

## The expert view: how to use urban economics in urban planning

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Alain,

It is good to touch base with you again about urban economics, urban planning and urban development. We last discussed this broad subject in March 2023. I still use your book <u>Order without Design: How Markets Shape Cities</u> in my work on urban resilience and sustainability.



What areas have you been focusing on over the past few years, and where do you anticipate this work taking you in the coming years?

*Alain:* I have continued to be busy since we held our last interview. I have been working mostly in the US, Brazil and India in recent times, advising on urban development policy and practice.

In Brazil, a primary issue to be addressed continues to be action to reform the planning system, which includes matters such as their ten-year plans and how to change regulatory planning rules and codes such as the minimum allowable plot size in urban areas. Cities in Brazil are today mostly well established – <u>over 85% of this</u> <u>large country</u> is now urbanised. Migration between regions and their cities is taking place and incomes are overall increasing, which is seeing cities grow as more people are able to afford more space and they can afford more things in life.



Pressing matters that need to be dealt with across this country include how to manage informal development, and how to tackle criminality. The latter problem has a major negative impact on cities and their people in all sorts of ways.

In India the urban challenge is very different – the country finds itself at a crossroads of how it will move forward with urbanisation. Whilst income levels vary greatly, its great strength is the composition and age of its labour force. Whilst fertility rates in India are starting to decrease, the country has some twenty years before the effect of this will start to be felt (it is of course already being felt elsewhere, which I look forward to discussing with you later).

India's labour market is positioned to deliver positive outcomes for some time if its position of labour strength can be harnessed. The country has good universities, and young people are well trained. Cities are expanding fast because of income growth and more people are moving to urban areas from rural ones. The two key questions for India as I see it are:

- (1) How to make urban expansion happen in a way that allows "bottom up" spontaneous development and sufficient flexibility for developers, including low-income developers, to participate in city development and to create new types of streets in ways that current rules and regulations do not allow.
- (2) At the same time, "top down" government and municipal action needs to ensure primary infrastructure is fit for purpose. When incomes increase, the demand for power and water and other infrastructure increases, and this needs to be planned properly for the long-term.

These two points demonstrate the dichotomy I often talk about in much of my work between the vital "bottom-up" freedom of allowing people to do what they want to do and to innovate in a way that is tested by the market to see if it works, and the topdown structure and engineering that is necessary, such as utilities and transport infrastructure, which needs to be implemented by government and authorities to support people to pursue their goals from the bottom up. There is of course a cost to this top-down structure and engineering, knowing that there is not usually a specific market signal that is triggering its need. Achieving it requires competent engineers to design and build what's required, including anticipating future growth and needs, and competent administrators to run it. Politicians need the competence to make it happen.

**Gareth:** Thanks for this overview, Alain. As I ask for your views on any trends you are seeing in global urban development, I may refer sometimes to a set of principles I use in <u>my Urban 2.0 work</u>, which are described below:

Urban 2.0 principles (by: G Byatt)

URBAN 2.0



Do you have any new thoughts about the variability of how urban development is being undertaken? It's a point we discussed back in March 2023 – at the time we talked about how urban development around the world continues to be a mix of regulated and unregulated, good and not-so-good, well-planned and governed and poorly planned with ensuing chaos and the poor always being vulnerable to shocks and stresses. We know that the people who run the world's cities and towns are always balancing competing needs with limited resources, including how to tackle climate change and how to minimise their vulnerabilities to hazards.

I want to stay positive and upbeat about this matter despite all the challenges we continue to see. Do you have good examples of urban development that people can consider and think about with relevance to their context?

*Alain:* One thing I focus on is the labour force, and I feel it is an increasingly important area.

The average labour force is aging in many parts of the world. I see this situation occurring across Europe, East Asia and Southeast Asia. The situation has changed a lot since I started in the world of urban development many decades ago. For most of my career I have focused on how cities can expand in a rational way.

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Times are quite different now. I find myself contemplating how cities should consider dealing with an ageing population, and even potential contraction. The change we are seeing is bringing major ramifications for city and municipal teams in many geographies to have to consider and plan ahead for.

To give you a couple of examples of the speed and type of change, when I lived in Bangkok in the 1980s the fertility rate and the age of people in the labour force was very different. The fertility rate was about 6 – in 2025 it is about 1.3. When countries have a low fertility rate, smaller cities tend not to grow, because most of their young people migrate to the largest cities when they have the possibility to do so. In Japan, which is a country widely known to have a very low fertility rate, most cities with a population below 5 million are losing population. In contrast, the mega-city of Tokyo continues to expand.

The wealth of a city is its people, and I think that cities will increasingly find themselves having to compete for people to maintain their urban vitality.

This is playing out in today's world in various ways. Cities are ready to pay money to attract industry and what it can bring with the promise of new jobs, yet they are too often not thinking enough about providing "normal affordable land development", to ensure people have jobs AND they also have an affordable house with good access to the labour market. When cities work out that they are competing for people, not just jobs, they should pay more attention to the quality of life they offer to people to move to their cities, and towns, and to those who already live there (to retain them).

Consider a couple of examples of different approaches that can be taken. A few years ago, New York City was competing with other US cities for Amazon to establish a major new base there, with the lure of thousands of new jobs. After longrunning discussions, in February 2019 Amazon cancelled its plans to build a corporate campus there after it had faced a backlash from lawmakers, activists and union leaders, who contended that a tech giant did not deserve something like \$3 billion in government incentives to move there. <sup>1,2</sup>

Did this outcome leave New York City better off? Providing tax subsidies to Amazon to create jobs in New York City was the wrong approach. The city should have instead proposed to invest an equivalent amount of money to improve the transport system and the quality of life of new Yorkers, which would have benefited future Amazon employees as well as many New Yorkers. "Bribing" very affluent giant firms like Amazon to bring jobs to the city is a silly approach!

Consider a different approach to attracting a tech industry that I have seen in China in the early 2000s. I worked in <u>Suining</u>, a city in Sichuan province, that, at the time had a population of about 400,000 people (as of the 2020 census, the city had grown to a population of about 2.8 million). The city was very successful with flatscreen production, and they wanted to expand their foothold in this market.

 <sup>1</sup> New York Times - Amazon Pulls Out of Planned New York City Headquarters: <u>https://www.nytimes.com/2019/02/14/nyregion/amazon-hq2-queens.html#</u>
<sup>2</sup> The Guardian - Amazon isn't bigger than New York': meet the man who killed the deal: <u>https://www.theguardian.com/technology/2019/feb/15/amazon-new-york-long-island-city-hq2-michael-</u>



However, they were struggling to attract enough engineers to live in this relatively small and quite isolated city nestled in the countryside (quite charming countryside, I must say). The mayor of the city did something quite novel at that time. Instead of trying to attract more growth in the industry by cutting taxes and subsidising land development, he realised that his problem centred around attracting the right people. He travelled to Shanghai and the big technology manufacturing hub on the eastern side of China and arranged to meet with the association of engineers that focus on flatscreen technology. He asked them what it would take to convince engineers to move to his city, and he discovered that their key requirements were to have high quality schools so that children receive a good education, a good ambient environment which included little or no pollution, and a place where sport is prevalent and easily accessible to all. The mayor returned to Suining from his fact-finding trip and set about responding to their needs. This included:

- Education: increasing the pay that teachers earn, focusing on attracting good teachers and ensuring school infrastructure was a priority for urban planning.
- Sports: designing a new promenade and a marina area that would leverage the two rivers that pass through the city, to enhance the city for a range of land and water sports.
- The environment: as part of overall city activities, focusing on action to keep pollution low and a good standard of air quality.

All in all, the changes made in the city in this people-first people-driven approach did not cost that much in comparison to the alternative "classic political option" of providing subsidies to an industry to entice it to come. Engineers did indeed come to the city, and they and their families have benefitted from a good life. Importantly, Suining's citizens all benefit from these measures – the benefits are shared as common public goods.

**Gareth:** I appreciate this example of a city team going to the market and asking what the market wants, rather than focusing on a narrower industry supply-driven approach of subsidy offerings. I can see the advantages of taking a market and a people-first mindset, using knowledge of good economics principles to make it work economically and socially. It seems a good example of how to think about the concept of holistic value, and to work out how to deliver benefits that can be shared by everyone, not just one group or one party, which is more siloed in its thinking.

Alain: Yes, that's a fair summary. The example I have given of Suining was a demand-driven approach, not a supply-driven approach. What struck me was that the mayor focused on attracting the right talent to his city, not the industry as a general nebulous entity. There were plenty of workers in and around the city of Suining, who could carry out certain types of jobs – the mayor wanted to attract people with specialised skills for the flatscreen industry, knowing that they can in turn support the city's ongoing development.

This market-driven and people-first approach is different compared to the common approach used in many industry location incentives discussions that cities have all around the world.



Whether it is being led by a city team or a national government team (which I know you want to talk about later), the approach to achieving increased urban economic prosperity with new industries or industry growth is more commonly to offer economic discounts such as reduced taxes or land subsidies. The mayor of Suining focused on a way that allowed him to use tax income on aspects of the city that would benefit the specialised workers in the industry he was targeting, and everyone else in the city. There probably was not a demand from the local population for the marina and the jogging tracks that were introduced to the city before they were built, because people had not imagined it would be possible, yet when they were built, people saw the benefits for their families and started to use and benefit from them. And of course, excellent primary and secondary education benefited everybody, not just the engineers' children. This excellent education insured also a better economic future to the entire city.

**Gareth:** I believe Suining is also recognised as <u>one of China's "sponge cities"</u> as part of the first group of cities to take part in this initiative. I find it interesting to hear that the mayor of this city had autonomy to make changes that could in turn help improve his city. I'll come back to this point later in a point about urban governance and the differing amount of autonomy that cities have around the world.

This type of approach to attract specialised talent to a city can naturally lead to, I presume, other talent being attracted, in a flywheel effect, such as healthcare professionals, perhaps café owners and eateries and others working in service sectors?

**Alain:** Yes, there is a spin-off or flywheel effect where a variety of professions and jobs are created when we think carefully about a plan to attract new talent for economic growth. The attitude of "people are a valued resource" is very important, and I think it is an approach that city and municipal teams should be focusing on.

People do not go to a city because its infrastructure is superbly efficient – although of course everyone appreciates using it. They go to a city because of the people who are there, because of who they can link up with and because of communities of all types that they can be part of. This gets me back to the key point of urban demography and how it is changing over time. Many cities (and towns) do not know how to handle an ageing population. Outside of the Middle East and Africa, the world is generally ageing, and this is something we need to deal with. A range of solutions will be required and focusing on market-driven and people-focused economics is part of the way forward.

**Gareth:** I am reminded about the writing of Jane Jacobs in her book, <u>The Death and</u> <u>Life of Great American Cities</u> (which has wisdom for everywhere, not just America), including her point that a city is not defined by its buildings, it is defined by the interactions and activities of people within its streets and neighbourhoods. This brings me onto your views of how well urban development is progressing around the world. Back in March 2023 we discussed it as being a mix of good and bad, well-informed and poorly informed, and that urban planners play a key role in how well development takes place.

Part of this is the approach taken, and the mindset to use good economics practices. In our last discussion we talked about how urban planners tend to describe their objectives in a qualitative way – with generic words such as wanting to make urban places sustainable, liveable and resilient. We discussed in March 2023 that urban planning objectives have tended in the past to be qualitative partly because it used to be difficult to obtain accurate, comprehensive and time-relevant data on what was happening. Nowadays, planners have data to articulate more quantified and targeted objectives to give people clear metrics to work towards.

Are urban planners making good use of urban economics and data, setting datainformed meaningful objectives and engaging properly with different groups of people (citizens, businesses and others) to help to create these targets?

*Alain:* I think there are encouraging signs of progress in the use of data and quantifying objectives for urban development. For instance, in Brazil I have seen how awareness about good urban economics principles spreads from one city to others who want to learn about a new approach.

The idea that there can be an urban expert who can design everything for a city or a town to the finest level of detail is not realistic at a city scale. It's true, and should be the case, when you have a building or a complex of buildings to construct in a city – and of course you want the right professions including architects, engineers and constructors to agree a detailed design and pull it all together as a functioning structure. A city is not a building. It is always emerging, and it is driven by a spontaneous order that planners must monitor carefully, respect and support. This is well accepted nowadays, I think. There are still many challenges that planners face, of course. Many have a technical background such as architecture or engineering, and dealing with economics may not come naturally to them. People with a technical background often misinterpret how the land market works – which is I think an opportunity for us to change and improve on, which I'll come on to in just a moment. If you create a scarcity of land, some people will benefit from holding onto it because of its scarcity. Land prices are not arbitrary, however: prices are not driven high solely because of land speculators sitting on it, but by supply made possible by infrastructure and transport development.

People with architecture and engineering skills are of course key to the planning and development of cities and towns. I think they should be supported by people who understand land and urban economics, so that the two aspects of knowing the price of construction work such as the cost of a housing development or a subway (which is what technical people know about) and understanding supply and demand economics (which is the value an urban economist can bring) are joined together.

If we think back to 100-170 years ago, engineers and architects found it initially hard to work with each other on large projects such as <u>the Crystal Palace in London</u> and <u>the Grand Palais in Paris</u>.

But over time the way they work with each other has improved and it is now very well integrated. I think it would be good to see how to make better use of urban economics roles in city and town planning, accepting that it will take time to mature. I hope we see continued progress over time.

Returning to the example of how land pricing works, there is an ongoing debate about whether land is over-regulated in many cities land development over-regulation means that it is a struggle to build anything unless you bend the law somehow! Developers sometimes have a bad reputation for their activities, but by pushing boundaries they are also exploring what is possible.

Gareth: Your points about developers having to bend the law to get things built is interesting. London is my home city, and I have studied and walked a lot of its history (I host a website about London's history, and I provide walking history tours of London). In the early 1630s, the development of now famous places such as Covent Garden took place in a way that was against the law at the time (a few parts, not all, of the original Covent Garden still stand today). In the early 1630s, Francis, Earl of Bedford, saw an opportunity to devise a way make money out of the land. How he managed to do this, we are not sure, because fifty years earlier in 1580, Queen Elizabeth I, concerned by too much growth, ordered a stop to "any new houses but those of the highest class" within 3 miles of the City, a law that continued into the 1630s (in the reign of Charles I). Maybe the Earl of Bedford knew the right people and accepted a fine for his buildings – we don't know. My point is that without being daring with an opportunity to create a thriving square that would subsequently set the tone for other squares in London and become a global marketplace, it may not have happened. So, I appreciate your point about sometimes having to push the envelope!

Do you think urban frameworks such as <u>the City Resilience Framework</u> developed for the Resilient Cities Network and the UN-Habitat led <u>City Resilience Profiling Tool</u> can help urban planners to ensure they use good urban economics principles in what they do, including for land management?

*Alain:* Yes, I do think urban frameworks can help planners. I think we need to be mindful of how large cities and the many institutions that support urban development such as development banks and multilateral agencies are structured. They are typically split into departments – which may include a department of economics, a department of planning and many others. There is always a danger of silos being in place – communication between everyone is vital, which is where a systems approach can be useful.

Consider the point about data availability on what is happening in cities. It is much more prevalent today than before. In the past, to know the movement of traffic we had to put rubber pipes on the roads or carry out original destination surveys. Much of this tracking was expensive and time-consuming, and it was either inaccurate or it was quickly out of date once it was captured because of the dynamic and fastchanging nature of cities. Nowadays, it is much easier to track traffic movement. With globally available tools that are accessible to anyone, we can easily see where we pain points are developing or they are already a problem to be addressed. Modern smartphone map tools show us instantly how long it will take to get from A to B at different times of day in a city – citizens use this information all the time of course, and so can planners to correct transport problems.

The question is, how do we integrate data and use it for decision-making. I think cities and municipalities should think carefully about setting up a good set of key indicators to be tracked on a regular basis, and that are updated when required on a regular basis, such as quarterly. Continuing with the traffic management example from just now, to get from point A to point B, if you use public transport, we should know how long it takes and aim at decreasing trip time. We should do the same for any other mode of transport. What we should have to accompany this is what I call a "blinking indicator" so that, if these journey times keep being exceeded over the target time by an agreed amount, you have to do something in response.

Of course, we need the right number of key indicators and the threshold levels (blinking indicators) – not too many that it becomes overly bureaucratic, but not too few that it leaves big gaps.

To give you a few other examples of using data, consider (1) the problem of urban air pollution, and (2) the different but also urban challenge of providing appropriate homes for people. An urban planning team can support those who work at the political level with data about air pollution and options to reduce it, and also with data about land pricing and the price trends of homes. But they cannot say that tackling pollution is more important than housing, or education, transport or providing jobs.

Establishing budget priorities between competing objectives like housing, jobs, pollution, education, etc, is a political decision. There is no scientific way to establish budget priorities. Decisions on priorities should be left to politicians. Technicians, like planners, economists, and engineers should advise politicians on the best strategies to reach political priorities.

Data and technology solutions can make detailed targets easier to set than in the past, as we discussed just now. For example, it is much lower cost and also easier logistically to monitor pollution and air quality levels today than it used to be. We also know that we can easily track the price to income ratio as a key indicator of housing affordability in our locality.

**Gareth:** The idea of key indicators and agreeing blinking indicators thresholds is an interesting one, Alain. It makes me think about well-designed and appropriately succinct City Dashboards, which is something I've written about elsewhere. I sometimes call these indicators like this risk appetite indicators with agreed risk levels / thresholds.

I am interested in your view about who should be involved in setting these thresholds? Returning to the Urban 2.0 principles that I mentioned earlier, I am wondering if this is an example of "meaningful involvement".



## This way, we can hopefully get people to agree what the "blinking indicators" should be, and the trigger points for action? I use a technique called Risk Appetite in this type of way sometimes with teams.

Alain: Let's return to the housing example. The price to income ratio is a general indicator, and it remains a reliable one. A city team could agree that if this ratio goes above, say, five, it sets off a blinking indicator to trigger action to be taken to stop it rising. Who establishes the metric of five (or something else)? In some cities around the world, the housing price to income ratio is way above this level. Is it sustainable? In such cities, there has been a gradual increase over time to where they are today.

My premise, which I would say links to your principle on good governance, is that if we set a certain value for blinking indicators, then if the values are breached, we need to have people who are accountable for proposing action. The same can be done for transport, for energy, and for education. Much of the data already for key indicators already exists – we just need to know where to find it, ensure we can capture it and integrate it into our operations. In education for example, we know the number of young people who progress through different levels of studies and those who drop out, as well as other data.

**Gareth:** I'm imagining that one of the things we need to be mindful of is to be careful with the type and the number of indicators that we use. We need to try to have a concise number of meaningful metrics, which can also help to stitch people across different teams in cities together to act in unison and avoid the silos that you described earlier? Perhaps this is where systems thinking can help city and municipal teams. Perhaps also, if we can be smart about the key indicators we use, we will see "smart cities and towns" that make changes when required, and react to changing circumstances to maintain as good a state of resilience as they can.

**Alain:** I do not believe that a "smart city" will ever be able to self-govern. Cities are constantly confronted with external shocks. COVID-19 was a major recent one, the breaking of globalisation that we see happening in 2025 is another. We should constantly adapt our approach to a changing environment and anticipate challenges. We should take a people-first approach. It is people who make cities, as we have discussed here and in <u>our previous interview of March 2023</u>, and the inventions, trade-offs and changing tastes of people are unpredictable.

Think about the long-term implications of cities that today are very expensive to live in, where their property price to income ratios are very high. Young people who graduate from universities in these cities today are being priced out of living in them. They understandably move to cities and towns with a more affordable cost of living, where they may be less productive. One thing is for sure – the city or town where they graduated loses out on a future earner and member of their community. If a city loses a lot of young people, there will be long-term negative consequences affecting that city's labour force and its overall economic vitality. **Gareth:** How land is used for commercial purposes could be an interesting type of key indicator or set of indicators. I think about some of the ways that land zoning exists around the world today, and the value of land. The ratio of land allocated to commercial activity varies greatly, from large commercial developments to small and agile mobile vendors.

*Alain:* Absolutely. In Greenwich Village in Manhattan, the street vendors occupy very small spaces (which is dynamic land use in action). They reflect the needs of the market, and they respond to demand in a dynamic way. If a city over-regulates on what is meant by commerce, and tries to control the market, it can impede dynamism, which impedes the main point we have been discussing here, which is that people are what make cities, and they need to be given freedom to work things out together.

**Gareth:** As we focus on establishing the right metrics and indicators, I am thinking that it is important to engage properly with communities and businesspeople for their input, feedback and ideas – would you agree with this? It goes back to the "meaningful inclusion" principle I use, which incorporates who should be involved in having a say about how an urban area should be run (this will link into a point I'd like to discuss later about how much autonomy city and municipal teams have with national / federal / state government).

Alain: Yes, I agree. If we look at some parts of the world, good examples exist. There are examples of specific publications by city / municipal teams that are statements describing target indicators and metrics they are working to improve by carrying out certain initiatives, whether it is changes to public transport infrastructure to reduce travel times or changes to the coverage of greenery. The government of Singapore is known to take a data-centric approach, for example with its public transport network and how it is continually working to expand it.

It doesn't work well when general statements are made by those who govern cities and towns about spending a general amount of money to improve a general part of a city – whether it is transport, education, health or something else. If the discussion is kept at the generic level, there is no specific targeted outcome that people can be held accountable for, and a few years later you may learn that the money has been spent on something that was not what people thought it would be! What is important is not the input, but the outcome. What is important is not how much a municipality intends to spend on transport, but how much faster the commuting time will be from point A to point B – and to monitor that this is actually being achieved.

People do need to be engaged and involved in agreeing what the outcome and impact should be, whilst also knowing that sometimes with infrastructure it requires enduring some discomfort during its build phase. The inputs to make the impact happen are obviously important, but the focus should be on the impact. The impact relates directly to what people do and what they will be able to do. If you will be launching an on-time bus service every 7 minutes which reduces travel time by X minutes, it will grab people's attention and it will hopefully drive more bus use and less private car use.

I think this type of example can be seen in places like Singapore, where data about the length of travel time from A to B considers the journey in its totality, not just a primary "flagship piece of infrastructure". For example, we need to show people the time taken to catch a local bus from a particular stop to a Metro (MRT) station which then goes into the centre.

**Gareth:** I appreciate the example about Singapore, Alain. It's a city that I know well. I know that the approach in Singapore isn't necessarily one that can be replicated in other parts of the world, however there are some great learnings for everyone to consider.

I'd like to hear some more about your thinking on how urban infrastructure is progressing around the world – to support good economic growth and to provide good resilience. UNDRR say that infrastructure is critical to providing good disaster resilience. <sup>3</sup>

Alain: In some parts of the world, it has historically been difficult to supply infrastructure built consistently in line with people's demands, but I think this is improving. It is linked to good governance. I remember cases in India where infrastructure projects were planned and took a very long time to complete. There continues to be a lot of focus on transport infrastructure across this large country, and examples like Mumbai show how a Metro system can make a big difference to transport capacity. This goes back to our discussion point earlier about the role of planners to provide this type of infrastructure, whilst leaving the market to work out how to organise itself.

**Gareth:** It seems that large scale infrastructure investments are one of many urban examples that can benefit from the right type of data analysis, agreeing key indicators and threshold targets, and regular monitoring, which of course links to good governance.

*Alain:* The availability of data to help inform what the highest infrastructure priorities are for an urban area and how to solve challenges plays an important part in selecting the right infrastructure to be implemented.

Publishing results and outcomes achieved (good or bad) is important, too. I would say that the media has a role to play here. There is a good sphere of "quantitative journalism" that creates good imagery and graphics of data analysis and shows how things are changing in a very good visual way. This type of journalism can be a powerful way to communicate what's happening with the public.

<sup>&</sup>lt;sup>3</sup> UNDRR – focus on resilient infrastructure: <u>https://www.undrr.org/news/focus-resilient-infrastructure#</u> This material is owned by Risk Insight Consulting. All rights reserved. Page 12 of 16



**Gareth:** This brings me onto a point that I'd like to revisit from our March 2023 interview, about city and municipal governance. Do you think cities around the world have enough freedom and accountability to act in their interests, whilst ensuring there is appropriate governance and oversight from the state / national / federal government that they are part of?

*Alain:* There are still many countries where political power and policy making is very centralised. When cities are entirely reliant on transfers from a central government, it doesn't always work well. This type of reliance on central government budget allocation reminds me of the Gosplan in the former Soviet Union, in countries that claim to be market economies.

City autonomy should include the entire metropolitan area, not be limited to the main municipality. Binding a metropolitan area together makes sense and it is a model that should be widely adopted. Take for example how Paris is an integrated part of, which has an elected political body that has responsibility for decisions on how to use a metropolitan tax base.

Another aspect of city and town politics is the benefit of having an executive who is in overall charge of a city rather than the city and its surrounding zones fragmented. There are many examples of effective city mayors around the world.

**Gareth:** It's a good point about a city and its metropolitan area. Greater London for example is formed of 32 boroughs and the City of London Corporation, and the Greater London Authority together with associations such as London Councils bind them together. The Greater London Authority (GLA), it was created after a referendum in 1998 when Londoners voted for a directly elected Mayor to represent London's interests and a London Assembly to scrutinise their work. <sup>4</sup>

I have also liaised for a few years with <u>the Metropole of Bordeaux</u>, to support their urban resilience efforts, and I have seen how taking a metropolitan approach supports good coordination.

My work includes disaster risk reduction and disaster resilience in urban areas. We know the types of hazards and vulnerabilities in urban environments around the world. Many urban populations live in hazardous areas, and some urban developments are being expanded due to various pressures. It seems to me that <u>the urgency to do something about urban areas most risk to disaster hazards is rising</u> (which links with my point relating to UNDRR just now). Would you agree with this statement?

**Alain:** Resilience is a huge opportunity to get right. We also need to remember that resources allocated to resilience mean that these same resources are taken away from supporting something else, so we have to show what outcomes the effort will provide (which gets back to our point about showing meaningful benefits).

<sup>&</sup>lt;sup>4</sup> Mayor of London | London Assembly website: <u>https://www.london.gov.uk/who-we-are/how-we-work-london</u>



There is no equation that says that spending 10% or 15% of a city's budget on resilience is the perfect solution. It's a political decision, and there are some good examples of resilience work in place and in progress. I recently visited the design offices of the <u>Bjarke Ingels Group</u> (BIG) in New York. They are designing <u>the East</u> <u>Side Coastal Resiliency (ESCR) project</u>, which is focusing on increasing the resilience of lower Manhattan. I was impressed by the way the urban design integrates into the city landscape in a way that makes the city a more attractive place for people. Of course, the solution needs to achieve its goal of improving resilience – and the way it seeks to do so is notable.

Good technical solutions like this project in Manhattan require a high-quality designer in charge to deliver a bold plan laid out by politicians, with good ideas coming in from others (which I think aligns with your principle of meaningful involvement).

Let's consider another example, that of subway systems. Researchers under the umbrella of the NYU Marron Institute of Urban Management have conducted an exhaustive analysis of the cost of subways around the world, called <u>the Transit Costs</u> <u>Project</u>. In New York the costs of subway development are far higher than in many other places – for example, they are estimated to be 20 times more costly on a per kilometre basis than in Seoul and five times more costly than the Paris Metro. The additional cost has been analysed to be largely due to the way projects need to be managed in New York, where every local alderman has an input and can modify their local station, adding to time and costs. At the end of the day, when a subway is so expensive to build, it means there is less subway that will be built.

**Gareth:** The East Side Coastal Resiliency (ESCR) project is a good example of combining resilience needs with an open public space. I remember <u>reading about it</u> <u>back in 2015</u> and I have continued to follow its progress.

There are plenty of learnings from the past of course when it comes to urban resilience – including the very recent past with the COVID-19 pandemic.

I wonder whether we can agree a good way of learning from each other about good ways and better ways of achieving good initiatives and projects for urban development, in a specific and detailed type of way?

*Alain:* I think this approach can work, as long as we always remember that context is key. Technical solutions can be replicable to a point, but the cultural, traditional and political context is always key.

To give you an example from a book that was first published in 1967, <u>Development</u> <u>Projects Observed</u>, by Albert Hirschman, he discusses the example of railways in Nigeria. Given the country's size, writes Hirschman, rail freight should logically be the best way to manage goods transport. However, as he points out, road freight is prevalent (it still is). Road freight is decentralised, whereas rail freight is centralised. Road freight is very responsive and agile to demand, and along with cultural norms, establishes freedom. It can work within the tribal culture across the country. Railways would be a lot harder to make work.



**Gareth:** It's good to understand some historical examples on the importance of context, Alain – thanks.

I'd like to return to our discussion point about key indicators, which I'd like to link into the global framework of the SDGs.

You mentioned in our discussion in March 2023 that there could be merit in working out how to use the global-level SDGs at a detailed level such as a city or a town. We discussed how they could be disaggregated to be useful for cities (and towns). Since our discussion in March 2023, I have since done some work to pull together some draft urban indicators, which are aligned to our discussion on key indicators today. I don't know if I am working on the right answer, but I have done some work to see how the SDGs could be measured in a meaningful way at a city / town level, which I link to my Urban 2.0 system. I wonder if there might be a demand / interest in this (including for the way that the SDGs evolve past 2030).

*Alain:* I do think there is merit in looking at how the SDGs can be linked to urban key indicators. They can provide credibility to metrics we use at a city level, and I agree about the merit of a cascading type of approach. I think it is best to start from the bottom-up urban needs, then see how these needs connect to the SDGs, rather than taking a top-down approach which might not fit the practicalities of how a city or a town functions.

To give you an example, linked to our discussion point about pollution earlier, one thing being done in New York City which involves my colleagues at <u>NYU is</u> <u>monitoring air pollution</u>. In the past, air monitoring stations may be situated above ground, such as on building roofs. Nowadays, we are able to measure with smaller devices that are low level and in different places (such as on or next to traffic lights, for example). Getting the level of pollution at the ground level is what counts. The technology now available for air quality monitoring allows us to have many low-cost monitoring points installed in places that are secure. My colleagues are using low-cost transmitters (which cost something like \$12, I think) which transmit data recordings in real time. This links nicely into our discussion about key indicators and "blinking indicators". It also links to the point about having transparent governance in place to share the data with everyone, such as the example of <u>the NYC Environment</u> & Health Data Portal.

If you provide a real time map showing the level of pollution, corner by corner, at different times of day, this should naturally link to a discussion about what level is acceptable and tolerable, and what level is not.

What matters for people is the local specific pollution where they are, what the stated targets are for pollution levels, and if the air pollution level is higher than the stated targets what can and will be done about it. Average statistics that are broad do not really help people at a local level, just as general funding intentions do not help much – however, if an agreed set of local detailed monitoring of useful statistics can be linked up to broader statistics, this can achieve a double benefit of driving action at a local level while also helping the higher-level politicians with their tracking towards targets like the SDGs It's the same for any other urban matter.



Take transport, as we have discussed earlier, and having specific indicators of how long it should take to get from A to B using different transport and mobility options. Again, focusing on the local level bottom-up approach to meaningful transport indicators whilst keeping in mind how to link to higher level indicators identified in the SDG global indicators is advisable. And again, we should be transparent about the data monitoring, through good governance, to allow citizens to check on transport performance and to allow them to challenge any situations where things may not be going to plan.

**Gareth:** The NYC air pollution monitoring initiative seems like a good example of Plan Do Check Act in action, Alain. As we know, when it comes to pollution monitoring, particulate matter at the ground level can be different to higher up, not only from vehicle exhausts but also matter from braking and tyres.

It makes me think also about your earlier point about the way media organisations can display data in a meaningful way with the public through "quantitative journalism" by using good imagery and graphics. I have seen some good work produced by the New York Times in urban visualisation.

*Alain:* I agree. Linking up with quantitative journalism is an example of good collaboration. The New York Times produces some interesting visualisation of land use regulation and a range of other urban matters.

**Gareth:** One last question, Alain. I know you continue to write papers. Do you have plans for any other papers and books? When we last talked, you mentioned that you might write a book on urban design at a lower, more detailed scale than what is discussed in Order without Design.

Alain: I have an idea for a book which is at an early stage of development. I need some time to focus on it, and at the moment I am fortunate to be busy on a number of interesting activities with different people and teams. I'm pleased that my book, Order without Design, is currently available in English, Chinese, Portuguese and Czech. A contract has been signed for an Uzbek version, too. Perhaps we may see the book published in other languages in the future.

**Gareth:** Thank you very much for your time, Alain. I look forward to keeping in touch about your work to support urban environments around the world.