was really hard." - *Durham Resident 5*

"It's not a good feeling, I feel like I failed my children as far as not keeping essential things they need to do everyday things. You feel bad but you have to keep pushing." - *Durham Resident 10*

### **Money Magic**

One interviewed resident called the act of prioritizing bills, borrowing money from others, and doing anything necessary to pay one obligation, that might create another obligation or financial difficulty as money magic. The following excerpts are key examples of money magic that residents performed in order to pay their water bills.

"The charges at one point got big. I was robbing Peter to pay Paul at one point. My bill at one point went from double digits to triple digits." - *Durham Resident 9*

"Social services don't really help you out like that. If I'm working then I just can't take off because that's going to take more money for me to have to go downtown to see if I can qualify to get my water paid. It's not much that they do or that they can do...they just give you these agencies to go to, but that's an all-day process. I have to make money to feed my kids and pay the rent...I went one time and they were just tapped out. So I went to other agencies and they would give 10 dollars or such and such amount towards it, but they don't help pay the whole thing so you're still sitting there all day to get that little bit of money. I'm not saying that I'm ungrateful for it, but to get that little bit of amount and you still have to come up with the other amount before they can even give you that amount. It's a struggle." - *Durham Resident 10*

"Asking for assistance, borrowing money from people I knew - that was the only resource I had...I was taking (funds) from the kids' clothing and food, my transportation costs, it was coming out of everything. Taking money from here and moving it over here... a nightmare." - *Durham Resident 1*

"I pawned my family electronics to come up with the money for the bill and cutoff. I pawned my family's laptop to cover the \$100 security deposit increase." - *Durham Resident 0*

### **Getting Water the Hard Way**

For residents who experienced prolonged water cutoffs, finding ways to bring water into the home became a burdensome, time-consuming task to maintain basic standards of living.

"It was hard to cook, take baths, wash clothes, the basic necessities of life you couldn't do...trying to keep uniforms washed, dishes washed, using the bathroom, personal hygiene,

it was real hectic. Real hard. Sometimes we had to keep wearing what we had. It was a living nightmare.” - *Durham Resident 1*

“I go out and buy water so I may have money to buy a jug of water, but may not have money to pay the water bill. There are a lot of us in the house so we use a lot of water. Kids still have to take baths and wash up and I’ll warm the water up and we will just live like that for a little bit and we do the best we can until I get the money up to pay the water bill.” - *Durham Resident 10*

“After it got cutoff, it was hard. I found myself buying gallons of water a day to just use it. Until I could find enough money to get it turned back on. A lot of days of no showering, not being able to do simple functions. Used the restroom sparingly or poured water in the toilet. I did that for about two and half months.” - *Durham Resident 12*

### **No Water, No Happy Home**

Having no water can create anxious, contentious, and stressful situations in the home amongst family members if the water is cutoff for a prolonged period of time.

“I was frustrated, depressed, confused. My family was upset and depressed...For my wife and kids I imagine they were ashamed. They couldn’t let the neighbors come over - the bathroom was backed up. My wife was stressed out. We were going at each other’s necks for no reason.” - *Durham Resident 1*

“There was still tension because my daughter was like, mom did you pay the bill. She’s an adult, and two adults living together and you’re depending on this one to pay the bill, and that’s the way we were.” - *Durham Resident 3*

“Everytime it happens, it causes a lot of stress and anxiety. We don’t fight in my family, but attitudes start rising, because there’s a lot of pent up emotion going on”  
- *Durham Resident 4*

### **Children are Negatively Impacted**

For residents with children, having the water cutoff caused confusion, anxiety, and sometimes fear of bullying in school.

“My daughter didn’t understand, my son, he’s a little older so he understood a little bit, but my daughter didn’t understand. She kept asking why is the water off? Why is the water not going anywhere? Why won’t the water come on?” - *Durham Resident 13*

“They [The kids] were upset. They couldn’t take baths.” - *Durham Resident 2*

“She got off the school bus and I didn’t tell her the water was off. I will never forget it. She went in to make her a bowl of noodles and she went to cut water on and that’s when she

discovered the was off. That's when she came screaming, "Nana there's no water coming through the sink!" It was hell on wheels...My grandbaby was crying, "I don't want to go to school stinking, I don't want the kids to pick on me." Think about it...that's something for a kid in elementary school to think about. It was very hard on my grandchild."

- *Durham Resident 3*

"It was really hard to explain to my children, especially my child who has special needs. When the water is cutoff they [the kids] don't understand because their regimen has to go right and if it doesn't it's a whole mess, a meltdown. He thinks I can go and wash my hands, it's part of my bathroom regimen, but the water isn't working and now the rest of the day is trashed." - *Durham Resident 6*

### **It's Not Just A Leak**

A handful of interviewed residents experienced cutoffs due to leaks in their pipes. These interviews shed light for the project team that leaks can put extreme financial strain on residents with limited options for recourse until the leak is fixed.

"It started off with a leak. And no one ever came, no one ever came... but they kept charging our bill. Finally it got cutoff. I was confused, ticked off - they claimed it was a water leak, what I couldn't understand was, if you knew there was a leak, why am I still getting charged, why do I have to pay for it?" - *Durham Resident 1*

"I had a real bad leak under the house...Gradually, my bill got higher and higher and higher. The renting office (landlord) didn't want to help me... And the City didn't tell them [landlord] they had to help me, even though it was their fault. I couldn't pay it. The second time [cutoff], I went through the same protocol, the [City] continued to tell me I had to pay this bill. This was \$700 and some change. The third time, I had the city come out - they found other things wrong with the house. By the third time, it was \$896 dollars. So they cut it off again. I ended up getting evicted at that time. They didn't ever say, Let's help you out with paying this. I still got that bill over my head. I have to make sure that bill is covered, before I get my water turned on." - *Durham Resident 2*

"We were having plumbing issues. My bill at one point went from double digits to triple digits. It went to like 200 dollars. When they [the City] called, they said that I needed to call a landlord or a plumber. I called my landlord and he sent somebody out. The toilet was leaking and I fixed it. Next month the bill was still a crazy high bill. So I called a plumber because the landlord wasn't moving fast enough. The bill up until my last months stayed in the triple digits. I was paying close to \$200 a month for water." - *Durham Resident 9*

"The water bill kept spiking and spiking and the City kept saying that it was a slow leak. It took a month to figure out something was dripping in the house. And the bill just accumulated and accumulated and it was something between the landlord and the water

department, but I still had to pay a lot of money out of my pocket, but the water ended up being cutoff.” - *Durham Resident 17*

## Interventions

The project team used the quantitative and qualitative data gained during the project’s understanding phase to brainstorm and implement interventions to not only reduce the total number of cutoffs, but also reduce the negative and inequitable impacts of cutoffs that still occur. Below are the initial interventions the project team is working on to meet these goals.

### Water Hardship Fund

The City of Durham has a water hardship fund that residents can access up to \$240 annually to help pay for their water bills. Early on, the project team discovered that the hardship fund has been underutilized in recent years. This underutilization led to a reduction in the fund from \$200,000 to \$150,000 annually in the budget. The project team wanted to gain a better understanding of why residents were not using the water hardship fund during our understanding phase.

Indicator	FY17	FY18	FY19
Total Amount Allocated to Fund	\$200,000	\$200,000	\$150,000
Total Amount Used	\$135,718	\$133,054	\$110,795
Utilization Rate	67.86%	66.53%	73.86%

At the time of project initiation, even though the water hardship fund sat in the City of Durham’s budget, the program was administered by the Department of Social Services. DSS administered the program because it was the city’s understanding that a third party had to administer any utility assistance program based on North Carolina General Statutes. The result of the water hardship fund being structured in this way resulted in customer billing having a limited understanding of the actual process that DSS implemented to approve residents for the hardship funds. The project team reached out to DSS to better understand their process.

DSS said that misunderstandings about the process, and the time lag of working between two departments, slows down resolution. Residents do not always bring the correct documentation or have documentation in another person’s name, and have to return at a later date. Even with

the right materials, long wait times to speak to a Water Department rep often prevent a resolution from occurring before the resident needs to leave. Talking with the Water Department involves finding information about the resident's bill and issuing vouchers to cover emergency needs, and the Water Department will either give emergency funding or an adjustment, but not both. A successful call, where the resident gets a water hardship voucher, often takes longer than the hour window allotted by DSS and causes delays in the department. For residents, the process continues after the acquisition of a waiver because they must physically deliver it to the Water Department.

DSS staff speculated that fear and manipulation were the two main behavioral forces creating problems in the process. They pointed out that residents are reluctant to refer landlord issues to the city out of fear of retaliation, which means that leaks can go unaddressed and that eligible residents avoid using the department out of fear of being reported as single or undocumented. Additionally, some residents with children fear going to DSS and reporting that their homes are without water.

During our resident interviews we asked each resident if they had ever heard of the water hardship fund. Although it was a very small sample size, no resident interviewed said that they had heard of the water hardship fund before. In addition, almost every resident interviewed expressed to us that they wished they knew about the fund when their water had been cutoff and that it would have been a great resource for them to have.

In summary, the water hardship fund was poorly marketed to residents in need, for residents who were aware of the hardship fund DSS represented a large barrier that threatened their safety, and for those who did try to use the fund, the process was extremely difficult and burdensome to navigate.

The project team decided the development of a web-based application would be the best solution to address the problems identified with the hardship fund. After consulting with the UNC School of Government and being assured that our solution would not be illegal under current General Statutes, the project team collaborated with customer billing and Technology Solutions to implement our solution.

Residents can now apply for the water hardship fund online through a simple application. The application is received and processed by customer billing. If approved, customer billing will immediately apply the funds to the water account and email the resident that their account has been updated and what money they still owe if any on the bill. Additionally, having a web-based form makes marketing the water hardship fund much easier for customer billing. A web-based form solution also reduces the risk of a resident being exposed to or spreading COVID-19. The application form can be found on the water department's home page.

As of July 15th, 2020 the form has received 218 submissions. The median amount residents owed who applied through the form has been \$210. Of the 58 residents who provided an explanation for their hardship, 34 residents directly mentioned the COVID-19 pandemic.

## LIFT-UP

The City of Durham is working with the National League of Cities to pilot a new program called LIFT-UP (Local Interventions for Financial Empowerment through Utility Payments). LIFT-UP aims to develop a scalable model that identifies struggling families, helps them reduce debt and become financially secure, and is financially sustainable for municipalities. Cities applying a LIFT-UP model seek to pro-actively link vulnerable households to financial services and public benefits, and provide them with tools to build assets and manage money more effectively. The goal of the City's pilot program is to reduce the number of families who experience water cutoffs.

The LIFT-UP model has four core components designed with the ultimate goal of increasing financial stability for city residents.

- The first component is an identification and referral process by which cities leverage utility data to identify struggling customers to contact for LIFT-UP interventions. For Durham, any resident who has received more than 3 disconnection notices in the past 12 months or has a water bill of \$100 or more and the bill has been due for more than 100 days will be identified as eligible for LIFT-UP.
- The second component, restructured utility debt, permits LIFT-UP customers to enter into longer-term and more lenient repayment arrangements for past due utility debt than customers are typically permitted. Durham will allow LIFT-UP participants to be eligible for a repayment plan up to 12 months in length and will be assessed on a case by case basis.
- The third component of the model is individualized financial counseling, including a budget review and customized action plan to address financial needs, as well as referrals to emergency assistance, public benefits, and banking services as appropriate. Durham will be partnering with Community Empowerment Fund (CEF) and CAH's Money Map as financial coaching options for LIFT-UP participants to use during the pilot.
- Fourth, the LIFT-UP model requires cities to provide some form of incentive to customers who participate in the program and achieve certain milestones. Any resident who decides to participate in LIFT-UP will not have their water cutoff while participating in the program, any fines and fees will be eliminated from their account, and will be able to access funds to pay down their current debt obligation.

- Finally, building from insights in behavioral economics, the LIFT-UP model encourages ongoing contact with participants through a variety of methods to monitor and motivate their progress in the program.

To advance this work, the City of Durham, with the help of Brian Smith in OEWD, partnered with the Community Empowerment Fund (CEF), a Durham-based non-profit with experience providing financial counseling and empowerment services to residents in low income households. CEF and Money Map will provide financial counseling for the city's LIFT-UP pilot. The LIFT-UP pilot launch was delayed due to the malware attack and COVID-19. The project team is currently working with CEF, Money Map, and several internal departments to adapt the pilot program to a virtual format.

## Leaks

During our understanding phase the project team learned that one of the most difficult situations that our residents face is when they are experiencing a water leak that is driving their water bill into the triple digits, but their landlord either refuses or is slow to fix the leak. The water department could send a staff member to help identify the source of the leak and offer a leak adjustment to the resident's water bill. However, the responsibility to fix the leak still lies with the property owner.

The project team is currently collaborating with NIS to create a process where customer billing can refer major leaks to code enforcement. Code enforcement can then work to identify the leak in the home and notify the property owner that the leak needs to be fixed pursuant to the city's code of ordinances. The customer billing team can work with the tenant to apply a leak adjustment to the water bill and apply any hardship funds as needed.

The project team is currently working to finalize this new process with the water department, NIS, and the city attorney's office. The goal is to have this process finalized and in place in FY21.

## Disconnection Letter

As mentioned earlier in this report, 51% of residents pay their water bill within one day of being cutoff. Additionally, the interviews we conducted with customer billing, individual residents, and DSS all indicate that many residents are confused by the city's current disconnection letter. Residents believe that their last day to pay before their water gets cutoff is the disconnection date listed on the letter. However, the resident must pay by 5 PM the day BEFORE the disconnection date to ensure their water is not cutoff.

This confusion creates a situation where a resident will attempt to pay their water bill on the disconnection date only to find out that their water has already been cutoff, they have to pay an

additional \$50 cutoff fee, and their water may not be turned back on until late afternoon the next day. As a result, the project team is working with CAH to redesign the disconnection notice to make it clearer for a resident to understand their actual last day to pay before their water cutoff day. An example of the original and revised disconnection letters can be found as attachments to this report.

With the help of CAH and customer billing, the project team plans to experimentally test if the revised disconnection letter is more effective at reducing cutoffs compared to the original disconnection letter. Due to COVID-19 North Carolina has suspended utility cutoffs. As a result, we cannot test the new disconnection letter until water cutoffs are allowed to resume. The project team is working with customer billing to have the new disconnection letter ready to test as soon as cutoffs resume.

### **Eliminating Cutoff Fee**

Potentially the most effective solution that the city can implement to reduce the inequitable impact of the \$50 cutoff fee would be to eliminate the fee outright. The \$50 fee is a representative fee to reflect how much it costs to send a water department employee to go out, turn a resident's water off, and to go out again to turn the water back on once the resident's water bill has been paid. According to the water department the \$50 is not intended to be a full cost recovery of the work described above.

Even though the \$50 fee is not a major source of revenue collection for the water department, the revenues collected are tied to the department's water rate model. Any revenue source loss could negatively impact the department's financial standing. The project team worked with customer billing to determine how much revenue would have to be raised from a water rate increase to offset the revenue loss of the \$50 fee. Customer Billing estimated that eliminating the \$50 fee out right would result in a water bill increase of approximately \$5.56 per customer per year, less than \$.50 per customer per month.

The project team recognizes that increased water rates represent a higher financial burden for lower income residents. However, an additional \$.50 per month borne by all residents is a more equitable policy choice compared to the inequitable financial burden the current cutoff fee imposes on poorer residents of color currently.

The project team plans to work with the water department to propose this policy change for FY 2021-22 budget adoption.

## **Customer Billing Initiatives**

Working with NLC on this project coincided with the great work that the customer billing team had done before the city even applied for this grant opportunity. The customer billing team has been concerned about the inequitable impact of the \$50 cutoff fee for a while and formed an internal team to address this issue. As a result of their work, customer billing has implemented several reforms to their process in parallel to the CAFFE project work. A summary of these reforms can be found below.

A temporary team has been formed to make personal calls to customers a few days before the cutoff date to see if they can help the customer avoid being cutoff. The team offers the hardship program, payment arrangements, and community resources as options. The result of this effort to date has been reduced numbers of customers being cutoff and resources being directed to those in need faster. This team has also taken a proactive approach by researching past due accounts for options to get the customer caught up before the customer contacts customer billing.

The customer billing team also has implemented a policy of waiving the \$50 delinquency fee if the customer signs up for automatic payments and applying a customer's security deposit, where possible, to assist customers with keeping their accounts current.

The customer billing team proactively changed the way delinquency charges are posted to accounts to ensure that these charges are included in payments and do not remain on the account resulting in a cutoff occurring in the subsequent month.

To further assist customers with their accounts the customer billing team has implemented new policies and procedures to reduce wait times and abandonment rates which has increased customer satisfaction and decreased escalated issues.

## **Report Conclusion**

The project team has already done a great deal of work to better understand the impact of water cutoffs and the best ways to mitigate these impacts given the tools at our disposal within the North Carolina legal environment. As the project team continues to implement solutions, work with the National League of Cities and our fellow cohort members, we look forward to updating Durham City Council on the results of our work in the coming months.

## Original Disconnection Letter



CITY OF DURHAM  
Department of Water Management  
Customer & Billing Services Division  
101 CITY HALL PLAZA | DURHAM, NC 27701  
919.560.1200 | F 919.560.4827

[www.durhamnc.gov](http://www.durhamnc.gov)

07/29/2019

Passive voice, not clear who's supposed to do what

Confusing sentence

Words are clear, meaning is not

Challenging word

### IMPORTANT NOTICE ENCLOSED



Dear Customer:

As of this date, the City has not received payment for your utility bill and your account is seriously overdue.

***Your payment must be received in our office by 5 p.m. on the last business day prior to the disconnect date. See below for your account information.***

Failure to make payment by this time will result in a \$50 delinquency charge added to your account, whether or not your water service is actually terminated. You may also be charged an additional deposit of \$50.

The back of this letter has more information, and answers to frequently asked questions. If you have additional questions, contact us at 919-560-1200 or <http://durhamnc.gov/2996>.

If your payment has been made, thank you and please pardon the confusion. You may disregard this letter. You may also want to contact us to verify your payment has been posted to your account.

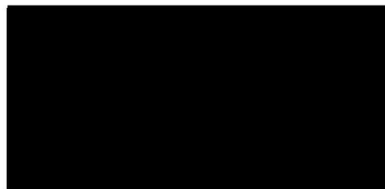
Sincerely,

Customer Billing Services Division,  
Department of Water Management

**DISCONNECT DATE:** 08/06/2019

**PAYMENT DUE:**

**Account Number:**



## FREQUENTLY ASKED QUESTIONS (FAQS)

1. Q: When you say "in our office" does that mean I must take my payment to the cashiers at City Hall?

A: No, although you may. "In our office" also covers paying by phone (919-560-1200, "option 1 ") or online at [www.durhamnc.gov](http://www.durhamnc.gov).

2. Q: Can I leave my payment in the drop box?

A: This is NOT advised if you are paying on the last day before disconnect. Payments left in the drop box are not posted until the following day, which is past the 5 p.m. deadline.

3. Q: Can I make my payment at a local store that takes utility payments?

A: That is NOT recommended. Payments made at these stores are not processed immediately. They will accept your money/payment and then send a check to the City. In most cases, it will be received AFTER the deadline and your service will be disconnected.

4. Q: What if I forget until the disconnect date?

A: You will still be assessed the \$50 delinquency charge; however you can call 919-560-1200 to speak with a representative who, once your payment is confirmed, can contact the field service representative to stop service termination. If the field rep has already visited your home, he or she can return to reconnect the service.

5. Q: What if I do not have enough money to pay the bill?

A: BEFORE the disconnection date, call 919-560-1200 or visit City Hall to see if you qualify for payment arrangements or other financial assistance. If you wait until your water is turned off, you will be responsible for the \$50 delinquency charge and may have a \$50 deposit added.

6. Q: What is to keep me from turning my water back on?

A: The field service representative will place a lock on the meter to prevent that. Cutting the lock or tampering with the meter or pipes is illegal and will result in additional financial penalties, which requires payment in full before your water service is restored.

7. Q: Why can't you remove the \$50 delinquency charge if I paid on the disconnect date but before the water was actually turned off?

A: The delinquency charge is for the extra staff time required to collect on this account, whether or not the water was actually turned off.

8. Q: Do I need to be at home when the water is turned back on?

A: We recommend that a responsible person be at the house. When the field service representative turns the water back on, he or she will watch the meter to see if water begins to flow into the house. If the meter indicates a considerable amount of water is flowing, the rep will knock on the door to make sure someone can check fixtures and hoses to make sure no fixtures are open/running. If no one answers the door, the rep will turn the meter back off to avoid overflows and potential flooding damage in the house and leave a notice stating "open fixture." There is a \$25 service charge to return to the house to turn the meter back on.

9. Q: How soon will my water be turned back on after I pay the bill?

A: The City will make every effort to get the water turned on the same day prior to 7:30 p.m. However, depending on the workload, it may be the next day.

10. Q: Why am I assessed a \$50 deposit?

A: The City ordinance requires an additional \$50 deposit, up to \$200, every time a customer's water is turned off for non-payment. This is to minimize risk to the City in the event the customer moves out without paying outstanding charges.



CITY OF DURHAM  
Department of Water Management  
Customer & Billing Services Division  
101 CITY HALL PLAZA | DURHAM, NC 27701  
919.560.1200 | F 919.560.4827

www.durhamnc.gov

06/16/2020

**IMPORTANT NOTICE ENCLOSED**



T1 P1 \*\*\*\*\*AUTO\*\*5-DIGIT 27707  
##-0001-##-1-623-623-2



Dear Customer,

We know many in our community have lost their jobs, businesses, and healthcare coverage in the wake of the coronavirus pandemic. If you are facing hardship, we urge you to call us at 919-560-1200 to set up a payment plan or receive a list of community resources that may offer financial support.

This is necessary because the City has not received payment for your water bill, and your account is overdue. **You need to act now.**

***If you do not pay or contact us by 5 PM on 06/23/2020,  
your water will be shut off on 06/24/2020.***

**We do not want you to go without water. But if we do not hear from you or receive your payment *BEFORE* your Disconnect Date, we will assume you are actively choosing to have your water cutoff.**

You must contact us *BEFORE* the Disconnect Date written below. If you cannot afford your bill, we will work with you (see back). If you regularly forget, you can set up automatic payments.

To pay, you can:

- Call 919-560-1200, and press "option 1"
- Pay online at [www.durhamnc.gov](http://www.durhamnc.gov). Select "Pay Your Water Bill."
- Put your payment in the drop box at City Hall, on Mangum Street


***DO NOT pay at a local store. They will turn your payment in too late and your service will be disconnected.***

If you have already paid, thank you and you may disregard this letter. To check that your payment went through to your account, please contact us at 919-560-1200 or <http://durhamnc.gov/2996>.

Sincerely,

Customer Billing Services Division,  
Department of Water Management

**Last Day to Pay to Stop  
Water Shutoff: 06/23/2020**

Payment Due: \$94.20  
Disconnect Date: 06/24/2020  
Account #: 

**Q: What if I don't have enough money to cover the bill?**

A: We want to make sure that your water remains connected, and **we will work with you** to make sure you have what you need to do so. Help is available but you must contact us **BEFORE** the Disconnect Date.

You can:

- **Set up a payment plan**, contact us at 919-560-1200. You do not need to pay all of your bill at once, and together we can work out a schedule for payments that (1) lets you pay off your bill a bit at a time as you're able, and (2) keeps you from having your water shut off.
- **Apply for up to \$240 in emergency money** from the Water Hardship Fund that you can use to cover the bill, contact us at 919-560-1200 to learn more.

These options are only available if you contact us, and you must call to learn more.

Other Frequently Asked Questions:

**1. Q:** What if I forget to pay until the day my water is supposed to be disconnected?

**A:** You will still have to pay the \$50 delinquency fee. However, you can call 919-560-1200 to speak with a representative who may be able to stop the shutoff if it hasn't happened already once we confirm that we have received your payment.

**2. Q:** What is to keep me from turning my water back on?

**A:** Tampering with your meter or pipes in any way is illegal and will result in additional financial penalties, which require payment in full before your water service is restored.

**3. Q:** Why can't you remove the \$50 delinquency fee if I paid on the disconnect date but before the water was actually turned off?

**A:** The delinquency fee is for the extra staff time required for the collection process, whether or not the water was actually turned off.

**4. Q:** Do I need to be at home when the water is turned back on?

**A:** We recommend that a responsible person be at the house. When the field service representative turns the water back on, he or she will watch the meter to see if water begins to flow into the house. If the meter shows a lot of water is flowing, the rep will knock on the door to make sure someone can check fixtures and hoses to make sure no fixtures are open/running. If no one answers the door, the rep will turn the meter back off to avoid overflows and potential flooding damage in the house and leave a note that says "open fixture." There is a \$25 service charge to return to the house to turn the meter back on.

**5. Q:** How soon will my water be turned back on after I pay the bill?

**A:** If payment is received by 3 pm, the City will make every effort to get the water turned on the same day prior to 7:30 pm. However, if you pay after 3 pm or depending on the workload, it may be the next day.

**6. Q:** Why am I assessed an extra \$50 deposit?

**A:** Durham City law requires an additional \$50 deposit, up to \$200, every time a customer's water is turned off for not paying. This is to protect the City against customers moving out without paying outstanding charges.