Triple Access Planning
for Uncertain Futures –
A Handbook for Practitioners

Summary version

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Planning for the future continues to evolve in the face of a changing world. What we did in the past will not work for the future. Even the recent shift, with greater interest in transport planning being vision-led and focused on people rather than traffic, it is still not enough.

Below is a summary of a new Handbook which is the next evolutionary step. It supports a way of thinking and acting that is intended to mark a **change from transport planning in the 'predict and provide' paradigm to 'Triple Access Planning' in the 'decide and provide' paradigm**. This is vision-led ('decide') instead of forecast-led ('predict'). It includes digital accessibility alongside spatial proximity and mobility (together making 'triple access'). It also includes addressing **uncertainty** about the future.

This summary offers a much shorter read than the Handbook itself and should not be considered a substitute. Both rely upon the reader being ready to invest some time in contemplating how we plan for the future.

The Handbook is a companion guide for those who are already conversant with transport planning or other planning approaches. It explains the **triple access perspective** on planning, the handling of **uncertainty**, addressing **access for goods**, and the **organisational and institutional challenges** associated with Triple Access Planning. For each of these themes, four planning phases are examined: (i) **Philosophy** - why take this approach?; (ii) **Preparation and Analysis** – assessing the current and future situations; (iii) **Strategy Development** – determining visions/goals and the approaches to achieving these; and (iv) **Measure Planning** – identifying more specifically what needs to be implemented to achieve goals. The first of these is an important (informal) orientation phase. The other phases reflect those recognised in European Sustainable Urban Mobility Planning (which also includes 'Implementation and Monitoring').

Triple Access Perspective

Philosophy

To plan is to set about shaping a system's future - first we must understand the system being shaped. Travel is often seen to be a derived demand when it arises from our desire or need to access people, goods, employment, services, and other opportunities. Fulfilment of access requirements has relied heavily upon the transport system with transport planning traditionally operating within a 'predict and provide' paradigm where forecasts are made of future travel demand to assess the transport infrastructure and services required to serve it. This has tended to neglect the contribution of spatial proximity and digital connectivity to meeting everyone's accessibility needs in a more sustainable way.

The alternative is a paradigm of 'decide and provide'. This is vision-led rather than forecast-led and identifies a preferred future for accessibility, and alternative pathways (enabling adaptation if needed) towards that future. **In the digital age, accessibility can increasingly be achieved via digital connectivity as well as physical mobility and spatial proximity**. The Triple Access System of transport, land-use and telecommunications is the world we inhabit. During the COVID-19 pandemic we exhibited our incredible capacity to adapt behaviours when circumstances change. We also came to realise the resilience provided to society by having the Triple Access System. To plan for the future of this system, we need **Triple Access Planning**.

The Triple Access System offers tremendous opportunity to support urban and rural living in ways which assist economic activity and social justice and are compatible with a need to reduce greenhouse gas emissions. By planning for this system, we

provide society with the support it needs to fulfil access requirements while encouraging redistribution of access demand. Digital accessibility (having access to activities through digital infrastructure) can help to ease demands placed upon the transport system by viewing mobility through the triple-access lens.

It is important to assess the merits of this approach. It is more fit for purpose than conventional transport planning, but this does not make it an easier option for the planner or decision maker. It's strengths, weaknesses, opportunities, and threats should be considered before adoption. This is very much reflective of **the important principle of '*thinking before planning*'**.

Preparation and Analysis

Planning to improve the current situation must begin by understanding that situation. To look only at the current *mobility* situation risks overlooking the combined significance of mobility, proximity, and digital connectivity in providing access – triple access.

Digital connectivity is a necessary but not sufficient condition for digital accessibility. Digital connectivity reflects the availability of digital infrastructure. **Digital accessibility is about the ability to *use* digital connectivity to engage in activities**. This involves having appropriate devices, sufficient digital literacy, and the availability, affordability and suitability of online activities and services to fulfil people's economic and social needs or desires. It can seem remarkable that **while digital connectivity and accessibility are for many now part of everyday life, they can be all but absent from transport and mobility planning**. They influence transport system use in many ways: substituting for, stimulating, supplementing, redistributing, improving the efficiency of, enriching and indirectly affecting travel.

It is important to try to articulate our understanding of the Triple Access System and the part that could be played by digital connectivity alongside spatial proximity and mobility. Systems thinking can be used to develop formal models that can help us understand the complex behaviour of a dynamic system. **We need to share, combine and write down our mental models to establish a common understanding of the system our planning is focused upon**. This also helps develop institutional capacity in terms of mutual learning across organisational boundaries and enhanced mutual trust.

While the concept of accessibility may be powerful and of value in directing transport policy, it is necessary to have concrete indicators or measures to assess accessibility. It is also important to embrace accessibility as a way of thinking to influence practice, foregoing the difficulties of complex accessibility measurement, in favour of simple indicators. Simple indicators can allow a representation to be produced of the variability in triple-access available to the population of an area, helping to pinpoint where improvement can be made. **Our minds are opened to the future prospects for how digital accessibility could change and be changed in potentially quite significant and substantial ways**, with ramifications for how we plan in terms of transport and land use.

Across a population, **people's circumstances and needs vary**. Such variation can easily be overlooked in planning and has in the past been neglected in the shaping of the built environment and forms of access available. This has exacerbated disability and inequity. It now merits close attention.

Strategy Development

Triple Access Planning recognises that a **change in supply of the means of access influences behaviours of people and businesses**. It also accommodates uncertainty

rather than concealing it. From a triple access perspective an approach to strategy development should be rooted in an understanding that the future makeup of access supply and demand is not pre-determined but is ours to shape.

A triple-access strategy requires joined-up planning and decision making across transport, land-use and telecommunications. There is a need to establish what institutional changes are required to entertain such a strategic approach. For a triple access strategy to be supported and have the prospect of being deliverable and effective, **it is not enough for planning professionals to be on board. Public and political support are needed**. Participatory methods have an important part to play here.

Measure Planning

It is said that if a problem is presented to different professions, different solutions will be put forward. In practice, the best prospect can come from the professions working together to understand the problem (or opportunity) and to ensure an appropriate array of solution options are brought forward.

Solution options are needed that change the availability and relative attractiveness of accessibility choices. Serious consideration is needed of non-transport measures to tackle transport problems. In the Triple Access System there are credible and attractive alternatives to car use for some journeys for some people some of the time. Digital accessibility measures are increasingly being introduced and evolved beyond the typical remit of transport planning or mobility planning. Spatial proximity and digital connectivity measures accompany physical (motorised) mobility measures in making a strategy suitable, acceptable and feasible to deliver successfully.

Triple Access Planning opens up greater co-benefits whereby reduced car use arises from greater availability and usage of alternatives. This introduces both more flexibility into people's lives and changes the experience of access for everyone. Key to the success of Triple Access Planning is being able to bring different perspectives and administrative functions together into participatory dialogue, shared learning and united action.

Uncertainty

Philosophy

Charting a purposeful course into the future requires that *possible* futures (i.e. what could happen) and *preferable* futures (i.e. what should happen / what we would like to happen) are considered alongside the strategies and measures developed to reduce the gap(s) between these. Possible futures are largely determined by unpredictable developments. Visions and preferences can also change over time due to shifting norms and values. **Futures thinking helps identify the possible types and magnitudes of future mobility and accessibility problems and opportunities and ways to handle them**.

Planners are ever more confronted with conditions of uncertainty as they make or inform choices regarding a system to change the system outcomes in a desired way. Uncertainty is the gap between available knowledge and the knowledge decision makers would really need to be confident in the consequences of their chosen policies. There can be uncertainty about future external developments to the system, the way the system works, the impact of plans on system outcomes, and the way system outcomes are traded-off. **In addition to different forms of uncertainty, planners are also confronted with different *levels* of uncertainty** ranging between *complete determinism* and *total ignorance*. Traditional planning practices

usually include low levels of uncertainty while not acknowledging or addressing higher levels of uncertainty. Ignoring uncertainty can lead to seriously misguided planning decisions and planning outcomes. Conversely, plans designed to take uncertainty into account (robust plans) will perform better than plans designed to perform well in one specific future world.

Preparation and Analysis

Scenarios help us to explore different *possible* futures considering different types of uncertainty. They represent alternative futures which are shaped by internal and external forces. They can be qualitative, quantitative or a combination of both.

Traditional predictive scenarios are based on forecasts of the future, assembled from data-driven trends. *Plausible* scenarios are scenarios that explore more widely what could happen, based on our current understanding of how the world works, and therefore should be considered in testing a potential strategy (and measures within it). The aim is to **find a promising strategy that both delivers the *preferable* future for the area (i.e. the vision) and performs well across different *plausible* futures (a robust strategy)**.

It is important to have representation from all of the transport, spatial and digital sectors, to create plausible triple access scenarios. Involving different stakeholders in scenario planning will help better understand what the future might have in store, foster sharing of ideas and a sense of ownership over the scenarios that emerge. The output is a set of ***plausible* scenarios for the planning process that are credible, coherent and challenging**.

Strategy Development

A visioning process generally consists of divergence (participants expressing their differing ideas, preferences, and future desires) and convergence (data collected from the divergence part being interpreted, analysed and processed into a vision or a set of visions). The process can be implemented through a variety of participatory methods (typically workshops and focus groups) that bring together participants from a diversity of perspectives. **Uncertainty plays a role in visioning**. Stakeholders' preferences might change in unknowable ways over time (and new stakeholders will become involved). Objectives and in particular trade-offs among objectives can change.

Preferred (triple access) futures are normative scenarios. Although all types of scenario development ideally include stakeholders, for normative scenarios it is a necessity. **Shared visioning exercises require a high level of transparency, balancing, and credibility, where trade-offs are constantly studied and discussed with all parties** depending on their level of involvement.

In a world that is changing in uncertain ways it is important to **bring uncertainty into the psyche of those who are co-creating visions – encouraging them to open their minds to what may be deemed 'plausible utopias'**. Advice on participatory visioning includes avoiding relying only on the 'usual suspects' since they will tend to be strongly biased in relation to their professional backgrounds and experience. In the case of Triple Access Planning it is important to include participation from transport, spatial and digital planning.

Measure Planning

Even if the vision is agreed upon, there can still be many uncertainties about the measures and external factors outside our control to achieve the vision. In Triple Access Planning, *plausible* scenarios not only help thinking early on in the planning process; they should also

play an important part in informing and influencing the dialogue and decision-making surrounding the identification of measures. This **'stress testing' in Triple Access Planning involves an examination of measures / policy interventions and how they would perform in different** *possible* **futures**.

Stress testing gives greater confidence in having established a robust planning approach than the conventional forecast-led approach of transport planning that relies upon the assumption of a 'most likely' future. Nevertheless, higher uncertainty may call for dynamic or adaptive robustness. Adaptive planning can extend robustness by allowing implementation to get underway in the face of high uncertainty by monitoring change and having contingencies in place to reshape and redirect implementation as emerging developments dictate.

Access for Goods

Philosophy

Approximately one third of transport greenhouse gas emissions is attributed to freight transport. The growth of online retailing and last-mile deliveries in particular has reshaped and increased the complexity of transport systems. This transfers responsibility for delivering retail purchases from consumers to online retailers and carriers, leading to a shift in the use of vehicles for freight movement. **Increased volumes of online shopping and last-mile deliveries have intensified (and created new) inefficiencies in local transport systems**. Many residents are experiencing a growing number of vans with non-optimised loads transiting their streets every day which are often parked inappropriately during deliveries.

Transport planning tends to be predominantly focused upon movement of people rather than goods. In terms of Triple Access Planning, **goods movements should be treated alongside people movement as a significant component of the dynamics of shopping behaviours and preferences in accessing goods**. Given the knowledge of the places, people, and businesses they serve, local authorities are uniquely placed to play a role in the design and implementation of policies and measures to improve the sustainability of last-mile deliveries to support the local economy and community well-being. However, many local authorities are currently unprepared to manage local freight challenges.

The three dimensions of the Triple Access System can together contribute to improving access for goods, while limiting the negative impact of their movements. Triple Access Planning involves considering the main factors that influence end-consumers' choices when they buy products online, especially with respect to the way they have their products delivered, and how urban areas can respond to these needs while designing and planning for an efficient Triple Access System.

Preparation and Analysis

When creating a mental model of the Triple Access System and considering variables that are specific to the freight domain, the complexity of the following should be recognised: shopping behaviour and individual preferences; local freight stakeholders; the local freight system; and spatial design (e.g., commercial areas, residential areas, loading/unloading areas, logistics estates). The main factors that end-consumers assess when they buy products online should also be considered, especially with respect to the way they have their products delivered, and how local areas can respond.

When considering problems (and opportunities), the accessibility perspective of goods will enrich the final strategy. With the increasing number of last-mile deliveries, **a holistic planning system that integrates goods movement within the broader transport system is now essential**.

Strategy Development

Decide and provide equally applies to access for goods to develop a vision that integrates specific goals to improve accessibility to places, opportunities, and goods. Local freight poses particular challenges due to the involvement of various stakeholders with diverse needs. **The lack of local freight data increases the difficulty of understanding the problem and designing appropriate strategies**. Local political support on freight may not be as forthcoming as it is when it comes to understanding and addressing movement of people. Many transport strategies have not addressed local freight issues. Triple Access Planning can be key in supporting local authorities in accounting for goods movements, as it supports them to integrate freight solutions within their planning to solve accessibility challenges.

The inter-relationships of the Triple Access System are very relevant when considering goods movements. Indeed, **the growing rates of online shopping and home deliveries are key challenges for accessibility**, and this requires using a more holistic approach with appropriate measures targeting each part of the Triple Access System.

Digital accessibility complements proximity logistics (e.g., spatial proximity and active travel), ultimately reducing dependence on motorised mobility for a sustainable future. **Using Triple Access Planning for goods movement helps in finding the right balance across supporting the local economy, reaching environmental goals and improving the quality of life of residents**.

Measure Planning

With a Triple Access Planning mindset, and appropriate policies and planning, areas can support the (re)integration of logistics facilities to facilitate and enable the shift to an efficient and sustainable logistics system. It is important to consider how to engage with stakeholders (e.g., retailers, logistics operators, residents) and developers to understand what the best and more accepted solutions might be for the area.

Freight related activities are usually business-led, and less regulated by local authorities, despite the increasingly significant impact they are having on the quality of life of local areas. There are potential challenges in measure planning relating to team skills and knowledge to inform thinking, being able to speak the right 'logistics' language, understanding stakeholders' needs and expectations, and data to be able to assess potential effectiveness of measures. Consider having in the planning team a digital planner who plans for more activities to be done (or managed) online and works with the transport and spatial planners to understand what kind of impact these online activities could have.

Using triple access thinking when designing measures for goods movements can help tackle cross-cutting issues, such as noise, congestion, and road safety issues associated with delivery vehicles. Some demand related issues might require more holistic solutions, including partnering with the private sector.

Addressing organisational and institutional challenges

Triple Access Planning cannot be applied in a vacuum. It must be adopted by organisations, and it has to fit with existing institutions (which are understood here as *ways of doing* **planning – both formally and informally)**. Organisational and institutional challenges are themselves set within a governance context.

Philosophy

As Triple Access Planning thinking and practice becomes more widespread, organisations and especially institutions will need to change. This involves **considering formal and informal institutional settings and governance practices from the beginning of the process and thereby reducing the uncertainty caused** by informal institutions (their impacts on the process otherwise being potentially 'invisible').

Triple Access Planning is an innovation that will diffuse into wider institutional norms – first finding those organisations that are prepared themselves to be innovators or early adopters and then in turn reaching further to the later adopting organisations and perhaps eventually those organisations and/or institutions slowest or most reluctant to embrace change.

Part of Triple Access Planning is to adopt a vision-led rather than forecast-led approach in which instead of having demand-led supply there is supply-led demand. This is **a new way of thinking that some politicians and planners will be reluctant to adopt**. The best response to this is to provide some evidence that predict and provide has failed to deliver and that **decide and provide is less costly and less risky**.

Preparation and Analysis

Existing ways of working and thinking greatly affect what data are gathered for the planning process, and in what way; this is an institutional issue. This in turn can affect (whether and) how uncertainty is dealt with (particularly where there is an assumption that the data gathered have a level of certainty to them). It can affect what future depictions of the transport system, and measures within it, are developed. If data gathered are primarily related to motor vehicle trips, this will tend to skew the generation of the vision and measures towards those that are related to motor vehicles. Assumptions about the importance or otherwise of the data that are being gathered should be reviewed and where appropriate challenged.

Once planners agree that they are working with higher levels of uncertainty, this implies that new methods are needed. *Plausible* scenarios are very different to traditional predictive scenarios, and completely different from policy packages (sometimes also referred to as policy scenarios). People may not feel comfortable with these because they may be viewed as lacking the credibility, rigour and precision that predictive scenarios appear to have. It is **helpful to emphasise that evidence is not synonymous with truth when it comes to the future and that it is better to be approximately right than precisely wrong**.

Engaging the modellers in the Philosophy and Preparation and Analysis phases of Triple Access Planning is a useful way of identifying practical and achievable evolutionary steps in analytical approaches. It will also help to develop organisational capacity to plan using different forms of scenario. **Involving the public in scenario development is important but not easy** because people have a tendency when talking about planning the future of transport (let alone access) to jump straight to the schemes (measures) that they think are

important, and to not discuss the strategic context. There is value in employing a professional process facilitator.

Strategy Development

Organisational capacity is needed to do the joined-up planning and decision making across transport, land-use and telecommunications that the Triple Access Planning approach recommends. This essentially requires breaking down the walls between silos and coordinating planning across policy areas. To do this, **changes are required so that professionals can get to know each other and preferably work together on a regular basis**. At a very basic level, this means regular meetings between different professionals to discuss planning developments from their different perspectives. Integrated departments and co-located office space can also help to improve integrated planning.

Measure Planning

A key message of the Triple Access Planning approach is that in the Measure Planning phase, the widest possible range of measures should be considered. As a key way of giving a plan the best prospect of being more robust in the face of uncertainty, **selection of adaptable and resilient measures is encouraged – which might not be the 'typical' measures of traditional transport planning**.

Measures that are seen to be new or untested may never make it in the Measure Planning phase because they are unfamiliar, there is scepticism about their relevance, impact and/or because there is a lack of knowledge about how to include them in processes such as modelling. Courses of action to address this can include: workshops and training sessions on different measures to discuss their effectiveness; and training colleagues to understand how conventional modelling techniques lead towards the selection of certain types of measure to the exclusion of others.

Planning for accessibility is obviously key to the concept of Triple Access Planning as a whole, but there are practical challenges – many of which are institutional – of which organisations should be aware. **Whilst Triple Access Planning does not offer an easier approach than established planning practices and institutions, it is more fit for purpose in relation to the challenge and opportunities we now face**.

Looking Ahead

What does the future hold? In the planning task, will we be more or less uncertain about the future *in future* than we are now? **It would be wise to assume that planners and decision makers will need to make it their business to address and accommodate uncertainty**.

Meanwhile, the developments within the digital age in terms of the art of the possible in relation to digital connectivity and accessibility seem set to continue and thereby further strengthen the significance of taking a triple-access perspective when we plan. **It seems remarkable that transport and mobility planning has done so little to explicitly account for digital accessibility. It is untenable as we look to the future that it continues to be ignored.**

This Handbook is a staging post in the onward journey of change in how we make sense of, and seek to be prepared for and shape, the future. Please embrace it.

The full Handbook can be found at https://uwe-repository.worktribe.com/output/11751967/ or by using the QR code below.