



## Tipping Point Community Fights Poverty with Data Science

Insights leading to policy changes and expanded thinking

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—Jamie Austin, Senior Director of Impact and Learning

### DETAIL

**\$100,000s**

Citation fees eliminated for low-income people due to policy changes

### CHALLENGE

“The San Francisco Mayor’s Financial Justice Project was focused on rightsizing parking fines and fees to one’s ability to pay,” says Ashley Brown, manager of impact and learning. “We wanted to see how we could contribute, and requested citation and tow data from the San Francisco Municipal Transportation Agency (SFMTA). We received about 7 million rows of data with many fields on three CDs. It was going to take a lot to clean, and we needed a more powerful tool than what we had.”

“Our Board of Directors knew that data science could provide insights and had been pushing us to look into ways to better understand poverty and how we could alleviate it,” says Jamie Austin, senior director of impact and learning. “We had tools like Stata and Excel, not the kind that can unlock insights like TIBCO® Data Science could.”

Steven Hillion, a TIBCO data scientist lead explains his role. “I learned the team was wrestling with the data. While it included a lot of information about each citation, it also had a lot of problems. License plates, vehicle identification numbers, and addresses were entered incorrectly. It needed a lot of data prep and cleansing. That was how we got started on the project. We also wanted to merge datasets on parking, business activity, and tow-away zones to normalize expectations across zip codes—so adding more datasets was an important criterion.”

## TIPPING POINT COMMUNITY

Tipping Point Community works to break the cycle of poverty for individuals and families in the Bay Area. The organization rigorously screens non-profits to identify and invest in the most effective education, employment, housing, and early childhood organizations.

## FAST FACTS

**Founded:** 2005  
**Type:** Nonprofit  
**Funds raised:** >\$200 million  
**Employees:** 50+

## SOLUTION

“We started using the TIBCO Data Science product about a year ago,” continues Brown. “Bringing this product into the nonprofit space, and helping us uncover insights that led to big changes for low-income individuals, is huge. It’s an incredible product and great to use, and the TIBCO staff was really amazing in helping me learn. They became part of the team on the analysis; they didn’t just hand over a product with a tutorial and wish us the best.”

## BENEFITS

### INSIGHTS LEADING TO POLICY CHANGES

“One of the most interesting insights was realizing that individuals with older cars can be tied to lower income and higher citation amounts for the same type of ticket. Those people get charged the same amount initially, but because they’re not able to pay, late fees are added, increasing the amount well beyond what people with newer cars, and likely higher incomes, pay. For me, a parking ticket when I forget to move my car for street sweeping is a bad day. For a low-income individual, it can send her into poverty and homelessness. A simple change to these policies can have a huge impact.”

“As a result of the findings, we worked with the Financial Justice Project, who in turn worked with the City to create a program that allowed people living 200% below the federal poverty line to be forgiven for any late fees. SFMTA saw such a commensurate increase in the number of people who paid their tickets because the late fees were forgiven.”

Austin continues: “When we went to SFMTA and the Mayor’s Budget Office, they were both impressed and surprised because the data had never been presented in this way. There was a shared sentiment that they do all they can to help those living in poverty, and yet with just one citation, lives can be ruined. The data analysis led to policy changes; we estimate that low-income people will avoid paying hundreds of thousands of dollars. There is still a lot of work to be done, but lowering fees can have a considerable impact on their income and their future.”

### EXPANDED THINKING

Hillion adds: “We learned that an organization wrestling with very complex problems might be motivated by anecdotes or news reports, but if those stories can be backed by real and meaningful data, a more persuasive case can be made. Taking anecdotes and driving them back through data to meaningful conclusions and concrete justifications is really powerful.”

## FUTURE

“We’ve been transformed by using TIBCO Data Science,” says Austin. “It expands the way we approach projects. We can think about understanding poverty in ways we never could before. For example, we’ve started projects to look at other fines and fees and the use of the earned income tax credit, a powerful poverty fighter. With this tool, in a quick and efficient way, we can ask and answer questions we couldn’t before. If we used tools like Excel, we wouldn’t have been able to even start to think about how to analyze the data.”



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