

**For many people working in local government the use of Quantitative Methods (QM) is integral to their roles. Here are some profiles from Hertfordshire County Council to tell you more.**

**Name:** Catherine Togher  
**Position:** Project Manager,  
Transformation projects  
**Department:** Environment

### How do you use Quantitative Methods in your everyday work?

My role involves gathering data for proposals for new pieces of work, as well as monitoring and evaluating services currently in operation. In project management, to initiate a project you need to put together a sound business case which outlines why you're going to do something, the benefit it's going to bring and what the impacts will be for the community.

### Do you have a specific example of using Quantitative Methods for a project?

I was involved in a project to review the Hertfordshire County Council website. This involved an assessment of the councils use of the website, and of the ways in which the public interact with the council via the website, telephone and face to face. The basic analysis of the data collected from our website metrics enabled us to improve our communication channels, and the dissemination of information to the community we serve.



**Name:** Sarah Sheldon  
**Position:** Graduate Management  
Trainee  
**Department:** Environment (previously  
Children's Services)

### How do you use Quantitative Methods in your everyday work?

A large part of my current role is helping senior managers to make decisions. This can mean presenting a case, giving a number of different options and then advising them on the basis of analysis which might be the best option. I need to take into account the outcomes for clients or customers, the environmental impacts and the value for money of each of the proposed options. I mainly employ Quantitative Methods such as data analysis, testing statistical significance, and testing assumptions in data when using different databases. Basic presentation of data is also important so that it's easily accessible to a number of different people, enabling decisions to be made based upon information which is clear, concise and relevant to that case.

### Do you have a specific example of using Quantitative Methods for a project?

I was asked to put together a report on the ambitions that Children's Services have for children and young people in Hertfordshire for 2013 - 2017. We were trying to gauge what the environment might look like in 2017 and to do this we looked at census data, and at projections from a range of different databases to see where there might be demand on services and from what ages: Would they be young children? Would they be older? And what would the associated needs be? An understanding of what the community will look like in the coming years is a crucial part of the way we plan our current projects.

### Does everyone need to understand statistics for this type of work?

I think that's where quantitative skills are really important, not necessarily to generate the statistics yourself, but to enable you to question them and to be confident that you can read them and challenge what they're showing, as well as justify why they are relevant and how we need to use them.

### How do you feel your experience of Quantitative Methods at university prepared you for your current role?

You don't have very much time to put what you learn into practice, and there is the danger that you maybe do something once and then it's another tick box done. I think we actually need to be more confident in using QM and use them more often. A basic understanding of numbers and a level of confidence in using and manipulating them to strengthen an argument is really valuable. If I were to have done something differently at university it might just have been to put into practice a few more of the stats techniques that I was taught.



**Name:** Tim Napper  
**Position:** Climate Change and Sustainability Officer  
**Department:** Environment (Resource planning team)

### Why are Quantitative Methods relevant to your role?

One of the key principles in planning is that things have to be very evidence based. If you're looking at a proposal that's coming forward from a developer and you're assessing some of the risks and constraints around what they're proposing, everything that you respond to that applicant has to be precise. People wanting to do work on or around particular water bodies have to approach us for consent and we need to assess that and make a decision based on the various data sets that we can have access to around flood risk. These decisions need to be based upon the data available to us.



### Have you made use of these skills in a specific project?

I recently managed a project in which we worked with an outside consultancy to produce a GIS based risk management tool for some of our activities. We've now got a piece of software we can boot up on our GIS viewers, so when we get a consent application in for flood risk activities we can have a look at those water bodies and say "yes, that's low risk, that's fine", or "no actually that's high risk we need to work with you around the development you were proposing." My role doesn't require that I need to be able to create the GIS program, but to be able to understand what it's showing me is essential. To have data and quantitative skills that allow you to work with that sort of technology, especially at the moment when we are trying to do more for less and develop innovative approaches to services, is really helpful.

### Did you study Quantitative Methods or statistics whilst at university?

Not really. There were data analysis courses at my university. I'll be honest, I didn't take them. With hindsight and the job I'm doing now I wish I had. It would have reduced the need for some of the on-the-job training I've undertaken.

### What would you advise people interested in this type of role?

I think if you're looking for the kind of role that involves planning of any sort then I think, yes some kind of data analysis skills are going to be really useful, to at least a reasonably basic level so you're able to interpret maps, evaluate different sources, and have perhaps some basic GIS skills. These are skills that I think are key to many projects. Another requirement when working in local government at the moment is the need to be really innovative.

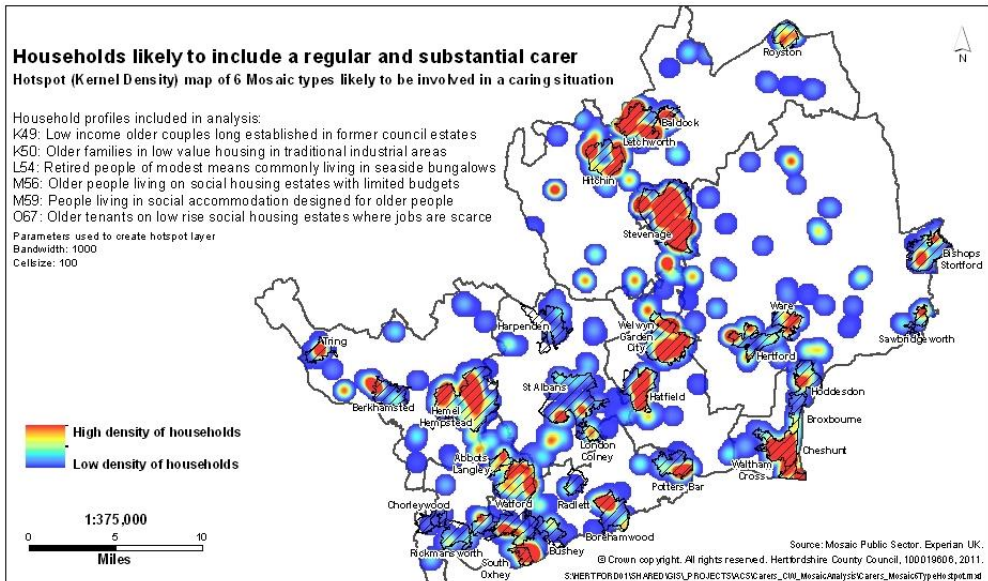
**Name:** Hannah Rignell  
**Position:** Commissioner  
**Department:** Health and Community Services

### What does your role as a commissioner involve?

The best way of describing what I do is going shopping for things that matter. I buy preventative services for older people, people with mental health problems, and people with substance misuse problems, on behalf of both the NHS and Social Care. As a commissioner there are a few different ways that we use data but essentially data and data analysis underpins everything we do.



*"These are skills that I think are key to many projects"*



Data mapping in Hertfordshire (Source: Hertfordshire County Council, Mosaic, Experian UK)

## Why are Quantitative Methods relevant to your role?

Firstly a key part of the commissioning cycle and the role of a commissioner is the needs assessment process. This is about questioning what the need is out there in the community; Are there lots of people who are getting dementia? Are there increasing numbers of people with a learning disability? Do we have pockets of deprivation where there might be particular issues where we need to commission more services? There is a huge amount of data analysis there in terms of bringing together all sorts of different data sets from across the public sector. Financial analysis is also required. Presently the public sector, in particular local government, is having to make huge savings over the next few years, so everything we do has to be based on a sound business case and we have to be looking at how much everything costs. We also conduct consultations with the community, and need to analyse the responses we get. So as a commissioner I use QM in three ways, in terms of needs assessment, financial analysis, and engagement and consultation with the people we're working with.

## Have you made use of these skills in a specific project?

I recently worked on a project to bring together a business case for investment in services which support carers. That involved getting lots of different data sets from lots of different places. We used Mosaic which is a customer segmentation tool, to look at what our community looks like, how they consume different media, how likely they are to have a caring responsibility and where they are. We studied census data to ascertain the number of people who are likely to have a caring responsibility, as well as lots of local data

around caring responsibilities. All sorts of data sources were brought together for the first time to make a coherent case for investing in supporting carers. We successfully made that case and we got the investment, directly leading to new pilot schemes in the county.

## Why did you choose to improve your Quantitative Methods skills?

I knew I wanted to go into the public sector and increasingly that's about having an evidence base for what you want to do and really having an understanding of the needs of your local community and a lot of that is about quantitative analysis.

Having a balance of skill sets is really important; quantitative skills are so crucial to back up and support an argument to people, but equally you need to be able to present the data you're drawing up on in a way that different people will understand. It really is worth investing some effort in improving these skills whilst still at university.

To find out more about where Quantitative Methods can take you, visit the following:

Quantile website:

[www.quantile.info](http://www.quantile.info)

RGS-IBG website:

[www.rgs.org](http://www.rgs.org)



# Quantitative Methods in the Workplace