

MATTHEW GRAHAM: My name is Matthew Graham. I am a geographer with the U.S. Census Bureau and I'm here to talk to you today about a specific application that I helped develop called OnTheMap. But first, before we start that, let me ask a quick question. Back at the end of March, beginning of April, how many of you filled out your census forms and mailed them in? Good job. So you contributed to a very large project to collect a lot of data that will prove to be useful for all of us. May I ask you a second question? How many of you earned a paycheck last month from an employer? Yes. You also contributed to an even bigger data set that I hope will prove useful to you, and I'm going to tell you about that right now.

Okay, the letters LEHD, the program within the Census Bureau that I work for, you can just forget that. The ones I want you to remember are LED: Local Employment Dynamics. And that is a partnership between the U.S. Census Bureau and the individual states. Through that partnership, we get access to, at the Census Bureau, those records that I just talked about that are produced as a result of you earning income from an employer. So that's the process of the unemployment insurance wage record system. You earn some money, your employer has to pay into the state's unemployment insurance system. As part of that, they contribute some data to the state so that the state can balance its accounts, hopefully. And in our partnership, we gain access to those records, we bring them into the Census Bureau, we mix them with other records on employers, on the individuals, and we produce a national database of jobs, okay? Now that is not job openings, it is existing employment positions, okay? So, as I said, we mix that with other things like the products you probably all know about, the decennial Census, the American Community Survey, the Economic Census, and other things. We then take this database, which is very useful for the labor economists with whom I work, but they want it for research purposes. I'm happy to take it and turn it into free public use data products and that's what I'll be talking about today.

So there are two key products that we produce. One is called OnTheMap. I'll spend most of my time today discussing that. The other one is called Quarterly Workforce Indicators, QWI. I'll mention that briefly right at the end. Okay. So I'm going to show you a very brief walkthrough of OnTheMap, but I want to give you a heads up as to what you're going to see, okay? First of all, this is annual data from 2002 through 2008. Just to let you know, going into the future we will release new data and we commit to releasing new data and also new versions of the application in December of every year so that at the end of 2010 you'll be picking up 2009 data. That is the standard data-lag you'll see in general from now forward, okay? For those of you who are into mapping, GIS, that sort of thing, we do now allow a lot of interactivity with mapping and GIS tools if you're familiar with Google Maps, Google Earth, also some of the GIS tools, ArcMap, Esri products, that sort of thing.

But I don't want to scare you away because you don't have to be familiar with any of that. This is a user-friendly user interface. We try to make this as simple as possible. It is a very complex and very large dataset, and yet it has value for most of you, and we want to make it as easy as possible for you to access that value. We also allow you to save, share, reload analyses, and I'll show you a bit about how that works.

So, before I go on, I just want to reiterate the key points. Jobs, this is a dataset and a tool focused on jobs, and specifically OnTheMap gets at both the work information and the residential information. So now we start connecting these two and we've gone from employment to transportation, okay? All right.

So a quick run-through of what you might see and what you'll see me do with the OnTheMap application. We find an analysis area, we choose a couple of data settings, we chose an analysis type, we run it, and view the results. Rinse and repeat. It's actually quite simple. I'm going to move very quickly through it, but—I can't say the word guarantee, but I almost

guarantee that if you sit down for an hour, walk through some of our help documents and our training tools, you'll be able to do exactly the same thing I do here in a couple of minutes.

All right, so let's just do the live demo. That's the exciting part anyway.

[Presenter shows website] Okay, here we are at the U.S. Census Bureau's website. See national response rate in the decennial Census, 72%. Good job. That saves you all some money. Down here in the middle, you'll see something called Local Employment Dynamics. That's in the Business & Industry section. We'll just click on that. And that brings us to the partnership's web page within the Census Bureau, okay? There's a lot of tools here. There's a lot of information here. I encourage you to explore this website at length. But the part we're going to see today is over here under the Quick Links section, and I'm going to go to the second thing, OnTheMap Version 4. So I'll click on that. That opens up a new tab in our browser, and again, this is the live Internet. I'm not faking you with some neat set-up here. This is just—this is exactly what you can see right now if you're sitting at the table with a laptop and have an Internet connection. So I'm going to run through an analysis. I sort of picked an arbitrary area around here to run. You could run your own analysis and I'll show how easy it is to pick some things.

But let's look at the city of Corona. And here's the main tool. And what we're doing is searching through all the different names of areas in the United States with the word Corona in it. So there is, in fact, a Corona, South Dakota, a Corona, New Mexico, but I'm most concerned with Corona, California. So I click on that and here comes Corona. That's going to load up, show us the city of Corona, the surrounding cities. This is in Riverside County. I chose this one because it is a little out of the way, a little easier to see than if I chose something in LA county, where things are extremely dense. Yet you can do that and be prepared to see a very interesting map.

So I'll quickly run through an analysis. I have some data settings here. I'm going to be happy to start leaving the defaults set. We're also going to run the analysis on the city of Corona. And at the end, we have a couple of choices. Now I've selected Corona as a work area. I first want to look at people who work in Corona, all right? And the question is, who are these workers? That's typically where I start. And so we'll do something that we call a Work Area Profile. So we'll just hit Go.

That's going to spin for a few seconds. I'll mention a couple things while that's spinning. This project was funded in part through the Employment and Training Administration, so when you go in and look at the different pieces, you will see Workforce Investment Board areas already loaded in here, you will see One-Stop Career Centers already loaded in here. For those of you familiar with them, the WIRED regions are also in here. So those things are built in as a result of our interaction with the Department of Labor. Okay.

So now what we see is a very interesting map. We see some points all over the city of Corona and now a blue background. I'm going to turn off the blue background. We call those thermals. And just leave the points up. Each one of those points represents one Census block. In urban areas, a Census block is often a city block. Each point shows you how many jobs are located within that Census block, okay? So what we're seeing here is the economic clustering of jobs within the city of Corona. Pictures are great, but numbers and reports are sometimes a lot better, so here we go. This is 2008 information, and we see that in 2008 about 58,000 workers employed within the city of Corona. We see an age distribution here of those workers, we see an earnings distribution of those workers, and then we see an industry distribution of those workers. These are by industry sector if you're familiar with the NAICS industry coding system. It's the two-digit level, okay? So we can see that in Corona manufacturing, construction, retail trade were all very large in 2008.

Okay, great. So we know a little bit about who these workers are. Let's ask something about their wider scope of where they live. Because certainly they don't all live in Corona. So I quickly run back, change one setting to try what we called a shed analysis, and then I'll select just a couple of different settings here, and we'll set that to spin again. So what we're going to see now is the same set of workers, those employed within Corona, but now we're going to see their residential distribution, that is, where do they live, what is the—what are the locations of that? And now we see, again, those points, and they're more widely spread, and we also see that, again, coloring in the background. We call that a thermal. That's just a job density, jobs per square mile, okay?

So for the shed I prefer the thermal display. I think it works better at larger areas. And I'm going to back off a bit so we can see a little more about the region. So there's Corona. As that loads, I'm going to turn off some labels just so we can see. Okay. So all of that blue distribution is the residential pattern of people employed within Corona. So now, if you know anything about southern California, you know that a lot of those people have really bad commutes. And, yeah, I—[laughing]. In my time in Los Angeles, I actively did not use a car and I managed to do it for a couple of years, so I don't like to think about driving on the freeways here. So now what we can do is go back and we say, all right, that's interesting. Again, let's see the numbers. So I'll quickly show you a report, the same 58,000 people, and we see that Corona supplies only 15% of its own workforce, so 85% of people employed within that city are coming from outside of that city, all right? So not the greatest supply and demand relationship ever. But Southern California is a multi-polar area, so that's what it is.

Riverside County supplies about 50% of Corona's workforce, LA County another 15%, and so on. And in this particular case, I always find it useful to tabulate by some different areas. We see that here by 110th U.S. Congressional District. Surprise, surprise. Congressmen should not only be concerned about the people living in their district, but also the people who live in their district, work outside their district, and vice versa. Not always clear to the people who make decisions, okay?

So let me go back and flip it around again, and we say, great, that was interesting. Let's go at it one more time and focus now on the people who live in Corona. That is, it's not just a center for economic activity, people actually live there. We know that only 15% of Corona's workforce actually lives in the city, but there are other people who live there as well. So I'm going to run the same sort of analysis there, so what we're going to do is say, who are the workers who live in Corona and where do they go to work?

All right, so I'll turn off those points. So now what we see here are the work distributions of people who live in Corona, okay? So, again, there is a cluster here within the city of Corona, but also as you move out, the major highways and interstates, they're clustered along there. Clustered along the 5 and the 405 here. That tends to be great transportation. Good economic activity there. And we'll see what the numbers look like for these folks. Okay. So about 54-55,000 workers living in Corona. Only 16% of them actually work there. So 85% of people working who live in Corona are going somewhere else to work. Again it's this spatial bias, this separation between the job and the home. And, again, I just prefer not to think about the commutes that some of these people have. So, again, we see it by county. So Corona's residents, 30% of them are staying within Riverside County, more are going to Orange and LA, and then again we see it by congressional district.

Now I've limited it up to this point to just cities, things that are easily definable. But let's say you have a particular area that you are interested in but is not well-defined, be it a neighborhood, a transportation corridor, whatever. The tools in this application are built in to allow you to make very complex selections and I'll just give you a couple examples. I won't run

all the way through the analyses. But let's say I'm interested in the 710 corridor. I'm going to draw a line here and I want to capture people—oops, not the cities, but the people within half a mile of the 710. So there you go. That can be my selection area. Let's say I'm interested in—oops. In the city of Long Beach. So there's the city of Long Beach. But really what interests me are the people who are living just outside the city limits. So what's that's ring just around the city? Okay, well, we can do that.

Now this is going to look all crazy because it is a fairly complicated selection. But now what we've done is made the selection area just the half-mile ring around the city of Long Beach, okay? So, again, I want to point out to you that, although this is fairly complex, there are some simple lines through the application. But if you need to get at something really detailed, something very specific, it's possible within the context of this application. Let me go back to my slides.

Okay. I'm going to wrap up. I'm just going to talk for one minute about the Quarterly Workforce Indicators. I said I would talk about them. OnTheMap has very detailed geography, as you've seen. Not as detailed characteristic information. Only 3 breaks on the age, only 3 breaks on the earning, 20 industry sectors. When you get into our Quarterly Workforce Indicators, they have less detailed geography, they're available at the county level, the Workforce Investment Board area level, and the metro- and micropolitan area level. But they have much more detail in terms of age, industry, sex is in there, private sector or all is in there, so in that you can get down to four-digit industry detail with those breaks.

Unfortunately, that tool doesn't have a really cool mapping interface, so it's not as amenable to the sort of presentation, but if you do have interest in that please feel free to visit our website. There is some information there about how to work through that piece of data, that data set, more information about OnTheMap. There's lots of training materials, there's an online video, there are a bunch of walkthrough guides. I encourage you to visit the help pages for both OnTheMap and QWI. If you have any questions, you can feel free to contact either myself, my e-mail is on here, or our program manager, Jeremy Woo. So I'll stop there. Thanks very much.