

## IFoU paper planning - Fieldwork Questions and results:

- 1. Age:** 30 and under x10  
Over 30 x3

Job:

- Student/part-time carer
- Web Developer
- Child support worker
- Retail worker
- Bank software developer
- Student/web developer
- Office administrator
- Manager
- Freelance hairdresser
- Waitress/afterschool art workshop teacher/face painter
- Graphic designer
- Quantitative surveyor

## **2. Have you been living in this city for over a year?**

30 years x2, 5+ years x8, 1-5 years x2, under 1 year x1,

## **3. Please tick the following technologies that you would use daily:**

- Smartphone (**yes x13**)
- Computer (laptop/desktop) (**yes x13**)
- Tablets (**yes x10, no x3**)
- Smartwatch (**no x12**)
- Self-tracking Gadgets (**yes x3, no x9**)
- Other: \_\_\_\_\_
  - mp3 player x2
  - games console x1
  - television x2

## **4. How do you normally get around in the city?**

- Driving/ By Car (**no x10, yes x2**)
- Cycling (**yes x5, no x6**)
- By Public Transportation (bus/ tram/ tube/ train) (**yes x9, no x4**)

Additional comments beyond the above:

Walking x3

Uber x1

Taxi x1

## 5. What do you like or enjoy most about your city?

### **Glasgow:**

"I think there's a lot of different things to do in Glasgow, lots of gigs on, things to see and do."

"The social aspects of Glasgow. I think everyone would say it has friendly people."

"Probably the fact that it's a bustling city, but it's also really small. You can go around the streets and bump into people you know. It's not just a big, sprawling space where everyone is just a faceless nobody."

"The people. They're just really friendly."

"I'm biased because I grew up here. In general, I like the setting because there is a lot of convenience. There's not a lot of traveling. If you're looking for a certain product, then it's quite close by."

### **London:**

"My friends and lots of live music."

"Diversity, it's busy, there's always things to do, there's always something new, so you're always learning."

"It's fast-paced, it always has something strange going on. An example is a cafe popping up in Soho that has owls in it. Those sorts of things. It has a uniqueness to it that isn't necessarily visible to tourists."

"I enjoy the mix of people. And the green spaces. London has a very good amount of green space."

### **Manchester:**

"lots to do (plays, shows, gigs, art galleries), good transportation."

"size, good music scene, and now, familiarity."

"I guess the sense of community can be quite nice, although it can be quite incestuous at times. It feels quite homey for the amount of people in it. So, the familiarity of... you're always going to know someone somewhere."

"to be honest, after living here for 10 years, I am a bit bored of the city already but most of my friends are here"

## 6. Have you heard about Smart Cities? Does it mean anything to you?

### Glasgow:

No, I think it's probably got something to do with using technologies in cities.

No, I guess I can extrapolate the terminology, but I don't actually know it.

No. I guess it would be a city that... like, everything is smart, like smart phones and smart cameras and everything like that.

Yes, it's more about interconnected services and devices. So smart meters in homes and hotspots and bus trackers and stuff like that. I think it's a term I just kind of came across through casual reading. I read a lot about interaction design stuff.

No. I guess I've heard about wifi hotspots on buses and stuff like that, but I'd struggle to define what a smart city is.

### London:

No. I suppose... maybe it's a city... in the way that a lot of objects are now being prefixed by the word smart.

No. I think I may have heard the term maybe once before, but it doesn't mean anything to me and I can't recall its significance.

No, but I guess I'm aware of what smart cities are, as in, it's used in where city planners use data to make areas improved and so on.

Yes, I heard about it through the kind of stuff that I read, mainly online through newsletters, from like Nesta. Or like research institutes.

### Manchester:

Nope, doesn't mean anything to me.

No. I suppose it brings up images of everything being connected in a digital sort of way. But yea, I've never heard the term before.

No. Well, I guess it might have to do with apps and finding out what is going on with your city.

Yes, and because of my work, I am probably biased in this sense.

## 7. How would you envision a smart city? What would some of its features be?

### Glasgow:

"I don't know. Something with wifi. Technologies for storing peoples' data.

I guess it would be a modern city with high tech things, like London or Tokyo or places that have a lot of technological development being done.

Privacy would be important.”

“I like to keep close watch of the Venus Project. I would guess that would be a smart city--a city governed by a democratic, people state, and a lot of the amenities of central government are maintained by a non-profit organisation, ergo a computer system.

Apart from the Orwellian response, I guess it would entail a better set of services for the general population, not just those who can afford it. I guess other parts of the smart city would be: almost the simple things in life would be easier to achieve. Like, buses would be on time, or a tube system that was connected to other systems and they would operate in a synchronous format.

In a lot of cities, they are chunking off a part of the road and dedicating it as a cycle lane. I think that an entirely separate route for cycling would make me cycle more, I guess.

I guess there are a lot of positive things happening with smart cities, but it would have been nice to feel like or provide some input.”

“I wouldn't actually know, to be honest.

I use my phone for texting and stuff, but I'm not a big one for social media. So I don't like the idea of everybody knowing your whereabouts. I think that's a little bit too much. But I like that I can look up directions on google maps while I'm out. Also, the fact that you're out and you need to send your CV, it's nice that you can go and logon to wifi in a cafe and send it out.

It would also be useful if, like, with public transport, if things could be up to date. Like, if arrival times could be in real-time. So, like, especially up here, with the unpredictable weather, sometimes the trains get canceled and you never know until the trains don't turn up, and they never tell you until afterwards. Or, like, you're sitting on the trains and then they'll cancel it. It would be better if you got a heads up, so that you could make other preparations.

I don't like the idea of everything being integrated and monitored. It'd be a bit like Big Brother and you just don't have privacy like you used to. Like, everything is public knowledge and I don't think everything should be.”

“I'm not really sure. I guess it would be a similar thing where you would be able to track the services.

I think city wise, I would love to see a one-stop pay system, kind of like London with it's Oyster card. I think there is talk about some sort of cross-Scotland rail card but I think they need to get it city-to-city first, so that you can just have one way to pay to get around."

"I guess if you're using public transport, your phone could tell you about if your bus is arriving or leaving or that sort of stuff. But also, kind of, if you, say you need to report that your bins need to be emptied or something like that, there's sort of more connectivity with your bins management people to let them know that your things are full. And that goes back to the council."

### **London:**

"There'd be more glowing rectangles everywhere, which I'm not really a big fan of. I guess more of those QR code things.

On the one hand, I don't complain about things being more accessible through technology. But on the other hand, it's not very romantic. I have nostalgia for the days when things weren't so easy and in order to know about things you had to know about them in different ways. You were actually interacting with people. I think when knowledge about things is mediated through technology, it is inevitably... those channels are influenced by capital and that's generally not a very good thing. That's not something I want to be in the background of the way that I come to know about things.

I would want more sincerity. Community. Good old fashioned talking.

A smart city would mediate conversations through technology, but I wouldn't be happy with that.

<sigh> But I'm going to be difficult. It's very useful for me to know about things that I wouldn't otherwise know about. Like, how to get to certain places or what's happening now or on Saturday in this part of the city. But I think culturally, it's a bit... deteriorating."

"I think one important thing about a smart city is in terms of: ease of access to government resources via technology.

Relayed traffic information would also be available in a smart city. For myself, because I am on public transport a lot, I like to know how often the train is coming, if there is a problem, what's going on. I think London is really good at that because there is a lot of information about the transit system.

A network of automated vehicles is integrated with infrastructures, kind of like in silicon valley. Technology is very ingrained and in tune with the city.

I think people would interact as in normal, daily life. But what would end up happening, is that the technology would be so integrated that it becomes a seamless experience. Things like

walking across a store, and because of information from your phone about what you've purchased previously, you would be shown a projection or information on a window about a similar product in a nearby store so that you could seamlessly decide if you wanted to go into that store or buy that product.

Nothing is impossible in terms of technology, it's only a matter of how much time is required. I think looking at how quickly the web was developed, I can say confidently that those sorts of technologies are in our near future.

I don't see an immediate link between climate change, the environment and the smart city. When I say 'immediate link' I mean that I don't think the technology of a smart city has a direct link to the environment... I think that smart cities will mitigate our impact on the environment because the technologies that will or could be in place will help to reduce greenhouse gases. Additionally, because the smart city has access to renewable resources to power its services, I expect that there will be a decrease in the mining of fossil fuels.

I wonder if someone will make genetically modified trees to absorb/process more CO<sub>2</sub> into oxygen.

If the government is keeping track of information for public purposes, then the information should be available to the public.

Privacy in terms of traceable information to me is important because it discloses my lifestyle. I don't want to disclose that without knowledge that I am disclosing it."

"For me, if you take a place like London, it's hard to replan a city like London, so it takes like a technological intervention to improve it. So one of the things which would be very beneficial and that I've seen people talk about before is the way people navigate the city, and a way to make it smarter would be to take readings of things like greenhouse gases and CO<sub>2</sub>, and map where the readings of that are highest, so that you can navigate your way through London to encounter the least amount of pollution. That would, to me, be quite a nice incentive.

The other things would be on new building developments and how they interact with the environment and how they respond to things. And that could be like, obviously I've got an environmental bias, but if the buildings were responding to pollution, if they were responding to how they were collecting energy, but with a much broader plan so that it wouldn't be just one building doing it, it would be a lot of buildings doing it, at which point they could communicate and share information to make each one of them more improved.

I don't know, there's loads of ways... but I think the main issue is that a smart city is a really interesting proposition, but for somewhere like London it's very difficult because it's not a planning issue... because it's already there. But it's a way to make London improved, and to improve how people interact with it.

So, yea, [the smart city concept] would be better for a smaller sized city. It would be a logical approach to create a smaller... well, if it's available, people should use the available resources, so that they can use data, they can use anthropological research to make a city improved in its planning stages. There's no reason not to.

It would be accurate to say that I am 'pro' the idea of a smart city."

"Probably one with a lot of artificial intelligence. Less reliant on human labour and intelligence, one which removes the likelihood for coincidences. One where technology takes over and makes things work a bit more efficiently. Probably a more expensive city. I wouldn't really like to live in a city like that, though.

I would like to live in places where there's an understanding of community and neighbourliness. So, you know, where people are resident. So they live in an area, and they *want* to live in that area, and they want to know and communicate with other people in that area. So that to me, is the most important thing. And I wonder if a lot of things that happen in technology kind of undermine that.

I'm not saying the former vision can't go hand-in-hand with the other. If technology could be used to facilitate community interaction, then that would be great.

The question is always who owns this technology, what is the purpose, why is it being used? A lot of the time, technology is applied in an urban area by a corporate organisation, and it tends to be about making something more efficient with the end purpose of making more money or making something more profitable. That I think is the general approach to technology in urban areas, so I wonder, and I like to hope, that that's not the only way it's going to be applied. But that's probably where it seems to be at the moment.

Maybe technology could be used to make the consultation process easier. Right now, consultation involves showing up at meetings and taking time out of your busy schedule. Maybe there are ways that technology could make that easier and better?."

### **Manchester:**

"A city that runs better, if there was a way to make things smoother. Basic things like traffic flow, so that you could get around faster without really affecting peoples' lives too much. If you could get places faster. More connectivity, although most people have data at the moment. But we have rubbish wifi on the met.

GPS on the buses!

People would communicate in the same ways that they do now. We've got so many ways of communicating, phones, text, social media, I don't see anything additional being necessary.

I'm quite antisocial so I'm not concerned about people interacting more or less with each other in a smart city.

It would be good if [smart cities could manage the environment] better, but I don't know specifically how they would do it. Less fossil fuels would be good, if it could come about.

I think it's all about connectivity. I think open access internet wifi would be great."

"I imagine something like Blade Runner, but I guess that's quite 80s, isn't it? I don't know. I think Manchester can learn from Scandinavian cities. Like, I was in Bergen a bit ago, and everything just worked. I can't really put it into anything... quantitative. But the transport was always on time. One of the mentalities is: it's cheaper to get the tram than it is to get the bus, which when you think about it, makes total sense, because the bus uses more energy and you get to a more specific point in the city, rather than in the tram, where you have to go along on the designated stops.

I think there is a charm about Manchester because it's not too technical. It still has a sense of northern backwaterness, which some people don't like. It is more people focused, there's more of a sense of community. I think that's what's nice about Manchester. It feels like there's more of a community, probably because of the size. The people seem to be less stressed and on the rat race. There seems to be a correlation between things being more futuristic and people being more stressed."

"I guess you would sort of have instant access to information about your geographical location, and finding out about things that are of benefit to you in a geographical sense.

I think smart meters are a good idea because then you're more aware of what you're using and you can adjust your behaviours."

"I would like to see all the public transportation system would be linked together."

## **8. Do you think you need to be consulted as people who live in the city when:**

there will be smart meters installed in every household? (**yes x5, nox4, yes and no/depends x4**)

yes, if it's something in their homes then yes

yes, i don't think you can install any kind of monitoring system without someone's permission



that depends on who has ownership of the resources. I generally see resources as a something I am renting and the monitor could be installed without being consulted. but if they're something i'm producing, then i don't think the monitor should be installed without.

yes, you would need to be consulted

no, i guess i don't need to provide any input in that

well, that's a privacy discussion, isn't it? one side of me would say, yea, every house should have meters installed in it, but what happens to the information afterwards?

i definitely think so. there are a lot of older people up here, and they're not very good on computers. they don't have smart phones or tablets or anything, so if everything is now becoming... like, if you're doing something with the government, you have to go online to do it, that has really upset a lot of people. online banking has upset a lot of people up here [because they can't use it], and with the meters being smart, i think it would upset a lot of people.

yes, because these become, these are like utilities. now if you start to grant that utility, if you start to grant the control of that utility to a private domain, then there needs to be governance around that. what happens if you have smart meters in the home, controlling everyone's heat, and that's suddenly controlled by a gas company, and that gas company could then decide, actually we're going to turn all of that gas off. these things are in principle supposed to be good, but there are huge questions over the ethics and governance.

yes because it... just to make sure it links with basic human rights, i guess. and people should be informed. and no, if it's without a doubt going to improve things and if asking everyone means it really slows down the process of installing them. i'm quite passive as a citizen.

for me i would be happy to oblige to it, but i could see how other people from other generations might not be so happy with it. but i see it being more useful from an environmental perspective than a technological one.

no, if it's something that helps you to reduce your energy use, and that in turn helps the country to reduce its greenhouse gas emissions, then i don't think you should be consulted since it's just going to help you. we requested one and we're just waiting for ours.

no, again, if it's good for you and the environment, it's fine to be installed.

the bins have been equipped with wifi hotspot and start talking to you? **(yes x4, no x8, n/a x1)**

yes because it's use of public money

yes, absolutely

no, that sort of technology doesn't need consent or consultation, UNLESS it starts collecting data that makes you identifiable

no, that's not so important

yes, that sounds like a security issue to me.

no, it wouldn't bother me at all.

yes, because it would be useful to know where they bins would be. but also, the older generation wouldn't necessarily understand that.

once things are installed, you have the option to use them or not. so.

i guess i don't really know much about this. i guess people would need to research the health implications first.

it's something you choose to interact with, so it's not being forced on you.

if it's something that's going to help with the environment and waste management, then we don't need to be consulted. the council should just do the research and then put it into place.

i think people should just be told that it's happening, that it's good for the environment and that it's for the best for them. you could even turn it into a good news story, like put a positive spin on it. like, it's good for your tax, the efficiencies that you get, because I think, as a hook, i think everyone would be interested in seeing the improved use of their tax. it could be a way to sell it to people as a way to streamline their service.

sensors are installed to monitor traffic? **(yes x3, no x6, depends x2, n/a x2)**

no because it seems less personal

depends on what purpose. in general I believe that the installation of any sort of tool for technological surveillance should be made public, but i don't know that a public consultation is necessary

no, that sort of technology doesn't need consent or consultation, UNLESS it starts collecting data that makes you identifiable

yes, i think so because i think they could be used to charge people for traffic violations and i think people should be aware of that.

yes and no, i used to work as a technologist who supported the installation of camera monitoring systems. over the course of three years, i saw them advance from just simple cameras to cameras that track your emotive status, which can be quite dangerous to draw assumptions from. so yes, it would be nice to know that those technologies were in place in my neighbourhood, but i also understand that they are already installed in a number of neighbourhoods.

yes, if it's in a public space, us being a democracy, people should be made aware of this. but if you vote on every last little thing, then nothing would get done. so i guess yes to some extent. i think if people were told about it, they would find some reason to be unhappy with it, but if it just happened, they would probably find some reason to be happy with it.

no, i see that as a good thing.

no, they should just do it if it's going to improve traffic flows.

no, as someone who drives to work everyday, i hate getting stuck in traffic. so i'm happy to see the sensors installed if they will improve things.

sensors are installed to monitor air pollution? **(yes x5, no x6, n/a x2)**

yes, and i think we already have those!

yes, as above.

no, that sort of technology doesn't need consent or consultation, UNLESS it starts collecting data that makes you identifiable

no

yes, because as a developer i'd like to tap into that for my own purposes

yes, if it's in a public space, us being a democracy, people should be made aware of this. but if you vote on every last little thing, then nothing would get done. i think if people were

told about it, they would find some reason to be unhappy with it, but if it just happened, they would probably find some reason to be happy with it.

yes, if you live in the city, then i think you should be consulted about how the physical infrastructure should be developed. it's affecting the place where people live, so i think it's important to get it right at the outset.

no, that would be good to install.

no, that would be good to install, especially if it is linked with the traffic data. they should just be installed.

no, it would be helpful.

your personal data is being made open access? **(yes x9, no, depends x3, n/a x1)**

yes, definitely

yes, definitely they should be consulted (it should not happen)

that depends on how granular the data is. can i be identified by the data or not? if i can be identified, then yes I need to be consulted. if i cannot, then it doesn't matter.

yes, definitely

yes, definitely

yes, because i think that's risky. it's your personal data. it should be personal for a reason.

yes, but what does it mean by personal data. [ding gives example of smart meter showing how much energy your house is using] well, i live in a house share, so the usage is not mine individually. but if it somehow was attached to me individually, and it was a reliable source, then that could become problematic.

if the data can be readily identifiable back to you, then it shouldn't be made public and people would need to be consulted. but if it isn't and it's just being used for the public good, then go for it. i wouldn't have such a big problem with it.

your personal data is sold? **(yes x11, no, n/a x1)**

yea, absolutely

yes

yes, definitely

yes

yes, anytime my data is being shared with anyone, i should know about it. that is fundamentally important to me. i do speed read

yes, but again it would come back to if you could tell whose data it was.

as long as it is not

if it's being used to help with addressing urban problems or societal problems, then i wouldn't have any issues with it, as long as the data isn't readily identifiable back to me.

a new technology is designed to support your lifestyle? **(yes x2, no x5, depends x3, n/a x2)**

no, if they're just developing a technology and it's not implementation then i don't mind that's problematic because it depends on what you mean by supporting of someone's life. if it's just contributing to a product, then that's not something that i would be happy to participate in.

no

yes, i'd like that as well.

that's quite open-ended isn't it? i'll say no, only because i don't want to be boxed in. i want to keep some spontaneity to my life, and to keep some randomness.

we have a neta thermostat, and that's connected to our phones. and it helps us monitor and use our thermostat. so, any sort of technology that is designed like that to support our lifestyles, yea, we support it.

**9. Please tick the following urban problems that you feel are most relevant to address:**

- Water Supply (yes x7, no x5, n/a x1)
- Climate Change and Air pollution (yes x8, no x4, n/a x1)  
**it's important but not the highest priority x2  
everyone has a responsibility for that  
that's definitely one that should be addressed**
- Traffic (yes x7, no x5, n/a x1)  
**traffic is a formality and in the next 25 years, we'll get to a saturation point where traffic can be a problem**
- Urban Waste Management (yes x9, no x1, never thought about it x1, n/a x1)
- Urban Sprawl (yes x2, no x9, n/a x2)
- Threats to Wildlife (yes x4, no x7, n/a x2)
- Green Energy Sources (yes x9, no x2, n/a x2)  
**yes, that is fundamentally important along with basic human rights, such as access to water**
- Public Health Issues (yes x9, no x3, n/a x2)
- Inequality and Poverty (yes x11, no, n/a x2)
- Crime (yes x9, no x2, n/a x2)
- Transparent Government (yes x9, no x2, n/a x2)  
**I don't think we'll ever get to the point where we have a transparent government, but I think it is fundamentally important.**
- Other: \_\_\_\_\_
  - Not enough affordable housing available
  - Better cycling infrastructure (places to lock your bike, public showers)
  - I'm interested in the sustainable city. How can we reduce the amount of traffic on the road? How can we reduce the amount of waste we produce? How can we have a circular economy? These are all important things to be looking at.