

FTC Changing Consumer Demographics Workshop  
December 6, 2016  
Segment 1  
Transcript

SPEAKER 1: We are going to get started in just a few minutes. But if those of you in the room-- actually if we could get a few people to sit on the left. We're kind of imbalanced. It feels strange. Just another minute here.

PATTI POSS: Good morning. My name is Patti Poss. I'm an attorney with the Federal Trade Commission Bureau of Consumer Protection, and I'm so excited to welcome you all here today to our workshop on the changing consumer demographics. We are here to learn and get a deeper understanding of the demographics of this country, and we're looking forward to discussing what it might mean for our consumer protection mission, especially our fraud mission.

And we're really excited to speak with those of you who work in this area and think about how we can work together to strategize for the future to protect all consumers. So thanks so much for joining us. I see several people in the room who actually helped us participate in some of the research calls. And of course we have our panelists and presenters today and a lot of staff who have also worked with us on this topic.

I want to say a special welcome to those of you on the webcast. We have a lot of people who are unable to come to Washington because of budgets and tight resources to be able to fly here. So good morning and thank you for joining us by webcast. And we appreciate you tuning in, especially those on the West Coast where it's a little early.

Before we get started, I want to tell you a few administrative details. So please silence any mobile devices. If you need to use them during the session and they're going to make noise, if you go out these back doors, the cell coverage is better along the back. Please be aware that if you leave Constitution Center for any reason during the workshop you're going to have to come back through security. So if you leave for lunch, it will take a little bit of time to get back in so plan accordingly.

We have coffee and tea against the wall over there. Lunch is on your own. But we have a cafeteria in the building that you don't have to go through security. It's just out these doors in there. If you really want to get outside, you can go out and cross the street. On the other side of the HUD building there is a food court over there. Our cafeteria is open from one to two. Restrooms are located just behind me. The men's and women's in the hall out there.

And most of you received a lanyard. If you're a visitor today please return those at the end of the day. We recycle those. So if an emergency occurs that requires you to leave Constitution Center but stay in the building, there'll be something on the public address system telling you what to do. If an emergency occurs that requires us to evacuate the building, an alarm will sound and everyone should leave and we go out, we meet actually on the other side of E Street. You go out the 7th Street exit. There'll be people directing you.

If you notice any suspicious activity, please alert the building security. There someone's sitting just at the entrance here. Please be advised that the event may be photographed. It will be webcast and recorded, and by participating in this event you are agreeing that your image and anything that you say or submit may be posted on [ftc.gov](http://ftc.gov) or on the Commission's publicly available social media sites.

We will take questions. We'll take them on cards. And we have a few of those we can distribute. If you want to take questions and just give them to one of us staff members and we'll try to get it up to the panelist and see if we can get it in. If you are participating online, you can submit the question by email. Actually if you're in the room you can submit it by email also. And that email address is [demographicsworkshop@ftc.gov](mailto:demographicsworkshop@ftc.gov). We also have a Twitter handle. We are tweeting today. And it's hashtag consumer dem FTC.

And I would at this point like to introduce our Chairwoman of the Federal Trade Commission, Edith Ramirez. Chairwoman Ramirez was sworn in as the commissioner in 2010. And she became our chairwoman in 2013. She has been a strong supporter of the FTC's Fraud Enforcement and Outreach Programs, particularly as we work to protect consumers from diverse communities throughout the country. She's led our effort to ensure that the agency protects all consumers by launching the Every Community Initiative in 2014. And for those of us who work on that initiative we're very proud of it and we're very thankful for her for initiating that. So with that I introduce to you our Chairwoman Commissioner Ramirez.

[APPLAUSE]

EDITH RAMIREZ: Good morning, everyone and thank you, Patti. For its entire history, the Federal Trade Commission has had to adapt to changing business practices and changing markets. And as the nation's Consumer Protection Agency, we've also had to understand the consumers that we serve and the way consumers interact with companies and with those markets. So deepening our understanding of consumers has been a key aim of our Every Community Initiative.

Launched in 2014, this initiative recognizes that fraud affects certain groups in distinct ways and that our work to protect consumers must be guided by a comprehensive strategy that reaches all of the communities that we seek to protect. And from its inception, this effort has focused on research and stakeholder engagement to enhance our law enforcement, policy work, and outreach in communities across the country. But when we refer to every community, what do we mean?

As we're going to hear in greater detail today from leading national experts, the population of our country is changing in profound ways as Americans become more diverse and increasingly older. And today's forum will explore what these demographic shifts mean for the FTC's consumer protection work. How will marketers responding to these changing demographics? And how will the types of fraud perpetrated on consumers change? What can the FTC other law enforcement agencies and stakeholders do so that we're effective not only today, but they were also prepared to protect consumers in the next 10 to 15 years.

These are the questions that we're going to be examining in detail throughout the day. To begin the conversation I'd like to briefly address some of the demographic changes that are taking place. And I'll start with the nation's increasing diversity. According to the US Census Bureau, by 2044 more than half of all Americans are expected to belong to a minority group. And the number of three groups in particular are rising quickly.

The multi-racial population is projected to be the fastest growing over the next 45 years, with experts estimating that it will triple in size. The Asian population is the second fastest growing group, with estimates projecting a 128% increase. And Latinos are the third fastest growing, with an estimated increase in population of 115%. As our population has grown more diverse, the FTC has been examining how fraud in its many forms affects different segments of the population.

We've also observed significant differences in the reporting of fraud among communities. For example, we've determined that all those certain types of fraud disproportionately hit African Americans and Latinos, fraud is also significantly under-reported in these communities. Specifically, our most recent FTC fraud survey showed that during 2011, 17% of African Americans and 13% of Latinos were victims of fraud, compared to 9% of whites. And two types of fraud have stood out for their disproportionate effects.

First, African Americans were more than three times as likely, and Latinos 2.5 times as likely, to have experienced debt-related fraud as whites. African Americans were also 2.7 times as likely to have been a victim of income-related fraud. And Latinos experienced income-related fraud at a rate that was almost 50% higher than the rate for whites. These findings are particularly troubling when contrasted with recent analysis of our Consumer Sentinel Complaint Database showing that we're not hearing from African American and Latino communities at the same rate as others.

Every week the FTC receives more than 30,000 consumer complaints about ID theft, telemarketing abuses, debt collection practices, all types of fraud and other potentially unlawful activity in the marketplace. And through Sentinel, we make these complaints available to state, local, and international law enforcement partners. The complaints are self-reported and unverified, but they're enormously helpful to us and we use them extensively in our enforcement work and our strategic planning.

But as you'll hear in more detail later today, we found that communities with large concentrations of either African American or Latino consumers filed FTC complaints at rates lower than communities with larger concentrations of white consumers. In fact, in communities heavily populated with Latinos the FTC received about 40% fewer complaints than in white communities. Consumer Sentinel data also shows that several metropolitan areas with large Latino populations reported the fewest complaints per capita of the large metropolitan areas in the US.

And this includes, for example, the Fresno, California area. In light of these findings, we plan to convene an event in Fresno to learn more about the issues that are facing consumers in that region.

In a further study regarding one particular FTC law enforcement action, there were stark discrepancies in both the scope of harm and the reporting. We analyzed victim data from our recent case against Ideal Financial Solutions, in which the defendant had fraudulently placed unauthorized debits on the bank accounts of consumers who had applied for payday loans. After matching the zip codes from the victim addresses with census data, we saw what appeared to be a vastly disproportionate impact on the African American community. In that case, consumers from areas that were heavily African American were more than four times more likely to be in the victim pool than those from predominantly white areas.

But when we looked at consumer Sentinel complaints regarding Ideal Financial Solutions, we found that communities with heavy concentrations of African Americans complained about 45% less often than whites. In other words, even though consumers in areas with high concentrations of African Americans were victimized at a much higher rate than other communities, they did not complain anywhere near their victimization rate.

Now we've always had a sense that there was underreporting, but the numbers are quite stark. And these wide gaps, as well as how certain scams disproportionately impact communities, are deeply troubling. And we have to develop strategies to ensure that the FTC and other government agencies hear from minority communities so that we can target our law enforcement and outreach efforts more effectively.

The other significant demographic shift that we're witnessing is the increasing age of the American population as the baby boom generation grows older. According to the US Census Bureau, in less than 15 years one in five Americans will be 65 or older. Baby boomers began turning 65 in 2011 and by 2030 they will all be 65 and older. This is a huge number of adults that are moving into their retirement years. And today we're going to hear that retirement may look very different for this group than it looks today.

As we've explored the implications of an aging population, we've learned more about the types of fraud they experience and how to craft more effective messages to reach the elderly community. For example, our research and law enforcement efforts suggest that, despite what most people think older Americans are not necessarily defrauded at higher rates than younger consumers. Instead, our law enforcement actions typically involve adult consumers from all age groups. But certain types of scams are more likely to impact older Americans.

For instance, the FTC fraud survey indicated higher prevalence of fraudulent prize promotions among older adults. And as part of the Every Community Initiative, we've paid particular attention to the characteristics of the consumers affected in our cases. In the past two years, the FTC has brought 16 actions that appear to have disproportionately impacted older adults.

The types of schemes vary. Some of them involved investment opportunity fraud, sweepstakes scams, technical support scams, and robocalls pitching interest rate reduction schemes and medical alert systems. Others concerned unsubstantiated advertising in the sale of brain training programs and other products aiming their advertising at older adults. Identifying which scams may target or disproportionately impact older adults can help us not only to bring law

enforcement actions to protect this population from financial losses, but also to develop more effective consumer protection education messaging.

We've already started adapting our outreach based on the research about how older Americans respond to education campaigns. Our Pass It On Consumer Education Campaign, an innovative outreach effort that we've been using to reach older adults is an example. We developed it in conjunction with communications and other experts who conducted qualitative and quantitative research with thousands of people in the target audience and those who work with them. As a result of this research, we learned not to presume that all older adults are frail or vulnerable because of age. And in fact, the research showed that treating them that way is likely to backfire and dissuade the consumer from listening to prevention messages.

We also learned that outreach efforts should aim, not to alarm older adults with descriptions of the possible consequences of fraud, as that might also lead them to reject our messages. Rather, making older adults helpers in the fight against fraud creates a powerful incentive to learn about fraud and help protect others in their lives. Suggesting that they pass on our education materials has substantially increased interest and engagement with our messages. So for older consumers of today, as well as the next generation of older adults like me, we'll need to continue with this type of respectful and empowering approaches.

Now although the FTC has been thinking of many of these issues for some time, it's clear that there's a lot more work to be done. To help us navigate these issues we've brought together demographers, marketers, consumer advocates, and government representatives to examine what these changes will mean in how we protect consumers. And I hope that this conversation will spur public debate about the issues that we discuss today. And that it will challenge us all to continue innovating as we seek to keep pace with a dramatically changing demographic landscape.

And just to close, I want to give special thanks to the panelists that are joining us today and thank them for being here to share their expertise. And I'd also like to thank the FTC staff who organized today's event and in particular, I want to thank Patti Poss, Rosario Mendez, and Monica Vaca. So thank you again for being here and I look forward to what will be a very illuminating discussion. Thank you.

[APPLAUSE]

MONICA VACA: Good morning, everyone. Thank you so much for joining us today. My name is Monica Vaca. I'm the Acting Associate Director of the Division of Consumer Response and Operations here at the FTC. And I'm really just so delighted to have these extremely illustrious guests here today, these demographers who are going to share a lot of their experience with us. So before we launch into a day of exploring all of the ideas, the strategies, and the policy proposals, we want to begin by hearing from these researchers.

We want to begin with a set of facts and a set of research. And that's what these demographers are here to do. They're going to tell us what's hanging around with the American public today. They're going to tell us how it's changing. So we're going to start with Dr. Jennifer Ortman. She

is the Chief of Population Projections Office of the US Census Bureau and she will give us the big picture of how consumer demographics are changing and help us to understand who are the consumers of the future.

Next we have Jens Manuel Krogstad, who's joining us from the Pew Research Center. Now I know your programs say Mark Lopez, but we have a last minute substitution and we are so fortunate that Gen can join us today. He's a writer and editor who focuses on immigration and demographics trends. And he's a regular contributor to the Center's Fact Tank blog. Mr. Krogstad will describe the changes in immigration patterns that we've experienced and that we're projected to experience.

And finally, we'll hear from Dr. Rolf Pendell who is the co-director of the Metropolitan Housing and Communities Policy Center of the Urban Institute. Dr. Pendell will discuss the Urban Institute's Mapping America's Future project, which is a platform for exploring the implications of future demographic changes at the local level. So our speakers will present first. And then we're going to hopefully have some time for some questions and answers.

And throughout, the question at the back of our minds is what does all of this mean for consumer protection? What should we all be thinking about? And how can we start forming ideas to address some of these changes? So Dr. Ortman, will you join us please?

JENNIFER ORTMAN: Good morning. Thank you so much for having me. I'm going to get us started by talking about the changing demographics of the US population. And here you'll see some of the press clippings from our most recent release, as I don't think will be a surprise to this audience, there's a great deal of interest in what the future might hold for our population, what's coming, what changes can we expect to see? So today I'm going to start off I'll give you a brief background about our national projections, share some of the results with you, and conclude with information on how you can access these data yourself for work that you might be doing.

So the Census Bureau produces national projections on a semi-regular basis. This includes full demographic detail of age, sex, race, Hispanic origin. And starting with our 2014 series, nativity, so native born and foreign born. For the past several series, we've been projecting out for about a 50 year period. State projections are something that we have produced much less frequently. And it's actually been almost two decades now since we produced a full series by demographic details. So the strength from the Census Bureau is what we can tell you about the nation.

We do provide links to individual states that do their own projections, which can be a valuable resource. And those entrusted in state level data, the University of Virginia actually did a full series for all states. And I think Rolf is going to talk about some of the work that Urban's been doing so there are resources out there. And I would suggest you look at those, not what Census has up on our website.

So population projections have a variety of uses. In addition to the general public trust, our projections are used by other federal agencies such as the National Institute on Aging, the Bureau of Labor Statistics, and the National Cancer Institute. They are also used for resource planning

and for academic research. Having some idea about what the future might hold is very valuable when you're trying to make a plan for something to come in the future.

This is my disclaimer slide. So the Census Bureau produces both projections and estimates. There are some distinct differences between the two measures. Estimates are for the past and present. Whereas projections are based upon assumptions about future demographic trends. So they are very much about the future. When both an estimate and a projection are available for the same date, we do recommend you use the actual estimate. It's best to go with what is known when it's available.

So our projections are based on assumptions about future rates of fertility and mortality and also what future levels of international migration might be. To project the future, we begin with the starting population. We age that population forward to the future date. So every year, if you're still alive you've given one year of age. And then we add in the number of projected births and immigrants, people migrating into the United States, and then we subtract out the projected number of deaths and number of people leaving or emigrating from the United States.

Our assumptions about fertility, mortality, and migration rates are projected separately for each of these birth cohorts and they're based on historical trends. Our most recent series of projections are the 2014 series. And they are the second series that we produced based on the 2010 census. They are projections of the population by age, sex, race, Hispanic origin, and nativity. And they go from 2014 up to 2060. These are the first series or projections where we made separate assumptions about the fertility rates of native and foreign born women.

So the results. So here you can see the total US population is projected to increase by about 98 million between 2014 and 2060, increasing from just under 319 million in 2014 to just under 417 million in 2060. Breaking the population down by nativity illustrates projected differences in the size of the native population relative to the foreign born population. In this figure the native born is represented by blue and the foreign born by red. The native population was around 276 million and is expected to increase by 62 million or 22% between 2014 and 2060, reaching 339 million in 2060.

At the same time the foreign born population is projected to grow from 42 million to 78 million. This is an increase of 36 million people or 85% for the foreign born population. The foreign born, because its rate of growth is projected to outpace that of natives, is expected to take account for an increasing share of the total population. And that's shown here by the yellow line. And it's projected to reach 19% in 2060, up from 13% in 2014

So when we break down our projections by the components used to project the US population, we see the total population change of 98.1 million between 2014 and 20 is the result of adding 197 million burst to the population, subtracting out 163 million deaths over that time period and adding 64.1 million people resulting from the net effect of migration into and out of the United States. Because these projections are the first to project fertility separately for native and foreign born women, we've separated the column representing births into two sections. Here you can see that about 80% of the births projected for the period from 2014 to 2060 are projected to be births to native women, while the remaining 20% are births projected to occur to foreign born women.

So projections, as the chairwoman just mentioned of the older population, are of particular interest.

The aging of the population is very much one of the biggest stories, the most central stories, we see in our projections. Between 2014 and 2060, the nation's 65 and over population is projected to more than double, increasing from 46 million in 2014 to 98 million in 2060. By 2030 one in five Americans are projected to be 65 and over. That's just over 20% of our population that will be in the older ages.

The growth in the older population will be driven by the aging of the baby boomers. They started turning 65 in 2011 and by 2030 all of the baby boomers will be 65 and over. The proportion of our population of 65 and over will remain at just above 20% through 2060.

So here start by just looking at the blue bars and we'll get to the red bars in a moment. So the blue bars show the total population, the total US population, which grew by 10% last decade. The population is projected to grow more slowly in the future. You can see those blue bars getting a little bit smaller over time. And we're projecting that by 2050 to 2060, we'll see just a 5% increase in the total population of the US. So slower growth over time.

In contrast now look at the red bars. That's for the older population. They grew by 15% last decade and we're projecting an increase of almost 40% this decade followed by another increase of 31% between 2020 and 2030. So this just shows you in another way that growth of the older population is a much more dramatic, much faster paced growth than what we're seeing for the overall total population size.

The older population is projected to be the fastest growing age group between now and 2030. They will be growing faster than children or adults under the age of 65. Now once the baby boomers of all reached age 65, their growth will slow. By 2040s, we're projecting growth rate for the older population to drop back down to a rate similar to the growth rate for the total population.

And growth is projected to increase for the older ages in the last decade of this projection, that 2050 to 2060 period. And this is representing the aging of the so-called baby boom echo. These are the children of the baby boomers. , So by that point in the projections they're going to start entering that oldest age group.

Not only is the US population getting older but the composition of our older population is also projected to shift. Between 2014 and 2030, most of our older population is in the 65 to 84 age group. After 2030, we see a jump in the proportion of the population that's 85 and over. And by 2060, one in five older Americans are projected to be 85 and over. So it's not just a story of aging of the US population, it's an aging of the older population as well.

And if you can't tell, I really like the aging story. So here's another way that we'd like to look at how aging is influencing our population. So here's a thing we called dependency ratios. They offer another way to examine the changing age structure of the population, looking at both the younger and older populations, the so-called dependent populations, those under 18 and those 65

and over. And the chairwoman mentioned retirement age, certainly that 65 and over you see some people using different age cutoffs to create these ratios as we consider what retirement age might be in the future when we look at those dependent populations relative to the size of those and the working ages of 18 to 64.

So the higher the value of the ratio, the higher that line goes up, the greater the potential burden of these so-called dependent age groups on the population in those working ages. And the old age dependency ratio here, which is the red line, is projected to increase. Again, as you just saw we see an increase in the share of the population in the US in the older ages. And the older age dependency ratio is actually projected to surpass the youth dependency ratio in 2033. This is a major shift in our population.

As for much of the last century, we saw dependency driven by the youth dependency ratio. So if you think of the baby boom, when the baby boom generation was being born we had a very high youth dependency ratio. Now that's shifting over and we're seeing dependency at the older ages more so than at the younger ages. And the youth dependency ratio is actually projected to go down slightly over the time series we have here.

Now it's always been the case that there have been more females than males in our older population. Female life expectancy has long exceeded male life expectancy. And this means women outnumber men in the older age groups. The gap in the number of women and men is expected to narrow due to a more rapid increase in life expectancy for men compared to the projected increase for women over the next several decades.

So these are the assumptions we're making that go into these projections. So the decline in the female share is most dramatic among the oldest old. Among those 85 and over, 61% are projected to be female in 2060. This is down 5 percentage points from 66% in 2014.

So aging is one of the important and powerful stories to emerge from our projections. But another striking finding is the increased racial and ethnic diversity that is projected for the US population in the coming years. For the purpose of this presentation, I've combined all groups other than non-Hispanic white alone and referred to them here as the minority population. In 2014, the nation is projected to be 38% minority. And sometime between 2040 and 2050, we project that the United States will become a plurality of racial and ethnic groups. This is a point when no race or ethnic group will represent 50% or more of the total population.

So that's a bit of a shift from the world that we live in today and the way we think of it. While the older population and again, the red bars here are the older population, it's not currently as racially and ethnically diverse as our younger population, but we're also projecting a growth and increase in diversity for the older ages as well. They'll see a substantial increase in their racial and ethnic diversity, following a trend of the total population as our diverse younger population ages into this life stage. So the population 65 and over is projected to be 45% minority in 2060. That's up from 22% in 2014.

So it's important not to just think of the US in a vacuum but it's important to be aware of how the US population, how our changes in our demographic characteristics relate to what's going on in

other countries in the world. So population trend aging is not a trend that's just being experienced in the United States. So here I am showing you projections of not just the US, but population selected countries from around the world, this is from the Census Bureau's international database.

The bars represents a percent of each country's total population that's 65 and over. The results for 2014 are on the left and the results for 2050 are on the right. I'm using 2050 here because right now our international database only goes out to 2050. So between 2014 and 2050 the percentage of the world's population that's in the older ages is projected to double, around 8% in 2014 up to 17% by 2050. Despite the increase in the share in the US population that's in the older ages, our nation is projected to remain one of the youngest developed countries in the world.

By 2050 Japan is projected to have 40% of its population in the older ages. Germany, Italy, Spain, and Poland are projected to see nearly one third of their populations in the older ages. In contrast, it's just over 20% in the United States. And we also see, looking toward the bottom, that compared to the largest developing countries, China, Indonesia, and India, the US currently has a larger share in the older ages in these countries, but in 2050 China is actually projected to have a slightly larger share of its population in the older ages than will the United States. And Indonesia has just a slightly smaller proportion of its population in the older ages as compared to the United States. So aging is not something we're experiencing just in the United States.

OK so I will quickly summarize. Hopefully these are the points that you picked up on as I was talking. So to start, the US population is projected to continue to grow. We're going to see an increase of almost 100 million between 2014 and 2060. But the rate of growth is slower this century than what we've seen in past centuries.

And of course aging is a major theme by 2060 nearly one in five, 20% or our total-- or sorry. I skipped ahead one side. By 2060, we're seeing growth in the foreign born, one in five of nation's total population projected to be foreign born. Also now I can catch up. The older population also, about one in five Americans will be 65 and over. And again driven by the aging of the baby boomers into those age groups. Despite the increase of the share of the US population that's in the older ages, the nation is projected to remain one the youngest of developed countries in the world.

So to access our data, that's a screenshot of our website. You can just go to [census.gov](http://census.gov) and type in projections into the search box or that is the URL if you want to go directly to our projections page. And that concludes my remarks. So I'll put the screen with my contact information up for the moment while we transition. Thank you.

[APPLAUSE]

MONICA VACA: Thank you so much if I could ask Mr. Krogstad to join us.

JENS MANUEL KROGSTAD: All right well it's great to be here and again. My name is Jens Manuel Krogstad, not Mark Hugo Lopez. And he sends his regrets. Again, he wished he could be

here but something came up. And I'm going to talk about big trends that are reshaping the US, big demographic trends that are shaping US. Communities.

And before we start, I want to talk a little bit about the sources. So here this first slide, you'll see these are survey results from the Pew Research Center. But I believe everything else is from the US Census Bureau. So it's Pew Research Center analysis of US Census Bureau data.

But to start off, I think it's important to keep in mind, all of these changes, these demographic changes I'm going to be talking about, when we asked Americans what they think of them, they're generally positive. 57% said an increasing number of people of many different races ethnic groups and nationalities in the US make the US a better place. 34% said it doesn't make a difference. Only 8% had a negative view, they said it made the US a worse place.

So with that said we'll start off with the u.s. Hispanic community. Some of the big trends among US Hispanics, we're seeing strong US population growth. But that growth has cooled in the last decade and the US Latino population, which had been spreading across the US, not just concentrated in the Southwest has also begun to slow. US births of Hispanic parents now drive Hispanic population growth, not immigration.

So for a long time through the 1990s and early 2000s, I believe immigration drove Hispanic population growth. But for the last 10, 15 years, US births have been driving Hispanic population growth. Foreign born share of Hispanics is in decline. And so as a consequence of that, immigrants make up a smaller share of Hispanics. And a lot of these trends started to accelerate around 2008 around the time of the Great Recession.

And one important point when you're thinking about the US Latino population is just how young it is. Half of US born Latinos are under the age of 19. The median age is 19 of US born Latinos. And to put that in perspective, the median age of the white population is more than 40. And the national average, I believe is in the early 30s. So US born Latinos on average are more than a decade younger than the US average.

And a growing share of Latinos live in English only households. So as immigration has become less of a part of the US population growth, we've seen this corresponding change in language. So more and more Latinos are speaking English. But it's also important to note that many of them are still speaking Spanish. So we have a significant portion of the US Latino population that remains bilingual.

Another important trend is the educational attainment of young Latinos. So an increasing number, a record number of young Latinos are attending college and that's driven by a dropping high school dropout rate and an increasing college enrollment rate. And those are all good news for Latinos, but the one part that isn't as good news is that the college completion rate for Latinos still lags other racial and ethnic groups.

And so that said here, you can see the long term trend of the US Hispanic population, which by virtue of its growth has reached new highs, in 2015 nearly 57 million Latinos were living in the US in 2015. And you can see how steep that line increased in the '90s and 2000s and it has

started to level off since 2010. And here you can see just how sharply the Hispanic population growth has slowed since 2007.

This shows average annual growth rate. And so from 2000 to 2007, the US Hispanic population on average grew by 4.4% every year. But from 2007 to 2014, that rate dropped to 2.8%. And here you can see how young the US Latino population is by looking at the population through generational lens. So among the US born, nearly half of Latinos are younger than 18. And you can see how drastically different that is from the foreign born population, where only 6% are younger than 18. And you can see, if you throw in millennial adults, more than three in four US born Latinos are either millennial adults or younger. And millennial adults are ages 18 to 22.

On language about 3/4 of Hispanic millennials are proficient in English. And you can see the gray box on the lower right shows that those bottom two bars represent people who speak English very well or speak only English at home. And you can see how large those two bars are off to the left among ages five to 17 where you have nearly nine in 10 Latinos who speak English very well or speak only English at home. And those bars shrink in size as the generations get older. And among the silent or greatest generation, that's those aged 16 and older, you have 27% who speak English very well and 16% speak only English at home.

Another fast growing group in the United States are Asian Americans. And Asian Americans are diverse in their origins and in their languages. That's an important point to keep in mind. And the Asian community is the country's fastest growing group. They are significantly smaller than say, black Americans and the Hispanic community. But the Asian community is the fastest growing group. Among Asian American adults, nearly 3/4 are immigrants. And among new immigrants coming to the US Asians actually are a larger number than Hispanic immigrants.

Arrival of new immigrants from Asia is driving the population growth, not births. So this is a reverse from the Hispanic population, where among Hispanics, US births are driving growth. But among Asians it's immigration still that is driving growth.

Asian Americans have the highest intermarriage rate. And Hispanics are nearly as high as Asian Americans, but Asian Americans still have the highest intermarriage rate. And here you can see the diversity of US Asian groups. And the bars represent the population in thousands. So Chinese are a 4.5 million population, and they make up nearly 24% of Asians. And the next three biggest groups are Filipinos at 3.6 million, Indians at 3.5 million, and Vietnamese at 1.9 million. But you can see there's a lot of origin groups from Southeast Asia. And they all make up small but significant parts of the Asian population.

And a century of change for these three groups, this chart shows how the Asian population, the Asian American population has changed over the past century. And you see the percent of the Asian American population that is Japanese today is 8% compared to 61% in 1920. For Filipinos, it has gone from 3% in 1920 to 19% in 2013. And the Chinese share has actually declined a bit from 34% in 1920 to 24% in 2013.

This chart shows the steep, fast growth of the US Asian population it has grown by 65% since 2000. And you can see in 2014 the Asian American population was nearly 20 million. And in

2000 it was only 6.9 million. I believe that's 2000. So this population has been growing quickly very recently.

Here you can see that more than one million more Asian immigrants are in the U.S. than Asian newborns from 2000 to 2013. So on the left you see this data among Asians. This is the population change 3.1%, the US birth population increased by 3.1%. No, I'm sorry increased by 3.1 million among Asians from 2000 to 2013. And for immigration the Asian immigrant population increased by 4.4 million from 2000 to 2013. And you can see those trends are reversed among Hispanics. US births for Hispanics increased by 12.6 million during this time, and the Hispanic immigrant population increased by 7.1 million.

And here's the intermarriage rates by race and ethnicity. You can see more than 28% of newlyweds who are Asian married someone else of a different race or ethnicity. Among Hispanics that number is similar, at 26%. And both of those are significantly higher than the black intermarriage rate, which is 17% and the white intermarriage rate at 9.4%.

And looking at immigrants as a whole, not just by race or ethnicity, some highlights on the US immigration population, it's growing and it's growing in number and in share, as Jennifer talked about. And as I had previously mentioned, immigration from Asia is now the biggest center of immigrants. It's surpassed Latin America, which for a long time was number one. It's important to note that most immigrants in the US are here legally, and that the US unauthorized immigrant population has stabilized since the Great Recession. And according to our estimates, it's at about 11.1 million.

Immigrants from Asia in general have a higher educational attainment than immigrants from Mexico or Central America. So there are some key changes by education among immigrants. And here you can see the projections of the US immigrant population and that's on the shaded part of the right part of the chart. The US immigrant population today is estimated to be at 45 million and it's projected to grow to 78 million by 2065.

And we highlighted the Immigration and Nationality Act in 1965, which was passed by Congress, because you can see that's when the immigrant population really started to grow very quickly. And here you can see the same projections, but represented by the immigrant share of the US population. So it's projected to hit a record high in 2065 of 17.7%. Today it's at 13.9%, and back in 1965 when Congress passed the Immigration and Nationality Act the immigrant population was at 4.8%.

And here you can see where immigrants live in the United States. The darker shades represent a higher percentage, a higher share of the population and this is by county. And so you can see immigrant populations are concentrated in the Southwest and in large cities. And the darkest green is where immigrants make up 30% or more of the population.

This slide shows the percent of immigrants arriving in the US in each year who are Hispanic and Asian. Among new immigrant arrivals Asians outnumber Hispanics. This point I have made previously, but here you can see in detail how much this has changed just over the last 15 years. In 2001, more than 50% of immigrant arrivals were Hispanic. And among Asians it was a little

bit over 20%. Now those trends have shifted in the last five years, and today Asians make up a greater share of new immigrant arrivals than Hispanics.

And here you get a historical perspective of the immigrant waves in the US. Since 1965, since Congress passed its immigration legislation most immigrants have been from Latin America and Asia. And you can see that, 51% from 1965 to 2015, the modern wave of immigration, 51% are from Latin America and 25% are from South and East Asia.

Now that's a dramatic difference from earlier waves of immigration, the Northern European wave from 1840 to 1889 and the Southern and Eastern European way from 1890 to 1910, Europe was by far the majority of all immigrants. And here you can see, this is a state by state look of the largest immigrant groups in each state. You can see my home state of Minnesota is Sweden, so good Scandinavian heritage there.

But it's really interesting to see, Mexico was the largest immigrant origin group in the Southwest, but only in the Southwest really. And Germany was the largest group in wide swaths of the plains states in the Midwest and even in the Southeast. And by 2013, you can see just how large of an impact Mexican immigration made just in the past 30, 40 years. Mexico is the largest immigrant origin group in more than thirty states.

And here you can see the US immigrant population by legal status. So an estimated 25.5% of the US foreign born population are unauthorized immigrants, so about one in four. That means the lawful immigrant population in the United States is three in four of all immigrants. And among the lawful population, you have permanent residents who make up 27% of the immigrant population, and naturalized citizens who make up nearly 44% of all immigrants. The US unauthorized immigrant population has been stable since 2009. We estimate that it's currently at 11.1 million, and it had peaked at 12.2 million before the Great Recession.

Education. There's some sharp differences by education among recent immigrants when you look at it by race and ethnicity. 35% of Asian immigrants have less than a college education, and 65% have a college education or more. And compared to Hispanics, it's reversed. It's 84% of Hispanic immigrants have less than a college education. Only 16% have a college education or more.

And that's the end of my presentation. If you have any questions, feel free to respond to Mark. He's happy to get e-mails, even though he didn't present today. Thank you very much.

[APPLAUSE]

MONICA VACA: Thank you so much, Jens. I could ask Dr. Pendall to come to the podium.

ROLF PENDALL: Thank you. Thank you so much everyone for being here and thanks to the group of leaders at the FTC who decided this is an important topic. I so much agree with that. And I also think that the idea of looking into the windshield to get an idea of the world we're entering, as opposed to just the rear view mirror to see the world we just left behind us, is something that we could all use a lot more of across federal agencies and society.

Today I'm going to do this talk in two main parts. The first is telling you about our methods, because as legal experts, social scientists, demographers, and others, the folks at the FTC need to know, how do you know what you know? So that's a starting point for me, because we're looking into the future, and obviously there's assumptions that are built into that. And then I'll talk to you about some bottom line findings, about what the nation might look like within the United States region by region in 2030 if past trends continue. I'll just skip reciting the punch lines because you can see them here.

So the first question is how our modeling platform works. It's actually called Mapping America's Futures Within Us, not just future, to underscore the idea that there are multiple futures that you can imagine. Because there are a lot of different assumptions that you can make about how the population of the United States is going to change and we just have some of them.

I'm really delighted to be following both Jennifer and Jens, and Jennifer in particular talked about a projection series and did a lot of the preliminaries here for me that allow me to say, well, we just take what they do and then we see well you know if the trends are different or the same, you know, how would that distribute across the United States? So here's where we start. Oh, and also if you're interested in all of this, if you just Google, Mapping America's Futures Urban Institute, we make lots of maps and charts and data you can download and play with so that you can really get a closer up idea of what's going on. That's an important feature of the project.

And so we take those national changes and then we see how counties and states differ from national rates in their fertility rates and their birth rates. And then we look at migration by age group and race group over a series of decades, focusing mostly on the 2000 to 2010 period, and we use those variations from the national rates to distribute the population going forward. So we're not doing it individually for each county. We're using the variation in the counties to get leverage on the question, how might the local population change if the national population changes as the Census Bureau says?

And you can see that there's a great deal of variation across the United States in these three main drivers of population change, the mortality rates represented by life expectancy at birth in 2005 on the left, and then the birth rates and migration rates represented by two figures on the right. And then accounting for these, we distribute these projections, the Census Bureau's projections, to all the counties. There's more than 3,000 counties in the United States.

But rather than presenting the data county by county, we aggregate them to 740 commuting zones, which are co-extensive with the territory of the United States. And we get the map that looks like the one on the left. Now the images that I've shown you here, and will show you in the next slide or two come from their earliest advantage of Mapping America's Futures, which uses the Census Bureau's 2012 projections.

The Bureau did a new projections release in 2014. And the maps show you later we'll be drawing on that series. We also made a few changes in our methods. So it's still online is the older data. And we'll have a new release of mapping America's future in 2017. But I still invite you to go ahead and play with this if you'd like to, because the magnitudes may be different, but the general patterns will be the same.

So rather than have one series as I said, we have different assumptions about births, it's maybe hard to see from the back, but birth, death, and migration are all on here. And if you take three times three times three, low, average, high, you get 27 different possible combinations of birth rate, death rate, and migration rate, that give you different patterns across the United States like this. So if you assume on the left, low birth, high death, and low migration, you get a map that looks like the one-- I think that's-- no in low migration you get a map that looks like the one on the left.

If you assume high rates of birth, low rates of death, and high rates of migration, you get them out it looks like the one on the right. And so you know rather than focus on these though, I would point you once again to the website and encourage you to explore the impact. And then you can drill down into individual commuting zones across the United States and see what it might mean for places that you know.

All the data are also freely downloadable this is at the bottom of the web page where all the maps are living. And so, if you're real data hungry, you can get all of these data, all 27 scenarios for yourself just by downloading. So just Google Mapping America's Futures and go and play yourself. I hope this is just a little taste of what you can find there.

So let me tell you about some of the bottom line of the latest update of Mapping America's Futures and it's actually the diversity of diversity within the United States. You can see, as on the previous map that we're expecting a pretty substantial variation in the overall rates of population change across the US. The Great Plains, Mississippi Delta, Appalachia, Northern Maine, and other areas look like they're going to be declining substantially in population.

But other parts of the United States, Las Vegas, San Antonio, Houston, Orlando, North Carolina metros look like they're going to be growing a lot faster. So these are the rates of change. And of course it tends to give you a pronounced picture, because there's small numbers behind some of these big changes. If you look at the absolute change, the change in the number of people, you see a pretty different story.

There's still quite a lot of new people coming to Houston and Dallas and Las Vegas, but there's also a whole lot more people that we would expect to come under this scenario to the DC area, to Los Angeles, and to other Florida metros as well and a substantial decline in people in the Pittsburgh and Detroit metropolitan areas, again, based on the 2000 to 2010 trends. Those may change somewhat in this decade. But generally it's one picture.

Now, thinking about the impacts of aging and diversity and how those impacts might differ across the United States, seniors are growing everywhere, less so perhaps in some of the states where there's already a large senior population. But really throughout the United States growth rates exceeding 50% in much of the US and even higher than 100% in some commuting zones in the Rockies.

Meanwhile the under 65 population looks like it's going to be either declining or growing very little in across a whole large swath of the United States, including some big metros around the Great Lakes, Detroit, Cleveland, Buffalo, Rochester and so on, and more rural states like Maine

and Nebraska. The consequences are going to be that although the United States will be older in 2030 on average, that trend is different across the United States, ranging from fewer than 20% of the population being 65 or older in the Southwest, in the Rocky Mountains, to more than 30% in the Northern Great Plains.

On the ethnic and racial side, Hispanics are also growing almost everywhere. The only places where they're not, in my home state of New Mexico and the panhandle of Texas, or sort of the Big Bend area of Texas are places that already have pretty large Hispanic populations. And those are rural areas where the population is aging and also declining.

The other non-Hispanic population, just a little note here. We only produce projections for groups, white non-Hispanics, black non-Hispanics, Hispanics, and then a catch all other category that includes people of multiple races, Asians, and people who mark other on the census forms. There are reasons for that I can handle in questions if you'd like. But clearly it's a very large growing population in the United States, fast growing and that too is growing all over the United States, driven by different things in different places.

We expect also a substantial percentage increase in the black, non-Hispanic population in a lot of areas that don't have all that many black residents to start with, including most in Northern New England, but also central Florida, Atlanta, Houston, Dallas, or the Texas metros, are the big metro areas that also expect high levels of African American and black immigrant population growth. Meanwhile, again, like the senior versus the under 65 population, the white non-Hispanic population is growing in a more limited number of locations in the United States. You can see Las Vegas and Northern Arizona, much of Utah, Southwestern Colorado being one, the coastal areas are being another. But pretty slow growth or even decline throughout most of the tan part of the map here.

So again, we have a map that represents a diversity of diversity on the racial front by 2030 with fewer than one third of the residents being white non-Hispanic in much of the Southwest in California to upwards of 80%, 85% being white non-Hispanic in the slower growing parts of the United States, Northern New England as we've mentioned before, Minnesota and Northern Great Plains.

So just a few thoughts to wrap up about aging and diversity, this is simply just packing a punch lines here. The US is aging everywhere, but some areas have been rejuvenated by migration, especially from abroad, while others are markedly older because more people have moved out than moved in. Also apart from a few rural areas, over 2/3 of the residents will still be under 65 in the United States, making the future not one of a gray America, but a salt and pepper America, of age diversity, as well as ethnic and racial diversity that people also stress.

And clearly the areas that have faster growth from migration and birth are diversifying faster than areas that have had persistent out migration and higher percentage of seniors, not only because that's where the immigrants are going, but also because as Jens pointed out, the children of immigrants are often people of color and they constitute a fairly large proportion in all of these states. So that's it for me. Thank you very much for your attention. I look forward to the questions.

[APPLAUSE]

MONICA VACA: OK. Can you hear me? Yes. OK. Thank you so much. Such incredibly interesting presentations here. Let me begin with, we have some questions from the audience. But let me also begin with a couple of things that I just noted. One is, this very strong finding about the US, senior population is growing, right? We heard that through all of the presentations.

And yet Dr Ortman, in one of your slides, you showed us that the US is one of the youngest, going to be one of the youngest developing countries. What explains that? And I'll open that up to ask first Dr. Ortman and then I'll open that up to the panel.

JENNIFER ORTMAN: Well, Jen's actually having him follow me, help to unpack some of what I talked about. So we're seeing a growth in our population in those older age groups. But we're seeing particularly, those immigrant groups, Hispanics in particular, with fertility rates that really are replenishing to some extent, the population at the younger ages and bolstering that growth and sustaining it. So as Jens mentioned, we see for Hispanics the growth for the Hispanic population is very much, in our projections, being driven by the births to Hispanic population, births to Hispanic women are much more so than by immigration these days.

MONICA VACA: Did you want to add anything to that?

JENS MANUEL KROGSTAD: For the fertility rate for Hispanics, there's a fairly large difference by nativity. So US born Hispanic women have a fertility rate that's more similar to the overall US fertility rate. And it's Hispanic immigrant women who have significantly higher fertility rate. Right?

JENNIFER ORTMAN: Right. Yeah in general, foreign born women of all groups, and this is why we for the first time in our most recent series, actually split fertility rates out by foreign and native born as well as race group. Foreign born women tend to have higher fertility rates than native born women. This is particularly notable for the Hispanic population. So Hispanic women who are foreign born have much higher rates of fertility than native born Hispanic women.

MONICA VACA: OK so another thing that sort of struck me. And we talked about this a little bit. But I wanted to get into this a little bit more. There was some discussion in your presentation, Jens, about intermarriage rates. And I wondered and also, Rolf, you mentioned this as well in your projections. So talk a little bit about, how fast is that growth of these multiracial or multiethnic groups, how is that changing the population?

JENNIFER ORTMAN: Well, the Pew Research Center recently did publish a study on multirace Americans. And we estimated that multirace Americans today make up between 6% and 7% of the US population. So it's a small but growing segment of the population. And interestingly enough, a lot of the people who we classified as multirace Americans had some sort of mix of American Indian in their heritage, in addition to significant numbers of black mixed race and Hispanic mixed populations.

ROLF PENDALL: I'd also say that people decide for themselves what they want their racial or ethnic and ethnic categorization to be. Any of you who's filled out a census form knows this. And you know that we now have the option of checking more than one box. Also, as more kids are born to parents of multiple races, sometimes they might be listed in one census as being of one race because their parents are classifying them.

But then they get a little bit older and they decide that they're either a different race or they have multiple races. So some of the growth in this other race category, it's not just because of fertility. It's because of the way that we self-classify. And I think there are a lot of really interesting questions about what it will mean to be Hispanic or to be black or to be Asian.

What will that feel like and seem like from either an objective or subjective standpoint in 2040 or 2050 compared with now? I think it's probably a little more stable between now and 2030. But still, these definitions do change through time. And there's always a tension between wanting to have good longitudinal data and also having categories that reflect the way that people see themselves. And the social science suggests that the experience reality in the United States.

JENS MANUEL KROGSTAD: That's a really important point, that it's self-reporting. If you say you're a certain race or ethnicity, then that's how you're counted on the surveys. And Jennifer, you might know the details better than me, but race and ethnic identity can shift over a person's lifetime, which Rolf alluded to. And I believe between 2000 and 2010, there were millions of Americans who changed their race or ethnicity.

JENNIFER ORTMAN: So race and ethnicity is something you want to think about that a little bit when you're interpreting projections. Because individuals can change how they classify or report their race. That can be one person changes from the 2000 to the 2010 census as an example, or you have situations where children are being reported by their parents on one census or survey. And then when they start reporting for themselves, they might report differently than their parents did.

And so that's at an individual level in terms of self-reporting. The other thing to keep in mind with race and ethnicity, at least from the Census Bureau perspective, we have never asked questions about race and ethnicity the same way on any two census forms. These are concepts, and I think, Rolf, you started to touch on this, these are concepts that change how our society has thought about race and ethnicity. The different groups that are represented in our country have changed over time. And Mark's slides certainly showed you how some of that diversity has shifted.

So it is important to us that we make sure those categories reflect our current population, which means we change those questions. So I think the change from 2000 to 2010 was probably the most minor. But what we're looking at for 2020 is potentially actually combining those questions into one. So it will no longer be a distinctive race and then ethnicity question. But there is a potential in 2020, we might actually be combining those categories. And OMB is, I believe they are considering changing the race classification this decade.

MONICA VACA: Interesting. OK, so Dr. Pendall, so one of the themes of your presentation was that while the population is growing larger all over the country, it's kind of growing differently in different parts of the country, right? These different localities are going to be different. So help us think about these different marketplaces and how these different marketplaces are going to be developing to meet the needs of these very different pockets.

ROLF PENDALL: So I'll give you just one example and I'll try to keep it brief because I know we're out of time almost, which is the field of discrimination in housing. The Urban Institute for the last few decades has been doing periodic surveys of rates of discrimination against people of color in rental and in owner occupied housing. And the way that we do these studies is in partnership with local groups in a series of metropolitan areas around the United States that do auditing on fair housing.

So you all probably know how those audits work. They have matched pairs of testers who go out and they try to find an apartment and they look for differential treatment between the two groups. In the most recent round, which we did between 2010 and 2012, there were certain metropolitan areas in which it was very difficult to find organizations, remember these were civil society organizations, in which there was a very strong presence of Latino or Asian interests. It was a sort of a long history of civil rights going back to the '60s and early '70s in mostly familiarity with the African American community in those areas.

So this is just one example of the ways in which the growing diversity of diversity within these areas, even areas that have been traditionally black white may need different thinking about not just enforcement, but also how civil society organizations that enforcement depends on may need to evolve going forward.

MONICA VACA: OK. So another very, very interesting finding was the finding that there are a lot more people speaking, or a lot more Latinos speaking English a lot more proficiently. So we have in the consumer protection world thought a lot about how it is that we are able to build up our language competencies and our cultural competence to serve the full population. Is that getting to be less and less relevant now, because there is more widespread adoption of English in some these households?

JENS MANUEL KROGSTAD: The trend is clear that more and more Latinos are speaking English at home or speaking English proficiently. But it's not the case that Spanish is going to disappear any time soon. In our own surveys, we found a great importance placed on the ability to speak Spanish as something that's part of their heritage, their cultural heritage. And so it's something value. And you see that that Spanish continues to be spoken, even among younger generations.

So overall among Hispanic adults, more than six in 10 speak English or are bilingual. And among this overall Hispanic group, 25% speak English, 36% speak both. So you see a lot of English speaking Hispanics still speaking Spanish.

MONICA VACA: And you also mentioned that the growth in the Asian immigration is something that we all need to also keep in mind. Talk a little bit about how diverse that group is.

JENS MANUEL KROGSTAD: Some of you might be aware, it can be a challenge to capture that diversity just in surveys that the Pew Research is done of Asian Americans, just because there are so many different languages spoken. And some of these groups might be small enough that it's hard to capture a large enough sample for our surveys. And so, that's unique to the Asian immigrant population. Because among Hispanics of course, they all speak Spanish. So you see this greater diversity within Asian immigrants.

MONICA VACA: Well we are out of time. Please join me in thanking these panelists I really appreciate all of their insights.

[APPLAUSE]

And let me welcome the next group of presenters.

DANIEL SALSBURG: Good morning. I'm Dan Salsburg. I'm the Acting Chief in the Office of Technology Research and Investigation, which we call OTEC. We're going to turn our attention now to marketing to different consumer populations. And for starters, let me pose a question. Do advertisers market different products or make different offers for the same products to members of different ethnic groups, different genders, and different ages?

In an era of mass marketing, this was a question that was really easy to answer. We could look at the ads in newspapers, magazines, ads on radio, ads on television, that cater to particular audiences. Online and social media ads are far more difficult to study, because they involve in a sense micro marketing, where specific targeted ads can only be seen by the targets of the ads.

So with this in mind we asked two incredibly smart and creative computer scientists to design and conduct a study looking at how the ethnicity, gender, and age of social media users impact the types of ads they see. In the following presentation, you'll hear from Yannis Spiliopoulos, Yannis is a PhD candidate at Columbia University. And Vincent Toubiana. Vincent is a computer scientist with CNIL, which is the French data protection authority in Paris.

Yannis and Vincent began their research this past summer when Yannis was an intern in OTEC and Vincent was a fellow on loan from CNIL. Most of their work however occurred after their internship and fellowship had ended. To our knowledge, Yannis and Vincent's research is the first time any researchers have successfully studied the impact of ethnicity, gender, and age on the types of ads Facebook users receive.

So a few things to note about their presentation. First, their work is preliminary. You should not extrapolate from it and it has not yet been peer reviewed by a journal. Online and social media advertising involve complex bidding models with multiple players. So although Yannis and Vincent study, attempts to control for all variables other than ethnicity, age, and gender, there may be some unknown things at play.

Second, as Yannis and Vincent will explain, the research looks at ads targeted at users that Facebook identifies as having particular ethnic affinities based on pages they like. Such users don't necessarily have to be members of a particular ethnic group. For instance, not all Facebook

users who have liked pages associated with Hispanics are going to necessarily be Hispanic. So their research makes an assumption that some advertisers will use Facebook's determination of ethnic affinity as a proxy for ethnicity.

Third, Yannis and Vincent found an advertiser that offered different terms to Facebook users who belonged to one particular ethnic affinity group than to users who belonged to other ethnic affinity groups. You cannot draw from their research any evidence of an intent to discriminate however. But their research should serve as a wake up call to advertisers who want to target based on ethnicity to take steps to ensure that their advertising does not inadvertently disadvantage a particular demographic group.

So enough of me talking, and let's turn to Yannis and Vincent and hear about the study.

VINCENT TOUBIANA: Thank you, Dan. Good morning, everyone. I'm Vincent Toubiana from CNIL, the French data protection authority. My colleague Yannis Spiliopoulos and I will be discussing preliminary results of research we've conducted over the last few months that looks at Facebook targeted advertising. I will be providing background information about targeted advertising on Facebook and the design of the study, and Yannis will be describing the results of the study.

So targeted advertising appears with both traditional and online advertising. For example back in 2012, Target made the headline for accurately predicting that a teenage girl was pregnant and sending baby related coupons to her family house. Other advertisers target consumers based on their online behaviors. For instance, Netflix show special ads for a new season of Black Mirror, a show that concerns technoparanoia only to people who were sold ad blockers. It means that people who didn't have an ad blocker will not have been able to see the ads.

Similarly, this past year some advertiser sends a messages in targeted location targeting. So only people in this specific area will have been able to see the ad. In the context of this workshop, we are particularly interested by Facebook ethnic affinity targeting. So [INAUDIBLE] Facebook ethnic affinity targeting existed since 2014. I heard about it only in March when it was used to send this special edition of the trailer of Straight Out of Compton to African American and Hispanic affinity groups. Facebook did not explain how these groups were created, and we have virtually no information about that. They stress that they don't know the ethnicity of the users. And it's true that while you can specify your age and gender on Facebook, you cannot specify your ethnicity.

Other researchers have studied Facebook ethnic affinity groups, and we met researcher from the University of Berkeley and the Center for Democracy and Technology in June and we benefited from their insights. And most recently, Julia Angwin from ProPublica wrote an article about Facebook ethnic affinity groups, explaining that it can be used to exclude people based on their ethnicity and just might violate the Fair Housing Act. Facebook reacted by preventing advertisers from targeting messages about housing and unemployment using Facebook ethnic affinity.

So the question we're trying to answer is, do Facebook users receive ads based on their ethnic affinity or is there a categorization? The thing is, we have virtually no information about how

Facebook gets ethnic affinity. Users cannot specify their ethnicity. So most of the data we have comes from a tool called Audience Insights that provides insight to advertisers about targeting options. So basically, as the Audience Insight tool details the most liked pages of users at Facebook as identify as being a particular ethnic affinity group.

As Dan said, users identified by Facebook as being for example in the Hispanic ethnic affinity group are not necessarily going to be Hispanic. They are interested in or respond to Hispanic content. So basically what we are trying to do is to respond to the same content. So we hope that we'll be in the same ethnic affinity group and to know which content which we'll like, we'll rely on [INAUDIBLE] sight.

So the group of ethnic affinities at Facebook identified include African American, Asian American, and Hispanic. And for each of these groups, retrieves the most relevant pages to like, using Audience Insights. And then for each of these groups, we created 20 accounts and like 10 random pages from that group [INAUDIBLE] pages using Audience Insights. Then we also create a control group with 20 accounts that we'll like on 10 random pages [INAUDIBLE] that are the most popular on Facebook. Finally, we collect and analyze the ads that have been shown to each account.

So for example, here are the most relevant pages for the Asian American affinity groups. And what it means is that like, the ABS, CBS News, someone whole likes this page is 31 times more likely to be in the Asian American ethnic affinity groups. So in theory, this is a simple study, but in practice it was very complicated. Because advertising on Facebook is complex. And our study design needed to ensure that our accounts were receiving particular ads due to their assigned ethnic affinity groups and not for some other reason. So here I'll leave the floor to Yannis.

YANNIS SPILIOPOULOS: So Vincent gave you some details about our methodology. I would like to add some points on that. First of all, the accounts are more than just the pages they liked. They have also other attributes like age, gender, their name, and a lot of their stuff. We followed standard practices and randomized those attributes. So we didn't introduce any systematic bias in our data set.

Another point I wanted to say is that unfortunately some of those accounts were very quickly disabled by Facebook. Also, the accounts didn't start getting ads at the same point in time. These two factors may actually impact our ability to detect relationships between ads and the attributes we were going to study.

So let's have a first glance at the data. Obviously I don't expect you to study the detail on those graphs. There are a lot of them, but you're more than welcome to look at the slides online. I'll just briefly describe them and then let you know about some points I would like to take with you.

So, at the top row we have the distribution of accounts from the different populations. The purple bars are the actual number of accounts and the blue bars are the number of accounts after applying some normalization to account for the fact that they didn't start viewing ads at the same point in time. On the bottom row, we have the distribution of ads in the same populations.

And the first thing I would like to take with you is that we have more than 24,000 impressions collected during the last month. And the second one is that we see that the distribution of ads follows more or less very closely the shape of the distribution of accounts, with two notable exceptions. The first one is for the Hispanic population, where it gets less ads. And the second one is for the age group 25 to 34, where they get a lot more than one would expect based only on the number of accounts.

So let's now have a look at if there is any interesting relationship between some of the ads and the attributes we want. This is a hit map with just a simple similarity score between some of the ads and the attributes we're interested in. We can immediately see that there are some very interesting areas. For example for the Hispanic ethnic affinity group, that black last over there-- I forgot to mention, the darker the box is, the more similar the ad is with an attribute.

There are also some interesting data points for the African American ethnic affinity group. That younger age groups. And also there are a lot of purple over there for the female group and the some for the male group. So given that, we wonder can we actually prove something stronger for some of the ads? Can we detect something stronger for those ads?

And the answer is yes. We can actually prove a causal relationship for some of those. The actual slide doesn't render that well. OK, I'll just go ahead. We will see some of them and I'll point out some of them. You're more than welcome to actually look at the actual slides online. So the African Americans got some ads from some fashion, a fashion site online. They don't show up here, but there were some ads for the True Examiner page in Facebook that actually targeted the African American group with ads about the Obama family.

There was also one that were detected a causal link for the Asian American ethnic group for some reason for insurance agents. Then for the Hispanic group, there were a lot more ads for which we were able to detect a causal link between them and that attribute and most of them were for Verizon. And they were actually targeting them with their prepaid plan. And an interesting thing about that is that no other population saw an ad about their prepaid plans, even they were more than those ads from Verizon.

So for the female and male group, the female group got some ads for clothing again. If I remember correctly, there were some ads for women career in financial consulting specifically and some migraine pills. And for the male group, there was only a single ad for which we were able to detect a causal link between them, and that was for men clothing from the same website as for the women.

Finally, for the age groups, there were a lot of ads for the group 18 to 24. One of those were for a casino and the claim that you could actually cash out your winnings. Another one was for an acne study. The 25 to 34 got an ad for a hotel. The 35 to 44 got an ad for wines. The 45 to 54 got an ad for, if I remember correctly, a drug treatment for metastatic breast cancer. And the 55 to 64 got an ad for family friendly theater in Northrup. So, I spoke up about the causal link between the ads and attributes.

There are two disclaimers about that. First of all, we didn't prove a causal link between the attribute and the ad, the ethnic affinity attribute and the ad. We proved a causal link between the 100 or so most relevant pages for that ethnic group and the ad. That means that it might be the case that those pages are also highly correlated with something else, like people interested in football. And it might be the case that the advertiser is trying to target those people, but based on the nature of the pages and the number of the pages we think that's highly unlikely.

The other thing is we had a lot less accounts, not what we would need to test for all the attributes we tested for and we just use the standard statistical procedure to account for that. Finally, and very briefly, a couple of observations. We had begun a relationship between ads and attributes. There were a lot more ads correlated with the attributes. We just couldn't prove or detect causality for them.

And the final thing is that there were a small number of ads on Facebook that we're clearly misrepresenting their intent to the user. So they would state that a famous person, A, just died although he was clearly still alive, and click here to see what happened. You would be redirected to a new site or something that resembled a famous news site. But if you tried to click on anything on that, you would actually get a redirect again to a form that would try to push you a miracle cream at a very special price.

And I think that's it. Thank you very much for your attention.

DANIEL SALSBURG: So let me just mention that the slides didn't render correctly. And so there was a table where you saw some blank spots. We will get a corrected version of that up on our website. And what the table was, it listed specific ads that appeared on Facebook and a p-value which indicated the likelihood that that advertisement was being targeted to the specific ethnic affinity group. And there were several examples that Yannis and Vincent found of advertisers targeting specific ethnic affinity groups. And you could see the language of the advertisement there. But thank you.

[APPLAUSE]

KATI DAFFIAN: Thank you I'd like to invite our next slate of panelists to come on up. And first I just want to thank Yannis, Vincent, and our Office of Technology Research and investigation for that work. And then I want to jump right into our next panel. As they're coming up, I'll just mention we know that targeted marketing to different segments of the population is occurring. But in this session, we want to learn more about those segments. And we want to talk with the experts about the legitimate forms of targeted marketing. So that's what we're going to be focusing on here.

I don't want to spend a lot of time on their bios because there's a lot to say. I hope you'll look in your programs about all of their fantastic experience. But I want to dig right into the topic of this panel. And I'll start with a question to Horacio Gavilan. Welcome. I'm going to ask this to all of the panelists as kind of an introductory question, this series of questions, about what community you focus on in your work, and what do you see that's changing with that community, including

what kinds of changes we might see going forward into the future? So Horacio, welcome and thank you.

HORACIO GAVILAN: Well first of all, thank you for inviting us. Obviously, as the name of our organization says, we're the voice of Hispanic marketing. We're the trade association that represent agencies, media companies, media buying companies, research companies, art work, in the US Hispanic market, also clients. The reason for [INAUDIBLE] has really helped corporate America better understand the value of the Hispanic market and the Hispanic consumer. I think in terms of change, and we saw some of the numbers from Pew earlier. I mean we all are aware about the numbers, you know it's 57 million and counting, 13% of all households, 18% of the total population.

But I think a couple of the most interesting trends in the US Hispanic market today are, number one, language. And we can talk a little bit about that later in terms of what does that mean. Language does not equate culture. And I think that's the biggest shift we've seen over the last decade, is do I still need to target this audience even though they're speaking in English and they're consuming media both in Spanish and English.

And then the second one, I think, is the one about buying power. It is a \$1.7 trillion market, that if that was going to be an economy on its own, I think would be the seventh largest economy in the world. But the fact that people don't understand is that we don't only-- and I mean we Hispanics, don't only go to Walmart, don't only eat at McDonald's. And actually the largest growing segment of the Hispanic market today is what is defined as upscale, that's a \$40,000 to \$100,000 household income.

And there is not only in terms of education, in terms of what they're purchasing, , how they're purchasing there's some incredible opportunities there for marketers. And for me, those are two of the most interesting trends in our space today.

KATI DAFFIAN: Great thank you, Horacio. And now the same questions for Ed Chang. Thank you for being here.

EDWARD CHANG: My pleasure. I'm representing Asian American communities. My background has been as an Asian American advertising marketing representing a partnership which is an advertising agency based in New York. And we've been helping companies market to this community for about 20 years now. I'm also the president of the Asian American Advertising Federation, which does a very similar role in the Asian community as a AHA does in the Hispanic community.

I think the one piece I'd like to just reinforce and highlight again, and that's what the earlier panel talked about. And especially when you looked at Mark Lopez's research and the Pew data that Jens shared. This is a community that is growing quickly. And it's growing quickly by immigration and new immigration. So if we think about it in the context of every community as the chairwoman has initiated here, if you think about the issues, the vulnerabilities, the opportunities that face a relatively new immigrant population, whether it's from cultural or

language or other areas where there might be some level of disconnect, I think that's the area where I view as needing greater understanding, more data.

You know if you look at some of the data, it's not disaggregated, right? You're looking at a huge pool of non-white, so you lose sight of some of the population change that's happening within the Asian community specifically. And so I think if we can help encourage more and better data around this community and look a little more closely at how this community is growing and changing, that can open up a lot more conversations. So I'm glad to be part of this conversation today.

KATI DAFFIAN: Great. And actually I want to turn to Orlena Blanchard now and just ask the same questions. What communities do you work with and how is marketing changing or how should it change to reach those communities?

ORLENA BLANCHARD: So I represent the African American community today, not in total, but for the purpose of this conversation. And I've spent the last decade working specifically in African American marketing and media. And when it comes to the African American community, I think it's critically important to understand, as marketers, as an agency trying to reach this particular population, that history still matters in this country to the African American experience.

And that's critically important in understanding how an African American person in this country sees himself as a citizen and a consumer and how they make decisions based on that lens and that experience and lifestyle. And so I think as we talk about the data and we see growth in the population, and the African American community in particular happens to be a little bit younger on average than other populations or the general market, when we see a lot of fluidity in terms of categories and lines, whether that is racial, or whether that is sexual, whether that is religious.

And I think for a lot of reasons as marketers we anecdotally believe that that means that cultural identity does not mean as much, racial identity does not mean as much. But for African Americans in this country, it is critically important. And it shows up that way. So that really is the crux of what we should think about as marketers. As far as that community is concerned, I think what's really important is that we recognize, and we've seen some of the data in terms of growth, but what you don't hear about as often is the growth rates in education and entrepreneurship in the African American community, and the African American female actually leading that charge. More degrees, we're seeing African American women, higher graduation rates, as well as higher businesses being started by black females. And actually black women are leading the charge in terms of graduation rates of total population in general market. So those are things that I think are important about this population.

KATI DAFFIAN: Great. And now just turning to Xenia Boone. I know your experience with DMA is broader than this, but I wondered if you could start by thinking about older Americans or those who will be older Americans in the coming years, and what you've learned about that through your work.

XENIA BOONE: Sure absolutely. So glad to be here and so glad to participate. I'm Xenia Boone, also known as Xenni. And I've been with the DMA since 2002. So for me personally, it's been a real trajectory. When I started email marketing was sort of the hot ticket in 2002. And now we're looking at going from direct mail, catalogs, email, phone, mobile devices, digital ads, and now cross device, and some of the data sharing that happens there. But on a day to day basis the DMA whose name is now changing to the Data and Marketing Association to recognize some of these very important changes, we work with a lot of older members of the population. And there's some real sensitivities there that we want to make sure that marketers are aware of, as well as millennials. So I just wanted to speak to each just very briefly.

So in terms of what we do at the DMA, we have a very strong self-regulatory platform. We take in consumer complaints. So on a daily basis, we talk with literally dozens and dozens of members of the population who might have questions about marketing, questions about how their data has been processed. And we're finding, in terms of older populations, there really is a need to continue to build trust and to continue to communicate very clearly about what's happening, both on the content side in terms of the offers that they're receiving, and also in terms of what happens to get them out of the process.

Because certainly we don't want to send offers to those who don't want to receive them. That's sort of our staple in terms of self-regulation. In terms of older generations, again this might seem like a blanket statement, but because there might be a little bit of a different trust angle, they really do prefer communicating by hard copy. They prefer speaking live to individuals. So we do ask that marketers are quite sensitive to that, and not let's say send an individual to an 800 number or to an e-mail that's not addressed immediately.

So being very effective and being very transparent is highly important. Also we do ask that marketers are sensitive to the volume and the scale and the scope of offers sent to the elderly and providing consumer choices. So for that we have DMA Choice, so that anyone can actually go to that website [DMAchoice.org](http://DMAchoice.org) and opt out of receiving future advertising from a particular advertiser or generally.

For millennials, a little bit of a different scenario. I'm sure many of them have grown up in the digital landscape. They're very comfortable in the digital world, very comfortable with information sharing. I mean, take a look at the Airbnb and other parts of the sharing economy, which is a great opportunity. But there of course there are some risks.

So in terms of advertising and marketing best practices we're asking marketers to pay attention to transparency, notice, choice, in terms of online. So there we have a m we work through the Digital Advertising Alliance to allow for such choices, and so that we self-regulate proper notice and choice and opt out processes for populations concerned in terms of digital advertising. So hopefully that addresses part of that.

KATI DAFFIAN: Yes, and that's a great transition to what I actually wanted to ask about next, which is the broad question for the whole group. And anyone can jump in, is what kinds of consumer protection issues are you seeing in the populations that you particularly work with? But one subset of that you can touch on if you'd like, is this whole question of big data that we've

been looking at and working on here at the FTC for some time, and how you see that playing into the work that you do.

HORACIO GAVILAN: Well I mean, first of all, it was very interesting, by the way the presentation prior to us, but it is important to understand that today digital media, it's the Wild West. It's not like TV, that measurements are out there. I mean we've been working closely with comScore and with Nielsen and there's a lot of deficiencies on it. So I think that's the caution to all of us, all the marketers. There's still a lot of, let's throw it out there and see what sticks.

It's getting better. It's getting better by the year and I think we're going to see major improvements, especially in a couple years ahead of us. But it's still a lot of uncertainties. It's not like TV or radio ratings, in what you know those things have been around. They're certified. There is a lot of depth to them. So I think that's a challenge for all of us as marketers.

Because we keep hearing, it's all about digital. It's all about this is what this community is. This is where the millennials are. So how do you justify shifting your budgets? How do you ensure that you're reaching that audience? And that's an ongoing challenge. And as a community of our marketers and advertisers, we're getting better at it. But it's all a big data.

Actually it's interesting I was just talking to a group, a large agency called iCrossing. And their unique selling proposition is, everything they do is based on big data. And I think for any marketer, the ability to have access and understand big data is critical. The problem is that it's also very complex. The problem is that it's very expensive to get some of that. So I think that's a challenge for all of us, is understanding what's out there and understanding how I can benefit as a marketer from that. But I hear everyday, we are not at the point that we need to be when it comes to how you take that big data and make sure there are efficiencies to that, make sure you're reaching your target audience

EDWARD CHANG: Kati, if I can add to that, and I also found the previous conversation very, very interesting. I'd like though posit this because if you're looking at diverse consumers, minority groups, and you're thinking about marketers and their budgets. And their budgets are limited. They can only go so far and reach so many different subgroups. And if you look at the Pew data on all the different Asian groups that you got to cover alone, it's quite substantial.

And so as a marketer, you're trying to be as efficient and careful about your dollars as you can. So when you think about the opportunity of online advertising as the team described, and you think about how it's being targeted to specific ethnic groups, I understand there have been discriminatory advertising practices. But it also presents an opportunity to marketers to be efficient in the way that they deliver their message.

So there was a mention about the prepaid cards. You know I can see a marketer wanting to market prepaid cards to an Asian community, simply because Asians have a lot of family back home. It's a relatively new immigrant group. There's a benefit to having access to knowledge that that card is available to them.

Just as, perhaps a particular health care deed, anti-smoking measure, when you think about it, there's just a lot of different ways to go. So having that flexibility to be efficient about our spending dollars and then be able to reach these specific subsets in a non-discriminatory way. I mean it sounds like there's a potential issue here. But you know I understand the history behind it, but there's also perhaps a need for it as well. So I just posit that as something to think about.

ORLENA BLANCHARD: I'm happy to jump in. I think there's been an extraordinary focus on data, to the point of analysis paralysis. I hate to simplify things that way. But I do think at some point we tend to be data rich and insight poor. And a lot of times we don't have the stories behind that data that ultimately tell us what we need to understand about a consumer and how they behave, and how they make decisions, and how we protect them. And understanding the story behind that data I think is as critical as the data itself.

So as advertisers and marketers, and we consider investment in data, we need to make sure that we're understanding how to apply that data in a way that it works for us so that we're getting a return and an understanding on what that data actually means.

XENIA BOONE: And if I could just add I personally hate the term big data. I've been around marketers and fundraiser for a very long time. And everyone understands and appreciates there's a scale of data, from, let's say, the least identifiable algorithms and the like, inferences, to the most identifiable, and the most sensitive. And in each of these areas, there are some risks that marketers and advertisers must pay attention to.

So for example, with obviously the most sensitive data, with health information, there are a lot of rules and regulations and principles to protect that type of data, regardless of the source of data, where you're getting that data, whether or not you want to use that data. But once you have that, the use of the data, you want to make sure that you've got systems in place to protect that data. And certainly when you're talking about demographic, ethnicity, and the like, having extra sensitivity is extremely important.

In terms of perhaps the least identifiable certainly we've heard some worst case scenarios, where there might have been some sort of unintentional discrimination by algorithm. We're always on the lookout in terms of our consumer complaint process to take a look at whether or not there is that ability by those that are out of compliance to potentially discriminate, let's say in housing offers, in insurance, in employment. So those practices are not obviously condoned. In fact, we're looking actively to get some of those cases so that we can make sure that we can frankly and get those companies in compliance.

HORACIO GAVILAN: And if I can just add to what Orlena said earlier. And I think that's the essence of advertising and marketing, you're creating an emotional connection with the consumer. You know you're trying to change or direct behavior. So at the end of the day, it's all about insights. It's about creating something that catches people's attention. And this is why, not necessarily because you have an ad with a Hispanic, a black, an Asian, whatever it is going to work. And so at the end of the day, it's critical for any of us to understand that it is about the insights. It's making a cultural and emotional connection with the consumer.

So I think that just again, especially when you put that against the backdrop of data, you know, it doesn't matter how much data, how good the data is, you don't have the insights that's how far you're going to get with the data.

KATI DAFFIAN: Yeah that's a really important point. And I was wondering if there are particular misconceptions about the groups that you work with, that you might want to mention?

HORACIO GAVILAN: Well, well, well, Where do we start with that?

KATI DAFFAN: Where do we begin?

HORATIO GAVILAN: Like I said before, I think one of the biggest misconceptions about the Hispanic consumer is the buying power. I think there is that misconception that, like I said earlier kind of in jest, but we only go to McDonald's and when we only shop at Walmart. And even though that's certainly the case, we conducted a study and by the way, everything that I said here is on our website. All the studies are there with charts and methodology and everything.

And we did one in partnership with Nielsen about three years ago, almost three years ago to highlight, especially to marketers, that the largest growing segment of the US Hispanic market are young, mainly millennials will make 38% of the market that fall into that \$40,000 to \$100,000 household income that are defined as upscale Hispanics. And it's interesting, and again I won't go into details, where we look at some specific areas in terms of where they buy, how they buy, how often they buy. And the interesting thing and the lesson to all of us here is that there are very unique patterns.

And I think again, going back to my point about our insight, so even though, not only do they represent about I think it's about 35 million, it's about buying power of about 500 million. That's probably up significantly over the last two years. And we're talking about 15 million households, that there is an incredible opportunity, especially for the upscale brands to market to Hispanic marketing. And actually that's one of the biggest gaps that we have now is that the luxury car, the Macy's of the world, some of the more upscale do not think that Hispanics buy luxury cars. Don't think that Hispanics necessarily go to the stores or dine out.

So we're trying to help again, corporate America better understand that, yes. And so it's about an incredible opportunity as a marketer to reach this segment of the Hispanic market that is growing exponentially. So I think that's one of the biggest misconceptions. The second one is the one about language. Because I think there is a misconception that a Hispanic market equates language.

Obviously, there is the language as a common denominator. I think that's also a very unique thing about the US Hispanic market that is different from the Asian market. You have 20, 30, 40, 50 different languages. And we had a homogeneous language but as a few numbers show, as we become less a group of immigrants, and more know US born, so we become more English dominant. We become more bilingual. But that doesn't mean that we're less Hispanic.

And actually every single study out there shows that even though they might even be bilingual, or they might not even speak Spanish to be fluent, they still consider their identity as Spanish. And I think for marketers, that's very important. Because even though they might not be watching Univision, maybe they might be listening to Spanish radio, you still reach them in a very unique way to create that connection with them. And I think that's the lesson for the marketers.

ORLENA BLANCHARD: May I?

KATI DAFFAN: Yes

ORLENA BLANCHARD: I was going to say with respect to the African American community, I think the number one misconception is that African Americans are mainstream in the sense that from a marketing and communications perspective, you can reach and impact African Americans along with the general market. And so what you say and how you say it and where you deliver it should be what you do for everybody, a one size fits all model. And that is the number one misconception.

And I talked about this earlier in the introduction, that cultural identity is even more critically important for the larger segment of the African American population than it ever has been. And so as I said at the beginning, the African American population is a little bit younger than the general market. And almost 50% of the African American population is Gen Z or millennial. And this is a very socially conscious population.

And so you have to imagine that again, while there are categorical there's categorical fluidity, a strong sense of cultural identity. So when you are speaking to this audience, whether it is consumer education or you're wondering why you don't get a lot of reporting from the African American community, or it doesn't compare in terms of reporting fraud or anything like that, you have to wonder why. And you have to look very deeply into sort of the lifestyle and experience and cultural identity as to why.

And so, again, misconception really being that the one size fits all model works. And it doesn't. And I have to say in this context I think what's very relevant to bring up and I think Xenni did mention this in terms of trust, is that right now especially, and I highly, highly encourage and recommend to this audience is when you think about the African American consumer and communicating to them and looking at opportunities to protect them as consumers, you have to think about how they consider themselves as citizens in the current climate and the current social climate and consideration for the social climate moving forward the next few years.

And thinking about really trust issues and consideration for government agencies and where they see themselves in terms of having an equal place in society as citizens. And that affects how you communicate. It affects their thought pattern. When picking up the phone to report or considering that they have just as much right to report an issue and feel that they're going to get an equal response that any other citizen would get. This is a really important consideration for this particular group.

And the conversation I think we should be having when it comes to the African American consumer who is desperately seeking acknowledgement and validation and equality as citizens and participants in this society. And that effects you know who they are and who they consider themselves as consumers.

HORATIO GAVILAN: And that's much different from the Hispanic market.

ORLENA BLANCHARD: Exactly.

EDWARD CHANG: If I can build on that. I appreciate both comments because I think there are truths to any community, Asian notwithstanding, to what Orlena and Horatio just mentioned. I'll add though, I think that, a little bit opposite of what Horatio and say, in the Asian community, you look at the statistics and they say, highly educated, affluence and then I think there's certainly truth to that. There's also this model minority myth.

And there are segments of our population that are not as educated or as affluent. And these tend to be the most vulnerable populations. So it's easy to gloss over the population if you look at this aggregated data that says most college degrees and whatnot. But let's not forget that there are segments of the population that are left out of that conversation.

But that leads me to my second point here is that then there's this conversation around while there's so many different languages and culture matters and there's so many different cultures and, you know, what am I to do? And then what generally happens is that a lot of organizations do nothing. They're not included in the research. They're not studied.

So I don't have a perfect solution for that. But what I would say is that as this population is growing and as the data we're looking at indicates it as so, there is a greater need to delve a little bit deeper in breaking down the data and understanding some of these dichotomies.

KATI DAFFAN: Xenie, did you want to say something?

XENIA BOONE: So just to tag on to what you're m just the importance of making sure that we're also paying attention to the digital divide, as much as we're focused on big data and the digital realm, there are still many, many individuals who do not on a daily basis access digital. And they don't have the capability. They may not have the income. And it's very important to make sure that we're providing information and resources for these individuals as well. So just wanted to add that.

HORATIO GAVILAN: Absolutely and I think again, we are probably the community with the largest number of illegal immigrants in this country. And I think that poses unique challenges. You know, when you're talking about reporting. You're talking about especially in this environment today, [INAUDIBLE] feel confident about making the phone call. And I think they obviously become a target of predatory advertising, lending, and some other practices.

So I think as a community, we're very, very understanding of that. And I think it is the job of marketers, both in the private and government sector is to make sure that those companies

understand that they have a right to be able to voice, going to your comment, to voice their problem, challenges, et cetera. And I think at the end of the day, and this is not about politics, and this is where we always look at everything as a business proposition, but regardless of what's happening, regardless of what the political situation is, there is a reality that nothing is going to change.

That is, by 2050 the United States is going to be a minority majority country. And nothing that people say or don't say or try to, is going to change that. So as marketers, we need to understand that. That train has left the station and we're going to get there. So how do we get better at reaching this audience as we get to that point? And 2050 is not that far from now, you think about it. That's right that's our children who are going to be around.

KATI DAFFAN: Great. I went to pull in a couple of threads here. Something that Orlena said about trust really reflected a lot of the conversations we had before today. And many of you mentioned trust and authenticity and the importance of those two things. And then we got a question, we'd have a few questions from the audience already, and one of them is have you received feedback that targeted marketing can be annoying to the recipients and that it can feel creepy and the recipient is being singled out by the entity? So I'm wondering how do you counsel clients about trust and gaining the trust in the community they're trying to reach?

EDWARD CHANG: On the annoyed, sometimes you want to reach a community in language that they can understand or better work with. So it might be a communication in say Chinese or it might be a communication in Korean or what have you. So if you're Chinese American, and you know, born and raised in the US and you get a communication that is in Chinese or Korean, you may be a little put off by that. You're saying, I'm an American.

So that is something that the community has to work with and trying to get a better set of data or list or what have you to help improve upon that. It happens, those types of things. This is not relevant to me. And I think that's true of any communication. At the same time, you want to present as an advertiser, communication that's very relevant and can attach to that individual. And so how do you do it in a way that's balanced? Men can receive a advertising piece that may be more directed at women. So it comes at different levels, but that's a instance that we find in our market.

ORLENA BLANCHARD: May I?

KATI DAFFAN: Sure.

HORATIO GAVILAN: But it really becomes creepy and becomes annoying when you know it's like I say, it's not targeted to you. So you know, I think is very important people to understand that you need to have the right experts doing it. Do you have the people who understand this community, people who understand the different-- but because none of our communities are monolith. You know none of those companies are one size fits all.

So even when you say you're targeting Hispanic market, African American, there are all this nuances that you need to be aware of. And what I see a lot and a big challenge that we have as an

industry, is that number one is, you don't always have the experts at the table. You don't always have that people who have the insights at the table. So what happens? Or your [INAUDIBLE] doesn't connect with that consumer.

Then it becomes creepy. It becomes annoying. It becomes a waste of money because you're not reaching the target. And so I think having the experts at the table, the people who know and have the insight of the communities is critical. And that's something that actually as an industry affects all of us. There is a buzz word out there called total market.

And total market is nothing more than trying to justify that now I can advertise to African Americans, Hispanics, Asian American, wherever it is, with one message. It's going to reach everybody. The problem is that the data shows that's not effective. The data show that's being used to save money. And it becomes a procurement issue, it doesn't become an advertising issue. So I will warn everybody to be very, very, very leery of what the total market is, total market is, and what is not. Total market is not or market is and. It's about an and, including general marketing putting all the different important segments within that advertising.

And we've seen that as marketers trying to save money, as marketers are trying to-- how do we better utilize the money and it is not by doing away with advertising to do to minorities. So I think that's a very important point. And actually we're conducting study right now, in partnership with the Decision National Advertising, DNA, about ROI, when total market is done right versus when it's done wrong, so again, it boils down to insight. It's all about making sure that you are not doing or, you're doing and.

KATI DAFFAN: Orlena, you had something to add.

ORLENA BLANCHARD: Thank you. I was just going to say I haven't had the experience of hearing about an ad or message being annoying or frustrating. I have heard and seen numerous examples of it being offensive. And I think we need to take into consideration the channels through which that message is being delivered. So who is delivering the message is as important as the message. And you know, as you guys have seen from my bio here, working very closely with the Black Media Matters Consortium, and it's an alliance of all the leading African American media companies and advertising agencies who have equity with these consumers.

So you take a BET networks that has been around for 35 plus years and has equity with the consumer, so a message delivered through a media platform or through an influencer that is trusted within that community is received differently than a message delivered by someone who is not well trusted. And so it goes back to the trust issue. But it's also again, about the channel through which you are delivering that message. And within these communities that we're talking about in these populations, there are well-established voices, both in individuals, media outlets and channels that are very well trusted and have significant equity within these communities and so we need to be better about the delivery methods and channels through which we position and send our message. I think that's critically important as well.

EDWARD CHANG: I strongly second what Orlena just said. To receive something, an ad piece that stereotypes a group, I think that perhaps is the most annoying of communication.

HORATIO GAVILAN: But you have to have the experts. And by the way, just a little public service announcement, we have on our website we have a media directory, that is a list of all these experts that are, going to Orlena's point, who are vested and have equity in the marketplace. It's there to download for free at [aha.org](http://aha.org).

So I encourage you to go there. You can download it. And you'll find information about what these companies are, what they do, and how they're vested in the marketplace. Sorry.

KATI DAFFAN: No. Shameless plug.

XENIA BOONE: If I could just add just more at a high level in terms of behavioral advertising, I've been in the trenches with behavioral ads since at least 2006 and 2007. And interestingly when they first started up, the biggest complaint that consumers had were about targeted, non-relevant ads. And those were very, very annoying.

A little bit humorously, we had a lot of dating ad complaints, where we had individuals saying you know, why can't I get the right dating ad? I really want some of this targeted advertising. I really want to make sure that I'm not inundated. So there's definitely a desire for the right ad at the right place at the right time.

More recently, we're seeing more of the issues around somebody purchasing something and then they're still getting ads about future purchases of that same product. So there's a little bit of annoyance, and there does need to be a lot of best practices applied. And then also I love the point about the influencers, especially in the social media channels and the social media platforms especially if we're looking at either older populations or younger populations. Because the proper influencer is so important and also having an improper influencer who might be seeking bad behaviors is equally important to take a look at.

KATI DAFFAN: Great. Now I want to turn to a question from the audience that perfectly dovetails to what I think is one of the central things we wanted to learn on this panel. So I want to leave each of you some time for this. Which is tell us more about what appeals in messaging to diverse segments, and specifically, if you are giving advice to government groups or consumer protection groups about how to reach people with important messages, what kind of concrete advice can you give us?

EDWARD CHANG: Well, I'll start. I think going back to the initial restriction about changing demographics and if you look at where the population is growing by state level for example, right? There are certain gateways for the Asian community that are traditional, California, New York but. As you delve a little bit deeper I think you're seeing the population is migrating, shifting to different parts of the country.

And so, to get to a community level, a local level, state level or what have you, partnership with are organizations within those communities to help level set, to help build the trust, to help build guidance and authenticity. I think that's perhaps the most basic first step that anyone can take on a marketing level. Then there are experts as Horatio mentioned, in our Asian market who can

also help facilitate some of those sort of conversations. But I think building trust with partnership communities is perhaps an easy first step.

KATI DAFFAN: Great. Thank you.

HORATIO GAVILAN: It's all about the experts. You're making sure you have the right people at the table. You're talking to the right person. Just because they'll tell you oh, we have a guy here who speaks Spanish that can do this for you. Don't fall into that trap. So I think again, I can't say it enough. It's all about having the right partners that people can provide you with insights to reach the community.

ORLENA BLANCHARD: Yeah, I think it's very similar for all of us because it's really about the message being received in a very relevant and impactful way. And that comes from authenticity and it being very organic. But in that regard, I think what I've seen in my experience is when reaching the African American community of marketers, whether in the private or public sector and they believe that if they put a person of color in their ad or they just go to a particular market that that's satisfactory.

Well, I think we should give consumers and citizens more credit for being quite savvy and understanding that that isn't an authentic representation of how they see themselves or what their experience is. So when it comes to the African American market, I would say the same things as my colleagues and my cohorts. But I would say make sure that in terms of the relationships and the channels you use and the markets that you go to, that you're doing it in a way that is really authentic, and not just doing it for the sake of doing it, and doing it for the sake of efficiency. You really are striving to be effective. Otherwise it's a moot point.

XENIA BOONE: Just to add in terms of let's say the older generations, obviously very important to remember some of the physical limitations and the digital divide. We of course talk to a lot of older Americans and they're very concerned about leaving their house. There might be some issues there, to build up that trust, and make sure that you're rooting out the bad actors.

There are a lot of fake government notices going out to some of the sensitive populations. And that of course breaks down the trust so that's certainly something to pay attention to. And locally, there are also local issues that if you're trying to reach a particular segment or locality, pay attention and partner with state and local officials.

KATI DAFFAN: That point about segments is something I wanted to pick up on because we've been hearing a little bit about that. Within each of these groups, there are so many different types of segments if you're talking about localities or generations or digital divides. And so, do you have any more granular advice for us about particular segments within the communities you work with?

ORLENA BLANCHARD: Absolutely. So for the African American community, we talk a lot about the millennial population and when we look at the-- I can only put it this way that the millennial population is the reproductive age, the baby making age. So that 80% to 90% of babies being born today in the African American community are born to millennial parents.

They're also more educated as a generation, more entrepreneurial and enterprising as a generation.

So we spent a lot of time, and a lot of advertisers and marketers are very focused on reaching the millennial population. This is a population that is much more socially conscious, really the root of so many of the modern movements that we see. And so I think it's really important to look at this population and this segment of the population as it evolves and has much more buying power as consumers and much more influence on the larger population and popular culture and the general market. So we're talking about people who are trendsetters and influencers across the board for the general market so really important to him to consider.

But the other thing that I was going to mention and I know when some of these questions come up from panels, you're looking for real tactics that you can take back to your desk and execute on. I think it's important that when you're looking to speak to or reach African American populations in the digital space, you look very closely at the different channels that African Americans are using in the digital space relative to the rest of the population or other segments. I had this conversation with a client recently in that African Americans are ferocious users of social media, but are using different social media platforms than the rest of the population.

So tend to be trendsetting and moving to newer platforms. My 14-year-old son would be mortified to think that I'm on the same social media platform that he is. So he is long gone to something else. But I think it's really important when we're speaking to this audience that you understand where they are and how to reach them, and how that looks different than what the data says for the general market.

The same thing for other forms of media is that in the media space, for those of us in the media and entertainment world radio is known as a dying business. But in the African American community, it is not. It's still very much a viable media play, and in many cases a voice of the community. So I would just give very close consideration to those trends in terms of media channels and where African Americans are actually looking to receive their messages from and those that they trust the most.

KATI DAFFAN: Wonderful, thank you.

HORATIO GAVILAN: I totally agree with that. And the Hispanic market is the same way, radio is still a very-- actually a number of Hispanic radio stations have grown over the last decade. The decline of print has been significantly less in the Hispanics than it has been in the general market. Even though with all that said, we over index when it comes to digital devices. We over index with social media.

So again it's understanding who you're trying to reach and understanding that as a community, as a group, it's not a monolith. So again, I can't say it enough times. It's all about the insights.

EDWARD CHANG: I think we've just laid out a blueprint for you, because it works across any I think, any of the diverse segments. I think the points about looking at media very closely are very relevant in the Asian community as well. There is a very strong print infrastructure for

example. So in terms of just segmentation, you have sort of the general approach I think. There's some national work, there's some community based work.

When you look at the Asian, we talk about a lot of different segments. So I'll say a tendency for marketers is to focus on some of the larger populations on a wider basis. But as you focus on some of the smaller populations, you look to where they are. There are going to be in certain states or certain areas and demographics. And so from an outreach standpoint, from media by standpoint, they can be much more targeted and efficient, digital also in some certain avenues. So there's ways of getting to that community. I think that the way to do it is very similar across all of them. It's just that I'm getting to the means of reaching them.

HORATIO GAVILAN: And that's not unique to the Asian American community. The Hispanic market is the same. I mean, you can look at Washington, DC. That's a very unique market, it's more Central America. You go to Orlando, more Puerto Rican. You go to New York, the same way. You go to Miami, it's Cuban.

So you can create very targeted messaging, especially at a regional level. So again, we're not a monolith. also understanding the nuances of the different communities. And it's interesting because I don't believe there's any difference between Spanish--

EDWARD CHANG: It sounds really complex.

HORATIO GAVILAN: It's not, but it's not. That's the problem, that it's not that difficult.

XENIA BOONE: And just to add maybe just a couple of helpful points. This is probably fairly obvious, but hire diversity, hire older Americans, maybe part time, maybe get some volunteer organizations if you're trying to reach these different groups. Use some of the best practices from marketing. So with younger populations, you all see, everyone's online all the time or on their digital device. Be there. These are fleeting images but work with marketers. Try to understand what really resonates with the younger viewers.

HORATIO GAVILAN: And sometimes you need to change the way you approach business. Example, a couple of years ago Walmart, a small company Walmart out there, Walmart publicly said that 100% 100% of the growth of Walmart is going to come from multicultural segment, African American, Hispanic. So, to be able to be effective and able to reach, that they revamp their whole marketing department.

So used to be Hispanics over there, African Americans over there, and they were just little silos. So they revamped in absolutely everything. It is from where do we open the stores you know, what publicity items are in the store, the advertising of it, it's all been now part of one big group that works together. And the center of it are Hispanic, African American and Asian.

Because they understand that's the future. So they need to reorganize. They need to restructure to make sure they can meet the needs of the new world. So I think for all of us, it's not only saying that we're going to do something but what do we need to do in our businesses to make sure that we are structured correctly to the right people? Is it the right structure? What is it that we need to

do differently? Because not only saying we're going to reach them, but this is really made up for all of us who think differently about how we build our businesses and how we market to this group and how we go about doing it. Who's going to be doing it?

EDWARD CHANG: You really have to build those competencies.

HORATIO GAVILAN: Absolutely.

KATI DAFFAN: This is so helpful and on point. But we're running out of time. So I just wanted to throw out one more question for each of you if you want to, just any parting thoughts that you have or words of wisdom to share here at the end with especially with government groups and with consumer groups that are trying to reach these important populations. You've already shared a lot of words of wisdom. So it's fine if you want to--

HORATIO GAVILAN: I mean, I think at the end of the day, like I said, when you are talking to the people you're going to be working with, making sure that you have those diverse points of view, you have the diverse insights sitting at the table. Don't buy into, oh, we'll get to those later. Because you need, they need to be at the table when strategy is being set.

When you're thinking the big, how are we going to-- do not make the mistake, and this is done, you know so many companies do it today. You know, we'll figure out market and then we'll deal with multicultural. No, it has to be at the moment at the table when you are coming up with strategy.

EDWARD CHANG: I think for Asian, we lack data. We need some help with data that anyone can use. We look very closely at the information the Census provides to us. The Pew data has been invaluable to a lot of the organizations that I work with. So there's a lack of it. And it's something that's sorely missed. And to the extent that government organizations can help.

HORATIO GAVILAN: It's a challenge for all of us. I mean, and what we try to do is fill some of the gaps that we see, but more and more, you know, the cost of it is just mind boggling. So it's something we're trying to do. We're working very closely with the Asian Association of Advertising Agencies out in California and with several African American agencies just to make sure we talk about multicultural, we include everybody.

Because it's not one or the other. It's not Hispanic versus Asian or it's all about all of us, how as a multi-cultural you want to call that community, we're changing the face of America, moving forward. And I think that's a message that's important, that is about the change of America and how we can make sure that all of us are there in all this different constituencies are at the table. And I think that's a challenge for all of us as a marketer is to demand that you have those voices and those inside and those experts at the table.

XENIA BOONE: And just to underscore, obviously marketing is a reflection of our society. It is critically important to ensure that the internet is kept free and open for everyone. So I think we're only as good as society deems us worthy. And as everyone is saying this is all about the insights

and the opportunities. So I think sometimes when we talk about these issues, we raise a lot of the concerns and the fears.

But we should also look at marketing as a huge set of opportunities. This has never been a more innovative time for marketing. We're talking about every marketing channel, both offline and online. So let's all taken a really close look at the challenges and the risks, but also take advantage of these great opportunities.

ORLENA BLANCHARD: I like what Xennie said about opportunities, and I think the point that I really wanted to make was the social-- it's sort of the elephant in the room, the social and political climate at any point affects how consumers see themselves in the context of the world in which we live and how they exist. That is critically important now more than ever, for especially communities of color.

And there is whether we want to admit it or not, a heightened sense of anxiety and fear and concern moving forward. And so I think it's really important for all of us in the professional communities in which we move to be more conscious of how we speak to how we position our message to how we deliver that message and how we consider the consumer and how they see themselves. And I think that more than anything is important right now and that's what I would advise that moving forward is just be very aware of how your consumer sees themselves in the context of the world in which we live and therefore, that affects how you deliver your message and what your expectation is of that consumer relative to what you do, whether in private or public sector.

KATI DAFFAN: Great well, I just want to sincerely thank all of our panelists for sharing their time and expertise with us here today. It's been fantastic and let's give them a round of applause.

[APPLAUSE]

And at this point it's my privilege to turn the stage over to Devesh Ravel from our Bureau of Economics. We're very grateful that Devesh has been spending his time on this groundbreaking research that he's going to be presenting to you today. I also wanted to just mention that you've been seeing a lot of great and detailed information on a lot of slides today. All of that's going to be available on the website going forward. So if you want to go back and look up some of that information, it'll be there for you.

DEVESH RAVEL: So I thank you all for coming here and I know I'm keeping you from lunch. So I'll try to be quick. But this paper is about what determines consumer complaining behavior. Here is the obligatory disclaimer. Let me start a little bit with explaining that the dataset I'm using.

I'm using data from the Consumer Sentinel Network. The Consumer Sentinel Network is a consortium of different complaints coming from different agencies. So some of these are coming to the Federal Trade Commission directly. Some of them are coming to other federal agencies, like the CFPB, some of them to the Better Business Bureau, state and local agencies, and so forth. So that Consumer Sentiment Network is getting millions of complaints a year at this point.

So it's called Sentinel and the reason it's called sentinel is one of the reasons for the Sentinel Network is in order to inform us about emerging problems that might appear in the marketplace. So you want to use that kind of data to try to figure out what's going on, try to figure out maybe emerging frauds, and so that we can deal with them before they get too bad.

But we also use the sentinel data in order to inform cases. So for example, we may in a particular case, use complaints from Sentinel Network to show a judge that there was fraud in the market. So this is one of the big resources that the FTC uses in its law enforcement mission.

So in this talk today I'm going to answer three questions. So first of all, who complains to the Consumer Sentinel? Or probably more accurately, what groups complain to the Consumer Sentinel? Second of all, what issues are they complaining about, and do those issues vary across groups? And then finally how do complaint rates compare to victimization rates?

So just whenever we see someone complaining, that could be because they have a higher propensity to complain or it could be because they have a worse experience. And in general it's hard to tell these apart. And I'm going to show you how I'm going to do it, in this case using matched data between frauds investigated by the FTC or other agencies together with complaints from those cases.

I'm going to start with what groups complain to the Consumer Sentinel. Looks like, something messed up in how it looks, but I'll have to deal with that. So I'm matching zip code. So in the Consumer Sentinel, most consumers, when they complain, report a zip code. And I'm matching the zip code to census zip code demographics. So I'm looking at a bunch of different variables. But I'm only going to look at four of them today.

So first of all race. So we have information on percent black, percent Hispanic, and percent Asian. There are cultural attributes like education, percent college graduates, and the degree of urbanization. Then there's things that might affect the cost of time, such as someone's median household income of the area, unemployment rate, median age, and household size. So in the talk today, I'm going to focus on percent black, percent Hispanic, percent college graduates, and the degree of urbanization.

And so what I'm going to do is I'm going to match data from the Consumer Sentinel on complaint rates in different zip codes to the census demographics. That's important to point out that the census data is based on what they call a ZZTA, which is the census version of a zip code. It's not exactly zip code, so I'm excluding post-office boxes and other areas that don't quite match.

Now in the main paper, I'm using data for 2012 to 2015, in this paper I'm only using 2015 and I exclude identity theft cases. Let's hope the graph works. So the first graph here is looking at how complaints vary across areas with different levels of minority groups.

So the x-axis here is the population share. So that's the population share, either of percent black, percent Hispanic. It's going from 0% to 100%. On the y-axis here is the number of complainants per 1,000 people. And it's the number of complainants by the number of complaints because we

want to avoid problems of serial complainants. So if somebody complains 100 times to the FTC. So it's the number of complainants.

So the red line here is percent black. What you see is it's roughly flat and about four complainants per 1,000 people, whether you are at an area with 0%, if your area 0% blacks versus areas with 100% blacks. So there are some wiggles there, but overall there's not much of a change over time.

Whereas if you look at the percent Hispanic, which is the blue line, there's a huge difference. So what you see is that areas that are about 0% Hispanic have about four complaints per 1,000 people. Once you get to about 10% Hispanic, the line starts to decline. And what you see is that when you get to areas that are almost 100% Hispanic, we're only getting about two complaints per 1,000 people. So the rate has fallen by about 50%. So

This is some evidence that say at least for Hispanics, minority groups might be complaining at much lower rates than other groups. I'm going to go back to the slide towards the end to try to show you how this changes when we look at victimization.

I also look at urban areas. So here this is the population share, this sort of the percent urbanization of the area. What you see is that urban areas do complain at higher rates. So there's a pronounced increase when you go from 75% urban to 100% urban, and it's going up by about 25%. So about from four complaints per 1,000 people to five complaints per 1,000 people. I'll let you take a second to look at that.

And lastly, I look at percent college educated. And what you see here is that barring kind of the left side where there are few college educated areas, you see that the number of complaints rises with the college education of the area. And this particularly rises sharply as you get to very highly college educated areas.

So when you go from an area that's 75% college educated, we're getting about six complaints per 1,000 people. When you get to an area of a 100% college educated, we're getting about 12 complaints per 1,000 people. So it's about doubling. So what this is telling us is that college educated areas are complaining at much greater rates to the Consumer Sentinel Network.

So everything I've shown you here is just raw. Statistics from the data. In the paper I go through a more involved regression process, where I try to control for multiple different factors. What I find is that you get higher rates in black areas, college educated areas, and in areas with higher unemployment, lower rates for Hispanic, as we saw in that previous graph, in rural areas and lower rates for areas with greater household size. And then surprisingly income doesn't seem to matter that much. Median age also doesn't matter that much. Although that doesn't vary as much because across localities in the US.

So the way way to think about these results is that these are different communities. there? May be communities that have very low percentage black or very low percentage Hispanic. Other communities are almost all black, almost all Hispanic, we're getting different rates of complaining behavior if we look across these communities.

So the second question is, what do they complain about? So here what I'm going to use is information in the Consumer Sentinel that tells me the reason for the complaint. And the Consumer Sentinel Group can aggregate that into different categories. So I'm going to look at a few of the largest categories. So I'm going to look at bank related complaints, debt collection, auto related complaints, impostor scams, and sweepstakes and prizes.

So let me first show you this graph for percentage black. So here the left axis is the share of complaints. And then again, the x-axis is the population share going from zero percentage black to 100 percentage black. Now the red line is auto related complaints. The yellow line is bank related complaints. The green line is debt collection. The blue line is impostor. And the purple line is price.

So you can immediately see a few things here. So when you go from zero percentage black to 100% black, the share of impostor complaints is going from about 20% to 15% of share of all the complaints in these areas. Whereas some of the bank and other related complaints are going from about 5% to 10%. I think it's sort of hard to see what's going on here, because some of these things differ a lot in their share.

So what I'm going to do now is I'm going to normalize them to one at 0% black. And then you can see the rates of change as you go from zero to 100%. So this is what this graph does. So here the index is one for errors, so there's 0% black and then you can see what happens as you go from here [INAUDIBLE] to a 100% black.

So the first thing you see is that for auto related complaints, bank related complaints, and debt collection complaints, there are big increases in the share of complaints, as you go from areas that have very few blacks to areas that are almost all black. So those are the first three lines there at the top. What you see is that when you go from areas that are literally 0% something like 5% there's already a big increase. And then there's a steady increase as you go from about 5% to 1%.

So some of these like bank related complaints are almost doubling when you go from 0% black area to 100% black area. Obviously some things have to decrease. The share of bank related complaints are increasing. The share of other complaints is decreasing. So here you see with the blue line at the bottom, the share of impostor complaints is rapidly declining as you go to areas that are almost all black.

And I can do the same for Hispanics. I think here perhaps the most pronounced thing is that the share of sweepstakes and prize related complaints, and that's the purple line is declining considerably as you go to areas that are 100% Hispanic. So at the last panel, we were talking about how people market. So it's not clear from here why this is the case, but it could be that those sorts of prizes and sweepstakes are not marketed to Hispanic consumers. Whereas, you do see increases in bank and debt collection related complaints as you go to areas that 0% Hispanic to 100% Hispanic.

So third is percent urban. So here the differences are similar to what we saw before. You see areas complaints about debt collection and bank related to this. So these are the yellow and the green lines increasing as you go from rural areas to urban areas. Whereas you see sweepstakes

and prize related complaints, that's the purple line declining as you go from rural areas to urban areas.

And then lastly, I look at college educated areas. And here you see college educated areas have a lot lower rates of sweepstakes and prize related complaints. They have a lot higher rates of bank related complaints. So again, these are all raw statistics from the data, but if you look at the paper, I go through a regression analysis to try to control over multiple different factors. So if you think about college educated areas probably have different levels of income, different levels of minority groups, and so on, but you're going to see similar variable patterns for most of these areas.

So the last question I want to ask is, how do complaint rates compare to victimization rates? Let me go back to the slide I showed you earlier. So here you see, as you go from areas that are 0% black to 100% black, you're getting about the same rate of complaints. And when you go from areas that are 0% Hispanic to 100% Hispanic. You're finding the rate of complaints falls by about half.

But the FTC regularly does fraud studies, when we do studies where we ask, where we know race, we find that both blacks and Hispanics report much higher rates of victimization than whites. And that's inconsistent with this pattern here that finds that heavily black areas complain about the same rate and heavily Hispanic areas complain of much lower rates. So one possible reason for that is that people in heavily black or heavily Hispanic areas are a lot less likely to complain to the FTC or to the other organizations in [INAUDIBLE].

So I can examine that directly through-- so there's two possible stories. One is that there's a higher propensity to complain. The second is that people have a worse consumer experience, they're more likely to be victimized. And in general we can't really disentangle that by just looking at complaint rates in the [INAUDIBLE].

So what I've done is I've taken victim data sets from a bunch of cases brought by the FTC or by other actors and match them to complaints in the Consumer Sentinel Network and then linked that to demographics at the zip code level. And in this way we can try to see whether the propensity to complain is changing versus victimization.

So let me get to the four cases. I have four cases here. The first one-- and it's nice to have a little bit of mystery in a talk and I can't tell you anything about this case, other than I've called it Case B. And he was sued successfully by either a state or federal agency. But here you can see the victim database is extremely large, with over 12 million victims. There are about 4,000 complaints matched.

The second is Ideal Financial. This was a company that took online payday loan applications and then took money out of their bank accounts without providing them anything. So here we are about two million victims, and about 1,500 complaints. The third which is Platinum Trust is also a payday loan related case. So this is a company that took online payday loan applicants and offered them deceptive credit cards. So here we are, about 70,000 victims and 500 complaints.

And then last one, WinFixer. It was a spyware case. So this is a company that told you that your computer was infected with spyware, and then they sold you deceptive software that was supposed to clean that software. And here we are about 300,000 victims and 1,000 complaints. So the first, I think simplest finding here is that the number of complaints is orders of magnitude lower than the number of victims.

So that's in general going to be a problem that we face is that most victims don't complain to the FTC. Yes, this is a fraction of a fraction of a percent that complained to the FTC. Now the first question you might ask is, do areas that have more victims complain more? And the answer to that is yes. So here I've listed for each case, if you increase the victim rate by one standard deviation, what happens to the complaint rate?

And across all of these cases, you find that the complaint rate increases between 12% to 17%. So it's actually pretty consistent across the four cases although they're about pretty different subjects. And they're highly statistically significant. So in general, if you have an area that has a greater rate of victimization, we're going to see a greater rate of complaints. And I think that's nice. That shows that you know these complaints and these victims are really coming from the same cases.

But next I want to look at demographics and compare victim rates across different areas with different demographic groups to complaints. So the first thing is that the victim rates are very different across cases when you look at different demographic groups. So here, the x-axis is the population share again, going from zero to 100% for percent black. The y-axis here is the number of victims per 1,000 population. And again I've normalized it so it's one and zero so it's easy to see.

So you can clearly see here is that the purple line and the green line-- so these are Ideal Financial and Platinum Trust. These are the two payday loan cases. As you get to very highly black areas, you're getting much, much higher rates of victimization. So there's an order of 400% to 600% increases in the rate of victimization as you go to heavily black areas. If you look at the WinFixer case, it's about flat. For Case B that I can't tell you about, it increases by about 100%.

If you look at Hispanics, we get a very different picture. And it's this kind of interesting picture. Because it is sort of an inverse U. The complaint rates tend to increase in sort of medium Hispanic areas and then they fall as you get to the high Hispanic areas. With percent urbanization what we find is that the threat of victimization for all four of these cases is increasing as you get to highly urban areas, again not by too much. So in these cases it's maybe 20% to 80% higher when you get to completely urban areas compared to completely rural areas.

And then finally, if you look at college education, you see the WinFixer case, there's a big increase in areas that are heavily college educated, so maybe these are people that are that are much more likely to use computers and so they're getting the spyware scams. So that's increasing by about 150%. The two to payday loan cases are actually declining. And that probably represents the rate of victimization in those areas.

But next one I'm going to look at is the number of complaints relative to the number of victims. That tells you what's the complaint rate relative to the number of victims in the area. So this is a way that we can kind of isolate the role of the propensity to complain as opposed to just differences in victimization rates across areas. So here we're going to see a very different picture than we saw earlier, when we just looked at raw complaint rates in the Sentinel. So this is percent black.

So here the y-axis is the number of complaints per 1,000 victims. It's not the number of complaints per 1,000 consumers in the population. And what you see is, for all four cases you're seeing a pronounced decline in the number of complaints per 1,000 victims as you get areas that have high percentage black populations. And in general, this is going to be a decline on the order of about 50% or more. So what this says is that areas that have black populations are much less likely to complain for this case, for all four of these cases.

We see a relatively similar picture of Hispanics. So if you look at the Hispanic rate, we see declines as you get to heavily Hispanic areas. And again, these are actually larger. These are 50% to 80% declines except for the Platinum case. So what this tells us is that for both heavily black areas and heavily Hispanic areas, we're finding much lower rates of complaints relative to the number of victims in these cases.

For urbanization for the Platinum case we see a big increase as you get to highly urban areas, somewhat for the other ones. As you do more complicated analysis, you don't necessarily find a consistent picture. If we look at college educated areas, we find higher rates of complaints relative to the number of victims and in college educated areas. For these cases again it's not quite as strong as the results on minority groups, but it's still there.

And if you do a more complicated statistical analysis to try to control for all factors, you continue to find significant rates of decline in complaining when you look at highly black and highly Hispanic areas and significantly higher rates of complaining when you look at highly college educated areas. So what this is telling us is that different demographic groups complain at different rates, even with the same level of consumer experience and the same level of victimization.

So I have a couple of minutes left. So there's a question of what do you do about this analysis? So I think there are a couple of different answers. So first of all, there's a policy answer, which is outreach. So this is something that the FTC already does. But one thing you can try to do is contact groups that typically complain less and try to encourage them to complain more. So it might be multiple reasons why they don't complain. One could be that they're not aware of the FTC or they're not aware of the resources we have. So outreach events might be a way both for us to find out what problems they have but also to encourage people in those groups to complain at higher rates.

Now if you're thinking about this from a marketing perspective, you know if you're one of the marketers, maybe you want to know both who's buying your product, but also who has problems with your product. And there maybe you want to do things like surveys or incentives to get everyone to participate and tell you what they think.

There's a second answer which is a more statistical answer, which is waiting. So you could think of. And I want to know the rate of victimization across different groups in the population I notice that certain groups are a lot less likely to complain so I'm going to overweight their complaints in order to get a kind of consistent picture across the population. But again, here to do that you need data on consumer experience in order to construct those weights. So in this case, that data was coming from the four cases where I had victims matched to consumer complaints. But that's it. And if you're an FTC lawyer and you have a case that could be contributed to this data set, please let me know.

[APPLAUSE]

PATTI POSS: Thank you, Devesh. All of those slides as everyone said will be on the website with the corrected version too of that one. They will be on the website up on the FTC.gov site. So I want to thank all the panelists and speakers from this morning. We're going to take a one hour break. We'll be back at 2:00 in this room. As a reminder the cafeteria is just down the hall here to the left and there's restrooms right outside here. If you do go out of the building and go back out through the street entrance, you are going to have to come back through security, if you're not an FTC employee. So plan your time accordingly.