

## The expert view: understanding and improving urban transit

Interviewer: [Gareth Byatt](#) – Principal Consultant, [Risk Insight Consulting](#)  
Interviewee: [Jarrett Walker](#) – Founder & Principal Consultant, [Jarrett Walker + Associates](#)

June 2025

Jarrett,

Thank you for making the time to talk with me about public transit (which is called public transport in some parts of the world – I'll refer to it as *public transit* in this interview) and its role in the transportation structure and approach of urban areas.

In our discussion, I may refer sometimes to some principles I use for urban development and management in [my Urban 2.0 work](#), which are described below:

Urban 2.0 principles (by: G Byatt)



Could we start this interview with a brief outline of your experience and work in public transit and transportation, and how you define public transit?

**Jarrett:** For 33 years I have been a consultant specializing in helping cities think about the geographic aspects of transit and how to make transit as good as it can be: which includes a thorough review of transit routes, schedules and all other related aspects. I call this activity "transit network design." Examples of my work include leading the redesign of many major urban bus networks in cities such as Houston, Dublin and others, and holding workshops and reviews in cities ranging from [Auckland](#) to [Reykjavík](#). You can find out more about the places where I and my colleagues have worked [on our website](#).

There are lots of different definitions of public transit (which I appreciate is called public transport in some parts of the world). My definition of it (which is how I open my book, *Human Transit*) is "a passenger transport service focused on travel within a region that is open to all passengers and has the ability to carry multiple passengers who have different origins, destinations and purposes."

Just to unpack this definition:

- "a passenger transport service" means that people are not driving the vehicle,
- "travel within a region" means tends to focus on urban and suburban areas, possibly to local rural areas but not long distance
- "open to all passengers" means the entire public.

The definition doesn't focus exclusively on transport operated by government or the public sector – it can include services operated by the private sector.

**Gareth:** Thanks for this context, Jarrett. To set some context before we get into specific points, how do you see general adoption trends currently and up to 2030 for public transit in the US and elsewhere around the world?

Regular monitoring continues of public transit ridership levels and usage, and I note that some public transit authorities are evolving into "public mobility authorities", integrating and subsidizing shared mobility options including bike-sharing and micromobility services.<sup>1 2 3</sup>

**Jarrett:** Whilst I don't have global statistics at my fingertips, my sense is that most countries have recovered with public transit use faster than the US after the COVID-19 pandemic, partly because many (not all) countries have less adoption of working from home than the US. There is certainly a continued interest from transit authorities about how to maximise the value of their transit services.

---

<sup>1</sup> World Economic Forum - Is public mobility the next public transport revolution?

<https://www.weforum.org/stories/2024/05/is-public-mobility-the-next-public-transport-revolution/>

<sup>2</sup> Our World in Data: [Share of urban populations with convenient access to public transport](#) (page accessed: update as of February 14, 2024)

<sup>3</sup> UITP - 5 key public transport trends revealed in our Global Economic Outlook 2024:

<https://www.uitp.org/news/5-key-public-transport-trends-revealed-in-our-global-economic-outlook-2024/>

**Gareth:** [The revised edition of Human Transit](#) was published in 2024, thirteen years after the first edition was published in 2011. In the preface to the new edition, you describe how changes you have seen taking place in the world since 2011 led you to decide to write the second edition.

I want to start first with some core aspects to human transit which have remained largely unchanged across the two editions of the book. I am keen to hear your views about the importance of geometry to public transit.

*Jarrett: The importance of geometry is threaded into the whole book, especially in Chapters 5-10, 12-13, and 15.*

*My most important point is that "technology never changes geometry." The reason transit works in a certain way is because of geometric facts, which are guaranteed to be the same across cultures and situations and [would even be the same on other planets](#).*

**Gareth:** Given the point you make about public transit and geometry, I'd like to understand your views on key areas of focus to achieve an optimal density ratio of public transit relative to the size of a geographic area, appreciating that local context is always key.

*Jarrett: Many studies have tried to find out if there are any common rules that can be applied. In my experience, there is no one density number that is common across all geographic areas. Some key factors to consider include:*

- **The mixture of uses at the regional scale**, which determines trip length and thus how many trips can be walking trips.
- **The ridership level judged to be "a success."** This is a [value judgement](#) and not something that should be hidden by citing a single density threshold.
- **The walkability of a place.** The local street network determines how many people in the local area around a transit stop can walk to it. For example, the street network layout may prevent some people from taking a direct route to a stop. Barriers such as large roads or even freeways and rail lines may reduce walking access. Also, when a transit runs two ways on a busy street or road, we have to allow people to cross the street or road at each stop, otherwise it blocks a round trip that people make.
- **The compactness of a place.** When development occurs over a large area, transit has to cover more distance to get to people than it would cover if development was more compact. Remember also that pockets of density that are spread out are not transit-friendly either, because it is costly for the transit to get to that place.
- **The linearity of a place.** Destinations that are along a straight line are more efficient to serve than those that require deviations.

*I discuss these points in more detail in Chapter 15 of Human Transit.* <sup>4</sup>

<sup>4</sup> Human Transit, Revised Edition: Chapter 15 (p. 195)

**Gareth:** Thanks for these points, Jarrett. Whilst a lot is written about the benefits of public transit, its use, quality and effectiveness (including frequency – something for us to discuss later) vary greatly in cities and towns around the world.

In Human Transit you raise some hard-to-answer questions to properly understand what to do about public transit in a particular location, including:

1. Should transit focus on peak periods or a consistent service all day?
2. Is a direct but infrequent service better than a frequent but indirect service (requiring a connection)?
3. Where do you strike the balance of who you want to carry on your public transit system (for example, disadvantaged people who need the service, or everyone)?

Are there any other hard-to-answer questions to ask? For example, is it appropriate to ask what proportion of taxpayers' money should be spent on public transit now and in future, and why?

*Jarrett: Yes, your last question (about how much should be spent on public transit) is a fundamental one, but I dwell on it less because the trade-off between low taxes and more government services is something that every elected official is already trained to think about. I focus the book on the things that need to be explained to them: the trade-offs that are intrinsic to public transit planning.*

*On the three example points that you have noted, the facts of geometry are why these questions have to be asked. The answers to these questions are value judgements, which should be made by elected officials. Do they differ by local context? Of course, and we explain the problem to each area's leaders using their data. The key point is that the answer is a value judgement, not something you should want a consultant to recommend.*

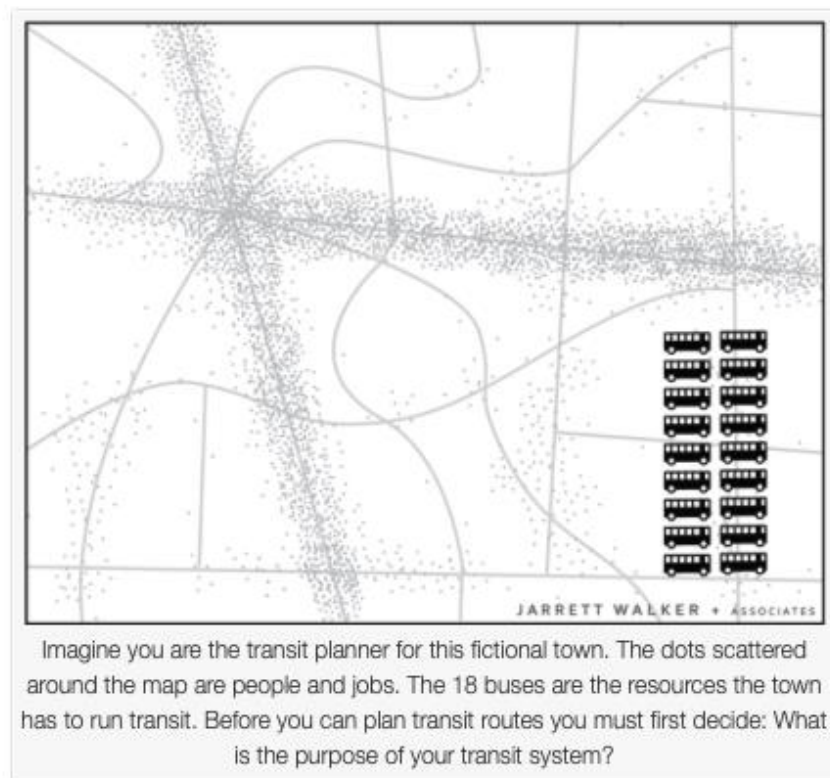
**Gareth:** Continuing with the theme of “hard to answer questions”, and linking back to the five key factors that you mentioned just now as well, I'd like to understand your views on a key challenge for city and municipal authorities for their public transit, which is how to agree on [achieving the right balance](#) (which may change over time) between public transit patronage (also known as ridership) goals and coverage goals. Put simply, the more our public transit coverage goes to less frequented places, the lower the level of patronage (or ridership) we can expect. So, if we want high patronage (or ridership), we focus on where the most people are and operate a frequency that “fills it up”. Can the goals of patronage and coverage co-exist in harmony or are they always going to be in tension with each other?

*Jarrett: It's a key point for many city and municipal authorities to consider. The position they had in the year 2000 may not be relevant to the cities and towns that they oversee in 2025. A lot may have changed.*

*As it happens, I have been writing about this subject for a number of years, as it is a key topic I talk about with transit teams.*

You can read an article about it that I had published back in 2008 on Science Direct, in the Journal of Transport Geography.<sup>5</sup> I also summarise the debate [in one of my blog posts on my website](#) (in which I use the term ridership, which as you say means patronage in some parts of the world).<sup>6</sup>

I'll use a few of the diagrams from my blog post to explain. Here's a fictional town showing the streets where a bus could run, and with dots representing people or activities, so that dots close together mean density. In this town, about 70% of the market is along the two straight streets. Suppose I have 18 buses to design a network:

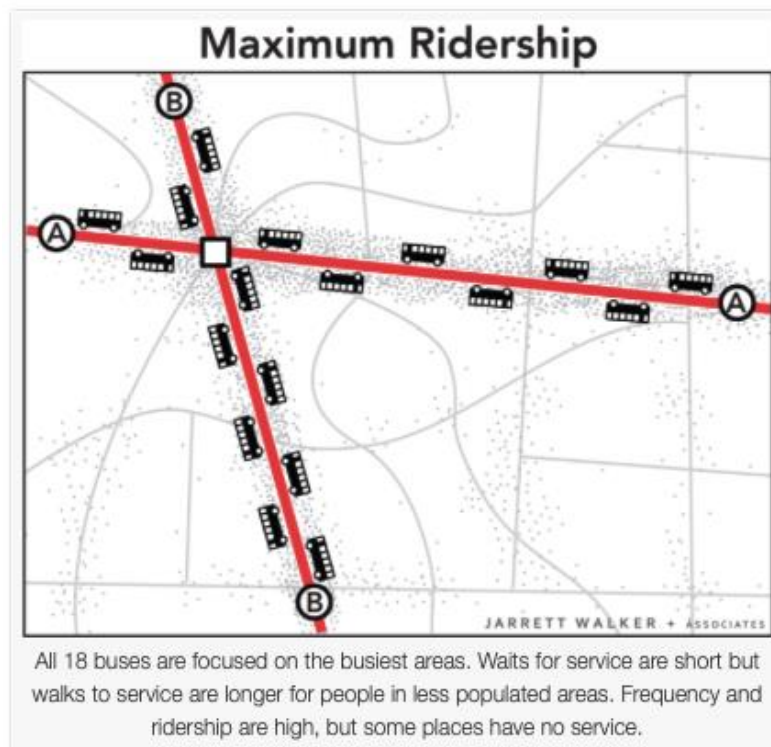


The right network depends on what the goal is, which I can illustrate by showing the network that would follow from each goal.

<sup>5</sup> The Journal of Transport Geography - Purpose-driven public transport: creating a clear conversation about public transport goals: <https://doi.org/10.1016/j.jtrangeo.2008.06.005>

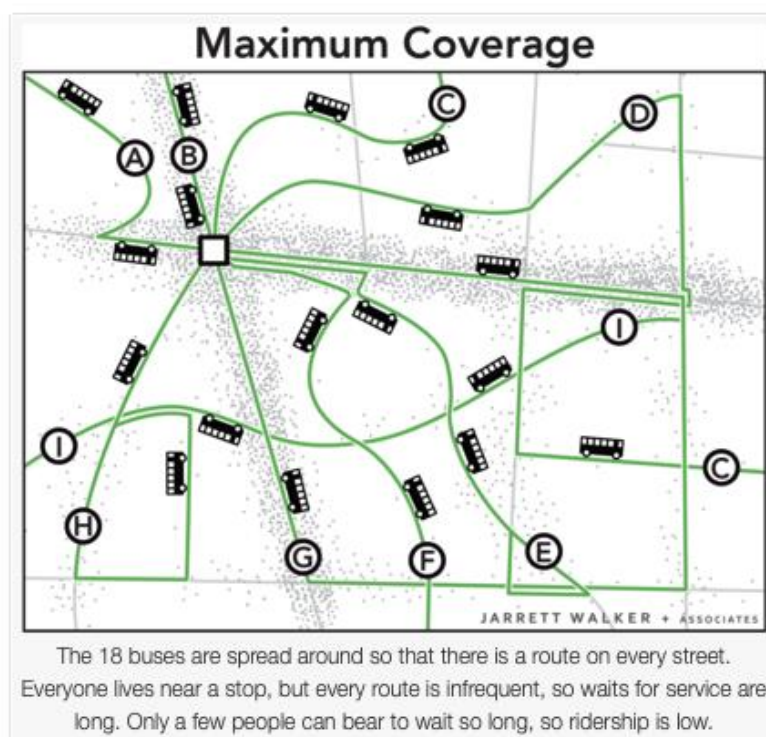
<sup>6</sup> Jarrett Walker website - Basics: The Ridership-Coverage Tradeoff: <https://humantransit.org/basics-the-ridership-coverage-tradeoff>

Option 1 – a patronage (ridership) prioritised service:



*The way to maximize patronage is to concentrate service where 70% of the market is and not try to serve the other 30% that is more spread out. That's the high patronage solution because it means that the frequencies are very high, and frequency has a nonlinear payoff for patronage. With just two routes, the 18 buses can provide 10-minute frequencies, which is just about optimal for high patronage.*

Option 2 – a coverage prioritised service:



*Mrs. Murphy lives in the SE corner of this town, and she doesn't like the first concept because it doesn't serve her. So, when we combine the voices of everyone who feels that they should have service, regardless of ridership outcomes, we have a powerful constituency for a network that goes everywhere. The second option shows the network that this "serve everyone" goal produces. Now there are 10 routes instead of two, so by spreading out our 18 buses we've made them much less frequent. These buses come every hour, which very few people will find useful, so far fewer people will use the service.*

*Which option is best? There are many socio-economic, environmental and future sustainable development aspects to take into account. The five points I noted earlier all come into play here. When you unpack it all, you can see that the decision on how to operate a transit service is a political, social, economic and environmental one. When you have a finite budget, you have to decide how to achieve it. Making this kind of decision is the job of elected officials.*

*If we approach this challenging subject in the right way, it is possible to have a meaningful discussion and debate that leads decision-makers to a choice whose consequences they will understand. That's always my goal.*

*A process of engaging the public on the patronage–coverage trade-off typically starts with an analysis of existing public transport services in these terms. This analysis categorizes services according to the purposes they are deemed to be serving. The analysis typically looks the current performance of routes or services and features of its design including the degree to which its existence supports other services.*

**Gareth:** I appreciate this explanation and this example, Jarrett. Thanks for explaining it with visuals. It prompts me to think about the criticality of planners and transit specialists to understand urban economics properly. It also makes me think about how to obtain a balanced view from the public about this and other transport matters.

You make two linked points early on in Human Transit – first, that we need to know the difference between values and expertise, and second, how to use this first point, so that a community gets to choose what it wants and why (values), and that a transport expert's job is to help with the how (expertise).<sup>7</sup>

These points are in line with [a discussion I had with Gil Penalosa, the founder of 80 Cities and Cities4Everyone, in April 2025](#) about the community being “the expert” on urban placemaking, and that it is the role of subject matter experts to help work out and advise options on the how, for others to decide which option to go with.

Taking this into account, my question is: *Are citizens of all ages and backgrounds being properly involved in the public transit discussion by city and municipal authorities to work out how to make life better for everyone?* I often find myself talking with people who live and work in cities and towns about the dearth of [meaningful involvement](#) and discussion that should be, but is not, led by city and municipal authorities on how to make urban life better.

<sup>7</sup> Human Transit, Revised Edition: Introduction (p. 6)

I wonder if there is too often a lack of [a compelling vision](#) as a guiding light for people to get involved, but I also appreciate that it's hard for people to find time in their busy lives to get involved in these types of things. Can an approach such as using "The Seven Demands of Useful Service" <sup>8</sup> that you describe in Human Transit help?

*Jarrett: I talk about this in Chapter 14 of the new edition. A problem with public discussions about these issues is that they are attended only by those who have an interest in the topic, and those interests do not necessarily lead us to what's best for the city or region as a whole. Outreach processes require a time commitment and literacy from participants that will inevitably exclude large parts of the population. I am especially attuned to this in the US because I am particularly interested in a lower- to middle-income person who is very, very busy, and is not usually going to come to a public meeting even if invited, but who will constitute much of the ridership of a well-designed service.*

*Given all of this, we undertake outreach with online surveys, and we try to make these surveys easy to complete on smartphones by focusing on practical questions, not grand visions. Visions tend to be a luxury for most people; people tend to care more about practical questions and impacts because that is what they face on a daily basis.*

*In the book, I provide an example of [work I undertook in Dublin](#), in which we obtained feedback from about 50,000 people on a draft plan when it was out for public comment (following on from an earlier initial survey prior to creating the plan). This may seem like a large number of respondents, but it represented about 3 per cent of the population of Greater Dublin -- not exactly a good guide to the whole public's opinion. For sure, we obtain valuable feedback from people who make the time to respond, but I never see the results of these self-selected surveys as an edict to be obeyed. It's just one input for elected decision-makers to consider.*

**Gareth:** As you mention in the book, Jarrett, it's a fact of life that people are angrier when government does something they really do not like than they are happy when it does something they like. <sup>9</sup>

We know that the key questions about public transit are made easier or harder because of the way that a particular city or town is already laid out. In [a discussion I held with Professor Adam Millard-Ball in February 2025](#), we talked about how it is difficult to change a street network once it is laid down. Whilst acknowledging this to be the case, are there ways that we can adapt public transit on existing street networks, whether their geometry is organic or a grid-like structured design – whilst involving everyone in the discussion on options to move forwards?

I am wondering about the pros and cons of different public transit options, particularly buses and trams. There are some great examples of bus networks and tram networks around the world, and some examples, particularly of bus networks, that leave a lot to be desired.

<sup>8</sup> Human Transit, Revised Edition: Chapter 2 (p. 24)

<sup>9</sup> Human Transit, Revised Edition: Chapter 14 (p. 181)

I am also wondering about the value of tactical trials of new approaches – for example, [the trial of Very Light Rail on a small section of road in Coventry in the UK in 2025](#) which uses a shallow-depth track system for a lightweight form of rail-based public transit (I am not suggesting this VLR example can work anywhere, rather, that it is an example of new thinking).

*Jarrett: "Adapting public transit to existing street networks" is what I do all day, and it is worth doing, although having a better street network to begin with would get better transit results. (That's what the [planning guide we wrote for Ireland](#) is about.)*

*Many people perceive rail as superior, but that's not always true, especially if your goal is a system that's useful to as many people as possible. Back in 2011 I wrote a piece about "[sorting out rail-bus differences](#)". In 2009, the then-popular [but now defunct] blog the Infrastructurist asked its readers whether streetcars (trams) are better than buses, and why. Readers came up with 36 responses that formed a good summary of popular perceptions about the rail-bus distinction. But most of these were either:*

- misidentified differences, such as the protection from traffic, nicer stations, or clearer maps and wayfinding. None of these are rail-bus distinctions, because you can do all these things for buses if you care enough about them.*
- cultural feedback effects, like higher standards of operation and maintenance. These are indications that the people making decisions are caring more about rail than about buses and therefore making decisions that make that difference larger. But again, these are all things you can do for buses.*

*Only 1/6 of the stated reasons referred to an intrinsic difference between bus and rail technologies, and many of those were not to rail's advantage. For example, in normal street operations, a bus can go around many obstacles that will block a tram, which is a big reliability advantage for buses.*

*For all types of public transit, I believe we should focus on maximizing the usefulness of it, which means using whatever tool achieves this goal in each situation*

**Gareth:** I appreciate [your blog piece about access and freedom](#) – some good visualisation here. Talking about bus networks and rail networks, I often wonder why bus networks work well in some cities and towns, with what seems like a balance of patronage / ridership and coverage, but they struggle in others. Do you have any thoughts on this – is lack of a compelling investment case the problem?

In my visits to cities and towns around the world, I see a range of approaches taken, which tie into the key points about public transit that we discussed earlier (patronage / ridership vs coverage, frequency etc.). Some use a uniform bus size, others use a variety of bus sizes for different routes and at different times of day; some have more dedicated bus lanes than others; labour costs vary. Some are adapting bus fleets to electric power, but many small towns I visit do not seem to have funds for changes like this.

Buses in Hanoi (a variety of bus sizes exist in the city), March 2023 (photo: G Byatt)



Buses in Delhi, many of which are very polluting, January 2024 (photo: G Byatt)



**Jarrett:** *In the US and UK at least, the most urgent need for investment is simply to run more service. The problem is quantity, not quality.*

*We know this in the US because when we compare US and Canadian systems, we find that Canada's transit isn't better or more technologically advanced, but there is a great deal more of it. A lot of urban indicators are better in Canada than the US for this same reason of quantity I think UK cities will find something similar if they compare themselves to Irish cities, especially given the major service expansion happening in Ireland over the next few years.*

*In wealthy countries, bus size is not usually a critical factor in operating cost, because operating cost is mostly labor. I emphasize that transit agencies are being smart by running the largest bus they will ever need and not worrying if seats are sometimes empty.*

*As for the electrification of a bus fleet, it's clearly happening but in some cases it is causing agencies to run less service than they otherwise would, especially in the US. I am ambivalent about it for this reason. If we run fewer buses so that the buses can be electric, and therefore force more people to drive, we may not be coming out ahead even in terms of emissions.*

**Gareth:** I appreciate the points about the quantity of public transit, which clearly differs around the world.

For new, expanding and fast-growing cities and towns around the world, noting that geometry is a key constant to understand and work with, that it is difficult to change a street network once it is laid down, and that a community should be involved in the balance of patronage / ridership and coverage, what advice do you have for urban planners and transport professionals in these parts of the world on how to think about and plan public transit (noting that local context is always key)?

I am thinking of new and expanding cities in the developed world as well as those in developing economies such as countries in Africa and Asia, and on the world's small islands as well.

**Jarrett:** *The layout of a city will overwhelmingly determine the potential for public transit in the future. If you lay out a city on the assumption that cars are what matter, you'll create streets that are so wide and fast that they're not safe for pedestrians, which is a huge obstacle to transit succeeding. You'll build major destinations in cul-de-sacs where they're hard for transit to get to. Later you will have to grow public transit, but these decisions will have made it harder. Is this what you want?*

**Gareth:** Your point about cul-de-sacs reminds me again of [my discussion with Adam Millard-Ball about street networks](#).

I wonder if a community's answers to tough transport questions such as the ones we discussed just now can inform a set of public transit key indicators for a city or a town to use and to display (for transparent governance), which have agreed metrics and thresholds to be monitored to take action if something changes and a threshold is reached?

This type of thinking is in line with [a discussion I had with the urbanist Alain Bertaud in April 2025](#), in which discussed how to use key indicators to make cities and towns the best they can be. For example, using agreed time to location and frequency metrics.

On a broader basis, would it also help to link urban transit indicators and other urban indicators to the 17 UN Sustainable Development Goals ([the SDGs](#))? I link my Urban 2.0 key indicators to the SDGs, to show how good urban development and management can contribute to the bigger picture, including aspects such as good health and equality for all, and how we should address climate change.

*Jarrett: I agree with Bertaud that cities need to develop better indicators, but also that these indicators need to reflect goals that people actually care about. Bertaud was one of my inspirations in focusing on access to opportunity as the primary measure of the economic health of a city. I would encourage cities to measure average [access to opportunity](#) by public transit ("how many jobs and other useful destinations can the average person reach in 30, 45, or 60 minutes"). This is a simultaneous measure of transit ridership potential, transit's contribution to economic health, transit's contribution to personal liberty.*

**Gareth:** I'd like to talk about one of the main updates in the revised edition of the book, which you note as the single most important change you have seen over the last few years, *the importance of freedom* – not simply as a feel-good word but as a thing we can measure and plan for. The 2024 edition has a new chapter (Chapter 8) about access to opportunity – the frequency and freedom to go places to do things.

You describe how you see factual evidence in your work of how a higher frequency of public transit service correlates with higher usage of the service.<sup>10</sup> You also talk about the importance of frequency maps to monitor this. Do you see evidence of city and municipal authorities using these types of maps, digitally, to pay attention to the frequency of public transit service (maybe linked to my point just now about having key indicators in place to monitor and help manage public transit performance)?

Do you think more cities and towns should display clear Frequent Network maps, which you describe in this chapter and [you have also written about in your blog](#)? You talk about some reasons why it is not prevalent in the book.<sup>11</sup> I wonder if some of the reasons are linked to how transparent authorities want to be with the public.

<sup>10</sup> Human Transit, Revised Edition: Chapter 8 (p. 92)

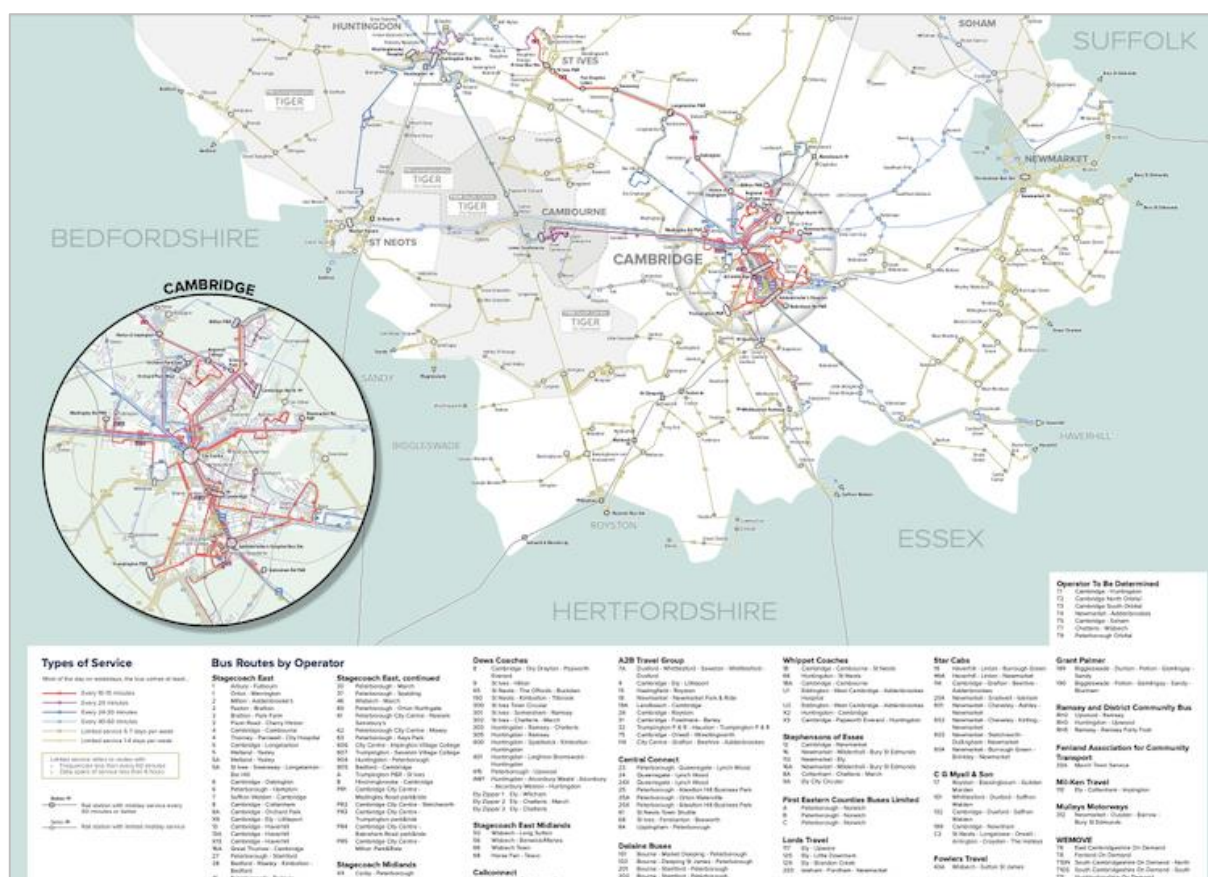
<sup>11</sup> Human Transit, Revised Edition: Chapter 8 (p. 101)

I also want to mention that I like your point in the book about how real-time information apps do not reduce the importance of frequency by purportedly increasing our tolerance for waiting (the argument being that we can do things with our time while we wait – well, only to a point...).

**Jarrett:** *Frequent network mapping has become much more routine since I first started raising it around 2010. I've been involved in many of the studies that have spread the idea in North America, and it's great to see it appearing more commonly around the world.*

More and more agencies are doing some intentional service branding, to convey that different bus services belong to different layers of the network and that they have different purposes. [Seoul's famous four-color system](#) is typical for dense cities where frequency is almost always so high that you don't need to emphasize it. In transit-poor places, however, it's important that much of the visual bandwidth of branding is devoted to distinguishing high-frequency services from low-frequency ones. Every map that our firm draws emphasizes this distinction. See for example [this map we did for Cambridgeshire and Peterborough](#) in the UK.

(to view a larger and whole version of this publicly available map, [click on the link here](#) or above)



**Gareth:** I appreciate these examples, Jarrett.

We know that city and municipal authorities face many challenges to keeping on top of public transit planning. Is it possible to do something about what I call the “urgent time” conundrum, which is that people working for urban transport authorities find they have no time to plan and think because they constantly have to deal with urgent but not strategic matters at the expense of important but less urgent matters. Are there smart ways to handle what’s urgent so that enough time can be given to strategic and broader matters, or are dedicated roles required?

*Jarrett: Yes, good managers create safe spaces (i.e. blocks of the time for appropriate staff) for longer term and strategic thinking, and they do not let crises of the moment interfere with this. Great managers also train their elected leaders to understand that if they interfere by creating frequent crises with their demands, there will be a cost in the overall performance of the agency or department.*

*There are as I see it broadly speaking two kinds of crisis in the context of our discussion.*

- *Crises of an everyday nature arise in operations all the time: an accident, a controversy about fare enforcement that attracts media attention, etc. Some US-Canada regions, like San Diego and Vancouver, have evolved a separation between the strategic planning of transit and its daily operations. San Diego has different agencies to focus on these tasks. Vancouver's Translink has an operating subsidiary that handles the operations-related crises. This separation of teams helps to keep operations crises from interfering with planning and thinking.*
- *A planning crisis is usually some aspect of the service that a controlling elected official demands be changed as a matter of urgency. Complaints are a normal part of the process, and there are normal ways to manage them, but they become a crisis when an elected official insists that a particular complaint be given priority to act upon.*

*I would also point to [the National Transport Authority \(NTA\) in Ireland](#) as a good model of an agency that has considerable arms-length distance from most elected officials. They report to the Minister of Transport and are thus ultimately controlled by the current government, but TDs (MPs) and councillors do not have the power to micromanage them. This has been instrumental in their ability to drive a major public transit reform program in Ireland over the last decade and staying the course through changes of governments.*

**Gareth:** Thanks for providing these examples of transport organisational structures to handle operations and focus on long-term strategy and needs.

In Human Transit, you talk about different structures of transport organisations around the world – for example, you mention how Transport for London (TfL) operates (which is influenced by UK national transport policy), and how in Australia the states oversee transport, including in the cities located within the states.

London and Sydney are two cities I know well, having lived in both for many years. The structure of transport organisations is different elsewhere.

How much difference does an operating structure make to how transport policy, including for public transit, is devised and implemented? Can good policy work in any kind of structure, regardless of the levels of bureaucracy involved?

***Jarrett:** Structures are hard to change, so the answer to your last question has to be: "Start where you are." There is always something that can be done to make an improvement without challenging the overall structure, no matter how crazy that structure may be.*

*I'm also sure that there is no such thing as a perfect structure. For example, in a huge urban region there will always be a trade-off between the advantages of a giant mega-authority controlling everything and the advantages of local control at the level of city councils or parts of the region.*

*The US has many regions where a tangle of many transit agencies exists, and while this causes lots of frustration there's usually wide consensus that merging them all into a huge agency would be worse.*

**Gareth:** Taking into account the way transport teams are structured and organised in different countries, do you think cities and towns around the world have enough freedom and accountability to act in their own local interests to optimise their transport systems for their specific context, including their ability to decide on frequency of service, and to raise funds for transport (including transit) investments, whilst ensuring there is appropriate governance and oversight in place of their activities from the state / national / federal government they are answerable to?

I am thinking about how receipts from transport income are raised, who controls what to do with them and the ability to decide on local transportation schemes including road vehicle charging schemes such as road congestion pricing. I appreciate all of this is mixed up with politics, at least in democratic nations.

***Jarrett:** Every elected official wants control but also wants external funding from another layer of government so that they don't have to raise taxes as much. But every government that gives out funding wants some kind of control in return. So, these debates will always exist.*

*Generally, I do like European, Australian and New Zealand government structures, where there are fewer levels of government involved, each with more consolidated powers. In Ireland, everybody knows that all the funding for public transit comes from the central government through the NTA, so cities don't expect to control the planning process. However, NTA works closely with the cities to build as much shared consensus as possible. Compare this to the US, where there are so many entangled semi-sovereign governments that need to act in "partnership" that we trip over each other all the time trying to do even the basic things.*

**Gareth:** Let's talk about external influences on transport and public transit and go back to the opening chapters of the revised edition of Human Transit. You talk about a major change you have seen since 2011 being the amount of venture capital funding that is going into businesses that are attempting to "transform" or "disrupt" public transit in some way. I saw a piece published in the World Economic Forum in March 2025 that relates to this, discussing mobility technologies.<sup>12</sup>

Ride hailing and driverless cars are being pursued. Money is going into air taxis, too. People talk about the economic benefits of driverless cars (very little downtime, no driver to pay for when it's a taxi), but they have an additive effect, adding more cars on the road. I sometimes wonder if investment in high-tech driverless cars and air taxis is the "*right tech*" – could some of this money be invested in supporting good public transit, or are the economic returns to investors not as attractive?

Maybe more focus on ride hailing could be on micro-transport, such as a bicycle carrier in Denver or a tuk tuk or a rickshaw in Delhi (which can be ordered on Uber nowadays) rather than ride hailing that is overly focused on cars.

*Jarrett: There will continue to be innovation in ways to transport single traveling parties in a way that protects them from the company of strangers. Chapter 4 of my book goes deep into why we'll always be dealing with that. But the key fact is that cities are defined by a shortage of space per person, which means the key problem of the city is how to help people not get in each other's way. That's why space-efficient transport: public transit and person-sized vehicles like bikes, will always be an essential part of the mix.*

**Gareth:** This brings me onto a point about how to make good investment cases for public transit. One of the activities I get involved in is [urban diagnostics](#), to look at how well an urban environment is performing in all or some aspects, and where it should be heading towards. Some of the people I speak with who oversee urban frameworks that support urban diagnostics talk about the importance of city and municipal authorities knowing how to write good investment cases for areas that it is agreed need improvement, but that the ability to create good investment cases is patchy.

Are city and municipal authorities focusing enough on writing compelling investment cases to attract the right investment and funding towards public transit, be it public sector funding requests or private sector, or a blend of both? Are there any examples of where it can be beneficial for a city or municipal authority to think more broadly than its own area, to "team up" with another city or town for a proposal to investors?

*Jarrett: I think this process is fairly advanced in Europe and much more embryonic in the US. My main concern in this area is that "the more indicators you are monitoring, the fewer indicators matter." That's why I always try to explain how indicators are mathematically or physically related to each other, so that people can get to fewer indicators while still knowing that the thing that matters to them is being captured.*

<sup>12</sup> World Economic Forum - 3 ways cities can accelerate towards the future of transport:  
<https://www.weforum.org/stories/2025/03/cities-urban-transport-mobility-technology/>

*I also think that we expect cities to do things that nations should do, especially in the US. Certain national social problems are by their nature more visible in cities, which makes it easy to call them urban problems and blame mayors for them. People are shocked when I remind them that Alabama has a higher murder rate than New York City. They think of cities as unsafe because crime is so visible there, but to me that means crime has witnesses and is more likely to be both prosecuted and deterred.*

*So, I think that for indicators to work and to matter, they have to clearly show which urban problems are really national problems.*

**Gareth:** I completely agree about the need to really get down to key indicators and not get lost in a large quantity of them, which can create a “cottage industry” of monitoring. On your point about the visibility of what goes on, I read [a piece in The Economist in May 2025](#), which was focused on Europe (not the US or elsewhere) about how things get done by city mayors.<sup>13</sup>

We discussed the importance of involving everyone, including businesspeople, in the discussion about public transit earlier. Businesspeople include those involved in the automotive industry. Is the commercial mindset of selling as many cars as possible one that can change to offering a service that moves people around and to pivot to offer different modes of transport to achieve this? I wonder if any car manufacturer and their shareholders would ever support a shift to being a provider of public transit.

*Jarrett: I expect businesses to continue to promote whatever product they see as profitable, which is why I welcome businesses and the private sector to the conversation, but I don't want them to monopolize the conversation.*

*It would be good to explore this question with Asian and European experts; my perspective working mostly in North America is that the car industry (including the electric car industry) is still mostly an adversary, eager to create dependence on their products.*

**Gareth:** I'd like to get your views on urban planning and general development if that's OK. I talk with urban planners and land use advisors on how land is allocated for different uses. We often talk about key principles of good land use, which includes [ensuring practices for land development that need improving are improved](#). I wonder what role private sector land developers can play in supporting good urban transportation including public transit, linked to land use planning and public transit investment plans. In many parts of the world, property development by the private sector, especially housing communities that are typically built on the outskirts of urban areas due to land availability, are not well connected to the urban centre by public transit or active travel. Thus, car use is encouraged.

---

<sup>13</sup> The Economist - Europe's mayors are islands of liberalism in a sea of populists:  
<https://www.economist.com/europe/2025/05/22/europes-mayors-are-islands-of-liberalism-in-a-sea-of-populists>

Let's do the bare minimum seems to be the prevailing attitude – such as an occasional bus service and creating a few basic (not well designed or built) cycle lanes. The way they are set up in most places (with some exceptions, such as Utrecht and other cities in the Netherlands) tends to perpetuate people's use of private cars. Can “perimeter areas” where people live be well served by good transport options to reduce people's reliance on cars for their regular daily activities?

A housing development on the perimeter of the town of Bury St Edmunds, UK – the development does not currently indicate any specific improvements to transit connectivity of this perimeter area into the town centre. April 2025 (photo: G Byatt)



A bus shelter for the local bus service outside this new housing development on the perimeter of Bury St Edmunds, UK, which isn't currently showing any change to what existed before the development started. April 2025 (photo: G Byatt)



**Jarrett:** [The guide to town planning that we did for NTA in Ireland](#) is all about this. Our message is that whatever density you're building, and whether you're doing greenfield or brownfield, there's a way to do it that will make public transit viable in perpetuity, and a way that will make it frustrating in perpetuity. It is not hard to do it right without sacrificing the basic specifications of whatever you're doing, and serving whatever you think the market is at the moment. What does not work is to design a suburb entirely around cars and then expect public transit to be able to serve it well later, when it finally becomes important to you.

**Gareth:** I'd like to finish by asking whether you have any suggested reading or viewing material for people about transportation, including public transit, for urban environments – such as books, papers, articles or online videos?

**Jarrett:** My own work can be explored in numerous ways, including the book, the blog, and this trove of lecture videos and interviews. There's also the Planetizen course series, which requires registration with them.

Here are a few books that I find particularly useful:

**Alain Bertaud:** [Order without Design](#). An important book which includes the central role of commute time in the economic success of a city.

**Stephen Higashide:** [Better Buses, Better Cities](#). A good practical guide to activism in support of public transit in the US.

**Peter Norton:** [Fighting Traffic](#). A definitive history of why car dependence in the US is not the result of free market forces but conscious government planning.

**Charles Marohn:** [Confessions of a Traffic Engineer](#). Charles leads an organization called Strong Towns in the US and is focused on reaching the business-leader audience in small and mid-sized cities. This excellent book discusses how traffic engineering works in North America and why the outcomes are terrible, although I disagree with much of his chapter on public transit.

**Gareth:** Thank you very much for your thoughts and perspectives, Jarrett. I noted [an interesting podcast between you and David Roberts](#) about the state of public transit in the US, by the way.