

The Geography of Longevity

Gillian White: And I'm so thrilled you're all here this morning. I am even more thrilled to be interviewing Raj Chetty. Before I was deputy editor, I had a past life as an economics reporter and for anyone who knows anything about Roger's work, he is kind of the guy when it comes to inequality and economics. So the way this is going to work is that Raj is going to talk to us a little bit about his work. I'm going to ask him some questions, then you guys will have a chance to ask him some questions, so, so we don't waste any more of your time. Raj, go ahead.

Raj Chetty: Great. Thanks so much Joanne. So thank you all for being here. It's a pleasure to be able to speak again here at the Aspen Institute. So I see some familiar faces in the audience. So I'm going to talk about new work that we're doing in our research group, but just to make sure everyone's up to speed, I'm going to start out by giving you some more general background of where we're coming from on this topic and then dive into newer findings. So, uh, what am I going to talk about today is the geography of economic opportunity and how we can improve economic opportunity in our own local communities and institutions. But I want to start at a much bigger picture level by talking about the American dream, which is of course a multifaceted concept that means different things to different people. But I want to talk about one way in which we can systematize our measurement of the American dream, which is to think about the traditional idea that America is a place where through hard work, any child should have the opportunity to rise up in the income distribution and have a higher standard of living than their parents did.

Raj Chetty: And so what I want to start out with within this first chart here is just an assessment of whether America lives up to that ideal both today and whether it did in the past. And so what we're doing in this first chart is computing a very simple statistic. What fraction of children went on to earn more than their parents did? Adjusting for inflation, measuring both kids in parent's incomes in their mid thirties and looking at that data by the year in which the child was born. So what you can see here is that for kids born in the 1940s and 1950s it was a virtual guarantee that you were going to achieve the American dream of moving up relative to your parents. 92% of children born in 1940 went on to earn more than their parents did. But if you look at what has happened over time, you see a dramatic fading of the American dream such that for children who were born in the 1980s who are turning 30 today, it's essentially a 50 50 shot as to whether you're going to do better than your parents.

Raj Chetty: So this broad trend, I think it's of great interest, not only from an economic perspective, but also from a social and political perspective. I think this is one of the key trends that underlies the frustration that many people around the country are expressing, that the u s is no longer a land where you can get ahead. It's motivated by this trend. In our research group at Harvard opportunity insights, we are focused on the question of how we can understand what's

driving that trend and how ultimately you might be able to restore the American dream. And the way we, that is following kind of three broad themes which I'll talk about today. First. Uh, in much of what we do, we use big data to study how to increase upward mobility. So just as you hear a lot about big data these days being used in the private sector by companies to improve the products they offer.

Raj Chetty: Our vision is that modern Datas I'll talk about here can be used to tackle important economic and social policy questions second rather than honing in on any one specific area of intervention. So when you think about inequality and mobility, you might naturally think about issues of education. For example, we rather than focusing on one theme, we structure analysis around a broad range of interventions from a life course perspective. Thinking about it from childhood to adulthood. And you will see as I go through the data of why that perspective is very useful. It seems like there are lots of different factors playing into these trends in the u s the starting point for a lot of our work and what I'm going to focus on in particular today in this session on the geography of opportunity is that there are very sharp local differences in rates of upward mobility.

Raj Chetty: So to show you that I'm going to turn to this map here, which we've constructed using data on 20 million kids born in the early 1980s in the u s are essentially all children born in America in the early 1980s we link kids to their parents using anonymized information from tax returns and we construct this map which shows you the geography of upward mobility within the United States. So think of this as basically starting to break down that national data that I showed you on the first slide across different parts of the u s so let me say a bit about exactly how we construct this. So we divided the U s and to 740 different metro and rural areas. In each of those areas. We take kids who are growing up in low income families, families earning about \$25,000 a year. That puts you at the 25th percentile of the national income distribution, and we ask where did these children growing up in low income families end up in the income distribution themselves?

Raj Chetty: How much are they earning when they're around age 35 importantly, when we emphasize this is the location where you grew up, not necessarily where you're living as an adult. When we're measuring your income, which is critical and understanding what's going on. As you'll see in a second, so start by looking at the scale in the lower right. The red colors here are areas with low levels of upward mobility. The blue green colors are areas with high levels of upward mobility, and if you just look at the range of numbers you see there are all of these kids are starting out and families at the same income level. But you can see in places like Dubuque, Iowa, kids starting out in families earning 25,000 a year, they are on average earning \$46,000 a year as adults. So a substantial amount of upward mobility across one generation.

Raj Chetty: In contrast, if you look at the places in the dark red, much of the southeast or places in the Industrial Midwest like Cincinnati or Cleveland or take a city like

Charlotte north, you're starting out in the family making 25,000 a year. You're still around \$26,000 a year, one generation later, very low levels of upward mobility, lower than any country for which we currently have data. Now naturally, I think the question of interest to us as researchers and to policy makers is what is driving this difference in rates of upward mobility across the country? And what might we be able to do to increase rates of upward mobility in the places that are in the red colors on the map. So I'm going to show you a series of results in the first half of this talk that show how we're trying to basically unlock the pieces of that puzzle and figure out what's going on here.

Raj Chetty: And that's still a work in progress, but you'll see how far we've gotten. And then in the second half of the talk, I'm going to talk about how we're translating what we found to change on the ground in terms of changing policies to actually try to help families. So let's walk through a series of potential explanations for what might be going on here. So one thing that people often think about economists in particular is that, you know, maybe this is driven by differences in economic conditions in these areas. The strength of the labor market, the availability of jobs, rates of job growth and so forth. So take the example of Charlotte. Many of you probably know that Charlotte is one of the most rapidly growing cities in America. It's the kind of the engine of the south in some sense. If you look at any traditional economic statistic like rates of job growth, wage growth, things like that, Charlotte would rank at the top.

Raj Chetty: Yet in contrast, if you look here, you see that Charlotte is actually 50th out of the 50 largest cities in America in terms of rates of upward mobility for kids who are growing up there. So how does that add up? How can you both have very high rates of job growth and very low rates of upward mobility? So what's happening in places like Charlotte, also places like Atlanta, is that they're essentially importing talent. Lots of people move to Charlotte and Atlanta to get those high paying jobs, but the kids who are growing up in Charlotte, Atlanta, themselves in low and middle income families are apparently not really benefiting very much from that economic growth. That pattern is a much more general one that extends beyond the example of Charlotte. So in this chart here, we are plotting rates of upward mobility. What I showed you on the previous map for the 30 largest metro areas against rates of job growth over the past 20 years or so.

Raj Chetty: And you can see that there's essentially no relationship between the two things. So what does that mean? The first thing you learn from this is that, you know, thinking about trying to get the Amazon headquarters to your city may not necessarily be the answer in terms of improving outcomes for people in your own city to begin with, right? Obviously you need jobs somewhere in order for people to have higher incomes. But at a local level, the key driver of differences in economic mobility isn't fundamentally appear to be about jobs. Okay? So next potential explanation that you might think of anybody familiar with the demography of the United States will recognize patterns related to race in this map. So in particular areas with larger African American populations have lower

rates of mobility on this map, right to the southeast, uh, places like Cleveland and Detroit and so on.

Raj Chetty: So you might ask, you know, how much of this we, we know that there's a long history of racial disparities in the United States. How much of this is actually about place and geography and how much of it is simply about race, that there are differences across race which are being manifested in this map. So we can get at that by constructing this map separately for black and white Americans. Uh, and so that's what we're doing here where I'm going to first start by showing you the data for men and then showing you the data for women separately. That gender distinction turns out to be extremely important here. So what we're doing here is showing the exact same statistics that we started out with. Uh, but the map on the left is for black men and the map on the right is for white men. So when you look at these two maps, your initial instinct might be, okay, they've put these two maps on two different color scales.

Raj Chetty: The map for black men appears to be in a red, orange color scale. The map for white men appears to be on a blue, uh, green color scale. But in fact, if you look at the bottom, you see that that's not the case. The maps are on the same color scale. It's just that the distribution of outcomes for black and white men in America is almost entirely non-overlapping. That is to say if you take the places with the very highest rates of upward mobility for black men, a place like Boston for example, you have lower rates of upward mobility than in place like Charlotte, which is the place where the lowest levels of upward mobility for white men. So it's like they're two separate Americas with two different completely different rates of upward mobility for black and white men. So there's no understating the importance of race.

Raj Chetty: Race is extremely important in understanding what's going on. Uh, that being said, there's still substantial differences within race across places. So you can see that if you look at the map for white men, for example, much of Apalasia, you see much lower rates of upward mobility than you see in the rest of the country in places like Iowa for example, or a parts of parts of the coast. Uh, and so my takeaway from this is that race is extremely important. We need to think about how to tackle racial disparities and upward mobility directly. That that being said, please. And geography continues to be extremely important. That is particularly clear when we now turn to the data for black versus white women. Same exact statistics again. Now, interestingly here, notice that you don't see two different sets of colors on the two maps, right? So if you look at black and white women, they actually have quite comparable rates of upward mobility across the United States.

Raj Chetty: Unlike black and white men. Very, you see very, very different outcomes. And in particular, if you look for white women in the southeast, you see very low, uh, you much lower rates of upward mobility than in the rest of the country. Again, you know, uh, coming back to the importance of geography and understanding what's going on. Okay, so me now getting come back to this map where we're

pooling all racial groups. So if you look, when you look at the big map here at a national level, your eye naturally gravitates to this broad regional variation, right? Do you think about the great plains versus the southeast and so forth? But in understanding what's going on, and this is where our most recent work has focused, it turns out that there is much more granular variation here than just at a broad regional or metro area level.

Raj Chetty: The roots of these issues emerge much, much more locally. And so to show you that, I'm going to toggle over to an interactive tool that you can access freely on the web called the Opportunity Atlas, which we put out about six months ago. And what this tool allows you to do is look at the type of statistics on upward mobility that I was just describing to you, not just at a national level, but zooming in to any particular neighborhood that you're interested in. And the way this works is very much like a Google map. You can type in any address that you're interested in, this upper left box and look at the data for your own neighborhood. So what I'm going to do here to illustrate this is focus on one area in New York. Um, that illustrates some of the key patterns that we find in the data.

Raj Chetty: So I'm going to jump into an address called five 30 Sutter avenue in Brooklyn, which is the Vandyke public housing projects in New York City. Okay. So now we've zoomed in and we're looking at the data within New York City and in particular in Brooklyn. So the first thing I want to do before I describe what's going on in that specific neighborhood is just notice that the spectrum of colors that you're seeing on the screen is exactly the same as the spectrum of scholar colors that you saw at the national level. So you go from the darkest reds to the deepest blues within New York, within a few miles neighborhoods that are within a few miles of each other. So a different way to say that is you can go from sort of like Alabama to Iowa in terms of rates of upward mobility, going a few miles down the street within New York City.

Raj Chetty: Really any other city in America you see extremely sharp variation at very narrow geographies. So what does that show you? The roots of these differences in economic opportunity are not about broad differences in labor markets or regional factors. They're actually much, much more local than that. So now to understand what's going on these places, I'm going to zoom in a bit more to this particular area. Um, and um, what, what you can do with this tool is look at the data, not just for everyone but for different subgroups. And so I'm going to click on the data here, looking at the data specifically for black Americans, um, and zoom in a bit more. So now we're looking at this area in Brownsville, uh, in Brooklyn, which those of you who are from New York might know that that's a very high poverty area, uh, in New York.

Raj Chetty: Um, and what you see is, you know, if you take this particular census tract that we're looking at, which is the, as I mentioned, the Vandyke public housing projects, the average income of black Americans who grow up in that, uh, public housing project is just \$18,000 a year in adulthood. Now what's interesting

about this is if you look at, uh, the set of areas, you see these red orange colors over here. But then if you come just across the street down here, a street called Dumont Avenue, you see very, you know, substantially different patterns where you're seeing average incomes and adulthood that are about \$10,000 higher than on the other side of the street. So rates of upward mobility are very different on one side of the street relative to another. That's a situation that we see, not just in this one example, but in many, many different cases across America. Now, why am I focusing on this particular example here? So it turns out after we put this study out, NPR did some interesting investigative reporting to figure out what's going on in this particular area. And so I want to show you what they learned, which I think nicely illustrates what's driving some of these differences.

Speaker 3: When people find out where Audra Palacios is from, they often react in disbelief. How could you come from and you lived there and it's like almost as if it's like, I can't believe you made it out. You're only 40% of Brownsville lives in poverty. And if you look at the opportunity outlets and zoom into Brownsville, a lot of it is exactly what you'd expect. Black kids raised in the area 30 some years ago now make about \$17,000 a year, same as their parents, but once you had across Dumont Avenue, everything changes. Black kids from the same exact background are doing better than their parents making around \$26,000 a year.

Raj Chetty: So why is it that we see these differences? Let's listen.

Speaker 3: In the eighties New York City had been hard hit by a recession. Then the crack in HIV epidemics, there was a part of Brownsville that was totally abandoned. The other side of Dumont, the New York City government sold over 16 square blocks of Brownsville. To the East Brooklyn congregations for \$1. Those blocks were dilapidated, rundown. The city agreed to build infrastructure and provide cash subsidies for over a thousand affordable homes. They would start selling at \$30,000 each. They were called Nehemiah houses after the man in the Bible who rebuilt parts of Jerusalem.

Speaker 4: The family was growing and we needed something that was much better for the children. I didn't like elevators up and down the elevators from my children because it was a lot of people living in the housing projects.

Speaker 3: Audra Policia was six when they bought the house. I remember when we moved, it's an emi. As we were so excited, we had rooms. We had space, we had our backyard. Here's Reverend Brawley. He said the Nehemiah houses in Brooklyn gave children a space to do homework, a good night's sleep.

Speaker 5: When people have ownership of their properties, ownership of their community, you have a better chance of addressing all core issues such as education and quality of life.

Speaker 3: After I leave the family, I walked just a few blocks to do Mont Avenue according to the outlets. It's the dividing line on the map. It looks jarring. But in person it's completely unspectacular. People bustle on their way to work cars zoom by just another New York City street. It means nothing but what side your means. Everything jasmine goes, NPR, news, New York.

Raj Chetty: And so what you can see from that example is, you know, if you think where I started this talk talking about the American dream at a national level, we now see that the origins of the American dream, you know, zooming in actually are at an extremely local level. Different sides of the street, different blocks within New York City appear to have kids having very different chances of climbing up the income ladder of achieving various, uh, life successes. So what I want to do next, building on these ideas. So in this particular example, they emphasize the importance of mixed income housing as potentially being a driver of these differences. Now I want to talk about more systematically as we look at the data, what are driving these differences across places. And so I'm gonna take you now to Seattle where we're doing some work, which I'll come back to in a second and just start out by showing you if you look at the same opportunity atlas snapshot in Seattle, you see similar patterns to what I was talking about in New York where you see very sharp differences in kids' outcomes depending upon where they're growing up.

Raj Chetty: And so the first thing I want to address in terms of starting to understand what is driving these local differences in rates of upward mobility is whether these differences are driven as Audra Palacios suggested in that NPR interview by differences in the opportunities offered in a given place. That is if you were to move from one place to another, you'd see different outcomes or is it simply that you have different types of people living in different places? That is if you take Seattle, the types of people living in the central district or different from the types of people living in Normandy park or in Bellevue. Are we just seeing differences in outcomes because of a differences in the demographics of these areas and so forth? Or is it that if I take a given child and move that child to a different place, I will see really different outcomes for that child.

Raj Chetty: So I'm going to turn to a study we've done where we looked at 7 million families that move across neighborhoods, then using anonymized information from tax returns and we ask whether children's seem to change when they move to a different area. And as you will see, this turns out to be quite instructive in terms of understanding what might be driving these differences. So rather than getting into the statistical details of that study, I'm going to summarize what we find where the simple example in the context of Seattle. So imagine you take a set of families that start out in the central district where we saw on the previous map that if you grow up in the central district from birth, you have an average income in adulthood of about \$26,000 a year. Now imagine the set of families had moved from the central district and Normandy Park, which was in a much bluer color on the map.

Raj Chetty: And we're going to look at the data by the age at which the child moves. We'll start by looking at kids who move when they're exactly two years old. So what we see in this first here is when we track this child forward 30 years and measured that child's income when they're adults. We see on average those children are earning about \$39,000 a year. Okay? So that's for the kids who move when they're exactly to. Now we repeat that analysis for kids who move when they're three, four, five and so on. And what you see is a very clear declining pattern. The later you make that move from the central district to Normandy Park, the less of a gain you get. And if you move after you're in your early twenties the relationship is completely flat. So what do you see from this chart? I think there are three key lessons.

Raj Chetty: The first is that where you grow up really seems to matter. It's not just about different people living in different places. Apparently if you take a given child and help that child move to a higher opportunity area where we're seeing better outcomes for kids who grew up there from birth, that child ends up doing much better, has significantly better life outcomes, not just in terms of earnings, which is what I'm showing you here, but a variety of other outcomes like college attendance rates, lower rates of incarceration and so forth. Second, what you see here is what really seems to matter is childhood environment rather than where you're living as an adult. We see in this study, in other analyses we've done that helping people move to a different area after they're 23 or so has essentially no impact on their economic outcomes. Third, you see that every extra year of childhood exposure to a better environment leads to better outcomes.

Raj Chetty: So there's kind of a dosage response here. If you spend two years in a better area that yields some benefit. If you spend four years or six years in a better area, you get a cumulatively larger impact. Why is that important? From a policy perspective, there's a lot of focus as many of you know on early childhood intervention these days. And so we think early childhood intervention could be quite valuable. But what you see here is even if you move to a better environment when you're 10 instead of your 15 or 15 instead of 20 you still see quite substantial gains. Okay. So what I think these data show you is that childhood environment really seems to play a big role in shaping kids longterm outcomes. The next question that you probably naturally have in your mind is what is it that makes some areas better in terms of producing better outcomes, having better childhood environments than others?

Raj Chetty: And so we have looked at a variety of different factors that sociologists and economists have talked about over the years as potential explanatory variables here. And I'm just going to summarize here in the interest of time, the four strongest predictors that we found. So first we see that areas with lower poverty rates, less concentrated poverty tend to have higher rates of upward mobility. That's very consistent with the NPR story focused on the public housing projects. Traditional public housing projects in the U s are the epitome of concentrating poverty in a particular area. And those types of places tend to

have very poor outcomes for kids in low income families. Second, we find a strong correlation with family structure. Places with more two parent families tend to have higher rates of upward mobility. We don't know exactly what's driving that, but that is a strong pattern in the data.

Raj Chetty: Third, you find perhaps some would related to that. Places with a higher level of social capital tend to have higher levels of upward mobility. So the idea of social capital was popularized, pardon me, in a famous book by Bob Putnam, uh, at Harvard called *bowling alone*. The way I think about social capital is the old adage that it takes a village to raise a child. Will someone else help you out even if you're not doing well? Salt Lake City with the Mormon church is a canonical example of a place thought to have a lot of social capital. Correspondingly has very high rates of social mobility. So we are in some of our ongoing work trying to measure social capital more precisely, measuring connectedness across groups. And I think we'll be able to save more about exactly how that works. But that seems to be a very important factor here.

Raj Chetty: And then fourth, as you might expect intuitively, places with better schools tend to have higher levels of upward mobility. Education matters quite a bit here. Now I want to show you one final piece of data that helps us understand what's going on here and then turn to how we can use this information to support policy change. So when I talk about high mobility neighborhoods, talk about all these factors seeming to matter. It's useful to think about what size of geography are we thinking about? When we say neighborhood, do we mean a few miles? Do we mean a metro area? Do we mean something extremely granular? And so to get at that, I'm gonna turn to this chart here, which shows you how you can analyze that in a very precise way. So I talked about in the previous slide how higher poverty rates are associated with lower rates of mobility.

Raj Chetty: So now imagine an exercise where I look at the poverty rate, not just in your own block, but also in a block in the next block over how predictive is that of rates of upward mobility in your own block. So that second dot that you see on this chart shows that poverty rates one block over are 60% is predictive of rates of upward mobility in your area as poverty rates in your own block. Okay? So there's a decay from, uh, an effect of 100% down to 60% just one block over. So now let's repeat this analysis looking blocked by block further and further away. And let's see what happens. And so what you can see here is that poverty rates that are more than about half a mile away from your house are essentially completely irrelevant in predicting your own outcomes. So when you think about the size of a neighborhood, it's incredibly small.

Raj Chetty: It's basically think about drawing a half a mile radius around your house. It's the conditions in that half mile radius that really seem to matter. Beyond that, there's no predictive power here. I'm showing this to for poverty rates, you can look at the sheriff, two parent families, you can look at, you know, all of the various other measures that I was talking about in the previous slide. They

would all have this extremely rapid decay pattern. So with that shows you is, you want to think about opportunity at a kind of a hyper local level. All right, so given all of that, let's now talk about how we can use this type of information to support policy change in the last few minutes. So the way I think about it is that in the way we're structuring this in our group, opportunity insights is focusing on three pillars that I think come out of what we've learned from the body of work that I've just been showing you.

Raj Chetty: The way I conceptualize the results that I've been discussing is that there are many pipelines to opportunity in America, small neighborhoods, half mile radius, right? Um, and these pipelines differ in their quality. There's some places that give kids great chances of succeeding. There are other pipelines that currently are, don't function as well for various reasons. They don't provide good support in helping kids climb the income ladder. Now those pipelines, they started birth and they end at something like age 22 or 23. So given that structure, keep that kind of model in mind, I think there are three natural ways that you would think about trying to improve economic opportunity in light of that theory of the world. The first is to sort of give people access to a better pipeline of opportunity. If you've got a low income family living in an area that lacks opportunity, perhaps you might help them move to an area with higher levels of opportunity.

Raj Chetty: So think of that as trying to reduce segregation, uh, moving to opportunity approach. So that's one strategy. Now of course, we recognize that reducing segregation, moving to opportunity is not completely scalable. You're, your answer can't just be that you're going to help everyone move to a bluer colored part of the map that I was showing you. So ultimately you also have to figure out how you're gonna improve places that currently are in the red colors on the map. How can you make place based investments to strengthen those pipelines. Now, the third piece of this is recognizing that after age 18 the key touch point is no longer the neighborhood. For most kids, it's an institution of higher education. Could be a community college, it could be a highly selective institution. And so you could think about how you improve the impacts of the higher education system on economic mobility.

Raj Chetty: And that's a third branch of work that we're focused on. So I'll briefly touch upon each of these and then I'm happy to go into more detail when we take questions and have discussion. So start with the segregation piece. So here I'm going to go back to Seattle where we're doing some work in collaboration with the Seattle and King County housing authorities and here on trying to think about how we can reduce segregation in the context of the housing voucher system. I'm gonna start with this here just as a descriptive analysis and important fact. So many of you will know that in the u s we spend about \$45 billion a year on various affordable housing programs. The biggest of which are housing choice vouchers. We spend about 20 billion or so giving, um, 2.2 million families, rental assistance to rent housing wherever they would like. These black dots overlaid on the opportunity atlas map for Seattle show you the most

common locations where families receiving housing Metros in Seattle live and you will notice a pattern that we see not just in Seattle but in all cities across America, which is that people receiving housing vouchers or more generally affordable housing in the u s they tend to be concentrated in the red and orange parts of the map.

Raj Chetty: People are not using these vouchers to go to the higher opportunity places where we see in the data, their kids will have much better outcomes. So why is that the case? One potential explanation is that this is about preferences. Perhaps you know, people for good reason want to stay close to family or close to their jobs or whatever else and they don't want to move to East Bellevue or the north side of Seattle or the south side of Seattle where we see some of the greener colors. A different explanation is that perhaps this is about barriers. Maybe you want to move to those places. Maybe you would if you, if you could, but you lack assistance in the search process. You may be lacking information. You don't have the money to put down a security deposit in one of these places where maybe landlords don't want to rent to you in these places in a hot housing market like Seattle where you can rent them.

Raj Chetty: Any others you don't want to deal with the inspections and the regulation of that, of the housing voucher system. So to test that test between those two explanations and think about how we can improve policy, we have been conducting over the past year a randomized experiment, a pilot study that we're calling, creating moves to opportunity in Seattle where we're basically trying to reduce some of these barriers and help families who want to move, uh, make, you know, whatever choices they would like to think of it as essentially trying to remove some of the barriers and enable choice. And so we're doing that by providing information to tenants, recruiting landlords in this program, offering housing search assistance. So the results of this study will be out publicly in about a month. And I hope some of you will see them, uh, in the media. Let me just say here that this is of the things I've studied over many, many years.

Raj Chetty: This turns out to be one of the highest impact, most successful things I've seen. So we've dramatically changed where families choose to live, where previously it was a small fraction of families living in high opportunity areas and now the majority of families are choosing to live in high opportunity areas. And this shows you that a small, actually relatively inexpensive and intervention would increase the cost of the program by only 2% dramatically changes the landscape of segregation. And we think ultimately rates of mobility for this set of families. Hopefully something that can be expanded to many other cities across the u s going forward. So, uh, I'm going to turn next to, uh, talk briefly about the place-based investment approach. So we recognize that the moving to opportunity desegregation approach can be valuable, but we also need to think about how to invest in places to improve outcomes in lower opportunity areas.

Raj Chetty: And so some of the work we're doing there on the ground focuses specifically on the city of Charlotte, whereas I mentioned earlier, Charlotte ranks 50th out

of 50 in terms of rates of upward mobility. That turned out to be really motivating for that city when we put out that study a few years ago and they set up a commission and a task force and started to work with people in a major private sector, employers like Bank of America and others to think about how they could try to improve outcomes for the youth growing up in Charlotte itself. And we are now collaborating with them, looking at the neighborhoods in Charlotte where we see the lowest rates of upward mobility to figure out what we can do there to improve outcomes. And the way we're structuring this is again from this life course pipeline sort of approach, thinking about what programs at various points of childhood seem to be relevant.

Raj Chetty: So this ranges from early childhood interventions trying to strengthen families to mentoring programs, to getting kids ready for college, uh, and, and career readiness sort of programs. Now you'll notice that there are lots of different things here that nonprofits are developing. Lots of good work being done on the ground, unlike everything else that I've been showing you in this talk. I don't have data or evidence to directly say, you know, these are the four things that seem to be most effective in improving opportunity under such and such conditions. And the reason for that is that we fundamentally lack the data historically to evaluate which of these interventions work and which of these interventions don't work. Uh, and so one of the things we're doing going forward in our group to remedy that problem is something that we're calling the American opportunity study, which is building the sort of longitudinal data where you can follow people over time, going back 70 years.

Raj Chetty: So that we can look at these various programs that people have implemented in many different cities across America and systematically understand which of these programs help the people who were already living in a given neighborhood. And which of them simply lead to gentrification and displacement of one group of residents and appeared to improve the neighborhood in that way. So the key thing to say here is we're working on a bunch of place based initiatives that I think could potentially be very promising, but there's still work to be done going forward and on, on building that evidence base. We briefly touch upon the last piece, which is not what I'm going to focus on here, but something we can talk about in more detail in a subsequent talk, which is the work we're doing in the context of higher education. Just to give you a quick taste of that.

Raj Chetty: So using the data that we work with, we're able to see where every child in America is going to college and link that information to their parental income background and their outcomes after college. So you can look at, say all the students at Harvard, ask what their parental income backgrounds were and then we can ask you to how much are they earning 10 years after they graduated from Harvard. So that's really useful because you can construct statistics on economic mobility for every college in America. And I'm just giving you one example of that where each dot that you see on this chart represents a different college in America. And we're showing two statistics on the vertical

axis is the upward mobility rate. So among kids who were from the bottom 20% of the income distribution, their parents are in the bottom 20% what fraction reached the top 20% so a simple measure of upward mobility and on the horizontal axis is just a measure of how many low income kids there are at a college.

Raj Chetty: The fraction of students from the bottom 20% okay? So if you take a place like Harvard or Columbia, you see that they have very good outcomes, very high rates of upward mobility for the low income kids who go there. That's probably not surprising given how selective they are. You also see that they have a very small fraction of low income students. They have very low levels of low income access. And so as a result, when you think about economic mobility, place like Harvard, despite its excellent outcomes actually is not in an accounting sense contributing all that much to economic mobility because there are, you know, you actually have to have low income kids in order to have higher rates of economic mobility. Um, if you then look across the spectrum, you see that there are many colleges that have higher levels of access. Take an example like central Piedmont Community College in uh, the Charlotte area.

Raj Chetty: You see higher levels of low income kids but much poorer outcomes. And so where are you want to be sort of in terms of high levels of mobility is on the upper right of this graph where you both have a lot of low income kids and good outcomes. So an example of that would be the City University of New York, which has lots of low income kids and they have quite good outcomes. And so you'll see lots of kids starting out in lower middle income families and moving up there. And so, you know, what we're working on is trying to understand how you can help colleges like Harvard and Columbia moved to the right on this chart and help colleges like central Piedmont community colleges move up on this chart. And the way we're doing that is through an initiative that we're calling climb a partnership between our group and 400 colleges around the U s we're linking their applications and admissions data to our data to study better how you can improve access and improve outcomes at each of these institutions.

Raj Chetty: So I'm gonna stop there. Let me just wrap up by saying, you know, uh, people often ask us a, at the end of these talks, how can I learn more and how can I protect Panetta potentially connecting with these efforts? And so let me just say a quick thing on that. So at Harvard this past year I taught a new class for undergrads, um, where there were 400 students, no, no prerequisites, kind of an introductory class called using big data to solve economic and social problems. And this course is now freely available online. So you can just go to this website opportunity, insights.org/course anybody who's interested, you can see a lot more of that type of material I've been presenting here and we're generally, our group is very happy to follow up with many of you who I know are doing important work in these areas. We'd love to hear from you and think about how we can collaborate. Thanks so much

Speaker 6: you.

Gillian White: So I guess my first question for you is in particular when we're talking about kind of the granularity of the neighborhood differences and the idea that a neighborhood is essentially for the purposes of considering upward mobility, a 0.5 mile radius around your house. Since you've told me that at breakfast I have felt a little deflated. That is a little terrifying. Um, and I'm wondering if you feel encouraged or discouraged by the fact that that is essentially the area that people need to make their decisions. And the idea that choosing to live on the left side of the street or the right side of the street could make all the difference in the world. But at the time that you are making that decision or buying a house, really the only information you have to go on is may be school district, but there's a good chance those schools are in the same school district, kind of just housing prices. So that's not even really a decision that a lot of people can make. So how should we contextualize the idea that this massive outcome for your life and the lives of your children is so, so tiny?

Raj Chetty: Hmm. No, I mean I think you can look at that like many of these results in two ways from kind of an encouraging or discouraging perspective. So starting with the encouraging perspective, I think the way I look at does it presents an opportunity, right? The fact that much higher rates of mobility, we don't need to look at a different country or a different time period to figure out how we would get to a situation with higher rates of upward mobility. Often we can just look a mile down the street or a couple of miles down the street. That I view is really positive because it shows that we're not trying to achieve something unimaginable. Um, from the perspective of, you know, both policy and families. I can see what you're saying that it's also daunting, right? It was, we can implement a uniform federal policy and that will fix everything in one shot.

Raj Chetty: That's obviously simpler at some level than trying to fix the social fabric in each of these places, fixed policies in each of these places. Um, I, I still think despite that half mile pattern, you know, the, what's useful about that is to understand what the underlying roots of these differences are. So if you take something like connectedness being important, so there are ways you might connect with people if you're deliberate about it, even outside your immediate neighborhood. It could be through mentoring programs that might bring in people who would otherwise be living in other areas, could be through the way we set up schools and so forth. So I don't view the 0.5 mile radius as some, you know, structural fact about the world that will never change. I think that's partly a result of the highly segregated nature of American cities that, you know, things tend to be very clumped in, in different ways and it need not be that way. Right. And then that half mile radius might become much bigger.

Gillian White: Yeah. I want to talk a little more in depth about the idea of the moving to different areas and using vouchers for that. Um, as you know, moving to opportunity, this has been tried several times in the past with the voucher program and one of the biggest problems in addition to getting people to move

out of neighborhoods that were high in poverty, high in crime, et Cetera, was getting people to then stay in those neighborhoods. It was the persistence issue. So you would see within a period of a few years, a lot of people who moved to those higher income areas with better schools. We're moving right on back. Um, for a lot of the reasons that you listed. So how do we solve for the persistence factor of staying in those neighborhoods that offer those better opportunities? Yeah,

Raj Chetty: it's a great question. So let me respond to that in two ways. So the first distinction, what we're doing here in the approach I described in Seattle said we are not requiring anyone to move to a high opportunity area to get a voucher. So previous iterations of this, some of you will be familiar with the famous moving to opportunity experiment that HUD conducted in the mid 1990s to be eligible for that program, you had to move to a low up to a low poverty, high opportunity area in order to get any voucher at all. And so if you think about what you just said really, and you could imagine as a family saying, I want to get this voucher, it's really valuable, \$10,000 a year or something like that. So I don't really want to move to this other neighborhood, but in order to get it, I'm going to move there and then I might potentially move back.

Raj Chetty: Now that I have the voucher here, it's fundamentally about choice. We're saying you get the voucher, you can move wherever you want. We're just going to remove some of the barriers that might make it harder for you to move to certain neighborhoods. And what's incredibly encouraging about this is despite having pure choice, you see a very high rate of moving to higher opportunity areas and connecting now to your question about persistence, my sense is because of that self selection and we get kind of this impression from just talking with families who have made these moves, they're very happy in these places. Some of them wanted to move to that type of place to begin with. They just didn't know how to get there. So I suspect we're going to see more persistence. The other thing I should notice, people often ask, you know, are do you destabilizing the neighborhoods that these families came from?

Raj Chetty: Kind of having them move out. And the key thing to keep in mind here is that this set of families already is moving for other reasons. So lots of low income families in America moved every year. And many of these families that some of them in our Seattle study are coming out of homelessness. Some of them have been evicted, many of them are moving for other reasons. And this is just kind of helping redirect the flow, helping them make the choices they want to make and where they want to live. Much as all of us would want to choose where we want to live without barriers.

Gillian White: I have one or two more quick questions and then we'll come to the audience for one or two questions. So do start thinking about them now. Um, when you talk about place based investment, um, the first thought I had was obviously that is a huge key and that's a huge driver and people think about that a lot. But the thing that often happens when you make place based investments in places that

have historically been underfunded, um, and places where there are high rates of poverty, et Cetera, low home values is that they become gentrified. Okay. Um, so as soon as someplace starts getting investment, a lot of people see that sweet spot of a neighborhood about to turn with really low housing prices and then the people who had the money in the first place come swoop in and kind of reap those benefits while the people who were in that neighborhood either get displaced or can't necessarily, you know, take on the same value that the people who are moving in Kansas. How are you thinking about kind of that factor as you consider place based investment?

Raj Chetty: That's an excellent question. I think that's a very important Boeree. So we are studying that issue empirically with the American opportunity study that I described looking at previous place-based investments and trying to understand which actually benefited the people who were already living there and which, you know, led to displacement and gentrification. I was, this reminds me, I was talking with Jeff Canada about the Harlem Children's zone and one of the things he was saying, which I thought was quite interesting is he feels like there's almost a victim of his own success in the sense that Harlem now has, you know, many parts are gentrifying and you're not able to provide those opportunities to the families who were originally living there, who are the targets of this program. And so he was saying one of his regrets is that they didn't purchase more housing and build affordable housing before prices went up. So I think that might be the type of strategy one wants to think about where you're both thinking about the affordable housing element while you're doing place based investment, anticipating that there might be general

Audience Member: vacation. Um, let's go to the audience for a question or two. There's a Mike runner right there. Dealer's choice. I wondered as you spoke about, um, the impact of schools as one factor within this, uh, in the old days or I don't know if it still happens if bussing programs happen longer, did they have a positive impact on the longterm economic outlook of the kids who had that opportunity or was it not valuable?

Raj Chetty: I mean, I think like with a number of things, especially the older programs that people implemented, the evidence base is not great. I haven't seen clear evidence that these programs really have been very effective, but I wouldn't necessarily draw a definitive conclusion based on the data we've had so far. Let me explain why I think they might not be a pure substitute for that neighborhood integration, moving to opportunity approach. So one thing that you see in schools is when kids come from a different community, they don't necessarily integrate. They have a completely separate circle of friends from other students. And insofar as we think that it's connections and networks that seem to matter and we have some ongoing work that suggest that's really critical. You may not achieve the same level of integration and social connectedness through a bussing program as you would through something that happens more organically when families move to a different neighborhood. So that's a hypothesis. It's not definitive evidence on that issue, but I could see

different effects because of the, sorry they have been studied, but the evidence is quite limited because of a lack of historical data where you can follow people systematically over time. There are studies which suggest some positive impacts, but it's unclear, I would say. All right. Let's take another question maybe on this side.

Speaker 6: Yes.

Audience Member: I want to say thank you Dr Chetty. I am a Charlotte tn. Um, it's quite jarring to see my city represented in this way, both as a major failure, I think, um, in social mobility and simultaneously as a success in place-based, um, attempted plays based, um, advantages. Um, what I'm curious about is that you said something around, um, that the information in the Cedi study, we actually hear about the tradees study all the time in Charlotte. Um, you said something about it being very motivating to the city. Um, and it made me think about the idea of experiences like this that could be potentially motivating but don't actually translate into change and that you've noted that you don't have data for historical outcomes and disparities. Um, and I'm really curious around, um, how are you and your team interested in holding communities accountable for when they're motivated to change the existing external narrative but not actually changed the, the outcomes? And for instance, um, a very well known foundation leader in Charlotte said very publicly after raising \$50 million towards some of these initiatives to very publicly, it'll take us a generation to see any noticeable differences. I'm really surprised to hear you say in Seattle, oh, in a year. We've seen some really noticeable in, in ways this. So I'm just very curious about that.

Raj Chetty: Great question. Thank you. Um, and so, you know, I think the answer there is to continue to measure these types of outcomes where we can look at this data. So take the case of colleges, for example, if we can put out data year after year on rates of access and mobility, you can imagine that's a way to sort of hold people accountable to see if changes actually occurred. Same thing at the neighborhood and community level. We hope to release opportunity, atlas updates where you can see things changing. Now you raise an important technical issue, which has been, you're thinking about upward mobility. It takes a long time to see those outcomes for the next generation, right? So one of the projects we're working on is trying to develop earlier predictors of later income. So what's a very simple thing you might think of measures that you see in schools.

Raj Chetty: So historically people focus a lot on things like test scores, but you can go beyond that. Think about other, uh, you know, measures both within schools and outside schools of how kids are doing and build basically a predictive model of what we think their earnings might be. Uh, 20 years down the road. And if we can get those earlier indicators and measure them systematically, then I think we'd be able to have kind of a more realtime feedback system. And so we are both doing that on the research side and then actively working with folks in

Charlotte to try to, you know, create change on the ground, working with the housing authority, working with local community foundations to implement change and not just talk about it, which, which I agree is the key challenge.

Gillian White:

I want to keep everyone on time for their next panels. So please join me in thanking Dr Chatty first time.