Coordinator: Welcome and thank you for standing by. Today's conference is being recorded. If you have any objections, you may disconnect at this time. All participants are in a listen-mode only until the question-and-answer session at the end of today's presentation. To ask a question at that time, you may press Star-1 and clearly record your name for a question introduction. Now I'd like to turn the call over to Earlene Dowell. Thank you; you may begin.

Earlene Dowell: Thank you (Ozmar) and thank you to Deborah Rivera-Nieves from the US Census Bureau for hosting our webinar today. On behalf of the US Census Bureau and a partnership with the Council for Community and Economic Research and the Labor Market Information Institute, welcome to our July LED webinar.

It is with great pleasure that I introduce Kristin McCue as she presents what Causes Labor Turnover to Vary.

Hiring occurs primarily to fill vacant spots that occur when workers separate. Equivalently, separations occur to move workers to better alternatives. A model of efficient separations yields several specific predictions.
More generally, separations are positively correlated over time as well as across industry and firm. These predictions are borne out in the longitudinal employer household dynamic's microdata at the economy and firm level.

Kristin McCue is a Principal Economist for the Business Dynamic Statistics Program at the US Census Bureau Center for Economic Studies where she co-leads a team working to expand the content of the BDF. She is also collaborating with researchers at Michigan to develop new data resources for studying retirement.

Her research focuses on understanding how employer characteristics influence demographic differences in career and earnings paths. She received her Ph.D in Economics from the University of Chicago and her MS in Survey Methodology from the University of Maryland.

With that, I hand it over to Kristin.

Kristin McCue: Thank you Earlene. And welcome to everybody and thank you for attending today's webinar.

So the first slide just lists sort of the agenda for the talk. There is a longer paper associated with the work. I'm just going to describe a little bit of what we worked on. But if people have questions about the paper, they could send them to me afterwards. There's a link to it at the end of the slides.

So the first topic that I'm going to talk about is how you measure turnover using the LED data. One other thing sort of housekeeping matter I should mention is that I've been a little bit inconsistent in how I term the - the name that I use for the data.
So the LED is Local Employment Dynamics which is a program that the Census Bureau that puts out a lot of statistics on local employment. There's an underlying database called the Longitudinal Household Income Dynamics database -- that got a little bit long -- that is the microdata.

So some of the things that I'm going to present involve using the public statistics that come out of the LED program and some of it is based on calculations from the underlying microdata. And I will probably be clear on which one I'm talking about when we get there.

So I'm going to talk in general about how you measure turnover in the LED data. And then I'm going to talk about measuring churn which requires using the microdata. And then I'm going to present some evidence in differences in turnover rates by industry. And then how it changes over the business cycle.

Deborah Rivera-Nieves: Kristin this is Deb.

Kristin McCue: Yes?

Deborah Rivera-Nieves: Is your cursor over - there you go. Thank you.

Kristin McCue: So this slide gives a little illustration of sort of how the data are put together from the individual information on firms and people. So the statistics I'm talking about from the Quarterly Workforce Indicators are all things that are under this rubric of employment change individual.

So they're based on looking at when individuals are changing jobs and tabulating statistics from that. So if you look at the column that has a T up at
the top and it's green all the way down, that represents the time period that we're doing the measurement in.

And so if you look at the first row, Hires All, the x in the yellow box indicates that we count a person as being a hire if they don't have earnings in that box so the quarter before T and that they are employed in T. So the LED statistics are constructed by counting up the individuals who show up as hires in a particular year.

And in what I'm presenting we're mostly going to look at turnover rates. And so to convert them from a count of people to a rate, we're just going to divide through by average employment for the firm that they're at.

And in the QWI statistics it's more generally in sort of the cell of that. So it might be if you're looking at QWI statistics that you've got the ratio of hires to the number of people who are employed by firms in a particular area or in a particular five class, something like that.

So there are a number of different statistics that are put out as part of the QWI statistics that are related to turnover measures. So there are a number of different ways to measure hires and separations.

And most of what I'm going to present use kind of a very general, mostly the Hires All version. But in some things I still pick out some things which we're looking at a narrower set of people who are in a job for at least a quarter okay. And I’ll try to make the distinction clear when we look at the numbers.

Okay, here are some average hiring and separation rates. And the last column I labeled "Churn" and I will give that definition in a few minutes. Hire and Separations I think are a little bit more obvious.
So the All Jobs sample is anybody who shows up with some earnings in a particular quarter is going to get counted as a hire if they are not employed at that same firm in the previous quarter. So the first row hire says the mean is .238.

But you can kind of covert that to a percentage by just moving the decimal point. So that would be about 24% of employees being new hires at a point in time which is a very large number, I think, relative to most people's guess of what it would be.

If you look over to the third column with the mean it says Full Quarter Jobs. That's if we restrict ourselves to employees who stay for at least a full quarter.

So one thing that shows up in statistics from the LED data is that there are a lot of very short-term jobs that if you go to something like the current population survey or other -- the (CIP) -- which also collects information on how long people stay on their jobs, people have a tendency to not report really short-term jobs.

And so you get a lot more of them in the administrative records based measures that are in the QWI than you do in household surveys. So you can see when you look at the full quarter jobs, it's more like 10% of people are new hires in a particular - which is also a pretty large number but not nearly as for the sort of All Jobs version.

There are also standard deviations in this table. And you'll notice that they are substantial larger than their means. And what that means is there's sort of a lot variation across both industries and firms.
And if you look at age groups or, you know, by gender there are a lot of
differences across the populations you look at. So there's a lot of variation in
turnover rates.

I will say that the statistics that I'm presenting are based on 29 states rather
than the 51 that exist in the US. So the reason for that is that we want to look
at changes over time. And in doing that, we want to keep sort of a comparable
set of states over time.

And some of the states that contribute data to the LED program have data that
goes all the way back to 1990 whereas others joined much more recently and
only have a few years of data towards the end of the time period.

So what we've got here is sort of the 29 states that have a very - have a
relatively long history of hires and separations. And those include a lot of
fairly large states, so California, Illinois, Texas. A lot of those joined pretty
early.

So it's not entirely representative of the US. But in various studies that people
have done with the LED data, generally the finding seems to be that if you're
looking at trends they tend to be -- and you’ve got a reasonable large number
of states. The trends you find are not terribly sensitive to which states you
get.

If you took a lot of small states that might be less true. But if you start with a
bunch of big state that's not so much of a problem.

Okay so here's a plot with turnover rates by industry. And basically what is
on the Y axis is the separation rate. And on the X axis it has the hire rate.
The redline is the 45 degree line. And the point of including it is basically to
make it clear that the industries that have high hire rate also -- hire rates -- also have quite high separation rates.

So while, if you think across firms there may be firms that are expanding and others that are contracting, it tends to be that most firms are in fact doing both at the same time. And that most industries are doing both at the same time as well. And that's one of the reasons that we're interested in this churn measure which I'll talk about in just a minute.

One thing that - let's see, let me go to the next page, okay. This is a similar plot. But we've added some data from the Bureau of Labor statistics. And I want to give a little bit of a plug for this data even though Census did collect it.

Because it's a smaller survey so it doesn't produce as much information as sort of detailed geographic level, for example. Because it's based on going and asking employers about their hiring and the number of employees that their, who is there at a period in time. It can also ask about vacancies.

And so the BLS actually has some interesting data on vacancies that if you're interested in this topic you might also want to look at. That's the job openings and labor turnover survey.

Our main reason for using it here is that we wanted to check to see whether the patterns that we see in the LED data also show up in this other set of data that collects the data in a different way but is looking for the same kinds of measures.

And you can see that they don't line up exactly. And it tends to be that the Jolts have slightly lower levels of turnover. But they - still if you look at sort
of which industries are at the bottom and which are at the top, it's quite consistent.

And I think they're generally pretty consistent with what people would expect based on, you know, we know sort of retail has a lot of turnover. And things like manufacturing tend to have low turnover.

One thing I would say is there's a category -- professional business services -- that has very high turnover. And that's, I think, largely because one of the business services that is in that category is temporary services.

And so that's one of the reasons why it shows up as having high turnover when there are other things in professional services like doctors' office don't have particularly high turnover. And they would fall into that category.

So let me talk about how we measure churn. So the idea of churn is that when we see businesses losing employees or laying them off and hiring other employees, some of that activity is to accommodate either expansion of the business. So they're doing well and they need to hire more employees. Or contraction if they're, you know, they need to downsize because they're not doing well.

But typically employers are both hiring and having people leave at the same time. And so you can think in a particular period of time, if an employer hires some people and fires others, that some of that is to accommodate changes in the size of the business. But there's additional turnover that is what we're going to call churn.
And so it's defined as being the difference between hires and separations. So either hires or separations and what's needed to accommodate the firm's increase and sort of the extra is what we're going to count as churn.

So as an example, if in a particular quarter -- that's how we're measuring it in LHD because that's sort of the timeframe that it has the best measures for -- we're going to count suppose they hire five people.

But at the same time two people leave. So employment increases by three so that's sort of - we're going to count that as being new hires that go to accommodate the new size of the employer. But then there are two extra people who leave and we're going to count that as churn.

And so this is something that you really have to have the firm level data to do, to calculate the numbers. And currently, while the data that goes into the QWI certainly has the information needed to do that, is not something that we put out as public statistics. I think partly because it's not as standard a measure as things like hiring rates and separation rates.

So we're using basically the same set of states. So the numbers we're going to have here are going to be very comparable to the numbers we have from the QWI statistics. Okay.

So another thing that is kind of striking about churn rates is that employers differ greatly even within an industry in how much churn they have you can find, you know. So this is a density plot of what the churn rate looks like. And it's weighted by employment.

So if you look at sort of the peak of the graph which is let's say about .03 or about 3%. For a large chunk of the population or a large chunk of workers
that are working for firms that have pretty low churn rates. But there's also some extreme at the other end.

And so we also see, you know, non-negligible serial employers that are, you know, turning over 20% of their workers on a quarterly basis. They're unusual but they're, you know, they still account for a significant piece of employment.

Okay so one of the most interesting things about hires, and separations, and churn is that over the business cycle, you see these distinct patterns. So there are kind of two things I want to point out in the graph over the business cycles.

So one is that if you look at the higher lines are from LHD and the others are from Jolt. And I'm going to focus on the LHD ones. But you see there's a downward kind of stairstep pattern over time.

So the shaded bars are the years or the quarters that are part of the official recession. So there's a downturn in 2001 which was sort of the tech bubble burst. And then there's the, you know, much bigger more severe contraction in about 2007 and 2008.

So you can see that the lines are sort of going down so what over time. But you see there's a big drop in the recession, particularly in the second one, was a much more severe recession. And then there's some catchup. But the mean sort of over time has gone down and doesn't catchup all the way in either of these recessions.

So you can see that both hires and separations go down significantly in recession. And that's quite consistent with the idea that both the hiring and
firing are -- or letting go, not necessarily firing, it might be people leaving -- are positively correlated. So we see them fall together.

In the next -- okay --so the next picture, I add churn to the puzzle or to the picture. And you can see that a big part of that drop is actually this drop in churn. And so in a recession we see sort of much less churn as well as less hiring and separations to accommodate firm growth or firm decline.

So those were things that I wanted to show you. And I think we are about ready for the question and answer period now.

Coordinator: Okay, thank you. At this time we will begin today's question and answer session of the conference. To ask a question at this time, please press Star then 1 and record your name clearly for question introduction. Just to let you know, your name has to be recorded for the question to be introduced. To retract a question, press Star-2. Again, to ask a question, please press Star-1 and clearly record your name. And once we have questions in the queue, we will introduce them. Thank you.

Deborah Rivera-Nieves: Okay thank you so much (Ozmar). And as we wait for participants to queue up for questions, I would like to take a moment just to ask of those who would like to ask a question to please only ask those that pertain to the topic of today's webinar. We would really appreciate that just so we can allow everybody enough time to ask whatever questions they might have.

I also want to mention that at the end of today's webinar, as you are all exiting the WebEx screen or the WebEx event, you are going to see a pop-up on your screen and that is an evaluation form, an evaluation survey.
We would really appreciate it if you could take a couple of minutes of your time. It doesn't take too long, it's not too many questions. But we certainly appreciate any feedback you can provide.

And perhaps you can even suggest topics that you would like to see covered in the future. So thank you.

(Ozmar), do we have any questions in the queue?

Coordinator: Yes, our first question is from (Jim). (Jim) your line is now open.

(Jim): Hi. Do you see significant differences in churn across metro areas even within the same industry?

Kristin McCue: You know, we have not looked very much at geographic variation although I would be surprised, given how much it varies across employers and industry, that it would be pretty different across areas.

It certainly, you know, it's quite possible to measure them at the metro area. That sort of just wasn't the focus of what we were working on.

(Jim): Great, thank you.

Coordinator: Okay, our next question is from (Anna María). Anna, your line is now open.

(Anna Maria): All right, thank you. I was wondering if you had any way to find out the cost of churn. So the cost of hiring a long employee and rehiring by particular companies or just overall?
Kristin McCue: So I don’t know that there's anything in these data that give you a good measure of the cost. So there's one cost which is for employers if they need to hire new people obviously that requires staff time.

On the worker side, if they're getting laid off that obviously is likely to have some cost to them in terms of, you know, they lose work time and they don't get paid for that. That, you could kind of approximate with how much they're earning when they are employed, you know, prior to being laid off.

It would sort of tell you approximately what their time was worth kind of to their employer. And then that would give you sort of the sense of how much they're losing by taking time off.

It's not something, it's not a calculation that we've done. But I think that QWI would probably give you a way to get an approximation for that. But that probably doesn't help very much on the employer side of the cost.

(Anna Maria): Yes. I know there are several articles out there that says 2003, the US Census Bureau released data on the cost to employers for hiring that long employee, you know, training costs and things like that.

And so far I've not been able to find that article. So I was hoping maybe somebody here might be able to point me in the right direction.

Kristin McCue: So the one Census survey that occurs to me, I don't actually know a lot about the detailed questions but it seems like it might be in that vein would be there's a supplement to the Annual Survey of Manufacturers that is called the Management Organization and Practices survey. Which is, its acronym is MOPS so maybe you can remember it.
It asks a lot of questions about sort of the details of how manufacturers, you know, go about sort of organizing their labor force and making decisions about it. And that might, I would guess if there's a Census survey that has that kind of information in it that would be where I would look for it.

(Anna Maria): Okay thank you so much.

Kristin McCue: Oh sure.

Coordinator: We currently have no questions in the queue. And as a reminder, if you'd like to ask a question, please press Star-1 and clearly record your name for the question introduction.

Okay we do have a question from (Tom). (Tom) your line is now open.

(Tom): Thanks. I was just curious why the actual turnover indicator in the - that you can find on the public QWI data, why you didn't use that at all? Actually the variable is called turnover. If you preferred to use kind of your own combinations of hires and separations or?

Kristin McCue: So there are a couple of reasons. So one is, I'll admit that the paper we started kind of a while ago. And I think it was before the turnover measure was available.

(Tom): Oh okay.

Kristin McCue: So I saw that when I when I started putting my slides together. But I hadn't actually seen it before.
The other reason that I, you know, if I were going to redo it, I might still use it is that we wanted to compare things to the BLS survey.

(Tom): Okay.

Kristin McCue: And in doing so, one of the things you kind of need to do is you need to do seasonal adjustment because otherwise the patterns are sort of, the quarterly patterns are very distinct and they kind of make it hard to identify other patterns.

And so we wanted to use the same statistical - the same seasonal adjustment for both series. And so we did do some of this through redoing things through the QWI. But that's not because we thought there was anything wrong with it. But because we wanted to be able to do the same thing on the two sets of data.

(Tom): Okay. So you don't have any issue with that variable. It just would be based on what…

Kristin McCue: Yes.

(Tom): The project you were doing. Okay.

Kristin McCue: Yes.

(Tom): Thanks.

Coordinator: Okay there are currently no other questions in the queue. And if you'd like to ask a question, please press Star-1. Okay and we just had - we just had a question arrive in the queue from (William). (William) your line is now open.
Regarding the charts that were longitudinal, has there ever been a breakdown regarding the separations between firings and just leavings?

So in that LED data because it's derived from sort of the records that come from the unemployment insurance system, there's no kind of asking about - There are other surveys where they ask people whether they, you know, left on their own fully and whether they, you know, they were fired.

We don't really have a way of distinguishing between whether people are fired versus decided to go on their own. People sometimes view this like an indicator of it's probably a voluntary separation if people go very directly from one employer to the next one.

So in the QWI, in the underlying data for the QWI that would be people who they, you know, they're working in one quarter and the next quarter they're working for a different employer. Some of those people probably are, you know, some of those people may have been laid off and just gotten a job right away.

But for people who get a job right away, often that's because they've lined up the second job before the left the first one so.

Thank you.

Sure.

And if any of you would like to ask a question, please press Star-1 and record your name.
Deborah Rivera-Nieves: So (Ozmar) this is Deborah Rivera. Do we have any questions coming in?

Coordinator: Okay we do have a question from (Latoya), your line is now open.

(Latoya): Hi, how are you? I would like to know if your institution is hiring and if you are, what is the procedure?

Deborah Rivera-Nieves: Earlene do you have a…

Earlene Dowell: So this is - I'm sorry, if we could just keep the questions pertaining to the presentation today.

(Latoya): I'm sorry. Hello?

Earlene Dowell: Hi. So if you - you could probably, wherever you applied, you could probably check that website…

(Latoya): Okay.

Earlene Dowell: Regarding your application. We don’t have those answers here unfortunately.

(Latoya): Understood. I understand that.

Coordinator: We did have a previous question in the queue. However, their name was not recorded. If you asked a question, I will open your line. Maybe you have a question, your line will now be open.

Man 1: Hello?
Coordinator: Hi, whoever queued up for a question, your name was not recorded but your line is now open.

Man 1: Hello can you hear me?

Earlene Dowell: Yes, we can hear you.

Man 1: Hi, Earlene, thank you for this wonderful presentation. My question is, in the chart that compared hires rates and separations rates from the LED program to those from the Jolts program, you might have explained this. But why is there such a difference between the two?

Why are the Jolts comparable figures that much lower than the LED's?

Kristin McCue: It's hard to say definitively. But we know from other comparisons across surveys that it's not unusual for - so the LED statistics are compiled from the record that the unemployment insurance services in the states keep to track eligibility for unemployment insurance and payroll taxes for unemployment insurance.

And so it's, you know, it's a database that's generated by government programs that have a lot of details that are just administrative records and aren't based on questions. They're sort of based on, you know, these records that we get.

In surveys, when you ask people questions, often, you know, for individuals if they don't have a paper record of sort of what happened over time, they have a tendency to forget about things that happened a while ago. And underreport things that they're asked about.
So if you ask people how many jobs they had over the last, you know, few months, they might say one when really they had two. Or, you know, they don't quite remember exactly when things started to stop. And so the reference period confuses them a little bit.

And so for the Jolts, it's a survey that goes to employers and asks them how many people did you hire in, you know, in this month? There's certainly - those employers generally have those records.

But, you know, when they're getting the survey form, they may not, you know, they've got other things to do too. And they may not go and look at the record and they sort of just guess.

Man 1: They may not look back as well as intently or as far back as something like the LED program which is simply looking at all available information?

Kristin McCue: Yes.

Man 1: That makes sense. Thank you very much.

Kristin McCue: Oh sure.

Coordinator: Okay we do have a question from (Patrick). (Patrick) your line is now open.

(Patrick): Yes, I was wondering how you handle seasonal layoffs? In the wage records there's a lot of construction employees who just never show up in the first quarter.

Kristin McCue: So we kind of take them as given. So, you know, it will be the case that some of the differences across industries may be differences in the seasonality. Or
in, if recordkeeping is sort of done in different timeframes that could - can shift things a little bit too.

(Patrick): Because I noticed the long term hire thing goes back several quarters. So that kind of eliminates that. But this study was just a short term hire, right?

Kristin McCue: Yes. We sort of included all hires which will include some very short term and some much longer term.

(Patrick): Okay thank you.

Kristin McCue: Sure.

Coordinator: There are no other questions in the queue. If you would like to ask a question, please press Star-1 and record your name.

Deborah Rivera-Nieves: Okay so while we wait to see if there are any other questions in the queue, I would like to take this opportunity to thank Earlene Dowell for organizing this webinar and Kristin McCue for giving this wonderful presentation that has been so informative.

As a reminder, you will see that evaluation survey link pop-up on your screen once you exit the WebEx session. Please take a moment to tell us how we did today, any feedback you can provide. And also any other topics that you'd like to see covered in a future instance.

And as a reminder, we will be putting the recording of this presentation in the Census Academy website under Recorded Webinars. And that should be available probably within a week or so.
We will also make sure to attach the copy of the PowerPoint slide deck as well as the transcript for anyone who might be interested in reading the transcript for that.

So we'll do one last check for questions but otherwise, I will turn it back to Earlene to close us out for today.

Coordinator: Hi Deborah, there are currently no other questions in the queue.

Deborah Rivera-Nieves: Okay.

Coordinator: If you would like to ask a question, again, as a reminder, press Star-1.

Deborah Rivera-Nieves: Okay, thank you for that. And Earlene, did you want to share any final words with us before we closeout for today?

Earlene Dowell: Yes, thank you. Thanks to (Ozmar) and Deborah. Also, I would like to thank Kristin for her excellent presentation. And thank you to our audience for joining us today and such great, sophisticated questions that were asked.

I wanted to tell you a couple of updates that are occurring in the future and coming up. So next month, please join us when Kristin Sandusky presents what may be driving growth in the gig economy. It was a featured article that was in our Census America Counts.

And then also, registration is now open for the 2019 LED Partnership Annual Workshop set for September 4 through the 5. You can go to LEHD.cef.census.gov to register.

So thank you to everyone and I hope that you have a wonderful day.