PEOPLE AND INFRASTRUCTURE BASED SERVICES – AN OPPORTUNITY FOR ENGAGEMENT

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Who Should Read This White Paper?

Infrastructure is the means by which society is supported. How it interacts with people is of crucial importance to its success – and thus that of society as a whole. This paper is directed to anyone who is either involved with infrastructure - whether as a policy-maker, designer, implementer or operator - or affected by infrastructure, whether as a user, affected otherwise. Too often infrastructure is seen in isolation of everything outside the particular item being considered. Infrastructure within society is considered in a piecemeal and distorted way. It is important to redefine the meaning of infrastructure so it can be perceived in a more mature and beneficial way and society can progress and create a better quality of life for all.

Key Messages from the White Paper

1. Every new piece of infrastructure has to be planned and designed in accordance with the needs and priorities of the people affected.

    "People affected" includes but is not limited to those affected by:
    - ⊡ how regard to heritage is being included in the project,
    - ⊡ how the process of planning, construction, or the provision of service includes their concerns,
    - ⊡ how the infrastructure continues to adapt to changing needs in the long-term, and
    - ⊡ how investment priorities (which might imply cutting investment in other areas) include their concerns.

2. To increase public participation and allow citizen identification with individual infrastructure projects, data has to made available to the general public as meaningful information.

    Data on its own, like evidence on its own, is insufficient. The information and communication provided to the general public needs to be understood by people outside the proposed project at all levels. This needs a sea-change in communications strategies, efforts and capabilities within the infrastructure sector.

3. Effective public engagement is not enough. People need to participate in the whole decision making process from concept to implementation and evaluation. The infrastructure industry needs to change radically so that both they and the public change the perception of the role of planners, designers, constructors and operators from just being technical experts to acting as process facilitators.

    We have to accept that people might want something not anticipated or not ideal from the scientific point of view. Technical professions need to understand that they are there to facilitate the full development of society - not only growth but also societal, cultural and health development - by working with society, not imposing

upon it.

Abstract

This paper considers the ways in which the public can be involved in the decisions surrounding the implementation of infrastructure. Using examples of decisions made which have led to good outcomes for the people and their city, the paper extracts a way of seeing the decision process from the outset to the implementation of the infrastructure. Starting by creating high-level principles that are agreed and accepted by everyone, enables infrastructure designers and decision makers to develop strategies based on these principles and consequently to create infrastructure that suits the needs of the people. The paper also considers some examples of where decisions have gone wrong. How could such large-scale projects be organised so that public participation is – and is seen by all parties to be – a genuinely positive contribution to the improvement of quality of life of society as a whole?

Key words

Decision-making, Public participation, Outcomes-Based Decision Model

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People and Infrastructure Based Services – An Opportunity for Engagement

1   Introduction

Society, like any system, needs a supporting structure to enable it to function. Infrastructure is just such a supporting structure. Infrastructure can be large or small, seen or unseen, but it is a vital component of the societal system that shapes the world's population and will take it forward. Insufficiency in the performance of infrastructure or wrong priorities in investment decisions will result in a poorer outcome for future society: whether in one hundred years' time the world will be largely at peace or consumed by conflict depends inter alia on the infrastructure we create today. Three characteristics of infrastructure demonstrate this situation:

First, infrastructure is a *global phenomenon* – what is created in one country or city has an effect on how the society there performs – culturally, morally, technically, politically – and thus how it interacts with other societies around the world. A bad journey to work could affect an investment decision that results in the impoverishment of a society in a different continent.

Secondly, infrastructure is *temporal* – what is done today is possible only because of history and will create the basis for how society performs in the unforeseen future. The street network of a city might be based on historical practice, but when emphasised by the subsequent development of the transport system, this can confine the city to a certain type of future – it would be very difficult for Los Angeles to become a community-based city because of the dominance of massive road infrastructure which divides communities, spatially, economically, and socially.

Thirdly, infrastructure operates in *multiple scales and polarities* – it interacts directly with individual people, sometimes at the level of neurons or molecules, whilst simultaneously influencing entire populations, sometimes when these are spread over great distances. This multi-scale characteristic means that tiny differences in the infrastructure design can have disproportionately large effects on great actions – "*for want of a nail…*[i]". Experiments at UCL to examine the boarding and alighting process in high-demand railway operation (Karekla & Tyler 2012) have shown that changing the dimension of a train door by a few millimetres can change the capacity of the whole railway system, thus its viability, and thus whether or not it exists. Similarly, infrastructure can have both positive and negative effects at the same time – it can bring great fortune and opportunities just as it imposes great blight on the same community. The shift from cottage-based to centralised industrial practice in the 18th and 19th centuries brought great opportunities to both rich and poor, whilst creating environments which had terrible economic, health, environmental, social effects – poor people became rich and rich people became richer, but rich people became poor, and many poor people became poorer, all at the expense of destitution, the remains of which are still being felt today, some 200 years later.

2   Making decisions about infrastructure

Sadly, people who are charged with making decisions about infrastructure rarely have the opportunity or capacity to look beyond the immediacy of a particular project. They see the project of building a high speed railway line, expansion of an airport, development of high capacity broadband, the construction of an energy supply, water treatment or security system

in isolation from anything else. In so doing they miss the opportunity to realise their responsibility to future generations and communities.

Take as an example the London metro system. This was not constructed as a system at all, but as a series of independent private projects. The perspective at the time was to make certain journeys into the capital easier. Looking at the system some 150 years later it is quite insufficient for the needs of the present day society, which, even though a lot of continuous effort is applied to cope with the numbers of passengers, has to endure distinctly uncivilised conditions every day. How could better decisions have been taken 150 years ago so that the system would be sufficient today? How can we be sure that decisions taken today will be any more valid in 150 years' time?

2.1   Process and principles

The decision process pertaining to infrastructure investment needs to deliver satisfactory outcomes in terms of the global, temporal and multiscale/polarity impacts so that the legacy of the present day leaves future generations able to meet their future needs. Brundtland's deceptively simple definition of sustainable development as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs"(Brundtland,1987) leaves a distinctly challenging duty on present-day decision makers: the three conditions described above sharpen that complexity and require decision-makers to have a much broader and deeper view about what they are doing.

It is impossible to know what infrastructure will be required unless there is a clear vision about what the context will be. What do people want the future city to be like? 'How will the people spend their lives there? How can we create a world in which future generations are really able to have the ability to meet their own needs?

Tyler (2015) sets out a decision process which seeks to achieve a system of societal support and uses the example of the bus system to show how this could be implemented. He describes three levels of the decision making process:

1. The creation of a societal vision,

2. The development of a strategy to bring about the vision and

3. The determination of actions that operationalise the strategy.

Within each level there is a need to create decisions. To create a societal vision, it is necessary to come to an agreement about very high-level principles that could be expected to outlive the present generations. In an analysis of the transformation of the city of Medellín (see Section 3 for more details), Tyler (2013) derived a set of five principles how a city should be designed and operated to meet the challenge of improving the quality of life of its citizens.

1. *The courteous city*: People should have mutual respect for each other, loosely that the city should be characterised by courtesy and politeness;

2. *The active and inclusive city:* There is a sufficient range of activities to enable people to achieve their aspirations, and that these should be available and accessible to all;

3. *The aesthetic and public city:* the public space of the city is a place where people want to be, that they feel that they own and have a responsibility for keeping it accessible and safe for everyone;

4. *The healthy city:* it actively promotes health, not only on the provision of accessible and available healthcare, but also in the way the public space, transport systems deliver health to the population;

5. *The evolving city:* it is not frozen in time – acknowledging that the city will evolve over time as needs and other circumstances change and that decisions taken today must not reduce the options available to future generations.

Ortegon and Tyler (2015) took this set of principles and tested them across a range of city stakeholders, including people from the retail, transport, planning, education, health and others, by engaging them in a sector-based workshop where the future for their sector was discussed. Bringing all these discussions together confirmed that the principles form a good set of starting points when thinking about future cities.

Once principles like these have been accepted, they can be incorporated in the process of developing a strategy and creating the decisions that will be necessary to put them in place.

Decisions on the other two levels can also have a simple structure. A possible structure is one in which the desired outcomes are determined, alongside with the factors that lead to successful achievement of the outcome and the limitations that act against such achievement (see Figure 1). Subsequently actions are defined which eliminate or at least mitigate the limitations and achieve or maximise the success factors. These decisions are nested – the actions of one decision form the desired outcomes for the next one.
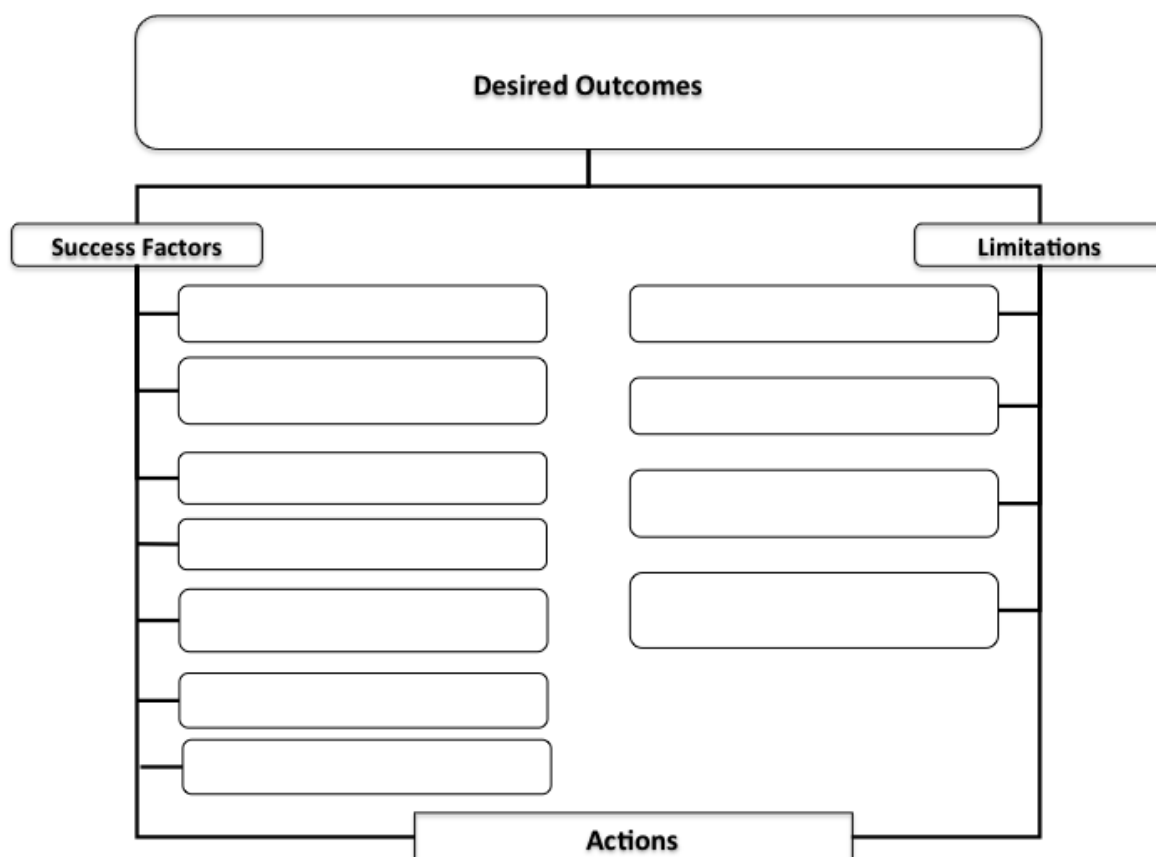
Figure 1 Basic Outcomes-based Decision Model framework (Tyler 2015)

2.2   Evidence vs. meaning in decision making

Once the actions have been performed, monitoring of the influenced situation creates

evidence about which outcomes are really achieved. This evidence, which shows the extent to

which different success factors have been achieved and limitations mitigated is necessary but

not sufficient. One of the challenges with making public decision-making truly public is that

it is often thought that the evidence-base needed for proper decision-making may require

some level of technical knowledge that the public does not have. This supposes that all that is

required is 'evidence'. However, if it is not meaningful to those who are affected by the

decision, and if it does not facilitate feedback from society into subsequent decisions (and

thus learning), evidence is useless. A more appropriate input is 'meaning'.

The decision-making process as described by Tyler (2015) which stresses the importance of 'meaning' is shown in Figure 2. Meaning is the interpretation or translation of evidence into a form that can be understood by the recipient. Often this is a case of a technician explaining technical points in everyday language, but it can also be a question of explaining local issues to a technician in a way that they can understand. It is the meaning, not the evidence, which is needed to drive the decision.
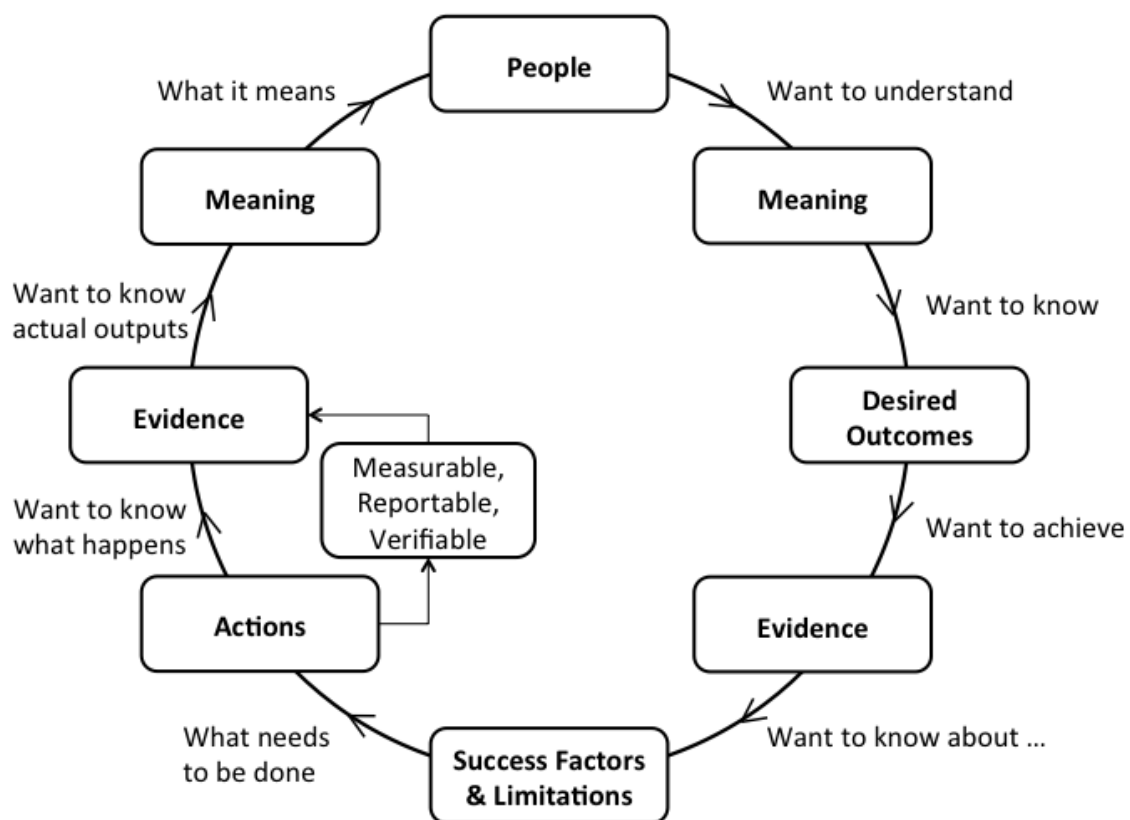

Figure 2 Making a decision (Source Tyler (2015)

A lack of clarity about the meaning of evidence or data makes it possible for people to create their own meaning where they wish to use the evidence or to dismiss the evidence entirely when they do not. An example where science has signally failed the world's community is in

the climate change, where the science community has long been unable to communicate the meaning of the evidence.

The need to include meaning requires the incorporation of people in the process – it is people who define the meaning. If the people involved in the process are drawn from a narrow band in society – a political party for example – the meaning will be distorted and insufficient for the complexity of the decision, as only a limited view about what the decision outcomes mean can be elicited. Therefore it is essential that the widest possible community is engaged in the decision process, especially when this concerns infrastructure, because the global, temporal and multiscale/polarity phenomena apply so strongly to infrastructure decisions.

There is a lot of mutual suspicion amongst the protagonists involved in the taking of public decisions. Politicians and technical officials are often fearful of their thinking being released to the public, especially through the press, over which they might have little, or no, control. The public often believes that the politicians and technical officials are seeking to follow other agendas and that they do not have the public's – or particular local community's – view in mind. In some cases, there is a difficulty in understanding the difference between thinking about and discussing new ideas, and proposing them for implementation. This creates an atmosphere in which sensible and open discussion about alternatives is precluded by the fear – real or virtual – that what is merely being posed as an idea for discussion could be seen as a decision to act. The creation of 'meaning' is thus also a strong contributor to the creation of mutual trust, which is a strong precondition for good and open public decision-making.

An example of the use of meaning in decision-making is the case of the installation of accessible bus stops in Brighton and Hove (Tyler 2015). Here the Council officers broke down a decision into three parts:

1. The laws of the land – legal duties and responsibilities of the Council which have to be complied with

2. The 'laws of physics' – the way systems have to operate, for example, the effects of gravity

3. Everything else

(1) and (2) are pretty much given – not completely unalterable, but they require intense action of one sort or another in order to be changed. In these cases, the Council officers, and their technical advisers, are likely to be the repositories of knowledge. (3), on the other hand, can be handed over to the local community – on the basis that as long as (1) and (2) are satisfied, the choice can be driven by the local community rather than the technical officers in the Council. Achieving the right balance of (1), (2) and (3) is key to making good public decisions and requires all parties to be prepared to relinquish their position when required.

In another example, the design of a bus service in rural Cumbria, the addition of a small village to the proposed route meant a significant change in the frequency. By having the discussion with the local community about why this would be the case meant that the evidence (the duration of the journey, the effect of this on the operation of a schedule and the importance of accessibility of this particular village) could be brought into consideration and a decision could be taken because all parties could understand the advantages and disadvantages and could make their decision on the basis of that understanding. The evidence was delivered, not as a stark statement of the mathematics, but in the form of what it meant.

These examples demonstrate that we should go beyond 'evidence-based decision-making' to 'meaning-based decision-making'. This is the reason for 'Meaning' being included in the decision process in Figure 2, in both the inputs to the decision and the understanding of its outputs.

2.3   Merging vision and decision

Tyler (2015) weaves these processes into an overarching vision-strategy approach to the challenge (Figure 3). Decisions are seen in the context of having created a vision, which yields a set of principles to be adopted by subsequent decisions, and a strategy for putting the vision into practice. Note that the vision, through its defining principles, comes into the decision-making process through the people: the vision is driven by the people – it is what they believe the future society should be like. It is crucial that the vision is set at a very high level – the longevity of infrastructure means that it is almost certain that it will extend beyond shorter timeframes, such as the political cycle, and may easily extend beyond a generational lifetime.

The strategy on the other hand is how that desire is to be delivered. The vision is of the people; the strategy is of the implementing process – the means by which the vision will be delivered by the politicians, technical, scientific, practical teams who will implement the vision desired by the community. As an example: something like 'build a high speed rail network' is a strategy. The associated overarching vision is more like 'Improve the quality of life for all members of society', where quality of life is seen as a basket of issues.

The determination of a vision is, of itself, a result of a decision-making process, where the vision is the resulting action, which becomes the desired outcome for the next stage in the

process. So, the vision of 'improving the quality of life of all people in society' is refined by

the process of determining the success factors and limitations – and thus the actions, which

will result in the vision being achieved. The five principles described in Section 2.1 are the

actions resulting from such considerations. So the process of defining the vision follows the

same decision-making process as that shown in Figure 2. Figure 3 shows how these

principles, in combination, lead to the creation of a strategy that drives subsequent decisions.
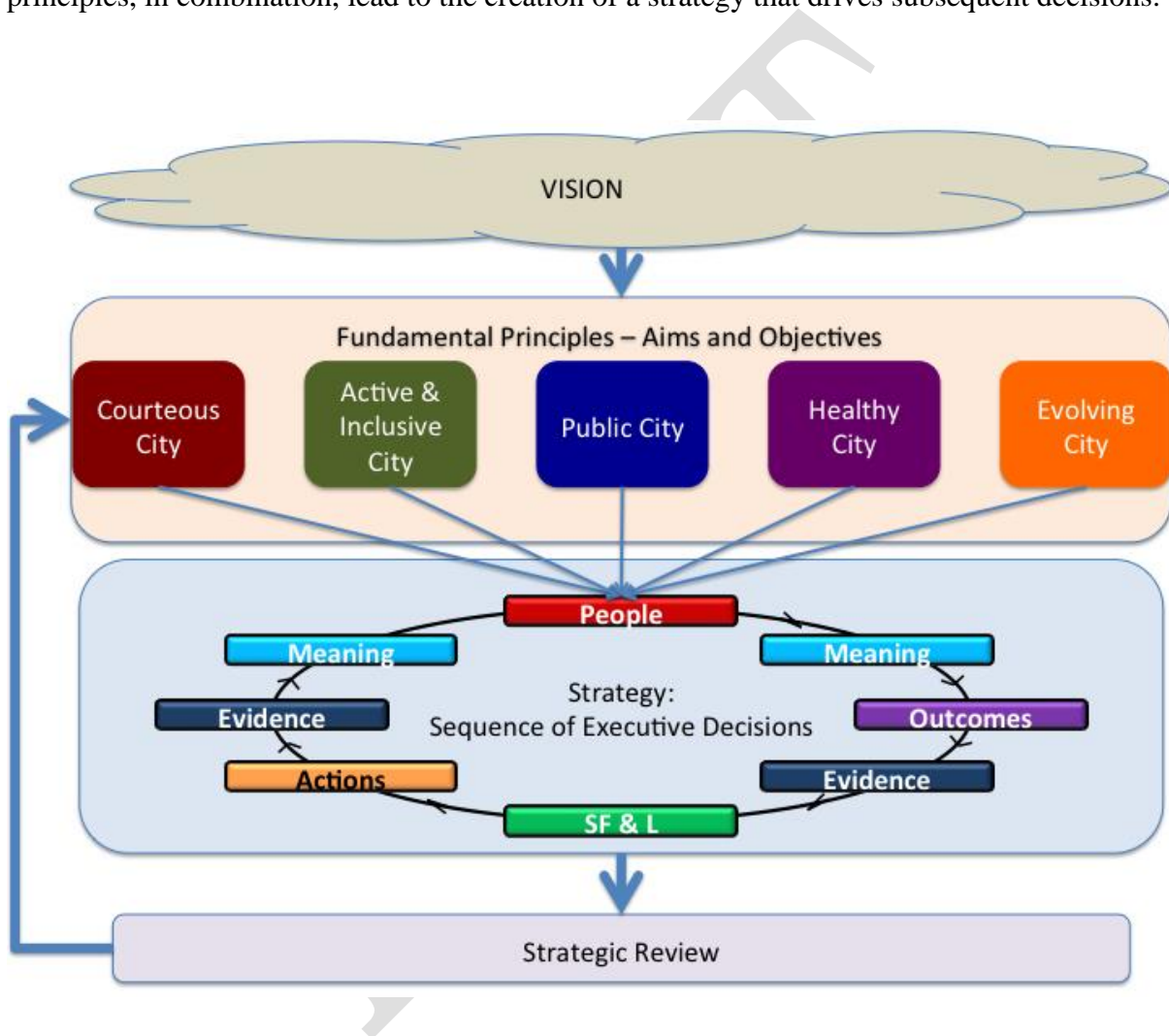

Figure 3 Decisions in the context of Vision (principles) and Strategy. Source Tyler (2015)

Clearly, there has to be some process of determining what society means by its vision in that

future context. Investments in infrastructure have no legitimacy if it is not based on such a

high level societal determination, and infrastructure as a supporting mechanism for society

must have that basic legitimacy if – as is bound to be the case – it is going to have negative as well as positive consequences for society.

3 An example: the evolution of city and society together

Medellín is Colombia's second city, known in the late twentieth century as the drugs and murder capital of the world, but which changed phenomenally so that by 2014 it hosted the World Economic Forum and was declared by the UN to be the World's most innovative city. How, in a single generation, could such a transformation take place? To illustrate an answer to this question, we can take the transport system as an example.

Medellín has a metro system – or rather a single metro line which traverses the city along the line of its river. This provided access in one dimension, but Medellín is characterised by being a city of three dimensions – not only does it have north-south/east-west alignments, but it is set 1,500m above sea level, with some sections of the city a further 500-1,000m above the city centre. Unsurprisingly these outer/upper regions are the homes of the poorer people in the city. It could easily take a couple of hours to reach the city centre from these regions. Medellín's vision was to create a city which all its population could love. This meant driving some important principles. Tyler (2013) shows that the five cities model is derived from an analysis of Medellín. But how to achieve that? It would clearly be necessary to make the city safe to be in and to provide economy, education and health to the whole population. This became the strategy.

Providing access to the city centre and its opportunities for employment and trade meant that some sort of transport system that was better than the bus system was needed. In consultation with the local communities it was clear that access to the city was important for many reasons – employment and trade, but also education, health care, political involvement for example. However, the difficulty of the terrain meant that not only was it extremely difficult for buses to reach the extremities within a reasonable time, but that it would be impossible to provide transport using a metro. The idea was to use a cable car and to link this to the metro system. This was trialled and a network developed to link three of the major poorer areas of the city to the metro system. The whole was a grand success. Access to the city centre could be achieved in 30 minutes and the sense of inclusion in the city was beginning to be felt. The thought was then to turn to a fourth area – the poorest area in the city – but the local community did not want a cable car system – it provided good access at the stations, but not further afield, which usually meant a significant difference in altitude. The community wanted a transport system that would provide access more equally within its area. Accordingly they decided on a public escalator, which was built in seven sections up the hillside, replacing the 300 or so stairs that provided access from the nearest road. However, just building hard infrastructure such as a metro, cable car or escalators does not meet the vision. To do that a real difference had to be encountered in the society itself.

The people who live in the city make the difference. People, who in the 1990s were scared to go out for fear of being shot in the crossfire, had to learn to love the city and feel safe within it. The imprisonment of the main protagonist of the drugs wars gave an opportunity to encourage people to respond to the city itself. This put the priority on making that sense of belonging, the sense of value about the city and the sense that people believed the city was good for them and their future, which in turn led to a number of interesting relationships with infrastructure.

The metro trains are driven by university students – so that they learn by experience that the metro is not a transport system, but a social integrator. The metro stations have book dispensers so that people can borrow books to read on their journeys. The escalator system is looked after by teams of school students – a previous situation of mass truancy was thus changed by making attendance at school one of the conditions required for selection to be in one of these teams. The sense of ownership is palpable – the infrastructure really is 'owned' by the people. The city works on the basis of 'integrated urban projects' (PUIs) – where 'integration' means that the project is about integrating society, whether this is as a transport project, housing, or energy supply. All city infrastructure decisions must proceed through the PUI process, which involves direct engagement with the community, who define the way they would like to reach the vision and the city authority then works with them to realise this ambition.

Energy, water, waste disposal, together with some aspects of housing, education and health care are provided by a company called Empresas Públicas de Medellín (EPM). EPM is a commercial company with a single shareholder – the city. A minority of the directors of the company is appointed by the Mayor (who is the Chair of the Board), the rest are elected by the city. The company votes to return (currently) 35% of its profit to the city for use in socially responsible projects. The company's mission is to provide corporate social responsibility and it sets out to achieve this in the way that it provides its services. With the encouragement of the city authority, EPM set up a set of 'units of joined-up living' (unidades de vida articulada (UVA). UVAs are located around the company assets, such as water cisterns, which were previously walled off from the community but now are integrated with the local community wishes – play areas for children, internet access with on-hand support

for children and adults (requested by and enthusiastically taken up by women), sometimes arts facilities and teaching. Thus the company contributes its ethos through its commercial activities – more particularly in the way it performs these – and helps to contribute to that city vision. EPM's ethos is as much an example of infrastructure as are its energy or water systems. The central point is that infrastructure can facilitate people coming together, but it cannot make that happen – this is wholly dependent on the culture that pertains in the city, in short, the desire of the people to act as a collaborative and collective social entity.

The concept of governance which leads to a company structure, which is heavily based in the community, is a major aspect of EPM's success in ensuring that society becomes better through the delivery of services such as water, energy, housing, education and so on. The fact that this is done by a commercial company, rather than by the City, means that it is a business proposition rather than a political mantra. The Company makes profits and helps people make sure that they do not become unable to, for example, buy their water or electricity. Instead of either subsidising the price – which is a common political solution – or ruthlessly cutting off supply (which would be a natural commercial solution), the company works with individuals in difficulties to learn how to make more use of less resource and to work out means of payment that work better with the realities of low-income living. The infrastructure is the way of thinking within the company, not just the pipes, cables, cisterns or power generation stations.

So it is possible to structure a system in which decisions are taken and implemented in close collaboration with the people in a city. The question is how this collaboration can be facilitated. Centring the decision-making process on the meaning of evidence, as outlined in

Figure 2, and understanding the importance of an overarching vision and principles, is a major first step towards this outcome.

4   How it can go wrong – and how engagement can put it right

The example of Medellín described in Section 3 shows how engagement can work well in redefining the city. However, it is instructive to look at cases where it might be argued that engagement has failed to work. Recent examples of where the approach to infrastructure decisions has been demonstrably lacking include for example:

- the whole explanation of climate change, where scientists have signally failed to communicate the issue in a form that people can understand, instead relying on their pre-eminence in the science to make the case on their behalf,

- HS2, where the technical feasibility of building a high speed railway line has somehow managed to miss the feelings and views of people who will be affected by its operation and

- airport capacity in South-east England, where the arguments have been distorted by assertions on all sides of what is meant by pollution, noise, capacity, need, operational requirements.

In all cases the arguments become polemical rather than informed and the result is delay, increasing costs, dissatisfaction and anger. It could be argued that the time for rational debate has been passed and the chance of having a rational discussion based on meaning has been lost. Almost inevitably, the chance of making a good decision has also disappeared. So if sensible decisions are to be made about infrastructure for the future we have to find another way.

The first point is to understand the need to learn from history - not only the events of the past, but also the outcomes. Lefebvre (1992) said that "… in a critical situation, a group must designate itself as an innovator or producer of meaning". Perspicacity about the innovation comes later. What transport would mean was not in the eyes of the inventors of the steam locomotives in the nineteenth century (the driver of this technological shift was more about the cost of grain for feeding horses). That distance was transformed into time, and that people and goods could be transported over great distances in a shorter time meant that other business, political and technological possibilities became feasible. If they had known what we know now about these opportunities, the railways might have taken a very different course and now, in the twenty-first century, we could have had a very different network, providing very different outcomes. So we must learn from that past when considering new infrastructure and we must take the time to consider the full range of potential meanings that it could deliver, both positive and negative. We also should think more carefully about what opportunities people want and need and then work out the best way to create the infrastructure needed to make those aspirations achievable.

The second point leads from this and points to the involvement of the public in the consideration of the decision, from the very outset – from the point when wants and needs are being thought about. The Brighton and Cumbria examples show how decisions can be broken down so that the public engagement is well-defined, coherent and complete and the technical inputs are responses to that outcome. The engagement of the public means that the public needs to understand the details – it is not just a matter of obtaining a wish list – so that they can make intelligent inputs to the process and the technical side can have a good steer to generate their response. Figures 2 and 3 show that the process starts with the people – they

define the desired outcomes – and it is the people who must determine how well the outcomes match their needs.

Engaging the public in generating high level principles like the ones suggested in the five-cities model by Tyler (2013) and then also in interpreting what these mean in terms of the requirements for infrastructure is a good start. The principles should not be prescriptive, but provide a reasonable basis on which subsequent decisions could be based. This discussion itself is perhaps the most important stage of the process of developing infrastructure.

Having a sense of mutual respect, as in the 'courteous city', for example, if applied as a requirement of the traffic system, would have several implications for the design of traffic junctions, control systems, prioritisation and so on. For example the traffic engineer would have to figure out how to design a junction that would enhance mutual respect – rather than simply reduce delay. Understanding the meaning of this process means that what might appear as constraints or limitations to free action are understood and complied with.

Bringing people directly into the process so that they can engage in the decisions leading to the selection of the overarching needs – and well before any scheme is considered – is a crucial part of creating infrastructure that is better for society. For successful public decision-making, it is critical to understand exactly what and how much people can contribute to the decision-making process – it is neither everything about the decision, and it is certainly not nothing. The city of Asheville NC in the USA went through an extensive series of different public engagement processes in order to engage with the population of the city about its future vision (see ADM 2009 for the full process, and a description and commentary in Tyler 2015). By bringing a disciplined approach to the incorporation of people's views, experience

and expertise, and by redefining the task of the technical professions so that they include the facilitation of these processes, the technical job of creating the infrastructure will run more smoothly, produce better infrastructure and result in a society that is better for everyone.

5 Conclusions

It is often thought that the general public cannot be involved in the making of infrastructure decisions, yet in cases where they have played a central role, the project yields better outcomes for society. Looking at successful examples of engagement, it seems that it is necessary to create involvement around high-level principles for the city/region/country which are not infrastructure-based but which set objectives to work towards meeting the requirements which any infrastructure must provide. Once those principles have been set, the next involvement is in the development of the strategy for implementation. The individual projects follow from the strategy and set the framework for the actual implementation of the infrastructure.

When considering decisions in terms of who is the dominant actor at each point, it is helpful to consider who 'owns' the different elements of the decision. A simple breakdown is into the three elements: the laws of the land, the 'laws of Physics' and everything else. Public engagement is particularly crucial for the third of these – i.e. after the 'laws of the land' and 'laws of physics' have been satisfied, the public can respond to all the other aspects of the decision. Tyler (2015) shows how they can also be involved in the other two elements, but may not be the leading actor in these cases. It is important that throughout the decision process, including those parts concerned with the law and physics, all parties – including the general public – are able to understand the meaning of what is being considered so that they understand what can and cannot be done, and why. Pausing to determine who plays the

different roles in each part of the process is a very productive way to ensure that public

engagement works successfully.

Taking into account lessons learnt from history is an important part of making infrastructure

decisions, not least in trying to understand better what infrastructure might actually deliver

(and what it might not) and the local knowledge about the physical, environmental, social

issues that might affect the successful implementation and operation of the infrastructure that

the local people will know.

Public engagement is a creative and exciting part of making decisions about infrastructure

and leads to making better decisions in the long term. It should not be seen as an optional

extra or cumbersome duty, but understood and employed as a crucial part of the infrastructure

development process.

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[i] Benjamin Franklin (1758) "For want of a nail the shoe was lost; for want of a shoe the horse was lost; for want of a horse the rider was lost; being overtaken and slain by the enemy – all for want of care about a horse-show nail". *The way to wealth*