

FHEO Table Talks Series, Episode 15: The Promise of Data for Affirmatively Furthering Fair Housing

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Tiffany Johnson (Host): Hello, and welcome to another episode of the FHEO Table Talks series. I'm your host, Tiffany Johnson, the director of the Office of Policy Legislative Initiatives Division and HUD's Office of Fair Housing and Equal Opportunity. In the Table Talks Series, we speak with trusted community voices and experts across the nation in order to share their insights with HUD grantees and stakeholders. Today's Table Talk focuses on the role that data can play in fair housing planning. In this episode, we will discuss the importance of data quality, and the variety of ways that communities can use data to make informed decisions about community planning and development. We will also discuss how data can deepen their understanding of how to combat barriers to fair housing and equitable opportunities.

I'm pleased to be joined by Dr. Michael Akinwumi, the Chief Tech Equity Officer at the National Fair Housing Alliance, or NFHA. Michael has extensive experience leading the tech equity initiative, the goal of which is to increase the fairness and reshape the design of algorithmic systems and housing and financial services. We also welcome Heidi Aggeler, Managing Director and Cofounder of Root Policy Research. Heidi co-founded Root Policy Research, a woman-owned research consulting firm, that uses applied research in community planning.

Michael and Heidi, thank you so much for taking the time out of your busy schedules to be with us today. I'm excited for our audiences to hear more about your experiences and perspectives on how data can help us understand and adjust barriers to fair housing. Hopefully, people listening in today will walk away feeling more empowered to use data. Keeping with the tradition of the Table Talks series, our chat will be meaningful and serious, but at the same time, easy and conversational. If you're all ready, let's get started.

Michael, my first question goes to you. Your organization, the National Fair Housing Alliance, is a leading advocate for the removal of barriers to fair and equitable housing. Can you talk about the role of data and identifying and removing those barriers? How can we use data, for example, to end segregation, and to promote more inclusive communities?

Michael Akinwumi (Speaker): Thank you for the question. The National Fair Housing Alliance, or NFHA for short, is the country's only national civil rights organization. It is dedicated solely to eliminating all forms of housing and lending discrimination and ensuring equitable and inclusive opportunities for all people. We work to identify, dismantle, and remove long-standing barriers to equity and also build diverse, inclusive, well-resourced communities. In our over thirty years

of work in this space, we know for a fact that data is required to identify discrimination by us in housing and is also required to fix these discrimination issues. So systemic, structural, and institutional racism, true policies— such as redlining, unequal pay, and Jim Crow— are to blame for many overarching barriers. These barriers may only be assessed and identified and also fixed by data.

For example, based on our work, we know that data can shed light on where gaps exist, and what policy and programmatic solutions need to be implemented to close racial wealth gaps, which are often attributed to opportunity gaps. In addition, we know that data can be used to develop an equitable approach to closing racial opportunity gap. A very recent example of our work is the First Gen Down Payment Assistance Program, which we developed in partnership with the Center for Responsible Lending, and the Open Institute. This work shows that data is at the core of fixing discrimination and bias found in housing.

To your question on how data can be used to help segregation and promote inclusive communities, I would like us to see the answer coming from the fact that data is required to understand various dimensions of segregation and how to develop inclusive communities. For example, when we talk about redlining or segregation, this is because we actually see the data on visual maps. Data is also required to understand how minority members are distributed across geography or how they are spatially exposed to majority groups. In addition, still looking at differing dimensions of the aspect of segregation, we also need data to understand spatial centralization, spatial concentration, or spatial clustering of minority members. It goes without saying that data is essential required to actually visualize these different dimensions and also call the attention of stakeholders or policy makers to fixing segregation issues.

For example, in our recent investigation here at NFHA, and also its subsequent search— so NFHA and its member fair housing organizations used data to uncover deep inequities in the policies and practices of one of the nation’s largest real estate companies. Without data we would not even be able to discover and also remedy these discriminatory policies. The company was using data to segregate communities of color, and NFHA used data to develop a more equitable solution that would expand equal housing opportunities for thousands of consumers and hundreds of our communities. I believe our viewers will agree with me that data is necessary to fix segregation issues in housing.

Tiffany Johnson: Thank you so much Michael. It’s always good to hear about the important work that NFHA is doing, and I agree completely on how data can both help reveal gaps in access to fair and equitable housing and identify data-driven solutions to close those gaps.

Heidi, my next question is for you. You are an experienced provider of technical assistant to HUD grantees and you consult with communities working to address housing and community development challenges. As you know, the obligation to affirmatively further fair housing requires recipients of HUD funds to combat discrimination and take meaningful actions that overcome patterns of segregation and foster inclusive communities free from barriers that

restrict access to opportunity based on protected characteristics. What are some ways that data can help HUD grantees affirmatively further fair housing?

Heidi Aggeler (Speaker): Thank you Tiffany for the question. I want to start by reiterating the three elements, that you said, of affirmatively furthering fair housing. The first is combatting discrimination. Second, and I think most important, is taking meaningful actions to overcome patterns of segregation. Third, fostering inclusive communities. Michael talked about how his organization has been able to use data to understand where certain housing providers may not be in compliance with the Fair Housing Act, and I was going to talk about public sector clients can use data to make sure that their programming is reaching the people that they need. Let's start with that first element, combatting housing discrimination. If you think about it, if I'm designing a program— I'm a HUD grantee, a unit of local government, and I'm designing a program to combat discrimination— without data, I may design a really broad program. I might put general ads on public transportation, or on billboards, or flier libraries. But if I have the data, and Michael's organization provides really good data, annually, on national fair housing trends. If I have that data, I will be able to design my program to more specifically target and speak to the individuals who are experiencing, or vulnerable to housing discrimination.

So for example, if I had been collecting data, or I drew on Michael's report, and I understood that people with disabilities are not getting reasonable accommodations when they request those, I would design a completely different enforcement and education program to reach the landlords, who may not know about reasonable accommodations as part of the shouting act, and also to reach the people with disabilities and inform them about their rights in terms of requesting reasonable accommodations. It's a pretty basic way of helping communities understand that data can be really important in tailoring programs.

Another very good source for that sort of data would be your local fair housing organization. As a public sector entity, when you start thinking about "where do I start?" In terms of collecting data, those would be my go to: the National Fair Housing Alliance and then your local fair housing provider, to give you a basis of who's most vulnerable to fair housing discrimination and how should you think of tailoring a program and take next steps in community engagement, which we'll talk about in a moment, to really dissect what's going on.

Tiffany Johnson: Thank you so much, Heidi. That sounds like excellent steps that HUD grantees can take to use data to affirmatively further fair housing and foster inclusive communities. Later in this episode I want to ask you to expand on the importance of community engagement and qualitative data. But first I wanted to ask a question about the types of standard sources of data that are available to most any communities.

Heidi Aggeler: I think people feel like when they start this process that it'll be really hard to collect and analyze those data. There's quite a lot at your fingertips. We almost always start with HUD's AFFH tool. You can simply in your search engine look for HUD's AFFH map and data tool. It will pull up the tool that HUD developed originally for the assessment of fair housing. Even though the data may be a couple years outdated, depending on when they're released by

the Census Bureau, it gives you a tremendous look at your community and your regions. Not only patterns of settlement, so where do people live, but how do those interact with other really important variables for economic and housing stability?

The reason that I like this tool so much is that, first of all, I can go back to 1990 and examine trends. I can look at how residents, based on race and ethnicity and income have changed over time. Second, the tool contains some really important indicators on what I'll call access to opportunity. It looks at, for people living below the poverty line and people who are not, how well they can access positive educational environments, how well they can get to jobs, how well they can get to transportation. It allows me to compare different types of residents, both those living in poverty and out of poverty, around those indicators. So, it's really powerful and a really good snapshot on the access to opportunity variables that I typically cannot get without a lot of extra work pulling and analyzing data.

I would also say the maps are really easy to use, they give a very good overview on settlement patterns, and then that allows me to take that next step in community engagement, as well as further analysis to ask that 'why.' The data on public assistance housing, where it's located, where it's lacking, is also very useful. We also typically look at housing affordability and needs measures. Mostly we focus on those by protected classes. We pull a lot of that data, probably eighty percent of the data that we use in fair housing assessments, from the Census Bureau, and then supplement that with local data as we have them. The National Preservation Database, Home Mortgage Disclosure Act data that's available from the Consumer Protection Bureau is also really useful in this analysis.

For most communities, if you start with these data sources— the AFFH map and data tool— and then analyze that context, you're really just looking at existing conditions. It's giving you a starting point for that deeper analysis. You can also, if you're a community that does a lot of community planning, so comprehensive plans, or general plans, you can start to piece together with those analyses too, why people have settled in the communities in which they're living and how equitable are opportunities for them to access educational environments, transportation, good employment centers. How readily available are those across the communities? And then that leads you to the next work, which is what's needed, and how can I take meaningful actions to make sure I'm creating more equitable environments.

Tiffany Johnson: Thank you so much Heidi. As someone who works with this data on a daily basis, I can attest firsthand how important good and reliable resources are. I also want to remind our viewers that the resources Heidi mentioned are linked in this episode's resources on the Table Talks Series on the HUD Exchange website. I encourage our viewers to check out some of these great resources.

My next question is for both of you. Michael, let's hear from you first, and then Heidi. Are there any specific communities, projects, or organizations that you've done an excellent job analyzing or presenting data to inform fair housing planning that you'd like to share with our audience? What do you like about those examples, as well?

Michael Akinwumi: Thank you for the question. Just like Heidi mentioned in some of her comments about data sources, also my comments about how data is a necessity when we want to identify bias and discrimination, I would say that all community work and projects that we've been working on require data. The ones that actually stand out which I would like to reflect towards were in 2018 when we wanted to really spotlight the importance of fair housing and what it means to be achieved with the Fair Housing Act. We went into partnership with Trulia and we received some input from Kirwan Institute at the Ohio State University. We really wanted to see if there was a link or a connection between where people live, especially people of color, which brings me back to my earlier comment about segregation.

We wanted to investigate the link between where people choose to live and opportunities that are presented to them. The patterns or trends of segregation that we saw are in 2018 were also present when we updated the studies in 2021 but now in partnership with Zillow. We used data to establish the link between place and opportunity. For example, the work with Trulia and with Zillow in 2021 showed that if you live in a community of color, your chances of adding a grocery store, bank, doctor's office, or even good schools or recreational facilities in your neighborhood, those chances are very slim. We couldn't have come to this conclusion without data. Equally notably is the fact that data actually revealed critical lenders are more likely to be in neighborhoods of color. To carry out that research, we used publicly available data like amenity data from Yelp, which is a really great resource, and in addition to Yelp and all that data we used demographic data from the US Census Bureau.

Tiffany Johnson: Thank you so much, Michael. Heidi, what do you think? Were there any projects that came to mind for you?

Heidi Aggeler: Three recent clients that I think did an exceptional job of utilizing data— and they did it in different ways. The first was that we did a fair housing study for the Baltimore region. That region's unique in that they have a dedicated fair housing planner. That position helps coordinate all of the education, the fair housing activities, the knowledge building, and advises their regional communities on meaningful actions to further fair housing. They also support customized research, and one of the things that this group had looked at was where voucher holders can most easily find housing, but they looked at where publicly assisted housing was being built and who's occupying, or who that's been built for, in terms of occupants. Answering the question of are publicly assisted housing development for seniors likely to be placed in areas of opportunities? Conversely, is publicly assisted housing that is family-oriented more likely to be in communities with high poverty rates? And why, and how can the region change that? That's a very good example of using data to understand the potential inequities of the placement of housing and how subsidies could help redirect and provide more equitable access to high opportunity areas simply by focusing more on the types of development that get put in the types of different neighborhoods.

The Richmond region, so not far from Baltimore, did something I haven't seen before very recently. One of our clients there, when we were presenting the information and primary

findings from the regional fair housing study, convened their city council and their planning commission. They brought them together so that they could jointly receive that information, ask questions and hear each other ask questions about the data and the findings, basically putting themselves on the same equity page. Then that helped them use data to inform their decision making, both as city council and as planning commission, in more of a joint fashion.

The last community that I will mention, and I've got an infographic to share here, this is the state of Oregon. In thinking about how they were going to measure the actions that they were going to take, we utilized data to better understand the difference in equitable access to neighborhoods as well as disproportionate housing needs. Those metrics that we put together that were drawn from data analysis that informed their housing study, that is how they will measure progress in the future, by monitoring whether or not they are able to change those indicators through meaningful actions.

Tiffany Johnson: I appreciate both of your responses, and I just want to encourage our viewers to check out the resources that both Michael and Heidi discussed. I'm sure that they will enjoy reading about closing the gaps on first-generation home ownership. Additionally, I also hope that our viewers will take a closer look at the efforts the communities Heidi has highlighted to incorporate data into their fair housing planning processes.

Okay, let's keep moving along. My next question is for you, Michael. You lead the National Fair Housing Alliance's Tech Equity Initiative, which aims to reduce bias in datasets that can affect an individual's or family's access to fair lending products and fair housing. From your experience, what do you believe is important for our viewers to keep in mind as they use data to understand and address barriers to fair and equitable housing?

Michael Akinwumi: Thanks for the question, Tiffany. I like that you mentioned that the initiative aims to reduce biases in housing data. More recently, there's been a lot of focus on technologies like artificial intelligence or machine learning. Whereas stakeholders and professionals are quick to forget that many of the biases and discrimination issues in AI and machine learning actually stem from data sets. To us, it's really important to focus on data, just as the focus is on data-run products and data learners like AI and machine learning.

So back to your original question on what I believe is important for our viewers to keep in mind as they use data to understand and address barriers to fair and equitable housing, I would like to emphasize four important items. Those items are well-known attributes of data, like volume of data, velocity— that is, the rate or speed at which data is being captured, the variety of the data, the veracity, and also value of data. So my first recommendation is that the viewer should not be intimidated by the shape, size, volume, or velocity of data. They should be ready to learn the tech that is required to manipulate data so that its full benefit can be maximized. We've been talking about how data is very useful for getting inside sources and causes of discrimination and other barriers. What that tells us is that data represents human stories and we should be courageous enough to be ready to get our hands dirty to manipulate the data and learn the tech that is required.

My second recommendation for things that viewers should keep in mind is around a well-known attribute of data which is veracity of data. When I talk about veracity, I'm referring to quality and accuracy of data. I really want to challenge viewers to be ready to identify missing portions or missing information in data and also document solutions that are being used to build that missing data. We know that data will have some shortcomings and it's really important for viewers and those who really use data to generate insight to document some of these shortcomings or blind spots in data. They need to be fully transparent as to how they fill in the missing data. I always like to say to viewers that they should know when their data is garbage and be bold enough to not derive any intelligence from the data once they come to a reasonable conclusion that the data is low quality for the problem they're trying to solve. My recommendation is that viewers should seek to understand, record, and visualize the lineage of any data used for their analysis. Again, this is coming from my approach to data, that data represents human stories.

Every data point tells human stories. That's why it's really important for them to pay attention or even ask questions about the whole life cycle of data. Just as good data keeps businesses running, good data builds trust into their byproducts. I encourage viewers to ask questions about the journey of a dataset from various sources to their consortium site, like business intelligence platforms. This approach would help resolve any data errors and fix quality issues, and also enable data consumers to have trust in products, services, and visuals that are derived from data.

My last recommendation which is the fourth one is data collected without use is like history that is not taught to citizens. We know what becomes of a society that has not embraced its history. I encourage viewers to be willing to conduct exploratory data analysis by using even rudimentary statistics like mean, median, mode, as appropriate, or visuals wherever possible. Intelligent insight that maximizes the value of data can often come from such an approach. Those would be the four key recommendations that I would like viewers to pay attention to as they get their hands dirty with these different data.

Tiffany Johnson: Thank you for that Michael, I could not agree more. Working with data is not just about presenting facts and figures, it's also about telling compelling stories about the people behind the data. That can motivate us to continue the crucial work of building equitable and inclusive communities. Also, data integrity is crucial, so thank you for that.

Heidi, my next question is for you. As you touched on earlier, in 2016 HUD realized the AFFH Data Mapping Tool— or, as we affectively call it, AFFHT— to assist HUD grantees in conducting a more robust analysis of fair housing barriers and access to opportunities in our communities. Over time, the tool has been updated to include more recent data and improve functionality for users. If you could just snap your fingers and make additional improvements to the AFFHT to help users conduct better fair housing analysis and planning, what would you do?

Heidi Aggeler: I have two responses— the first is I might soften the ding sound that happens whenever the map is loaded, sometimes it's a little bit startling. I'm just kidding, it's fine, but you always know when your map's loaded and sometimes it's a bit distracting.

I would actually allow the variables to interact a little more. Oftentimes we end up making our own maps, and it's not because the data in tool are not data that we need, but we don't have the ability to have the two layers interact as much as we want. I'll give you an example. If I was starting with the dot-density map on race and ethnicity, I'm looking at where individuals live in a jurisdiction, and I'd like to know if there a cluster of people of different races and ethnicities I areas of high poverty. The underlying data, it's called a choropleth map, so the gray shades in that map that I can work with, that's key to HUD's low poverty index. It's actually an index, not a poverty rate, that that map uses. So those of us who work in data a lot that may be perfectly logical for us. But if I'm presenting that data to a city council member or planning commission member, somebody who doesn't think about data all the time, it's a little harder for me to explain that I'm overlaying race and ethnicity with the poverty index. And in low poverty indexes, world high is actually better. It just adds an area of complication. If I had the ability to pick the layers that I wanted those variables to interact with, the dot-density variables, I think that would be a tremendous benefit in helping me step through the questions that I might have as I go through the process.

When we do fair housing studies, we always think of those as being iterative. I get to a point and I ask questions— the 'why,' why do things look like they do— and then I use data analysis to take that next step and try and answer that 'why,' and that may lead me in a different direction. Having a little more interaction in that tool, and I realize that's asking a lot, I think would add to that iterative process.

Tiffany Johnson: So, I want to open the floor, and Michael, see if there's anything that you would add, if you had a magic wand in this case.

Michael Akinwumi: Thank you, Tiffany. There are two points that I would like to add, but first I would like to comment on Heidi's request for interaction. We know that when we say that data represents human stories, there is no way we can actually tell that story if we don't allow interaction among or between variables. I agree with Heidi that there should be more interaction among all these variables.

In addition to a request for interaction so we can tell more varied stories of human stories that are represented by the data, I would also like to add that it would be helpful to allow users to enter data from other sources into the tool. For example, that could be data from other city or state agencies, or any number of other things that would be useful in fair housing analysis. What we know as an organization is that in 2015, HUD took a position that it would not include data in the tool that it could not provide to each of its grantees. What that means is that some data were left out. For example, homeless data, which is really a great resource, for us, was one example. Another example that I like to cite is data about people with disability which are maintained by the Center for Medicare and Medicaid Services. I'm very sure that there are

other examples but as an organization, our position is that HUD should provide those data where they are available and not penalize jurisdictions for which is not available.

Now having said that, I really think the tool is a wonderful source for jurisdictions, especially smaller ones with limited research or GIS capacity and for community stakeholders. As an organization we have experts looking into it too, and we know for a fact that it pulls a wealth of data from different sources, like the census, HUD, which are very important sources for analyzing fair housing issues. But if you could ask for more, I would ask for flexibility, so that these different data sources, if they are not provided by HUD, users can actually have that functionality that allows them to import some of this data. Thank you.

Tiffany Johnson: Thank you both so much. Both of those answers were really great and helpful for us to think through, but also, they're really helpful for grantees and funding recipients of HUD to think through where there might be some gaps that they can manage on their own.

Heidi, we'll stay with you for this next question. I know that your firm helps communities conduct community engagement as part of their housing and other planning processes. We all know that community engagement can be an opportunity for HUD grantees and funding recipients to collect data from community members, but it's also a great way to share data with community members. What are some of the best practices for sharing and collecting data as part of community engagement? Additionally, can you talk about the use and value of qualitative data in fair housing planning? Why is important for communities to use qualitative data, and do you have any recommendations on how qualitative data and quantitative data can be used in tandem to tell a richer story about the community?

Heidi Aggeler: Those are very important questions, and I really appreciate the emphasis on community engagement and using qualitative data to bolster what you're seeing in quantitative data. We really rely on resident surveys. We distinguish resident and stakeholder surveys— not that residents aren't stakeholders, but we use the term stakeholder to refer to people whose business life or their work life is focused on housing or services provision. Well-designed resident surveys, which are a lot less expensive to conduct now, they're easier to administer through all the tech tools that we've got, and they can be administered very equitably when you work with trusted partners who can convey the information that this is an important survey to take. They can be done very inexpensively and return a lot of valuable information.

I'll give you an example of that and how we used qualitative data, in this case a survey, to bolster or explain what we weren't seeing in quantitative data. We did a study in a community in New England and fielded a resident survey, worked with our client, who was a city at that time, and the county, to get the survey out on social media. We also worked really closely with trusted housing partners and asked them to encourage their clients to take the survey. We had very good response. In this community, in this particular city, there weren't a whole lot of fair housing complaints that had been filed recently. But when we looked at the survey data, we found that a lot of people felt like they had experienced housing discrimination and there was a huge difference by race and ethnicity. People of color were three to four times more likely to

say they felt like they had experienced some type of housing discrimination than non-Hispanic, white survey respondents. And most of them said they had experienced discrimination in 2020 and 2021, which as we all know, was a really scary time to face housing instability and vulnerability. When we asked them: What did you do if you felt like you had experienced housing discrimination? The vast majority of them said they did nothing. About a quarter of them said they did nothing because they were afraid of losing their housing or being harassed in their housing. One survey respondent in particular wrote in an open-ended response— so we give people the opportunity to write in a response— she wrote “most women do not have the time or resources to pursue action.” This is really powerful information, and it allows us to understand the lack of complaint data that we received. There were a low number of complaints. It was difficult to know ‘how am I to submit a complaint,’ particularly during the pandemic, and it helped us understand why people were not taking that extra step and contacting HUD or local fair housing providers about their situation and their feeling that they had been discriminated against.

If I were to step back and design the perfect community engagement or qualitative data that I would collect, this is what it would look like: I’d start with a resident survey, and again I’d use trusted partners. A lot of times we’ll work with public housing authorities and ask that they promote the survey through their housing choice voucher waitlist or their public housing authority unit waitlist. We always reward people with a drawing for a gift card to thank them for taking a survey. And then the ability to take that survey should be really inclusive. We always make the option to complete the survey in a variety of languages, or for people who are uncomfortable using an online format or filling a survey in the paper format, they can give us a call. We’ll walk them through the survey instrument. We also supplement that survey process with resident focus groups. We’ve been doing those virtually because of the pandemic, but before the pandemic we did those in person. We would typically gather in a trusted community partner’s setting. That could be a community center, it could be a food bank, somewhere people go to access services and information. We’ve done that as part of supportive environments for youth who are at risk of homelessness and piggybacked on their conversations about their situation. We’ve had dialogue in those focus groups about where people feel like they’re housing-vulnerable, and what solutions they need to achieve housing stability.

We also do a lot of virtual stakeholder groups. We talk to people who are experts in the field, who can help us understand where there are maybe regulatory barriers and private sector barriers to housing choice. There’s really on the front lines helping their clients navigate housing provisions and they have a lot of really good information, particularly about solutions. We also talk with cultural navigators. We’re doing a study in Denver right now and we’re holding at our offices a conversation with recent new Americans— so people who are escaping violence in their countries who have relocated to Denver— talking with them about their housing needs. So, a lot of different creative thinking around how you can engage residents, with the big idea of “how do I understand peoples’ story, and how do I get that information that I can’t see in the qualitative data from engagement?”

Now what I've laid out is a pretty comprehensive and maybe a little bit of a costly proposition for engagement, but typically what we'll do is start with, for our clients, what questions do you feel like are not being answered? That you get from your city council members, or planning commission members— what do you want to know that is not in quantitative data? And then we can help gather the qualitative data. Then we'll prioritize the community engagement activities to gather those unanswered questions. And again, as Michael talked about earlier, the big idea here is to make sure that we're telling everybody's story equitably and that we're using those stories and the quantitative data analysis to inform meaningful action.

Tiffany Johnson: Thank you for your response, Heidi. As you suggest, surveys are a great tool to help HUD grantees and funding recipients learn more about the needs of the residents in their communities than if they solely relied on standard sources of data such as the census data. Local or survey data can also be more timely than other data sources, which can help communities make even better community-driven decisions.

Michael, I want to turn back to you for the next question. As someone who works with large and complicated data sets and often shares from your analysis with a broad audience, what tips can you offer our viewers on how to present data in a compelling and effective way to stakeholders, like community members, elected officials, or executive leaderships of PHAs? How do you tell a story with data in a way that draws people in and build support for their action?

Michael Akinwumi: Thank you for your question. One of the things I'd like the viewers to know about me is that I enjoy watching movies. I don't just watch them because I want to waste time, I watch them because I see a parallel between good movies that tell good stories and using data to tell stories. For example, when I watch movies, I pay close attention to the characters in the story— how they interact together, the plot, the setting, the conflict, and how the conflicts are solved. This is some learning that I transfer to using data to tell stories that call stakeholders into action. Like Heidi mentioned, the importance of qualitative data, or even other types of data— if we really want to tell the story of humans or individuals that are represented by the data, it's really important to pay attention to four recommendations which I'm going to mention.

Data storytelling requires narratives, it requires visuals, and it could also require using descriptive statistics or basic statistics. For example, I deal with complicated data sets that actually qualify as big data in terms of volume, variety, and the quality of the data. And what I'm trying to do in all those situations is use simple statistics with compelling visuals to actually reveal the stories behind those data.

So my first recommendation for viewers on tips if they want to use data to call stakeholders into action is to consider records or rules in for example any platform like Silvia or even Excel spreadsheet as representations of real life objects or humans. And that first recommendation is very important because if an intelligence analyst who is looking at the data just views them as static objects, maybe they miss out on telling the real story. So that is the first time. For

example, if you look at flat files, say CSV files, that is just four data points— income, credit score, zip code, and maybe social security number. The key step to effectively tell the stories from inside these data, even though it has just four variables, is to imagine different reasons why some individuals, say five individuals randomly selected from the data, different reasons why they have income and credit score values that are recorded in that file. At that stage of storytelling, I really use a complex visual. What I try to do is connect the data to the context of individuals.

The second point now is where I set the stage by discussing the problem that I want to solve with data. This actually comes through experience, because usually an analyst or a business intelligence analyst would just jump into describing or explaining the problem before connecting the data to stories. In my case, I try to delete the problem description until after I have made the connection to individuals that are represented. This is because the problem itself is usually a single story. That's why I use an appropriate chart or graph at this stage. In my experience, this is one of the things that even people that provide feedback after I use visuals, they actually really appreciate that step.

The third point that I'd like viewers to keep in mind is using visuals to stretch imagination of the audience. That's where the conflict setting where I was using the movie analogy comes in. There's a lot of research out there, some of them are opposing or contradicting, and even though they may be factual, so I use visuals to set the stage where my audience will actually see the conflicts. Then by stretching their imagination, in their minds they can start thinking about possible hypotheses and all that, even though I've done the analysis, I know the result I want to present to them, but I actually find that very engaging. If I really want to call the audience into action.

Now the fourth and last recommendation is to, without going into the specifics or the math of the statistics that I used to derive the solution or a resolution to the conflict which I presented in the earlier stage, what I do is I use visuals to present my results and also recommendations. I've seen presentations where presenters only show visuals and they expect the audience to derive narratives from those visuals. What I do is I use compelling narratives to guide my audience into lifting inside from the visual so the audience feels compelled to act or push back or even critique my findings, because at the end of the day I want to make sure I engage my audience. This is very important, I like to say that presenting visuals to the audience and simply expecting them to tell the narrative of each visual, is not effective storytelling with data. The habit of just presenting static images or even interactive images could become counterproductive as a diverse audience may leave with multiple interpretations of the same insight. Thank you.

Tiffany Johnson: Thank you so much, Michael. As you make clear, it's always important to keep the human element in mind as we use data to tell those compelling stories that we've talked about in this episode.

For my last question I want to turn back to Heidi. Goal setting is an important part of fair housing planning. From your experience working with communities on assessments of fair housing and analysis of impediments, what advice would you offer HUD grantees on one— using data to establish meaningful goals to affirmatively further fair housing— and two— tracking progress against those goals? Are those common challenges that you see across communities as they work on setting goals and measuring their progress?

Heidi Aggeler: That's a wonderful question to end on. Yes, this is a common challenge. I would say this is the most important thing that communities can do in fair housing planning, and also probably the hardest. So we've been talking throughout this episode on how to use data to identify fair housing barriers and housing challenges and disproportionate housing needs among resident groups. This question really asks how do you use that data then to set goals, and what are meaningful goals? I'm a huge fan of goals, I think they're really important in affecting change. They can also be hard to achieve sometimes. Setting realistic goals that are data-informed and data-driven are really important. I'll give you a couple examples of communities that I've seen that I think did a really good job of using data to set meaningful goals.

In one community in which we worked, one of the city council members paid a lot of attention to the resident survey that we had done and saw that many voucher holders said that they had experienced discrimination and that disproportionately affected persons of color. That led that councilmember to advocate for a source of income protection for that city that was later adopted by the state. Using that data, which were very robust, to help inform additional fair housing protection.

I've also seen, this was an add-on for a study we did for a community in California, in addition to surveying residents, we also surveyed property owners. We asked them what would incentivize them to be more open to taking who they perceived as hard to house individuals, hard to house renters, including voucher holders. They responded with a variety of recommendations, including making the regulatory process a little bit easier, as well as offering the type of incentives that would attract them to lowering those barriers to what they perceive as harder to house people. That's a really good example of using data to craft policy and achieving— you really get four steps forward, when you can enact policies that fast after you've done a fair housing study that's very linked to the barriers that were identified in that study.

In terms of tracking progress, a lot of the data indicators that are available. I'll use cost-burden for example, there's a lot of what we call in the data world exogenous factors that influence or not whether people are burdened. I might be cost-burdened because I expect my income to go up in the future so I might buy a house that's a little out of my reach, I have to stretch a little bit, but I know I'll be able to afford it in the future. That type of person we're less worried about when we think about setting meaningful goals around managing effective outcomes for their situation. When I look at cost-burden, there's a lot of noise in that data and I want to be sure that I'm managing to the right goal. If I were to say I'm going to reduce cost-burden in general, it's hard because actors like the example I just gave you, they're making a choice that's not

really in the public realm to address. But if I'm narrowing the gaps in cost-burden among different races or ethnicities or if I set a goal to narrow the gap in home ownership by making sure that I'm affirmatively marketing programs that can get typically under-represented populations into homeownership, that would be a reasonable goal. So setting goals around data, recognizing the weaknesses in the data, like the cost-burden example I just gave you, and then making sure you are responding to what you can actually do and how you can move that needle is really effective.

The last example I'll give is if you have a leader— I talked about one of the regions in which we worked who had a dedicated fair housing planner— if you have someone within a task force, someone you may be able to employ to arrange fair housing planning for a region, that person can keep you on track as a jurisdiction in terms of goal setting and help you understand where you might be falling short. And it's perfectly acceptable to be honest as a community if you haven't reached your goal and need to do more. That's a really powerful program to implement, having somebody there to keep you on track. As well as making sure, as I mentioned in the Richmond region, that you've got a variety of community leaders who understand what the needs are and the goals that you're working toward. If you think about the levers you have at your disposal to really affect change, there are a lot of people who can contribute to changing housing outcomes and reducing fair housing barriers. They may not know what their role is, or they may not know that they have the ability to do that. If you can get your city council, your planning commission, your committees who are representing disadvantaged populations to all be in sync, to all be on board to achieving those goals, you have a much better chance of achieving those positive fair housing outcomes than if people are going into disparate directions.

Tiffany Johnson: I appreciate that response, Heidi. It's so important for communities to not only establish meaningful goals, but to monitor those goals over time to ensure that they are moving the needle forward for all fair housing planning. Before we conclude, do either of you have any final thoughts that you'd like to share?

Michael Akinwumi: I can go first. Based on the comments and references to some of the earlier questions about using data to identify bias, discrimination, or even fixing segregation, it goes without saying that when it comes to designing effective programs like enforcement programs, education and housing programs and even compliance programs, data is required. One of the common sayings about data is that data is the new oil. But I would like to say that in the fair housing movement, data is actually the new frontier for fair housing. I already said the following statement earlier on, but I'll repeat it: data collected without use is like history that is not taught to citizens. And again, we know what becomes of a society that does not embrace its history. That shows there are some parallels between societies that actually fail to leverage the data that has been generated or even every second. If our collective objective is to live in a fair and equitable society, if our objective is to remove barriers to equitable economic and housing opportunities, then we must be willing to leverage every insight that is coming from the data that we have in housing. Thank you.

Heidi Aggeler: I would just add to that— I’m speaking mostly to our clients who are public sector cities, counties, and states— don’t be afraid of data. It’s easier to work with than you think, and there’s probably more of a story in there than you realize. Just taking that time to understand what that story might be. Also, I think people underestimate their ability to affect change by using good data, just as Michael talked about. Think about data as more of a storytelling exercise, or in Michael’s case, watching a movie and that simplifies the process, but it also makes it a lot more fun, because working with data is a lot of fun. Never underestimate the power of using good data to tell the right story.

Tiffany Johnson: This concludes today’s episode on the promise of data for fair housing planning. Thank you so much to both of our guests. I want to thank all of our viewers for tuning in today. I hope you enjoyed the conversation with Dr. Michael Akinwumi and Ms. Heidi Aggeler as much as I have. I’m hopeful you come away with greater awareness of issues related to data and fair housing and how that will feed into the critical work of all you do to end segregation and remove barriers to equitable inclusive communities. In the meantime, be sure to tune into our next episode of FHEO Table Talks Series. We’ll see you then.