

IFoU paper planning - Fieldwork Questions and results:

1. **Age:** 30 and under = 14
Over 30 = 8

Job:

- Student/part-time carer
- Web Developer
- Student
- 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
- Senior NHS charge nurse
- Self employed graphic designer
- Graphic designer for company x 2
- Director of own marketing agency
- Creative director of design/marketing agency
- Guest host
- Lecturer
- Studio mentor

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

30 years = 2
5+ years = 12
1-5 years = 7
under 1 year = 1

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

- ☐ Smartphone (**yes x 22**)
- ☐ Computer (laptop/desktop) (**yes x 22**)
- ☐ Tablets (**yes x14, no x8**)
- ☐ Smartwatch (**no x 22**)
- ☐ Self-tracking Gadgets (**yes x4, no x18**)
- ☐ Other: _____
 - mp3 player x2
 - games console x1+1=2

- television x2

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

- ◁ Driving/ By Car (**no x17, yes x5**)
- ◁ Cycling (**yes x8, no x12**)
- ◁ By Public Transportation (bus/ tram/ tube/ train) (**yes x17, no x5**)

Additional modes of transit beyond the we identified above:

Walking x5

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.”

“There’s lots of nice places to go and socialize, coffee shops, restaurants, and I grew up here as well so it feels like home and I’m comfortable with it.”

“I like the amount of things going on whether it’s the capacity, the availability of things like exhibitions and just all the trappings of living in a city really.”

“I like the cultural aspects of the city, I like the people, yeah they’re probably my main two.

Erm, I don’t know, it’s home. It’s where I’ve been brought up, so yeah, it’s a good friendly city.

I guess maybe the proximity of it as a city to rural areas I guess. Loch Lomond, the Trossachs, that kind of thing within 40 minutes from your door, it’s quite a nice thing. I guess it’s also very manageable city from my point of view, in terms of size and feel. It doesn’t feel overwhelmingly big, you don’t feel lost in it but yet it feels big enough to give you that kind of, I guess the opportunities that any city provides more than a town.”

“The people.”

“A few things, there’s a lot of culture things and it’s also a smaller city than London, and it’s really easy to get to the country side. I like the people”

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."

"I do indeed like the hustle and bustle. I complain about it sometimes but I actually like it. Sometimes it can be quite annoying with the overpopulation that London has, but sometimes it's also quite nice. And I think it's mostly because of the serious disparity between where I'm from, so I'm from a very very small village in Ireland. So I think I've always really like the idea of living in the city, so now I live in the city and it kind of has that nice sensation to it. I also like the fact that there is anything and everything in London. Like, I'm never pushed for things to do, if I so choose."

"When I first live in London I enjoyed of getting around and knowing no one. Also there are a lot happening in London too. I think I'd enjoy London a lot more if I have more money."

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"

"Night life in Manchester. Like Soup Kitchen, there are a lot of venues in the Northern Quarter of Manchester. That's mostly what I like about Manchester."

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.

Yep. One of the things that I have experienced first hand is public transport. A lot of the bus stops have got variable message signs on them that tell you when your next bus is and how far away it is and if its on time, and that's kind of only first hand experience.

I have vaguely but I'm not sure what it means. I've got a feeling it means joining up information from various kind of bodies who run the city and availability or rather access to that information but what it actually means in practice I don't know

I have heard the term but no it doesn't really mean anything to me

Never heard of it

"Yes, I have heard about it and have been discussing it quite a bit as well. But I think it's quite unclear what it actually means and I think it means different things to different people. I am not sure either, because it could be so many different things and probably should mean all of them. So to make it more simple, it could either mean what's quite often meant, this idea that if we have sensors everywhere if we can monitor a lot of things that goes on in the city. Maybe we

can make more intelligent decisions about how to operate the city from minute to minute, from day to day, or year to year and planning how we should build it and so on and so forth, but that's kind of just one way of seeing it. And another way to see it perhaps and the most extreme contrary idea would be to see it as making people more active part of in how the city's been planned and how the city's evolved and how the city's been lived. Like doing this kind of extreme democratisation, like these apps let you report when theres a porthole in the streets to get it fixed more efficiently rather than having workers driving around on the streets to find these portholes. Shift the power to the hands of people using the app."

"Yes, I have. I did some work that related to the data used in the city. Smart city is kind of just a city that can react day to day to its population. So it kind of knows when what is happening where."

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.

Yes, I have. Smart city means to me, augmenting the city at a kind of customer service level with technology. So embedding small devices or creating networks inside the city for transport services, like tourist information etc.

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.

I think I have heard about the term 'Smart City', is it like an initiative? It's like making the city a tech hub or something, meaning the city centre is quite well connected with devices.

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.”

Well thinking connected and joined up like public transport network and mobile phone networks and infrastructure like cabled I.T stuff like the broadband network and stuff like that. One of the things i tend to think about mostly is public transport and just in terms of having access to up to the minute public transport information, whether services or running, and being able to do that very easily from where i am around the city and that taking into account other you know accurate by virtue of being joined up with traffic data and information about what’s going on in the city that day, so for example if there’s a big event happening in George Square thats going to cause disruptions so itd be great to know about things like that ahead of time. and then other than that just thinking more broadly I don’t know, erm , i imagine just being kept up to

date with what's happening in the city of a day. not kind of so much publicity things for events but more things you might need to be aware of.

Ok I suppose just having information about the city at my fingertips probably for me what would actually be relevant to me would be having very easily accessible access to like public transport systems when buses are coming when trains are coming, how I can sort of get a taxi here and there that sort of thing would be quite useful to me.

No I've absolutely no idea, I can't say that I've ever really thought about it to be honest no this kind of context erm, I really don't know. I guess, you know, good efficient like transport links and stuff like that. I've been in Tokyo and it seems like quite a smart city cause all the transportation is all insanely efficient and you just, you know how long you were going to take to get from one place to another and stuff like that. I would like to see Glasgow use technology to help with like the health issues that kind of the city suffers from obviously it's got a really low life expectancy in certain areas and things like that and fitness is quite a bad problem in Glasgow, so if you were able to use technology somehow to help people to do that on a daily basis then that would be something that would really improve the overall feeling of the city.

I just heard it (I had explained prior to interview) it doesn't mean I guess, it doesn't mean a huge amount to me. I genuinely see that as being just a term, like you say. a marketing term or something that someone would use to describe a city. I think if I had to, if I didn't know what it meant and I hazard a guess to it, I would think, I would expect it to mean that the city is using technology in the best possible way for the people who live there, whether that be through kind of business opportunities or whether that could also be I guess from an environmental point of view. So even the kind of the waste management of that city, the travel, kind of opportunities, I guess the kind of - around the city as well, the idea that people there's a network out there that people can use to find their way around, so I mean, I guess that kind of thing but it's not something I've considered, I've never really considered Glasgow to be a smart city

I guess it will be a city, more easy for me to get access to different kinds of data, for example, what streets are being most popular right now, what other things are going on in the city and where are people gathering where are people not gathering and what's the quickest way/ quickest mode of transportation for me to get from one place to another. but also things like how can I optimise my energy using based on the weather or other people living nearby or having some sort of hot water pipes to their house and can I join in the water pipe that sort of thing. I would imagine it as a holistic system that if something is wrong in the city that it could pull other parts together to rescue. A lot more fluid.

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 CO2 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 CO2, 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?."

"I would probably be a complete copycat and, so the only kind of example I know of is the city of Oulu in Finland, they have a series of hotspots across the city where people can access the Internet through wifi and each of these hotspots has a large screen where people can see what's going on in the city and potentially look at waste management and they also have electricity consumption about the city. So I would probably just copy that because I'm out of ideas.

With my lack of knowledge, though, I imagine there would be a lot more to a smart city. But for me, to be considered smart, I would expect the city to do a lot of things that it already kind of does, to an extent. Like, Transport for London, for example, have the real-time updates for buses. I think that's very very good. They could potentially do that a bit better, like, if they link that in with a public database, you could imagine you could access that on your phone and google maps, and it would be real-time updates on the bus routes. That would be cool.

And I'm sure there's an awful lot more you could do, but I don't study the subject, so I don't know.

Of course, yea, I think there's a dependency there. I don't think technology alone would be enough [to make a smart city]. You would have to change policy, you would have to, for starters, um, this technology would need to be explained. It needs to be usable by the general public, who may or may not be tech savvy. You would need a lot of policy changes, you would need a lot of infrastructure changes, obviously to embed all this smart stuff, you would need to have the technological infrastructure there to... in order to do that. So. No, it would not just be technology-based.

For me, the most important thing to focus on, would be improving transport. One of the most important parts of the city, I believe, is getting around efficiently. Um. Yea, Healthcare would be a big issue. I know some cities implement applications on phones where you can report accidents or potholes, stuff like that. It's quite smart I guess. Having some sort of citizen action or something actionable by citizens is important, and I would probably do my best to implement something like that."

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 backwateriness, 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."

"If I were to have a smart city, since the smart city is a connected city, probably... sometimes I feel the 4G connectivity is not good enough, so I would say wifi hot spot all over the city, on public transport. Because I mean, it tends to be moving more and more to an internet based economy. Everything is moving to the internet at some point, everything is digital, so really I'd like to see a smart city with a lot of wifi spots and maybe also with that bit of encouragement what resources you can get with that, access to written materials, access various source of information as well."

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

comment to this question: I think I have heard that Manchester is becoming a smart city. It's starting out. I wouldn't say it's anything advanced at the moment. It's a good start but I think it could be developed a bit more.

◀ there will be smart meters installed in every household? **(yes = 11, no= 7, 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.

yes, there's a lot of controversy about them back in Ireland, where i'm from, so i'm probably a bit biased about that. Smart meters were introduced to great antagonism by the general public. So smart meters were introduced for homes for water meters to tax people on their water consumption. This did not go down well with the Irish public. People were given a year in advance, which is probably not enough for a big social change, **because that's not just infrastructure change, that's social change, as well.** You're expecting people to now pay for something that they always got for free. So that's a bit. I don't think that was done too well. I think there's a series of steps that should be taken if you want to introduce something like that. I understand that the economy may warrant it, it may be necessary, um, but you would need to a) make sure the public understand what [they are] and what they are not paying for, em, if it is mandatory, minimal effects should be placed on the public themselves, so it should be installed by some government body, em, it should be totally hassle free, as much as possible to the customer, and of course if you're installing a meter that they're going to be paying tax on, I don't think they should pay for the meter. you should install that, they will then pay for the water, but not for the meter.

Personally I wouldn't mind if they just went ahead and did that

I think you should, yeah I think you should be told, I think you should be informed.

No not really, I think that's pretty fair yeah

I think we probably should be consulted on that, yeah but I guess they could do it if they wanted to

I think you need to be, yeah anything to do with people's homes I think absolutely they need to be consulted, but whether they should have the option, I don't know about that so much. I think that should be, if its going to be something we consider to be compulsory because its beneficial to our output and individually can save people money as well I think it should be something that people should do and have, but I don't think it should be forced on them as such.

Probably not. I think that I don't think it is easy for individuals especially not for someone who doesn't have technology background to understand the implication of smart meter. or the possibilities of it. So I am not sure that if that's a good idea to leave it to the hands of the people living in the house. (Interviewer asked isn't this a contraction to the democracy discussed earlier) Well, they should be informed, absolutely. So there should be some kind, but I am not sure if it should be some sort of consent form either. It's like we are not being asked whether or not... if I am part of ... there are a lot of places where they are monitoring how many people are passing certain points or how many cars are driving pass certain junction or how many people are walking on the street things like that... but I am not aware of them or I am acknowledged of that no ones is asking me about that but the data can be very useful for planning purposes. The question is, is that deferent from a smart meter in their house that where the data is sent to the energy company? I don't know. Then that deepens on how the data is being used and how the

data is being stored and for how long. So if the data is made available in such a way that it could be incriminating to someone's privacy then it might not longer be such a great idea anymore.

Yes, I think you should always be informed what's gonna change in your household. Maybe, I think the consultation should go down to the local governments, maybe it should be something that your local MP could tell you about it.

yeah, I think people should be told what's gonna be installed, what data is collected and how this data feeds back to them.

◁ the bins have been equipped with wifi hotspot and start talking to you? **(yes x5, no x13, n/a x4)**

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.

I'm going to say 'no'. It's not like that is a major... it's not going to impact people too much because, if the bin can talk to you, that's great, but that's not going to change—I mean, sure, some people might argue that could encourage people to put trash in the trash bin, I don't know, maybe, but no, I don't think that's something that needs to be consulted on because that's not going to directly impact peoples' behavior or directly impact what they do on a day to day basis.

I think at home aye, there would need to be some sort of consultation about that but in the street no

I think its fine as long as you get told and it encourages your habits but then if that becomes the case that is goes to the council and you get a letter from someone at the council saying you won't get a collection next week cause you threw out a ready meal in your recycling last week then yeah that would be unacceptable.

No, I'd just consider that the next evolution of , I don't know, the bin, you know.

No I think that's ok, I think that's an intelligent thing to do.

No, not really

◁ sensors are installed to monitor traffic? **(yes x4, no x13, depends x2, n/a x3)**

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.

yes because that is going to impact what they do on a day to day basis. it's going to impact their, em, the routes they may take, and it will also impact their usage of public transport versus their own personal transport.

I know the motorway networks have already got stuff like that...and obviously there wouldn't need to be consultation about that.

No, I don't think you need to be, I assume that happens anyway.

Yeah I think that's brilliant. (Do you think people need to be consulted?) No

Well I guess they already do and things like that were not consulted on.

No I don't think so.

No, I am not that bothered with the traffic in the city to be honest.

◁ sensors are installed to monitor air pollution? **(yes x6, no x13, n/a x3)**

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.

well, I guess yes, because if you're tracking public transport vs personal transport gasoline consumption, I guess then yea you should tell people about that, [and that links to air pollution].

I think they're here already. I know of at least 3 or 4 around the city.

...I think that's happening anyway

Nope

No that's fine

I don't think so, no

No, as I think that's a good idea.

◁ your personal data is being made open access? **(yes x16, no 1, depends x5, 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.

yes, 100%. I have great reservations about public access to public data, and personal data in general. I'm quite privacy-centric when it comes to social media and anything like that. And also because I've read how a lot of people believe that making data public is a unanimous way, like, a solution to everything, and it is not always good. for example, there was an issue in the US, there was data released for funding to politicians, and of course, some politicians would say something against a certain party or body but of course it would turn out that they were being funded by something so... so I think that's bad because that then also leads to, em, you could influence other peoples' behaviours because of that data. Data is great, but data has to be interpreted. And you can interpret data in many different ways, you can interpret data in ways that can effect general public interpretation of that data. So, em, no, I believe making data public can be a very dangerous thing, actually.

Definitely needs to be consultation about that

I wouldn't mind if it was anonymized, but if it was actually my name then yeah, I would have a major problem with that, yeah.

If it would be used to help improve the systems then I think that would probably be ok

Oh absolutely yes, we should be consulted on that, yes

I guess it would depend on what personal data is in terms of locational data or ... oh I see so (if I could find out) if my next door neighbours were recycling, that kind of thing, yeah I think you'd need to be consulted

No, I wouldn't like my personal data to be made open access. I don't think there is that much need of my personal data. I mean, would that be open to everyone? So say, it could be market campaigns I don't want to be part of; it could be something more sinister, like a hacker getting hold of my personal details. I don't think personal details are something that could be readily shared.

◁ your personal data is sold? **(yes x 16, think so x1 depends x2, no +1, 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.

yea, absolutely not. don't sell it for a start. but if you need to sell it, I would expect my written consent.

Public transport I wouldn't have an issue with but personal fuel consumption definitely cause that would be, that could be exploited.

It's anonymized I don't particularly mind but yeah, if my name is attached to it or if I can be identified in any way through it then yeah.

Sold on? I think if it's all in the best interest of improving the way we live then I wouldn't have a problem with it, as long as that was always the best interest in improving tools that we have.

I would expect to be consulted on that but suspect its already done without consulting on it.

Definitely yeah

I think people should be aware of all data collected so that they know their actions that presenting themselves in a way though data, but it is also very difficult to make people aware of how data can come to present them. Definitely people should be aware of it, people should not be ... Data should be not be collected from individuals unless they are aware that their data's been collected.

◀ a new technology is designed to support your lifestyle? **(yes x9, no x7, depends x3, n/a x3)**

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.

yes, I would like to know about it so that I can know about why it is apparently going to impact my lifestyle in a good way. I'd like to know how it's going to do that.

I don't think I'd need to be consulted about the development of that, clearly there would need to be some assurances I've signed up to use it.

Personally I'd like to be consulted. I don't think that'll happen but it'd be nice if it did but ... I don't think I'd necessarily need to be consulted before it was developed, but it'd be nice to be. I think it'd be a nice thing to know, I wouldn't be that upset about it. It'd be nice for them to say to me, you know we used your data to optimize it as close to you as possible,, and I think I'd also, yeah I'd probably like to know at the beginning cause I'd like to know if my data was being used for something that I would be able to use, so I think that'd be something I'd like to know about, yeah.

I suppose that would be a good thing (being consulted) but I still think we should be asked and it should be quite clear what it is being used for and who is using it.

Erm, yeah it would still need to be, yeah

I mean, yeah, that's what I was trying to angle for in the beginning. Smart city can be so many different things for different people, and one way to see it is to use the data how the city is being used to then be able to taylor it to one individual but another way it to try to see how data of the

aggregate can be used to make the living for the aggregate better. so actually not so much taylor it for individual but to make it better for everyone.

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

◁ Water Supply (yes x9, no x12, n/a x1)

◁ Climate Change and Air pollution (yes x14, no x7, 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 x12, no x7, 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

I guess...traffic seems to be quite important to me. I guess inequality and poverty and one more...and maybe crime as well but not in a Daily Mail sort of way.

◁ Urban Waste Management (yes x12, no x6, never thought about it x1, n/a x3)

◁ Urban Sprawl (yes x5, no x15, n/a x2)

yes, but not to the same extent as the other items in the list

◁ Threats to Wildlife (yes x8, no x12, n/a x2)

I live in the city centre, so I don't see much wildlife. it'd be nice to see more, so I'm going to say yes, but it's not compared to the others.

◁ Green Energy Sources (yes x12, no x8, n/a x2)

yes, that is fundamentally important along with basic human rights, such as access to water

◁ Public Health Issues (yes x16, no x5, n/a x1)

In Glasgow and Clyde...there's a big social media presence. There's lots of individual initiatives in things like NHS 24 and their health information service. They've got a big social media presence and Greater Glasgow and Clyde assigns projects periodically as well on Facebook and Twitter. The most recent one that I can remember seeing was linked in with a national cycling event and they had a young guy who had signed up for a weight management programme for teenagers and young adults who had lost 30 or 40kg, had lost half his body weight practically through engaging with sport. It was linked in with something that was in the wider media, it was stuff like the national news and paper about the Cycle for Scotland event and they had timed it at the same time as that. So they're fairly kind of, from a public health kind of view, they're fairly switched on already. I don't know whether it's a priority because they're doing it and doing well at it. I think public health issues... being some of the main ones.

◁ Inequality and Poverty (yes x19, no +1, n/a x2)

yes, I live in one of the lower income, lower socio-economic parts of London and you can see the difference in the population in the part of the city and how they interact amongst themselves.

I think inequality definitely because the problem of access for some people, they either don't have devices or they cannae afford to sign up for the infrastructure.

I am not by any means very poor or that, but you can see... well, I can see it on the street. It's very hard to see. I see a risen of people begging on the street. They need some help. There seems to be the case the richer getting richer and the poorer getting poorer in the city. I think making Manchester a smart city this might be addressed. If we are about to be connected that we can probably reach out to tackle this issue more or maybe

something like e.g. share photo of it via social media. I mean that is probably already happening but if we are reaching out to more people by becoming a smart city then more people could see that this is existing and this is a problem needs to be addressed.

↳ Crime (yes x15 , no x5, n/a x2)

↳ Transparent Government (yes x10, no x10, 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.

Like I said before, I think it may not be a good thing, so I'm not concerned about that.

I think Glasgow City Council are fairly good, they've got a big social media presence if you know where to look for it, it's easy to find. ..I (do) look at it on Twitter now and again.

↳ 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.
- More patrol at varying times of the day. I frequently get the late bus home and it can be a bit intimidating at times. So I guess. It's nice that I can see the police out and about, but I'd like to see some more.