



# CIVIC TECH:

Case Studies From Innovative Communities

JUNE 2019

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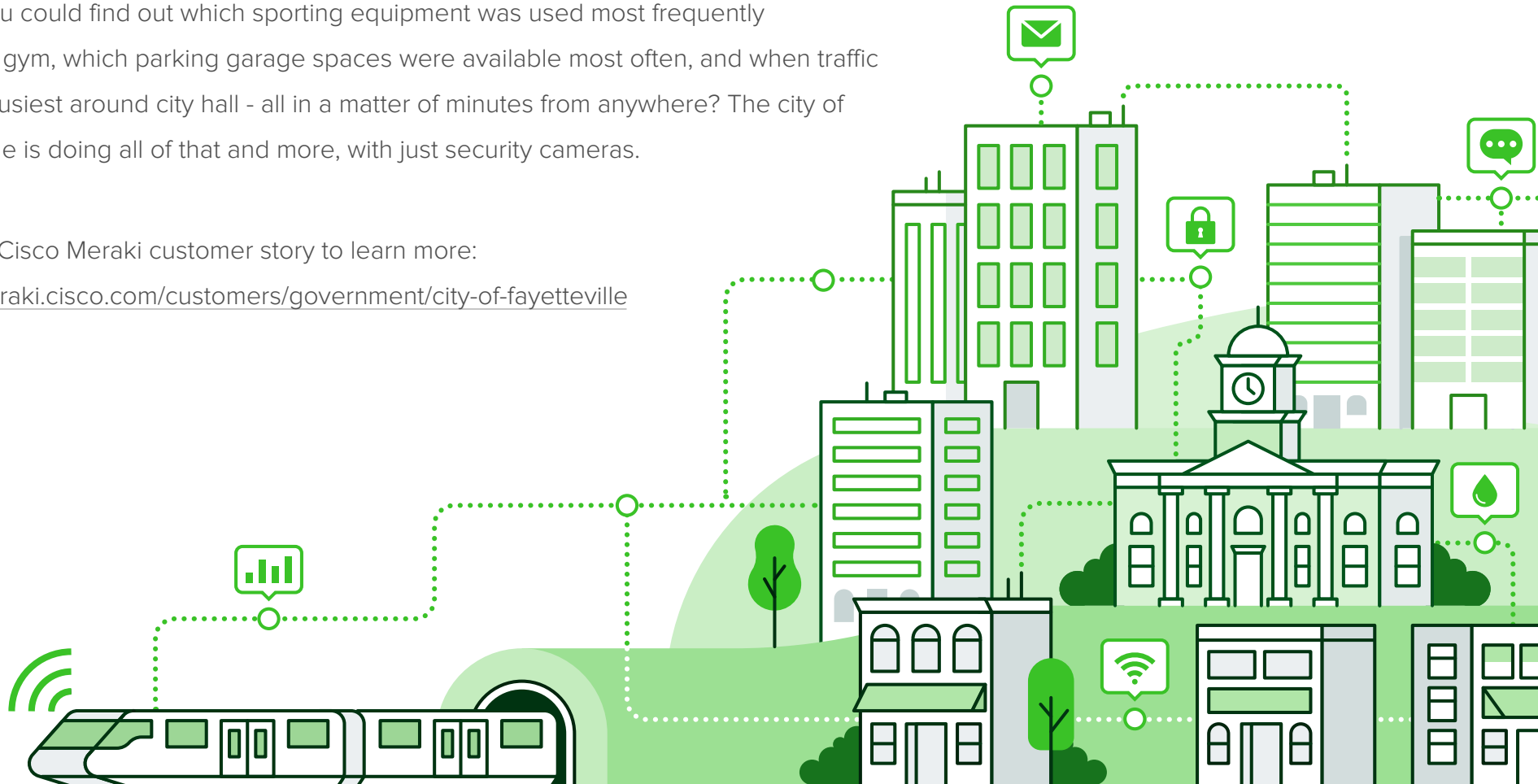


# City of Fayetteville Makes Informed Decisions with Security Cameras

What if you could find out which sporting equipment was used most frequently in the city gym, which parking garage spaces were available most often, and when traffic was the busiest around city hall - all in a matter of minutes from anywhere? The city of Fayetteville is doing all of that and more, with just security cameras.

Read the Cisco Meraki customer story to learn more:

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HEALTH & HUMAN SERVICES

# Want to Address Food Insecurity in Your Community? There's an App For That.

How a county housing authority partnered with a tech nonprofit to deliver food to vulnerable residents.

BY KATE ELIZABETH QUERAM

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*A volunteer's car packed with food (courtesy 412 Food Rescue)*

Every month, food delivery trucks pull up outside Allegheny County Housing Authority housing units and wait for volunteers to open the doors and begin unloading boxes of goods.

It's mostly produce—cucumbers, green peppers, apples, heads of cauliflower and broccoli. Some have minuscule bruises, others are in good condition but slightly past their sell-by (not expiration) dates. It's all edible, and all distributed for free to residents of the housing authority—every piece of it diverted from landfills, courtesy of Pittsburgh-based nonprofit [412 Food Rescue](#).

"There are a lot of issues with the way we distribute food, and we need to understand how to actually make sure that people can access the food we're making available," said [Leah Lizarondo](#), the group's co-founder and CEO. "Partnering with housing authorities and other sites such as daycares allows us to bring food right to where people already are. That has been such a game-changer in terms of how we address food insecurity."

Lizarondo launched 412 Food Rescue in 2013 after being stunned by a National Resources Defense Council [report](#) that found that nearly half of the food produced in America ends up in the trash. The nonprofit's main tool is the [Food Rescue Hero](#) app, which connects volunteer drivers with grocery stores and restaurants wanting to donate excess food. About 15 percent of donations are bread and pastry products, but more than half of it is fresh produce—all perfectly edible but failing to conform, for one reason or another, to various aesthetic standards.

"It's the apple with a little bit of bruising, or the eggplant with what grocers call 'rusting'—those brown marks,"

Lizarondo said. "We all know how beautiful supermarket shelves are. The imperfect produce just gets left behind. Every day, there's about two cases of those from a regular-sized grocery. And it's all perfectly good—it's just not perfect."

Using the app, donor organizations ping the nonprofit whenever they have a cache of food ready for pickup. Officials there match the donation with an organization that can use it—time-sensitive produce might go to a soup kitchen, for example—and then dispatches a volunteer driver to deliver it (Lizarondo compares it to Uber or Lyft, but to transport food instead of human passengers). From start to finish, most transactions take about two hours.

The nonprofit works with hundreds of community organizations, including both the Pittsburgh and Allegheny County Housing Authorities. The county partnership began in 2015, after Bev Moore, the agency's deputy director, approached Lizarondo at a networking event after hearing her speak about the app. The agency had previously partnered with a private food bank to operate distribution centers at several of its sites, but those were discontinued, leaving many residents without a way to obtain staple food items for their families. Lizarondo's concept presented a unique solution, Moore thought.

"I told her, 'The way you described what it is you want to do—you need what we have, and I'm making that available. We're ready when you are,'" Moore said. "That's what got us started."

The partnership began with several pilot sites, which "went over beautifully," Moore said. Since then, the app has "rescued" and delivered more than a million pounds of food




to the housing authority. At least 4,800 residents there receive food from the app each year, many of them using the ingredients to feed their families. A third-party survey of participants showed a 90 percent improvement on food insecurity, with 88 percent of recipients saying they use almost all of the food they're given.

"Has it really made a difference with food insecurity?" Moore said. "Absolutely."

Housing authorities represent a unique opportunity to deliver food directly to people in need, rather than going through a third-party intermediary like a food bank, where impoverished residents still must find time to pick up goods and get there and back, Lizarondo said. The nonprofit partners with housing authorities in both Pittsburgh and Allegheny County, and has since expanded to Cleveland, Philadelphia and San Francisco.

"We try to partner with housing authorities in every city we're present in, and the driver for that really is the results that we have shown in Pittsburgh," Lizarondo said. "Since we started working with them, emergency calls for food within the housing authority within our city have pretty much ended. People are now having food every single week in most of the sites and we are building up to cover all of their sites."

There are bonus benefits as well. Moore has seen residents strike up conversations and friendships during food pickups as they bond over unfamiliar ingredients. Once, a young mother expressed confusion over how to prepare cauliflower for her family.

"An older lady there taught them a recipe and then took it to another level and said, 'I'm going to cook one, and I want you to come over so you can see what it tastes like.' That stayed with me because it was such a teachable moment," Moore said. "The stories that have come from being exposed to this kind of produce are incredible. They are now seeing the value of eating and preparing a healthy meal for themselves." 

Top: The Food Rescue Hero app works like Uber for food donations, connecting donor organizations with volunteers who deliver the goods to recipients. (412 Food Rescue) Bottom: A produce haul from Whole Foods (courtesy 412 Food Rescue)

Members of the El Progreso Club crowd around the library's 3D printer (El Progreso Memorial Library)

INFORMATION TECHNOLOGY

# How a Library Embraced New Technology and Helped Build a Prosthetic Hand

The public library in a small Texas town used an assessment tool that helped officials eventually upgrade equipment—including buying a 3D printer. One community member used it to make a prosthesis.

BY KATE ELIZABETH QUERAM

**F**our years ago, occupational therapist Adrian Vega crafted a custom prosthetic for a 6-month-old infant born with just one hand.

He made it at the local library, using a 3D printer.

“He called me,” recalled Mendell Morgan, director of the [El Progreso Memorial Library](#) in Uvalde, a southern Texas town with a population of around 16,000. “And said, ‘Mr. Morgan, I read in the paper that you’ve got a new 3D printer.’ And I said, ‘Yes,’ all perked up, and he said, ‘May I come over and make a hand for a client of mine who’s 6 months old?’

“And I said, ‘You want to do what now?’”

The library had just acquired the printer as part of a new suite of equipment purchased through a technology grant that officials had applied for after completing an assessment through [Edge](#), a performance indicator system. That test had identified gaps in the

facility’s technology that could be partially addressed by equipment upgrades.

“Edge gives a framework of questions, standards, benchmarks you might be wanting to attain, and when you’re thinking about those questions you’re having to assess where you stand. It’s an evaluative tool,” Morgan said. “Depending on the results, it helps you formulate the strategies you need to employ.”

Edge, created by a national coalition and funded by the [Bill & Melinda Gates Foundation](#), is overseen by the [Urban Libraries Council](#), which launched an updated version of the platform in March 2019. The system allows library officials to assess their services against the needs of their communities.

The upgrade features updated benchmarks and gives users the ability to compare their facilities to libraries of similar sizes and to save and manage action

plans online. The goal is to help libraries showcase their successes and target areas for improvement, which can help secure funding from both local governments and outside organizations.

“If they’re able to say, ‘Hey, our library is underperforming on serving disabled members in our community, and I can show with Edge that we’re lagging behind other similarly sized communities,’ that’s shown to be a very effective tool for libraries to get grants and other tools for improvement,” said Curtis Rogers, director of communications for the Urban Libraries Council.

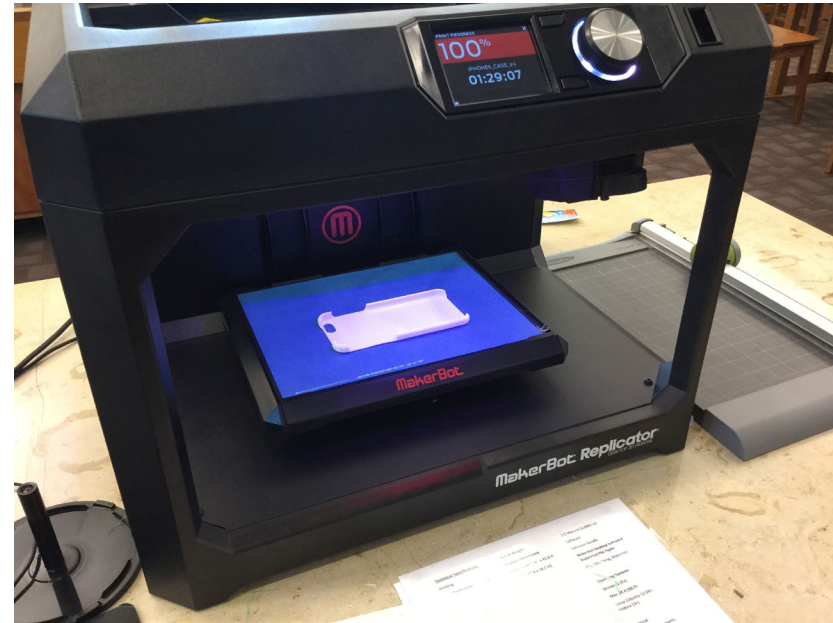
At El Progreso Memorial Library, Morgan did just that, using assessment results to secure a \$10,000 [technology grant](#) offered by the [Texas State Library and Archives Commission](#). Morgan used the money to purchase several computers, four iPads, a poster printer, a high-speed scanner and, notably, a 3D printer—the first of its kind in Uvalde.

“I was aware that other libraries had them, and in going through the process of that assessment it appeared it would be a very good thing because a lot of libraries are going into what they call ‘maker space,’” Morgan said. “It wasn’t offered in the community elsewhere. Even though we’re somewhat isolated and rural, I wanted our users to feel like they had the amenities like a big-city library would have.”

Morgan pictured community members using the printer to make cell-phone cases, bracelets, replacement buttons and Christmas decorations—all “nice applications,” he said. But shortly after the device was installed, Vega called with an entirely different kind of project in mind.

Vega’s client, 6-month-old Elijah, was afflicted with [amniotic band syndrome](#), which occurs before birth when a fetus becomes entangled in fibrous, string-like bands of amniotic fluid in the womb. In Elijah’s case, the band wrapped entirely around his arm, impeding the development of one hand. Vega told Morgan that he had previously used a 3D printer to create a hand facsimile for an adult, and was interested in doing the same thing for Elijah.

“I said, ‘Please come over here right now and show me,’” Morgan said.




*The library’s 3D printer (courtesy El Progreso Memorial Library)*

Vega came to the library with a thumb drive that loaded a printer program onto the computer. The printer constructed the hand in stages—first the lower parts of the fingers, then the upper half—which Vega then took home to assemble.

“Eventually he put it on the little boy, who was thrilled because he could immediately get anyone’s attention by smacking them with his plastic hand,” Morgan said.

Vega returns to the library periodically to print new devices that keep pace with Elijah’s size as he grows older. The project brought publicity to the library and helped Morgan demonstrate the facility’s importance, a constant struggle in Uvalde, where only about half of the library’s budget is funded by local municipalities.

“It costs, realistically, about \$465,000 per year to run the place. The city is presently giving us \$102,000 and the county about \$127,000,” Morgan said. “We’re always on the lookout for things we can do to raise money, and Edge helps with that by giving me ideas about how technology can be embraced.” 





PUBLIC SAFETY

# One City's Journey to Filing Complaints About Police Online

Austin, Texas, debuted an anonymous online feedback form that eases the process for residents to describe interactions they have with police officers.

BY EMMA COLEMAN

*Members of the Austin Justice Coalition hold a protest asking for greater oversight. (Austin Justice Coalition)*

It used to be very hard to submit a complaint about an interaction with a police officer in Austin. A person would fill out an official form, and attach a notarized affidavit to it. The complainant then would need to file the document, with a valid government ID, at an office located in a police building in North Austin, a part of the city with limited public transportation options.

“Barrier after barrier made it extremely difficult for the community to talk about their experiences with the police,” said Marni Wilhite, the head of product for the Texas city’s Office of Design and Delivery.

Wilhite led an initiative to change that. In collaboration with Austin’s Office of Police Oversight, Wilhite’s team built an online, anonymous form for resident feedback about their interactions with the police.

The anonymity is key to making sure the new form is utilized, officials said, although people can provide their personal information and help in any investigation going forward. “The whole process used to be terrifyingly official,” said Ben Guhin, Austin’s head of design and technology policy.

### The fight for oversight

The online form grew out of the efforts of activists like Chas Moore, the founder of the Austin Justice Coalition, who began pushing in earnest for a revised police contract with greater civilian oversight after the 2016 [police shooting](#) of David Joseph, an unarmed and naked black teenager. The issue of oversight also arose that same year when Breiaion King, a black woman, tried to file a complaint about being slammed to the ground multiple times during a [traffic stop](#), only to find that the one-year statute of limitations, set in the police contract, wouldn’t allow her to proceed.

In Austin, though black people make up only 8% of the population, they are subject to 25% of [traffic stops](#) and are arrested at more than [double the rate](#) of white and Latino residents. Police also use force disproportionately against African American residents, as [23% of people shot](#) by

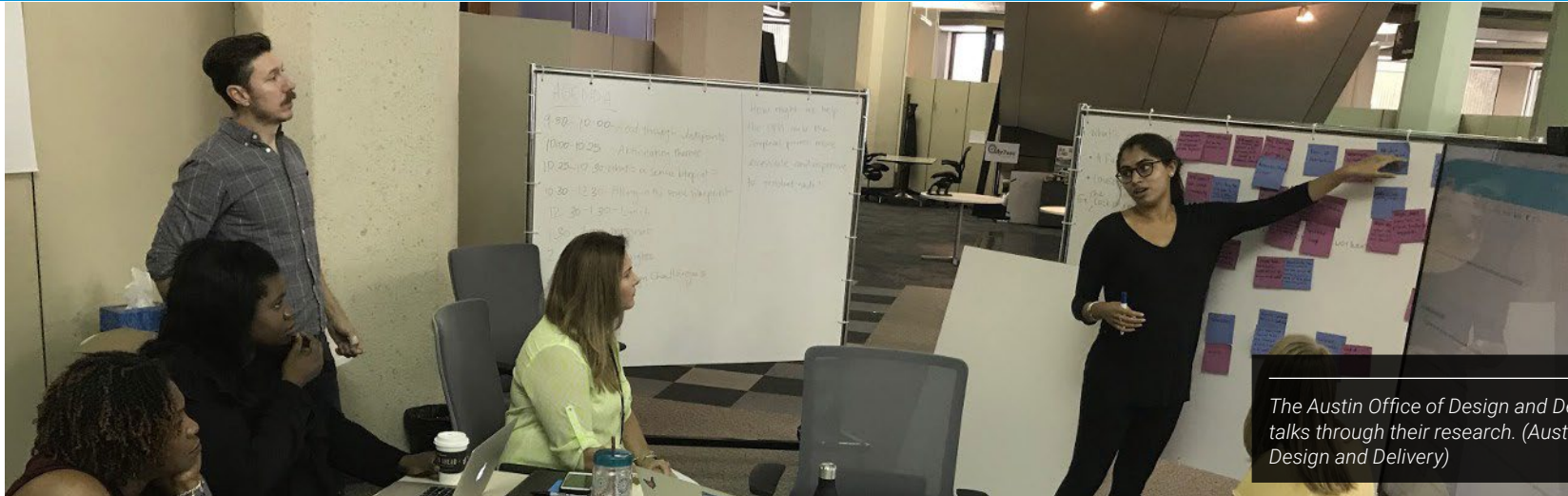
police are black. Moore said that these numbers forced the community into action.

For 18 months, the Austin coalition of activists turned their attention to the contract between the city and police union as a way to force greater oversight. They found an ally in Councilmember Greg Casar, who brought the problem about the complaint process to the negotiations. “My hope is that everyone in the community recognizes that some of these changes are not extreme asks and should not require extreme measures to get,” Casar told the *Austin Chronicle*. “When [they] brought up that there are people who complain to the [Office of the Police Monitor] and then aren’t allowed, because of our lack of transparency, to even know what happened to that complaint, it brings into question why we even have that in the first place.”

Negotiations ran into an impasse, and the police contract expired in December of 2017. That meant that the Office of the Police Monitor (the predecessor to the Office of Police Oversight) could not accept complaints through the first nine months of 2018 until a contract was reached. Instead, formal complaints had to go through the department’s Internal Affairs division.

While statistics show that African American residents of Austin have disproportionately more contact with police, Guhin said the old formal process was utilized mostly by white and higher income residents. An Austin Police Department [report on racial profiling](#) showed only four formal complaints about profiling and nine informal complaints—those that might be left on a police department’s voicemail—in 2018.

There’s a difference between formal complaints and contacts made to the Office of the Police Oversight, however. A formal complaint is one investigated by Internal Affairs, but a contact is recorded anytime a resident lodges a complaint with the office. Of the 977 contacts recorded in 2018, only 40 resulted in formal investigations. The low formal complaint number is something that further convinced Moore of the necessity of creating more robust civilian oversight and a more convenient complaint option.



The Austin Office of Design and Delivery talks through their research. (Austin Office of Design and Delivery)

“There’s no way a number that low could be true in any city,” said Moore. “Austin would be a utopia if there were only 50 complaints a year.”

When contract negotiations finally settled, the police received \$80 million in **benefit hikes**, in exchange for the public’s ability to easily submit anonymous complaints, the elimination of the notarized affidavit requirement, and the condition that citizens receive follow-ups on their complaints so that they know the results of investigations. The Office of the Police Monitor was also revamped as an independent organization and renamed (becoming the Office of Police Oversight) to make it clear that it was a neutral third party.

The office was put in charge of receiving and reviewing newly anonymized complaints. All that was left was the construction of the online form.

**Introducing an Online Option**

The Austin Justice Coalition became a part of the working group that reviewed prototypes and provided feedback to Wilhite’s team at the Office of Design and Delivery as they developed the form. Wilhite’s team presented biweekly updates to the working group based on research they conducted with a wide stakeholder group,

including community members and police leadership. “We sat together in a room and read real complaints, so we could have an honest conversation about the challenges people in the community face.”

The working group also provided feedback on design, which was fully customizable. “One cool thing about our team structure is that designers and developers are part of the research project together,” said Guhin, who also worked on the design process. “A lot of government designers get hit with, ‘the developer says I can’t do this, so that’s the end of that.’ But we want our goals to direct the technology, not the other way around.”

Wilhite anticipates that the information submitted through this form will make Austin a more data-informed city, where public input is analyzed and used to make iterative improvements to city services. And because they built their form using an open source, modular architecture, the Office of Design and Delivery hopes that other local governments can use the platform for their custom needs.

Ken Casaday, president of the Austin Police Association, said that the form simply represents business as usual for the police department. “We have no problem with the form, because we always allowed anonymous complaints, if someone would call in and leave us a message, for example, we would always investigate that,” said Casaday.

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## “We sat together in a room and read real complaints, so we could have an honest conversation about the challenges people in the community face.”

**Marni Wilhite**, the head of product for the Texas city’s Office of Design and Delivery

Prior to the form, somebody with a complaint **could file** with the civilian office, Internal Affairs, or complain to the officer’s supervisor, and while anonymous complaints were allowed, they weren’t well publicized, a 2016 audit found.

“It’s really a trust issue,” Casaday continued. “The activist community didn’t believe we were investigating these complaints before. So they’re excited about the new option.”

Farah Muscadin, director of the Austin Office of Police Oversight, said the form was much needed. “Many people feared retribution if they called or submitted a complaint,” she said.

In the first two weeks after the form debuted in April 2019, the city received 20 complaints and five compliments. Once a complaint gets submitted using the form, which is available in English and Spanish, it is assigned to a complaint specialist from the Office of Police Oversight. During their preliminary review, they look for available police reports or video from police cars or body cameras from the time of the complaint. If they suspect a policy violation might have occurred, the complaint is sent on to Internal Affairs, which handles the investigation moving forward.

But the anonymity cuts both ways. “Anonymous means anonymous to us,” Muscadin emphasized. “If there is no personal information submitted with the form, we can’t follow up.”


If a resident does choose to provide their information, though, they’ll get monthly updates on the status of their complaint, either by phone or by email. Depending on the seriousness of the complaint, the process could take up to six months. The updates for the first few months

will show if a sergeant has been assigned to the case, if information gathering has been completed, and if witnesses and the officers involved have been interviewed. Muscadin explained that the final updates will show if the complaint is then under review by the chain of command for potential disciplinary action.

Moore said he hopes that with the new form’s followup structure, complaints will be taken more seriously. “I think the number of complaints that get investigated will drastically increase. That’s why we fought for that so much for that option,” he said.

In addition to the data, Wilhite also believes that the form could improve community relations with police, and noted that submitting compliments through the form would be a good way to do so. “When we talk about behavior change and improving community relations, it’s really important to recognize positive work as well,” Wilhite said.

The Office of Police Oversight is now conducting a tour through local libraries around the city to meet with community members and explain how to use the form to file complaints and compliments.

The Austin Justice Coalition is also advocating for the community to use the form. “It’s great that people can anonymously submit complaints from the comfort of their own homes. But it’s going to take more than people being aware of the form for change to happen. The biggest factor in mistrust between police and the community is lack of accountability,” Moore said. “If regular citizens do something wrong, we get a ticket or go to jail. So we need to see the officers that people are filing complaints about held accountable. That will improve community relations.” 

# About the Authors

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## Emma Coleman

Emma Coleman is the assistant editor at *Route Fifty*. Prior to joining *Route Fifty*, Emma was the senior communications manager and a policy fellow for New America's Public Interest Technology initiative, where her research focused on data improvements to the reentry process for people returning to D.C. after incarceration. She holds a BA from Stanford University in international relations and comparative studies in race and ethnicity, and is originally from Chicago.

## Kate Elizabeth Queram

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