NDRC Topical Webinar: Measuring for Success in Resilience
Webinar Transcript
September 9, 2015
3:00 – 4:30 p.m.

Patrick: …over to today's presenters.

Patrick Revord: Excellent. Thanks, Patrick, I really appreciate it. This is Patrick Revord from HUD, not to be confused. I am in the Office of Community Planning and Development in the sub office of Economic Resilience. And we ran the Sustainable Communities Initiative Grant Program for the past few years and now, have some things to share from what we learned our grantees, our planning grantees, on data – the data and metrics that they used for their planning.

So of course, to begin, the friendly disclaimer here. This presentation is a topical webinar, so we're providing advice and information about general resilience planning activities but it is not an official word on anything from the NRDC or the NOFA. So if you have any questions on that, obviously, check out the HUD Exchange or email specific questions to ResilientRecovery@HUD.gov.

So a brief introduction to those of us on the call today. Again, as I said, my name is Patrick Revord. I have handled gathering the data from our one hundred and forty-three sustainable communities grantees and now we are working on reporting on that data up to a higher level – Congress. And I will say we have had some great successes among our grantees but also, some issues. And so if they say hindsight is twenty-twenty, right now, we are looking back and hopefully, I can offer you some of that twenty-twenty hindsight about what our planning grants could and should have done back when they sat in your seat ready to begin their plans. And I'll let Adrian and Holly introduce themselves.

Holly St. Clair: My name is Holly St. Clair and I'm Director of Data Services from the Metropolitan Area Planning Council in Boston.

Adrian Evans-Burke: My name is Adrian Evans-Burke. I'm an analyst at the Department of Housing and Urban Development in DC, specifically the Office of Strategic Planning and Management.

Patrick Revord: So we'll try – the three of us will try and walk through the best info we have here. But for those on the call, please feel free to share your experiences and ideas with others on the line. So during the presentation, you can submit any comments or questions you have on that side question box and then we'll try and address them as they come in.

So with that, we'll begin by asking the question, "Why measure?" As planners and project managers and leaders of communities, we often have an idea of how our city is and an idea of how we want it to be, but those are just ideas. There are some problems with the situation. What if our current perception isn't correct? And what exactly does our ideal community look like? We have to have some context to get from here, where our community currently is, to where we want to go. And so metrics provides that mass data and measurements.

So first, we kind of have to determine where we are. We define metrics and indicators, we measure baseline numbers that describe where our community is on the map and where we currently are. Then, we determine where we're going. We talk about what the measures will look like at a future time and where we want to be. Finally, as we choose our course forward, we choose an action to

undertake, we continue to measure to see if we're taking the most direct route there. Now as NDRC applicants, you guys are already on that journey. Hopefully, through Phase 1, you've developed a vision for what you want your ideal resilient city to look like. And hopefully, you've begun articulating the goals of how you want to get there.

But now in Phase 2, it's time to choose the route – the course to take from where you currently are to where you want to be. And so trying to – it's time to build your data management process to figure out where you are and how best to get there. So it can be intimidating, I know. It's a big task. But today, we'll hopefully walk through the reality of how to do it and some achievable steps.

So a quick look at where we're going. We'll start off with some terminology to all get on the same page, then we'll talk about setting goals, start big, then turning those goals into actual metrics and indicators as a measure along the way. And then we'll talk about how to set up a data team and a management system to actually handle the information that's coming through your office. And then finally, we'll get to data analysis and communicating that analysis to the public.

So quickly to dive back in, "So why measure?" The fundamental principle is obviously where are we, where are we going, and how do we get there, but there are a few more reasons. First of all, we live in an age of limited resources. Our staff time is limited, your constituents' time is limited. Obviously, there's limited money. And so as you're moving forward, you can't be moving blindly. You have to know: is what we're doing really the most effective way to do it? And so, metrics allow you to tell if you're being effective and in fact, how effective your actions are.

Obviously, next, there's increased accountability. We live in an age of scrutiny of governments and funding and so we have to be able to transparently say what the results of the funding have been, how we've used the money that the public has given us. And good analysis and good publication can help build that trust.

Obviously, strong analyses and good data backing that up can also be useful for outreach. It can make for a good pitch to media outlets. Newspapers are often more willing to pick up stories that have good strong numbers behind them. Numbers can be a valuable influencing tool, so when trying to convince other people of your position or why or how you spent the money the way you did, it can be important, obviously, to talk about why you made the decisions you did and back those up with numbers.

And then also, numbers can help you engage with your constituents, with the public. People are really willing to participate in visual representations of what's going on in their city. They can help educate them so they also become decision makers along with you and they can help them care about what's going on around them rather than just experiencing it.

And as far as the NDRC, obviously, you're at a really important point right now before you've begun your interventions to ask, "What is the current state of our city," and then to know whether what you've done has been successful. So it's really important to set up your metrics and indicators now.

So to start off with some terminology just to make sure we're all on the same page, I want to go back to Phase 1 of the NOFA. If you guys remember, as you were filling out your applications, in the long term commitment section, the NOFA asked specifically for you guys to list a metric, a baseline measure, and then an outcome measure. And it's a three-part question and unfortunately, many of the applicants struggled with the task. We received responses like, "Our community will be resilient by 2022." Okay. "We plan to remove twenty-six houses from the flood plain." That's getting

there, we've got a number there. Or, "We currently have zero infrastructure – green infrastructure demonstration projects and we will fund twelve." Okay. So all of these responses don't quite answer the question in an actionable way. We have to know both where we are and where we're going and by when.

So we'll start going through the words here. First of all, a metric is obviously a measure used to track an activity over time. So, what is a measure? A measure is a number of something. It can be twenty-two houses, it could be three million dollars in tax revenue, twelve counts of flooding. But right away, the first example of, "Our community will be resilient," doesn't have a measure in it. How are we able to measure resilient? Yes or no? One or zero?

Next up, when setting goals, we have to have a baseline. The baseline is a measure at a specific point in the past and we use it for comparison when going forward. But it's important to both have the measure, the number, and the date. We have to know when that measure was taken. The baseline should not be set arbitrarily. It should be measured before we began taking action so that now when we measure that same metric again, we're able to determine if our action has made a difference.

So in the second example, "We'll remove twenty-six houses from the flood plain," there is no baseline in this. Were there thirty houses in the flood plain to begin with? Were there three hundred? Is twenty-six even a significant number? So and we also have to establish when that occurred.

Finally, a projection is a future looking number. Much like a baseline value, it has to have a measure, a number, and a date. So to only say that, "We will have twelve projects funded," is valiant but does that mean twelve projects, you know, green infrastructure projects funded in the next year or in the next hundred years? So it's important to both have, again, a number and a date.

So to strengthen, to use these definitions to strengthen the metric, we could say – instead of saying, "the output of twelve green infrastructure projects funded," we can say that really, the outcome of having a green infrastructure project is reduced flooding in the neighborhood. So a strong metric would be, "The count of flooding incidents in a specific neighborhood with a measured baseline of twenty-six in the year 2014 and a goal of only ten flooding incidents by the year 2018 by the time the projects are done." So it's actually more than a three-part question. It's almost a six-part question because each part has to have both the measure and the year involved, as well.

So that's just kind of a word of caution for the past and then a word of hope for the future that we'll include years and measures for each of those.

A few more terms to kind of get through. Obviously, we're talking about data, we're talking about a collection of information. And then generally, a data set would be a group of related data. So like the American Community Survey would be a data set. It has housing data, income data, education level data. When we talk about data management, we are talking about basically how the spreadsheet is handled. It could mean creating fields in a spreadsheet, it could mean creating relationships between fields, removing bad entries, making sure all phone numbers are in the same ten-digit format. All of these are examples of data management.

Data mapping, however, would be defining the relationships between those data sets.

Data modeling is using a hypothesis to project for the future. So for example, the IPCC – the Intergovernmental Panel on Climate Change – has created a model or a hypothesis for how climate change might play out. So a model takes into account a theoretical input like the amount of carbon released and then will spit out a theoretical output based on the hypothesis, so like the global temperature in an IPCC model.

An indicator, as compared to a metric, an indicator is the proverbial canary of metrics. It's the strongest indication that we're heading in the right direction. So all indicators are metrics. Here's an example. If our goal is to have a strong mixed used neighborhood in our downtown, our action might be to change the zoning code. There are a number of metrics that you could measure. You could measure a population increase in downtown, the dollars of commercial income. But the best metric available for what we're trying to do might be the number of building permits requested, the number of new building permits. So we could use this one data piece as an indicator and not collect the other ones, necessarily, and save time while still having a good proxy for the success of our action. So it's important because obviously, we have limited time and limited resources, to really focus in what those strongest indicators are for the goal that we want to achieve.

And then finally, analysis as opposed to the data management and data collection side. Analysis would be beyond just outputting that data into a spreadsheet or a graph. The analysis would require an extra element of critical thinking. So framing the data in the context of the problem or goals of community in the situation in which it's in and determining then where it's pointing you to go towards in the future. So should we change our course? Analysis is being able to make decisions – complex decisions – based on the nuances of the data.

Really quick, Holly and Adrian, anything to add on this thus far?

Holly St. Clair: No, I think these definitions are good and I think it's important to have definitions because I think we all use these words interchangeably and I think it is helpful for clarity's sake to be really clear about what you're trying to do. So if you're trying to create an indicator versus a general metric, I think it's important.

Adrian Evans-Burke: I concur. We've actually got into the same problem working here in the data shop at HUD with the fact that offices throughout the agency use different words, use "indicator" or "metric" interchangeably, and sometimes use the term "goal" and "metric" interchangeably. So it's really important for you to be on the same page, not only with your organization or your team but also, with the stakeholders that you're working with so that they understand exactly what terminology you're using and everyone has the same expectations in terms of terminology and the language that you're using.

Patrick Revord: That's excellent. So with that, actually, Adrian, I'll let you take on goals and what makes a goal different than an indicator.

Adrian Evans-Burke: Sure, thanks. Well, just real quick, here at HUD in the Office of Strategic Planning and Management, our shop is responsible for pulling together all the offices through HUD to put together HUD's strategic plan. This is drafted every four years and contains our targets, our metrics, our ways of measuring progress, and our goals. So it's really important to set really good goals because that's how you define – you define success against those goals, and as an agency that's constantly going to the Hill and trying to justify the work we do and trying to ask for money. It's important that we can point to these goals and say, "We have a plan and this is how we're following it."

It is a bit cliché but we do live and die by the SMART method here at HUD, particularly in this office – "SMART" being goals should be Specific, Measurable, Agreed Upon, Realistic, and Timeframed. And all of our well-crafted goal statements include all this information. I'll give you an example of a goal that we have here at HUD – a bad example, a decent example, and a good example of measuring the same thing. "Increase of green buildings in our community," or, "Make our community greener." That's getting towards some type of definition of green. Are we talking about renewable energy? Are we talking about water or energy efficiency? Communities – are you talking about public housing, private homes, commercial buildings? Now, you can get a little bit more specificity and say, "Increase the energy efficiency of housing across HUD programs." Now, you know we're talking about HUD programs, we're talking about housing and not commercial buildings. We know we're talking about energy efficiency. But we still – we don't know what "increase" means because we don't know how much we're increasing. We don't know what the time period is – five years? Two years? Six months?

Now, the actual goal that we have here at HUD, which gets refreshed every two years because we do timed out goals, we do two-year priority goals. The actual goal statement is, "Between October 1, 2013 and September 30, 2015, HUD aims to increase the energy efficiency and health of the nation's housing stock by enabling one hundred and sixty thousand cost effective, energy efficient or healthy housing units." So right there, you have everything that's SMART. Specific, we're talking about what type of housing, we're talking about energy efficiency and health, which frankly, we could even get more specific and mention that we're talking about lead hazard mitigation. It's measurable, so we're increasing by a hundred and sixty thousand units. It's agreed upon – this is something that we worked with EPA, DOE, and internally, to agree upon what these words mean and what we're aiming for. It's realistic. We didn't say, "Five hundred thousand units," because we don't have the funding or the manpower or the grants to push those big numbers. And it's timeframe. It's two years. I cannot stress enough – I know many folks are probably nodding their head when we're saying "specific," when we're saying "realistic," when we're saying, "timeframed." But I've kind of set it as the kind of middle of the SMART equation, which is "agreed upon." Oftentimes, you and your stakeholders, you and your partners may have the same vision but may disagree on the ways to get there, and may even disagree on terminology.

We've done a lot of work with VA – Veterans Affairs – on tackling veterans' homelessness and chronic veteran's homelessness issues. But just getting down to the definitions of words – what is it to be homeless? Do we count folks who are in temporary housing? Does it need to be permanent housing? Chronic versus just homeless. You think you're maybe getting a little too cute there but these definitions and terms matter, and you really need to agree on your stakeholders what you're trying to count. Because when you're working with stakeholders and you both think you counting the the same thing but you're not, your data's useless.

So that's an example of kind of a bad, good, to great goal that we use in HUD. And again, I highly recommend the SMART method for your organizations – Specific, Measurable, Agreed Upon, Realistic, and Timeframed.

Patrick Revord: Excellent. Thank you, Adrian. So we'll take the next step. After defining those SMART goals, we have to decide what numbers we're actually going to measure and keep track of. So this can be a challenging process. There are a lot of potential metrics in the world, a lot of things that can be counted, a lot of data that exists. So it's important to make sure that the metrics are directly related to the goals and that maximizing the metric will maximize the goal. Because sometimes giving the wrong metric can lead to a perverse outcome if it leads an actor to do something just to increase their numbers.

So yeah, obviously, first of all, we want to link the indicators directly to the goal. It helps people focus. And in fact, people – constituents may also offer better solutions if they know what the ultimate goal is behind it. Maybe we're not measuring the right thing. Maybe we're not going about it the right way to reach that goal behind it.

Next, just collecting data for data's sake isn't helpful. So the metrics and indicators have to fit into the context of the larger plan and you have to know what success means for each metric. So, for instance, if someone says that they want to measure the age of housing stock, the age of a house in a community, the question really arises, "Well, what's better? Old housing stock that's been around longer? Newer housing stock?" And if they say, "newer housing stock," then the followup question is, "Well, are we trying to encourage people to build new houses? Is that what our ultimate goal is?"

So it's important to not only set the metric but to determine what success looks like. Is it an increase? Is it a decrease? And then why that change will lead to the goal.

Next, think big but start small. You know, setting up a data system and performance metrics can just be incredibly overwhelming. Like I said, there's so much out there, where to even begin. So actually, this was advice from Holly and she says to pick ten indicators and just build from there. So just being able to manage that and feeling comfortable with that can help; one, build your team's confidence; but two, also be early wins, early successes. So you start talking about where those early indicators are leading and your partners start getting excited about where the project is going and there, you can build more support, roll more people in, and build from there. But you've got to start somewhere so don't bite off more than you can chew at the beginning.

Output versus outcomes. This is kind of an important consideration to make. Output can be considered what your organization does or what they create. So it might be making a grant, it might be making a widget. Where the outcomes ask, "What changes take place in people's lives or in the community because of your organization?" So I kind of got to it earlier with the green infrastructure grant. So an output metric would be, say, "We gave out twelve green infrastructure grants." Whoop-de-doo, how does that change the community? So the outcome – first level outcome might be to say, "And because of the green infrastructure in the neighborhood, there was decreased flooding." So the outcome is decreased flooding in that neighborhood.

Now, some – there's a spectrum both in time and geography in outputs and outcomes. So in time, usually, the first thing that happens is the actual output. You create the project or product. And then, there are first level outcomes, the people who are directed affected by that product or project. And then, going down the line, there are longer and often bigger and often harder to measure, outcomes. So secondary and tertiary level outcomes. So it's important to kind of consider: is what we are measuring important? And it's hard because often, the further down the line, the more important things become. But then, is what we were measuring possible to measure? And further down the line, things get harder to measure. So those are just two things to consider when considering the time scale of indicators.

There's also a spatial scale and especially at the scale of a lot of these NDRC grants working across states, regions, counties, it's important to have nested data sets. So to be able to break up data at a county level, you know, have statewide aggregated data, and then also, to be able to take it down to the community level, neighborhood, or block level data. Because that will help inform decision-making and will help fine-tune it based on the different scales.

So it also allows for effective communication back to the different constituents. Obviously, some are really concerned about the neighborhood they live in, but the statewide data doesn't really matter to them. Whereas people acting at the state level obviously don't care what's going on necessarily in that tiny little neighborhood. They want the big needle to move on the whole state.

So Holly, anything to add there about turning goals into indicators?

Holly St. Clair: I do think – I agree with everything you said and I think that this is really more of an art than a science, even though we're presenting it in a very scientific way. I think that it is important to really think about – and I hate to use this word because I feel like a lot of funders – not HUD but other funders – have pushed us to really talk about this a lot. But I feel like your indicators need to be surrounded – or your metrics need to be surrounded – by some sort of framework or theory of change about why we're going to measure one thing because we think we have implementation steps that will obtain this goal. You really have to start to really articulate that all the way through so you understand what you should be measuring to capture the sort of signal that your implementation can send out.

And I think that one of the other challenges here is this point around time scale. Often, many of us are creating implementation steps that we won't see the impacts of until years down the line. And so I think thinking about the time scale in a way that not only informs your indicators but can help you think about what different indicators might pick up the signal over time as different parts of your change start to sort of roll out from your implementation steps.

And then finally, just speaking from experience, definitely think big but start small. We have a great Metro Future project here in Boston. We have over two hundred and fifty-six goals and objectives and many more indicators than that, and we are collecting a lot of data and putting it out there. But you know, we're also in the process of paring back many of the indicators and metrics that we said we'd collect. So I think what's important is not to overcommit but to make sure you really can deliver what you say you're going to measure and add over time as it becomes more apparent which ones you should be following and really emphasizing. And I think that can be hard when you're managing multiple constituents from different interest areas.

Patrick Revord: Absolutely. Well, we'll move on to creating the data management system and team to actually handle these goals and indicators now that we've created. So I think step one is really prioritizing data work early on in the grant and planning process. And this has to be done both with, you know, a verbal commitment from upper level management and leadership but also, a financial commitment. Be able to set aside people's time, their work hours, and also, funding to be able to pull data sets together and to be able to pay for analyses and to be able to communicate those analyses.

And I just can't stress that enough that now is the time to do it. Looking back at the SCI grantees, there were those like Holly and Metropolitan Area Planning Council who early on, had an idea of the data they wanted to collect and prioritized it throughout their grant application and all of their grant applications and in the partnerships that they made. And then there were other grantees who it came as an afterthought. And trying to tag it on as an afterthought just hardly works. Because your whole process of where you're going is informed by the measurements that you're taking along the way.

So with that, like I said, ongoing work. It has to be planned as a system. We just talked about the time scales that data measurement occurs at, and most of those time scales are the long run. You know, we can usually track our outputs in the short term within a year or two like Adrian's HUD

example of the number of homes that we've actually retrofitted for green for energy efficiency. That can be tracked in the short run. But the question about what happened to those residents, were they able to save money in the long run because of the retrofits? Were they able to save energy, actually, because of those retrofits? These are the types of things that need to be tracked over long time scales – five, ten, twenty. Population change might be tracked at a fifty-year time scale.

So it's important to plan that into your management system. Do you have a personnel who's dedicated – or a position that'll be dedicated to handling these incoming numbers and managing them for the next scale that big? And of course, it's hard sometimes to think that far ahead so I guess you do the best you can at the time you have.

But same consideration with computer systems. Is the format that we're using going to be viable in the long term? Or will it be able to be converted to something that's viable in the long term?

It's important to consider both how widely used a data format is. You know, maybe what does your State GIS department do? If they do ArcGIS SDC, you might want to consider doing that. But ArcGIS is also expensive. So another consideration is – and this is kind of a modern idea – is the open data format. What are the open source options? Do they fulfill your needs? And if so, will they fulfill the long term needs, as well? And being able to take that into consideration can help decrease your costs while increasing the long term viability of the project.

So also, next up, establishing data intake and management protocols. Obviously, you have to have a plan for how you're going to gather the data, how it's going to be collected that's coming into your organization. Then once in your organization, how you're going to store it, who's going to be in charge of it, who's going to manage it, what format it will be in. And then also, standards for how it's going to be saved, how it's going to be distributed. Maybe that means publishing an Excel document once a year, maybe it means updating your community's GitHub website and publishing that out, or posting that for public consumption.

So it's important to establish the protocol along the whole way and to not only have a baseline protocol to say, "Look, at a minimum, here's what we need to do to make sure that we have functional, useful data," but also, to establish kind of a gold standard to say, "You know, if people have time, we should try to work to this standard of data and organization because it will help us draw stronger analyses at the end."

Adrian Evans-Burke: Patrick, if I may – this is Adrian Evans-Burke again with HUD. This is a key, I think, you need to really drive home, or everyone needs to think about, is the expectations in terms of data collection and management protocols. We have a great team here at HUD working on performance management and data driven management. But it was put in place to work with data sets that had been in place for years and years before this part of the organization was created. Therefore, it's been a very long struggle working with all the program offices that used very disparate data collection systems and formats and programs to wrestle with all this data. And we spend a lot more man hours than we would like taking all these different formats and reporting methods and twisting them and putting all these round pegs in our square holes so we can actually get usable information and crunch it and analyze it. And you will save yourself so much time on the back end if on the front end, the folks that you're working with to get your data and you're collecting data, if they already know the format and the delivery method and all the protocols to bring that data in. Because the more massaging you have to do to make it usable, the more man hours and money you're spending on playing with data instead of making your program more successful.

So that's just my two cents. It's been a long term pain point here at HUD, having so many different protocols and standards out there.

Patrick Revord: And I can speak on the other half of that. As one of the programs that reports to Adrian's office, we even struggle with our partners – you know, the other community grant planning programs – trying to figure out what are we reporting. Are we reporting partners? Are they reporting the same type of partners? Are we all putting it in Excel, Access? I mean, it was a great message, Adrian, as to it's an entire process about how to – you know, even the minutiae of who to send it to, where the spreadsheets are saved. That all needs to be considered to have a strong framework for the data management.

So taking it to the next step beyond that, we'll look at data gathering. And there are kind of three – I've broken it out into a spectrum of three ways of gathering data. First, there's the existing data sets – the national level, the local level data sets. Then there are some of the more inaccessible data sets, maybe private data or data that you need to manually gather yourself. I mean, I'm sorry, then the third level would be manually gathering data yourselves.

So at the first level, the easy level, there are the big public data sets. Most of you are familiar with, I'm sure – the American Community Survey, the American Housing Survey, data.gov. Then there are some local data sets that some of our sustainable communities grantees used to kind of use as indicators in their projects, and I thought some of them were kind of interesting. One of them asked, "What are our partners already collecting?" And so sometimes a lot of our grantees were the Metropolitan Planning Organization and so they would kind of take the role of gathering the already existing data sets in their community, maybe the new building permits, the roadwork data, the city tax revenue, crime data, local school data. They brought all of these organizations' data together under one roof and under one database and were able to gain so much more information out of that.

Another thing to consider is the 311 data. This is really cool because one, it's matched with geographic coordinates. It is citizen-submitted. You have people right out on the streets complaining about things that they see every day. And by acting on those things, it will allow you to demonstrate changes in your citizens' lives. So if they experience an issue of, you know, a day-to-day thing that they've been reporting and you can say, "Look, we decreased the number of times that that issue occurred," then that's a very real way to show people that you're influencing their life everyday rather than just creating a widget or outputting a certain number of projects.

Another thing with this is you can use existing data sets as a proxy for other data that you might not be able to get. So for instance, it may be hard to measure a neighborhood decline but you could measure new home starts or you could measure home sales, prices, and use those as a proxy for neighborhood decline.

Finally, as far as existing data structures, I would encourage you to check out the National Neighborhood Indicators Project. I should've written it out on the slide but it's the National Neighborhood Indicators Project through the Urban Institute, and they have about thirty cities around the US who are really pioneering strong sets of indicators and are doing the heavy work to try and gather these multiple data sets under one roof. So I encourage you to check out that list and see if there is one of these neighborhoods near you and obviously, try and tap into what they're doing if not being able to assist them a little bit with the data that your organization might have.

Holly St. Clair: Pat, can I just add a word in? This is Holly. It's actually the National Neighborhood Indicators Partnership.

Patrick Revord: Pardon me, yes.

Holly St. Clair: And the reason we started to talk about this was because I think one of the things that's important for some of the folks on the webinar to remember is that you don't have to do it all and you don't have to be an expert. There are usually some sort of data clearing house near you whether it's part of a university or it's an NNIP partner. It's important to maybe meet with them early on so that, you know, you're not reinventing the wheel – that you're strengthening the wheel in your community and giving up data sets that you both are interested in but maybe have different expertise in, have different funding sources to work together with. Again, really thinking about data as an infrastructure that your community does need to build and that you should build collaboratively together from many different resources and thinking about how this project fits into that and how much your project would've benefitted if people before you had already done this.

But in particular, the National Neighborhood Indicators Partnership are thirty different types of organizations – or thirty different organizations that are different types from universities to regional planning agencies to nonprofits who specialize in using data to measure change in neighborhoods and using indicators in their work. Now, you might not have one in your particular city or region but you might have one in your state. And most of us, when we download data, we usually are already downloading or working with data even on a statewide level. So they might have the ability to sort of give you a leg up to get started on some of that work.

So I think it's just important to remember you're not alone, there are resources.

Patrick Revord: Thank you for that clarification, too, on Partnership.

Holly St. Clair: I'm sorry, one last thing on that NNIP. They also have a good library on their website of like data MOUs, some data sharing agreements, which you'll probably need to look at. Also, I think we started a job description database. There's a whole bunch of like – if you need to start a data portion of your group, like there's some nuts and bolts, really practical resources on the website, as well.

Patrick Revord: Wonderful. So the next type of gathering data would be those inaccessible data sets. As Holly alluded to, almost every community has anchor institutions – the hospitals, the universities that are there and have been there a long time. Generally, they not only have a long term stake in how the city turns out but they report to a board and so they often gather data about their institution and what's going on around them. So those are great partners to work with in your project.

Holly also recommended to me a call for data sets. So make a list of those indicators that you do want but don't have, and make it an advocacy initiative. Create a top ten most wanted data sets and publish that around and then try and solicit different ways to get them – either through community or partner participation or sometimes you'll have to pay for them yourself or engage philanthropy to pay for them for you.

So at times, it can be strategic to pay for data. As Holly said, it's a piece of infrastructure. And we're reaching the point where there are many private data sets that can be quite informative and sometimes it's worth your organization's time and money to just set money aside and pay for it because staff time isn't free either and often, it's already prepackaged and prepared.

So in some senses, actually, local philanthropies can be both an anchor institution and might gather data themselves, or it can also be a funder, as well, and can give good funding for some of those private data sources. So engaging philanthropy can be a critical long term win in your region.

Finally, we'll talk about recording your own data. There are obviously a bunch of different options here. You know, some communities put out their own sensors. That would be like a bike trail sensor to count users, GPS from a bus to determine congestion, or a rain level gauge. These would all be firsthand data that you're collecting.

You can do surveys – not only surveys of your constituents but like a dashboard housing survey where you drive around and do a visual analysis or inspection of housing.

There are interesting software tools now that can be used for gathering firsthand data. I know some of our partners in the Sustainable Communities grants were Place/Matters – and actually, Holly, you've participated with Place/Matters, too, so hopefully, you can expand on this. But there's, for instance, a sidewalk condition mapping tool where it's become citizen science where people go around and record the condition of the sidewalks in front of their home and then it maps it all out into a great kind of red-orange-green map of the parts of town that have either very good or very poor sidewalk conditions. So that kind of ties into citizen science there.

Holly, anything you had about software or citizen science?

Holly St. Clair: I think the other sort of newer area is the idea of sort of scraping from websites, which there's legalities you have to pay attention to for that. But I think we shouldn't ignore that in terms of if you're just trying to get data for planning and not repurposing their data and publishing it back out. For example, we're starting to work with Airbnb data to understand how the sharing economy's affected our vacant housing stock and possible new resources for funding of affordable housing through lodging taxes to be applied to Airbnb.

So I think we should just also be aware that there are new data sources that are starting to pop up all over the place that we need to think about that people for provide; for example, craigslist and looking at rent data and so on.

Patrick Revord: Wonderful. So we've moved through the gathering of the data. Well, we've moved through setting the goals, determining our indicators, setting up our data team. Now we've gathered data, we have it, and now it is time to analyze and communicate that data.

So this is an all-important step because even if you make it through those first goals – or the first steps of the process along the way but just hang onto the data yourself, it is of little value. And so it's important to be able to have a strong analysis to communicate what the data actually means, where is it pointing us. You know, maybe what is the current state of our community? Maybe it's not what people believe. Is our activity really moving the dial on changing that current state?

So with strong analysis, as I mentioned earlier, and the benefits of gathering and reporting data, it can be picked up by the press and can be used to actually change people's opinions on things. It can – decision makers or stakeholders are more likely to support an action that comes from good data and thoughtful analysis. Funders are willing to pay for a project that has been demonstrated to work. Citizens will stand behind a project that's successful. It goes across the whole spectrum.

There's obviously a fine line about communicating data and metrics, and that is that you want to give enough information to be clear and accurate but you obviously don't want to overwhelm. So that's just something to consider along the way of analysis communication.

I know we're getting towards the end here. Adrian or Holly, anything to add to analysis and communication before we wrap it up?

Holly St. Clair: No.

Adrian Evans-Burke: No, I think it's good.

Patrick Revord: Again, I mean, so hopefully, we've laid out all the steps today and you guys can all feel comfortable about moving forward in the process. I want to again vocalize the importance of gathering commitment among all your stakeholders and partners and leadership, and setting aside specific time and funding to make sure that data management and analysis occur. You, as applicants, you've probably determined your project goals and now is the perfect time to determine what your indicators will be. So please do not miss this opportunity and I assure you, it will bear great fruit down the road when you're trying to consider the successes of your project five and ten years from now.

So with that, we will turn to questions. Hopefully, Patrick and TJ can open up the phone line for us. And it looks like we have a few written questions, as well, so I'll start with those.

We have one from Dave Haddix [PH], who says, "Resilience addresses shocks and stresses. Can you give some specific examples of metrics and indicators of shocks and stresses?"

Adrian Evans-Burke: Sure. So, when speaking of shocks and stresses, these do kind of fall into a couple different buckets. You can think of physical shocks and stresses as in buildings, infrastructure, recovery times on rebuilding infrastructure and buildings. Then there's also kind of a secondary effects of when an area is affected by any type of disruption and there's usually economic liability or economic health. So anything around jobs, income, taxes.

And then, there's also the social wellbeing. So are folks – just kind of going off the top of my head here – but you know, do folks feel safe? Crime indicators, school attendance. And this is, again, this goes back to being very creative and being mindful of the kind of data that you have access to. Sometimes the type of data you have access to will inform what indicators you can track rather than kind of putting an indicator out there and then finding due to privacy issues or just due to access or expense issues, you can't get that kind of data. I usually kind of look at what's available and then think from there.

So again, kind of thinking in terms of infrastructure, economics, and also, social wellbeing, I think those are kind of three places to start when you're thinking of shocks and stresses that affect a community.

Patrick Revord: Thanks, Adrian. Alright, it sounds like we've got something from Frank. Frank, do you want to go ahead?

Patrick Taylor: TJ, can you unmute Frank?

Frank: There, I believe I've connected now. Can everyone hear?

Patrick Revord: Yup.

Frank: Okay, excellent. How's everyone this afternoon?

Patrick Revord: Very good, thank you.

Frank: Good. Just a couple of quick questions. The first is the strategic plan that was mentioned earlier on in the call. Is there a source for that strategic plan or is it publicly available on HUD's website?

Adrian Evans-Burke: It is, it is publicly available. Usually, if you just Google "HUD" and "strategic plan," you'll be able to find it. The latest version of that is the – I think the link goes to the 2010-2015 but we actually have a more recent one than that. The current strategic plan, if you look for it, is HUD's strategic plan for 2014 through 2018, and that will outline our various strategic goals, our strategic objectives that fall under those goals, as well as some of the metrics we're looking at. And that's publicly available as is each year, we have an agency report and agency plan that goes into our yearly progress towards these goals and that's all publicly available. And if anyone has additional questions or trouble finding that material, please reach out to me offline.

Frank: Wonderful, thank you. And that kind of leads me into my next question, which was the formatting of data as it's collected or gathered to measure successfulness of project implementation. I'm assuming that the strategic plan will kind of speak to that to some extent based on your comment? And if not, is there any advice that can be given on, you know, preferred structures or formats or what would be most useful to HUD in terms of data that results from implementation to measure project success?

Patrick Revord: So Frank, are you referring to implementation of your NDRC plan?

Frank: Correct. And I'm looking just for ways to incorporate, you know, performance metrics into the overall Phase 2 approach to ensure that – of course, you know, we want to be sure that from a public perception standpoint, that it's very clear and data driven, the message of successful implementation and the impacts to the community to demonstrate that it was the highest and best us of taxpayer dollars, etc. And also, you know, ensure that future elements of the project may be funded and so forth.

So just want to be sure that as we work on that, as we develop those types of ideas, that they're going to be consistent with, and dovetail into, you know, potential systems that HUD already has in place or at least be formatted in a way that would be easy for HUD to use upon project completion or even through implementation if we're awarded.

Patrick Revord: So it's an excellent consideration. I think, given that this is outside the bounds of the NOFA itself, I can encourage you to pick the goals and indicators that work best for your region. And then we on the HUD end can manage how we record those collectively, you know, among the recipients. But I would say for now, focus on the locality first and not on fitting within HUD's baskets, necessarily.

Frank: Excellent, yeah. And we would absolutely prioritize in that fashion. It would just be nice to have some visibility or at least some general knowledge on some parameters just to be sure that we wouldn't be too far off base. And I would also imagine that if an award was provided, then there would still be time to make, you know, general adjustments and so forth to be able to ensure that any systems that were in place would talk to one another efficiently.

Patrick Revord: I'm guessing that that would be part of the awarding process will be clarifying those issues.

Frank: Okay, wonderful. And then my final question, which is still kind of related to that, is traditionally, with implementation of HUD grants in terms of managing metrics and performance evaluation and so forth, outside of the generally required contract and project management, I guess, general requirements that are out there per regulation, do you guys typically work with grantees or sub grantees or recipients and subrecipients and expect some level of data collection and reporting and so forth in terms of community impacts? I know that, you know, contractually, there will be minimum performance standards and so forth just associated with implementing grants. But above and beyond that, what is kind of typically expected at headquarters for HUD in that realm? And any response that you guys can provide would be greatly appreciated, if that makes sense.

Patrick Revord: Adrian, do you want that one or shall I?

Adrian Evans-Burke: Yeah, I'd say go for it.

Patrick Revord: So it really varies between our grant programs. Some of our grant programs have been established for a long time and as Adrian insinuated, have a long track record of collecting certain things in a certain way. And it's sometimes hard to update that. So the newer programs, and especially this NDRC being among the newest programs, will have, hopefully, a stronger outlook, or we'll have a clearer view of collecting long term impacts from the program than some of our previous programs have.

So I guess what I'm saying is, it's hard to tell you what the NDRC will have based on previous programs because the NDRC is not based on previous programs. It's a whole new ballgame for all of us participating in it.

[Multiple Speakers]

Frank: Sorry, go ahead.

Adrian Evans-Burke: I was going to say – this is Adrian – it reflects a bit of a sea change in the way that HUD, and to a larger extent, this administration is approaching projects kind of – project management and evaluation. And it's using data to get to those outcomes rather than just counting widgets. I mean, for years, HUD was just counting how much money we spent, how much money we threw at a problem. There were offices here that some of their metrics included how many meetings they held.

So many of our – our programs have evolved and our data collection standards have evolved and they will continue to evolve. So I would be, as Patrick says, I would be hesitant to offer advice based on past examples because we're always trying to do a better job. And each program has a different kind of objective and therefore, different things they want – they'll be looking for.

Frank: Okay. Yeah, that's all really helpful information. I mean, I'm just going to move forward with the assumption that the overall objective, regardless of program and given the comments on the past and the future, that at the end of the day, it's most important for HUD to be able to have visibility on the impact of the dollars that are moved to the local level and have a clear chain between the impact of those dollars and the project and you know, pretty much the whole ball of wax from the federal government to the local level and how that money impacted the community in

a measurable data-driven way, and have it be clear and concise and essentially, you know, packaged in a way that it's easy for that information to be used at the local level, at the state level, or at the federal level to be able to communicate that message in a way that's unquestionable.

Patrick Revord: And how to ask for it better. That is the challenge.

Frank: Alright, well, our goal is to try to incorporate that best we can. You know, of course, as you guys mentioned and are aware, every situation and every circumstance is going to require a different approach in order to make that a reality. And there are a lot of players regardless of where you're at in the nation to be able to make better reality.

But you know, the best thing that we can do is just try to set up a framework that would result in that and try to do the best we can to implement that if we're awarded.

Patrick Revord: Right. So Frank, I will say – this is Patrick again – I will say yeah, take what works best for our locality and that will be what works best for us. Because each project will be different and like you said, all the players are different. And so, however you tell the story strongest will also be how we will tell the story the strongest.

Frank: Excellent.

Patrick Revord: So I think with that, we are a few minutes over time here. I want to thank you all for joining us. Hopefully, this has been informative. If you have any questions, our emails are up here. And hopefully, we'll have the recording and the PowerPoint of this posted up on the HUD Exchange shortly – I imagine within the week but that's up to the Cloudburst guys.

But thank you again all for joining us and we look forward to you joining us for the next webinar in the series.

Adrian Evans-Burke: Excellent. Thanks, everyone, and have a wonderful afternoon.

Patrick Revord: You too.

[End of audio.]