**Annotations** for

Public Transit is an Investment not a Cost: Perspectives from UITP by Mohamed Mezghani,

9/27/24

Hanyang Tang

Part I. Literature (for further reading about public transit as an investment)

1. Benefits of Public Transit

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Part III.

Jinhua questions

Q:

Paris was where you lived this summer. What's the (transit) experience this summer (during the Paris 2024 Olympic games)?

A:

There was a lot of discussion before the Olympic games, months before and years before, that Paris would not be ready for the Olympic games and the transport system would not cope with the demand, etc. But I was in Paris during the Olympics, and actually, it worked very well. The system was very efficient.

They (RATP) could cope with the high number of passengers. They deployed staff everywhere in the stations to guide people. The way it was organized and operated was really good. They created bike parking around the stadium to make it easy for people to bike to the stadium. They sold special tickets (passes) that covered round trips to airports and developed mobile ticketing apps to avoid people queuing at the stations. Google Maps also provided more accurate information and public data to passengers.

One important aspect was the increased tariffs from €2.5 to €4 during the Olympics, so the Parisians would pre-purchase their tickets before the Olympics. There were no disruptions and it went very well.

Q:

To talk about the fare and, broadly, the financial structure. You made an important point of moving: those who travel shall pay, or those who benefit shall pay. That's a much broader notion of the financial structure there, right?

You mentioned that, in France, many corporations, including hotels, contribute. Give us some examples of this broader set of financial support. Also, while many agencies face funding challenges, many cities are introducing free fares to public transit. I think it's quite a bit of a debate on what's right and wrong in this. Tell us your view on this, as well.

A:

Regarding the first part of the question, when we look at the list of beneficiaries who pay on my slides, one of them is the employer. In France, every employer who has more than ten employees contributes to the funding of public transit. A percentage of the wages goes to public transport through a transport tax or levy. If it's a city or territory with a subway system, then you will pay 2.2% - 2.5% of the wages. If the city just has buses, then it will be 1.1% - 2%. In addition, if I take the Paris region example, all employers have to cover 50% of the cost of the annual pass or the monthly pass for all employees. Employers fund public transport at two levels: First, with this transport tax or levy, and second, by supporting employees.

Regarding free public transport, we hear more and more that some cities are either implementing or considering free public transport, but I would say it depends on the objective. If the objective is the mode shift, to have more people using public transport and leaving their cars, when you ask people (car drivers) why they don't use public transport, they will never tell you because they have to pay. They don't use it because it's not available, not punctual, or the network is not dense or frequent enough. For these people, offering free public transport will not attract them. The cities shall attract either people who used to walk and take public transport for one or two stops, or they are making those who use public transport use it more, but not so.

The objective is affordability because we have a population that cannot afford public transport. This is the case in Latin America, with about three public transport cities for that. We need to support those who need this. Now, with smart ticketing, we can do that. We can easily identify and give a special smart card to their own application to those people and directly support those who need this, but not to offer free public transport.

Simple tariffs or flat fares that is what you will pay, and we'll offer you access to the system without having a complex pricing structure that will sometimes divert people from public transport. Now, we see that daily or weekly capping will let people know that they will always pay the optimal price (day pass or weekly pass price). So first, we need to improve the quality, prioritize public transport, and then think about the tariff.

Q:

More from the supply side, some agencies are struggling to recruit drivers and workers in general. Is this the case in other members you observe? And what do you recommend to reattract the talent to the industry?

A:

Yes, this is a global trend, with some exceptions. In general, this is a trend all over the world where transit agencies are struggling to hire drivers.

I would say there are two aspects. The quantitative aspect means the companies need numbers. They need people, and they couldn't find drivers, mainly, and the qualitative aspect is that we need new skills in public transport. We need experts like cyber security experts, etc. And for these new skills, we compete with other industries because when you are an IT expert, you can work in banking and consulting. Why work in public transport?

We need to increase the employers' branding of public transport, a positive image to encourage people to work in public transport. Now, a lot of young people are looking for a job with a purpose. What could be that job with purpose? It's a great job. It's a job that contributes to sustainability, decarbonization, etc. This could be a way.

Also, in Europe, we have 20% of the jobs or of the employees in public transport are women, but 60 to 70% of the users are women. So, we need more women in public transport to better understand travelers' expectations. This would be an opportunity for the sector to attract more women.

In Santiago, there was a company that boom-advertised to attract drivers. The first announcement only said that they want to hire, and they get only 5% of the applications coming from women. Then they republished the announcement, saying this is for women only, and they got 10,000 applications. So, it means that for the 1st time, the women did not see themselves driving buses. Also, maybe from the way it was advertised: Maybe they put a photo of men driving the bus and not women. But when they said for woman is for women only, the woman felt legitimate. In the end, they hired the number of women they wanted to. We need to take this into consideration to better sell public transport to women and young people and show that it's a sector where they can work, grow, and thrive.

Q:

On autonomy as a technology, autonomous vehicles have been discussed in the modern era for at least 10-15 years. Finally, it is getting to a maturity of operations. Waymo is operating in San Francisco, in Phoenix. Apollo Go is operating in Wuhan. What's the view about both autonomous vehicles in the form of cars and their current operation mode and their relation to public transit? For automation, in general, as a technology that can be applied to public transit? We're collaborating on writing a memo with the World Economic Forum. Please share a few insights on this.

A:

Public transport was among the pioneers in introducing autonomy: Driverless metros, unmanned completely, have been operating in public transport for 40 years. This technology is completely under control and is now being developed in many countries and regions. What is interesting here for metro systems is that it's not just for the new metros but for old Metro being converted into driverless metros like in Paris.

Autonomous vehicles have many advantages, such as reducing the cost of operation, tackling the challenge of finding drivers, and also having better coverage of the territories we serve. The cost is lower, so we can operate in low-density areas with autonomous vehicles at a lower cost.

But there are. There are risks or challenges when removing the driver from the car. We will induce more traffic because we will have empty vehicles running on the streets.

Our approach to autonomy is for on-demand vehicles that complement mass transit. It's about integrating the different transport services, autonomous or not. But, if they are autonomous, have more flexibility, have less cost, etc., this is our approach. If we just replace the existing cars with autonomous cars, then we are creating more problems than actually solving them.

Q:

What's your favorite system in the world?

A:

In UITP, we never rank the public transport systems. My favorite one is the one that is easy to use that I don't need to think a lot when I want to buy a ticket, or I want to go from A to B, etc. And if you look at. If the cities where you live have an integrated authority covering all modes, such as Singapore, Hong Kong, London, or Vienna, where the integration is very good, these are cities where it's very easy to move.

Also, we should not forget open-loop payments because they also make use of public transport easy, especially for the occasional users. You just have to tap in and enter the system, and at the end of the day, you will not pay more than a daily pass or, at the end of the week, not more than a weekly pass. This is how we can make public transport easier to use.

Audience questions

Q:

The vision of UITP is moving people for a sustainable and inclusive world. When UITP was established in 1985, and people needed goods, they would go out into the streets and go to stores and get those goods, which was the dominant model for a century. We've seen a rather significant shift just over the past few decades and significant urban logistics with the rise of e-commerce. Are your members at UITP looking at the opportunity for public transportation systems to form part of the urban logistics network moving goods in addition?

A:

Some of them look at that, but it's very marginal. We had some experimentations, such as using tramways to carry goods at night in France and in Germany, but it's not really large scale.

Q:

Do you think it should be? This is a cultural grounding because, for decades, that has been our vision and our purpose to serve people. That's difficult to change the mindset, but maybe our purpose should be wider than just moving people?

A:

If, by doing this, we can better use the infrastructure, and we need less space at the end because we combine people and goods, it will be good to do. The problem is when you look at freight transport, only 10% of it could be transported, not depending on the speed of delivery or on the necessity to be there at a certain time of the day. If you combine this with public transport, then you need to consider also the constraints of public transport, and not necessarily the constraints of freight transport, and find the intersection.

An example in Paris is RATP. They are now considering sharing their bus depot with Amazon in the daytime when buses are not there. They can provide the best dispatching centers for Amazon. This kind of collaboration is considered, but I am not aware of large-scale mixing of freight and public transport.

Q:

What are your thoughts on a universal multimodal payment system where travelers can easily select the mode that works best for them on a specific day or time of day for a specific purpose without being locked into one mode because they subscribe to a parking pass or a transit pass? Specifically, about the integration of payments, what are your thoughts?

A:

This is a definition and one aspect of mobility as a service, to have one ticket or one app that allows you to move from one mode to the other.

Q:

There have been experiments with Lyft and Uber, as ride-hailing platforms, to integrate public transport into their platform. Have there been experiments by public transit providers to integrate non-public transit into their platforms?

A:

Integrating public transit with car-hailing and bike-sharing exists in Germany. The challenge in this approach is about data sharing: who will control this platform? The integrator will own this data because the data about how people move, how much they pay, where they are, and at what time they travel, etc., is very precious. And the integrator who will own this data can, of course, make the most out of it, too.

The challenge is always to have private companies cooperating with the public transit agencies, and every one of them would like to control the system. Maybe we need a 3rd party to make sure the old players have the same rights. They operate all in the same market and cannot be forced to share data, so they have to have the same rules for everyone. That's why mobility as a service is a very good system on paper but not really deployed at a large scale yet.

The algorithm will govern the way. When you want to go from A to B, you have one that tells you to take mode a, and then mode B and mode C, and another one will give you a different route. We need to ensure that this combination is dictated by sustainability principles instead of the mode that will generate more money for the operator or integrator.

Part IV. Summary of Memos.

Themes from Other Memos

1. Public transit is an investment, not a cost: Many memos agree on and reemphasize this central topic. Public transit presents massive benefits to society and far exceeds its costs. The benefits include environmental friendliness, job creation, public health improvements, economic growth, and road safety. Transit investment is crucial for sustainable and inclusive urban development.

2. Alternative funding modes for public transit: The suggested funding models, such as “polluter pays” and “beneficiary pays,” are innovative solutions that make entities responsible for negative and positive externalities fund these transportation systems instead of the riders. Examples include hotels contributing to local transport funding and companies subsidizing employee transport passes.

3. Using mega-events to promote public transport: Transit developments can be boosted by major events such as the Olympics that provide investment in public transport. While such events can provide opportunities to build or enhance transport infrastructure with lasting benefits, some memos expressed concerns about the potential for making such event-transit projects temporary and shortsighted solutions rather than sustainable improvements to the urban transit ecosystem.

4. Cultural changes needed on transit in the US: Public transit in the US often suffers from a negative image, and driving is often linked to freedom, convenience, and social prestige. People in cars and in a car-dominant mindset don't care about the expenses of transit but the convenience and time spent on the road. There must be changing mindsets and cultural shifts to accept and use transit in the US, which can be hard.

5: New technologies like MaaS: Some memos mentioned that new technologies such as AI, autonomy, and MaaS make public transit more efficient and attractive, while we need to view them cautiously as well. Mobility as a Service (MaaS) can sound appealing from a user's perspective, but it can have unintended consequences if not carefully implemented. For example, if the fastest and most convenient option presented by a MaaS platform is always a private taxi, it could lead to negative externalities such as increased traffic congestion and emissions.

My Reflections

This week’s seminar is by Mohamed Mezghani, Secretary General of UITP (The International Association of Public Transport). The seminar introduced UITP, as the only worldwide network on public transport stakeholders, its roles and missions, presented their definitions for public transport, and emphasized the huge and multi-faceted benefits brought by the development of public transport.

An interesting discussion was about how transport development can cope with the traffic issues of large events, such as the Paris Olympics in August. Mohamed told us that despite initial worries, the RATP metro system successfully transported the Olympics traffic through fare adjustments and higher manpower. Large-scale global events can provide cities with funds to expand and improve their transit networks, such as the expansion of the Beijing Metro and Shanghai Metro for the 2008 Olympics and 2010 World Expo, respectively, and the Dubai Metro Expo 2020 line in UAE. These transport infrastructures will not only be used during the event but also boost the city's future development and enhance economic productivity. I sincerely hope that there will be more academic evaluations on the long-term benefits of these event-oriented transportation projects and that this will truly produce strong policy support for funding and new projects.

Another key discussion was about public transport funding. Mohamed proposed three potential sources of funding: public transport user pays, polluter pays, or public transport beneficiary pays. Currently, for most transport agencies, the cost of the public transport network operations is usually borne partly by the government and the rest by public transport users. Given that many public transport users can be socially and financially disadvantaged, and the transit service is well-

designed and reliable, we may consider more of the latter two payment methods as a possible solution. The huge benefits public transport can bring will surely be a rewarding investment and not a cost.

Part V. Other Information

Other questions:

Do we have studies around the efficiency of dedicated bus lanes in the developing world? The bus lanes could eat into the already insufficient lanes for private vehicular traffic, leading to worse congestion until consumer behavior shifts to using the buses. Are there any other factors to consider?

Can that idea of "who benefits" be extended to include broader benefits when calculating benefit-cost for transit? instead of cost-per-rider metrics?

I would love to hear more thoughts on fare capping vs the annual pass models common in German-speaking countries.

Other literature:

Mezghani, M. (2000). For an integrated policy of urban mobility. In *Workshop. Gdańsk* (pp. 2-3).

Mezghani, M. (2008). Study on electronic ticketing in public transport. *European Metropolitan Transport Authorities (EMTA)*, *56*, 38.

# Public transport is an investment, not a cost

Mohamed Mezghani
Secretary General

MIT Mobility Forum, 27 Sept. 2024

# THE INTERNATIONAL ASSOCIATION OF PUBLIC TRANSPORT

## OUR VISION

Moving People for a sustainable and inclusive world.

## OUR MISSION

Together, we advance public transport through advocacy, knowledge, and networking.

## OUR VALUES

- Integrity and Respect
- Impactful Leadership
- Inclusive Collaboration

# WHO WE ARE

We are the only **worldwide network** to bring together all public transport **stakeholders** and all sustainable transport **modes**.

**1,900**

MEMBER COMPANIES

FROM

**100**

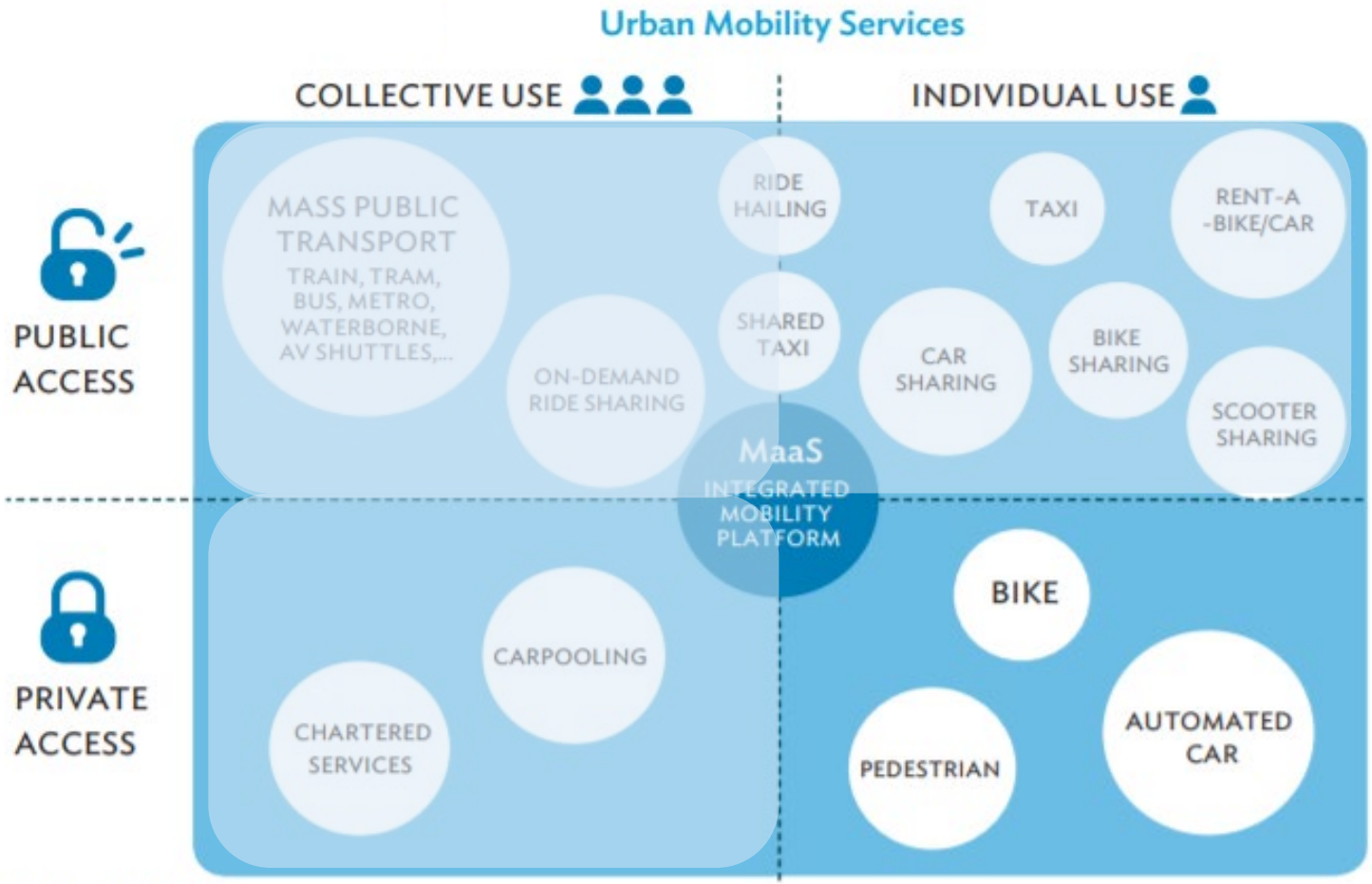
COUNTRIES

**13**

OFFICES

UITP

# REDEFINING PUBLIC TRANSPORT

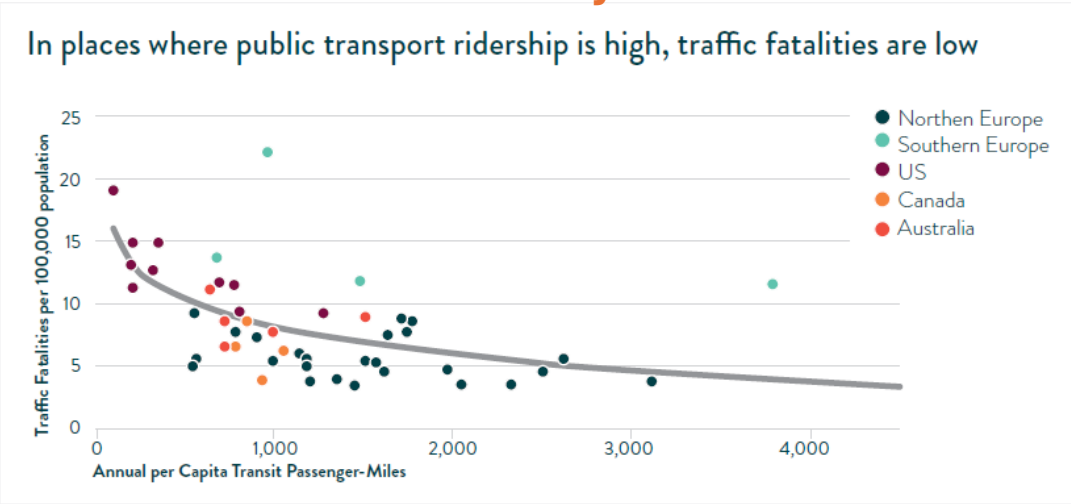



MaaS = mobility as a service.

Source: International Association of Public Transport (UITP). 2019. Report: Mobility as a Service. https://cms.uitp.org/wp/wp-content/uploads/2020/07/Report_MaaS_final.pdf.

# PUBLIC TRANSPORT BENEFITS

## Road Safety




## Environment

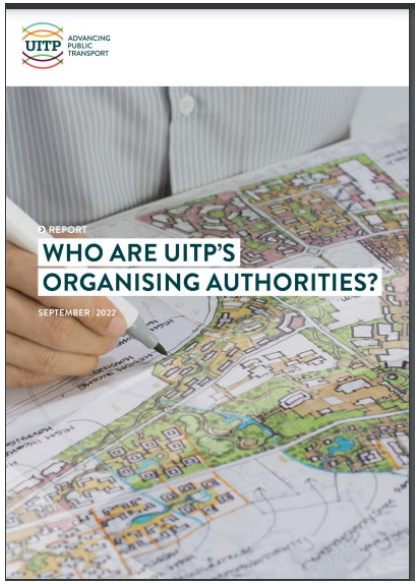
## Health

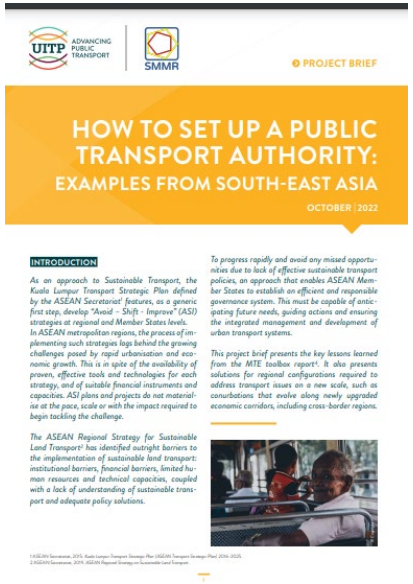

## Jobs

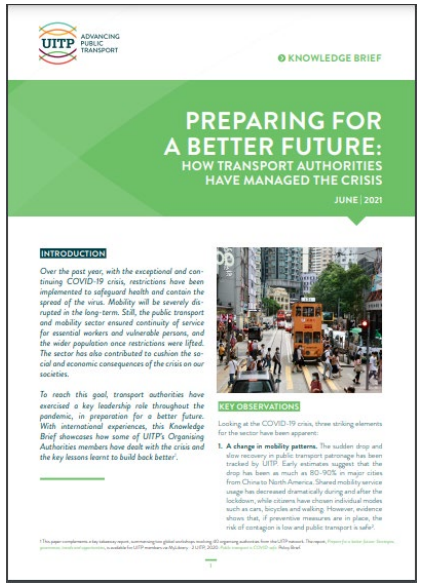
## Economy

## People

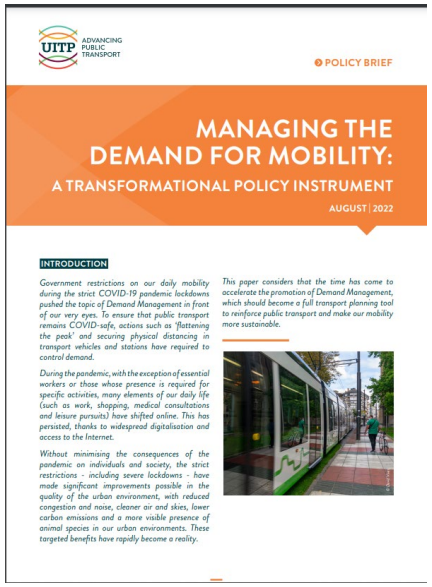

REPORT
TRANSPORT AUTHORITIES FOR METROPOLITAN AREAS:
THE BENEFITS AND OPTIONS IN TIMES OF CHANGE
JUNE | 2022

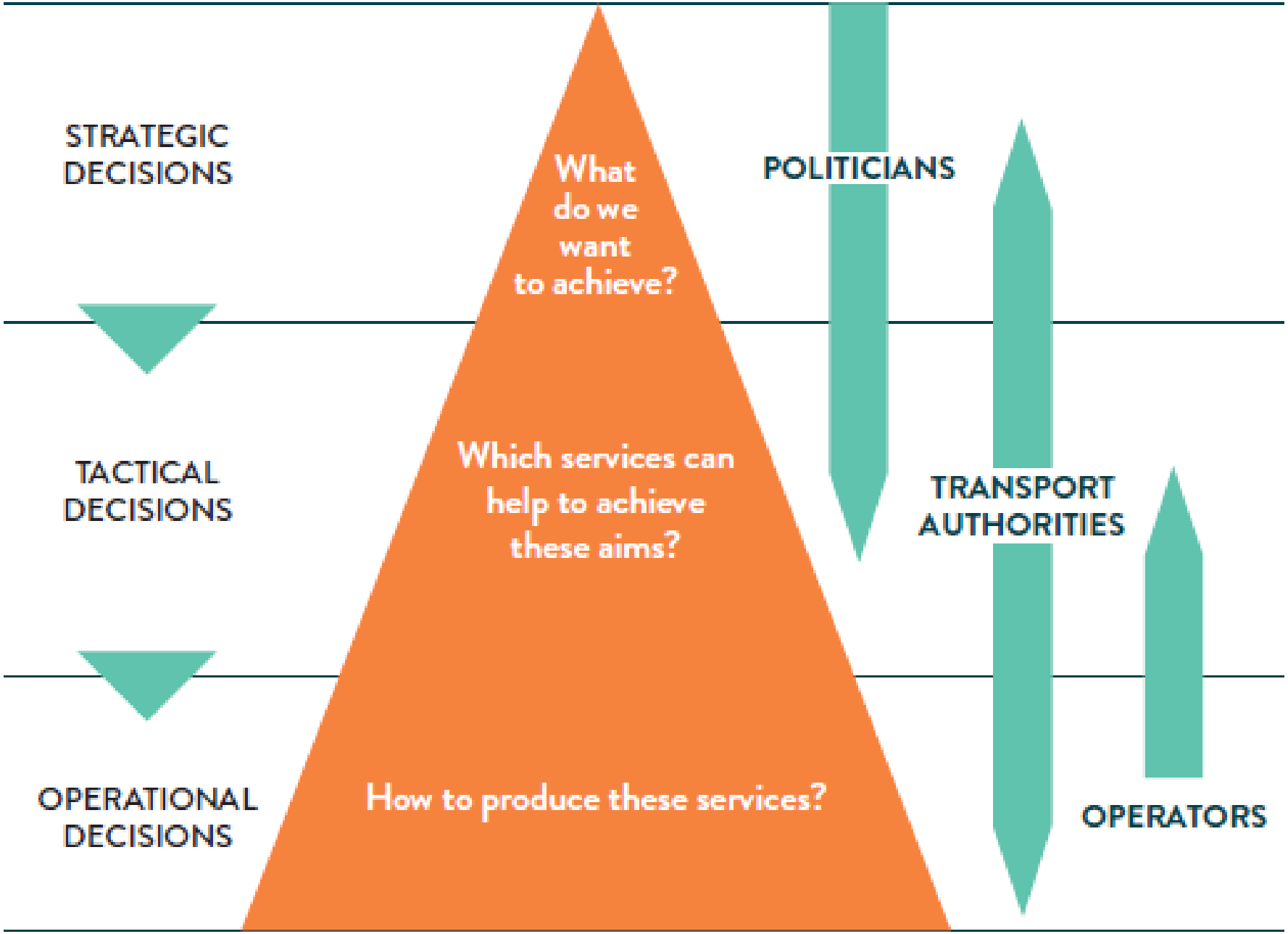

REPORT
WHO ARE UITP'S ORGANISING AUTHORITIES?
SEPTEMBER | 2022


PROJECT BRIEF
HOW TO SET UP A PUBLIC TRANSPORT AUTHORITY:
EXAMPLES FROM SOUTH-EAST ASIA
OCTOBER | 2022
INTRODUCTION


KNOWLEDGE BRIEF
PREPARING FOR A BETTER FUTURE:
HOW TRANSPORT AUTHORITIES HAVE MANAGED THE CRISIS
JUNE | 2021
INTRODUCTION
KEY OBSERVATIONS


PROJECT BRIEF
GOVERNANCE AND REGULATION MODELS TO MANAGE DISRUPTIVE MOBILITY SERVICES
OCTOBER | 2021
INTRODUCTION
DISRUPTIVE INNOVATION


POLICY BRIEF
MANAGING THE DEMAND FOR MOBILITY:
A TRANSFORMATIONAL POLICY INSTRUMENT
AUGUST | 2022
INTRODUCTION


STRATEGIC DECISIONS
What do we want to achieve?
POLITICIANS
TACTICAL DECISIONS
Which services can help to achieve these aims?
TRANSPORT AUTHORITIES
OPERATIONAL DECISIONS
How to produce these services?
OPERATORS

# Who pays

# How to pay

**Who uses, pays**

**Public transport users**

**Taxes charge on users:**
1. Fares

**Who pollutes, pays**

**Private vehicle users**

**<u>Taxes and charges to internalise negative externaties</u>**
1. Excise on fuel
2. Parking fees
3. Tools and area entry fees
4. Vehicle ownership fees
5. Vehicle km tax
6. Parking levy

**Who benefits, pays**

**Taxpayers**
**Enterprises**
**Local residents**
**Public Authorities**
**Companies and citizens**
**Private sector**

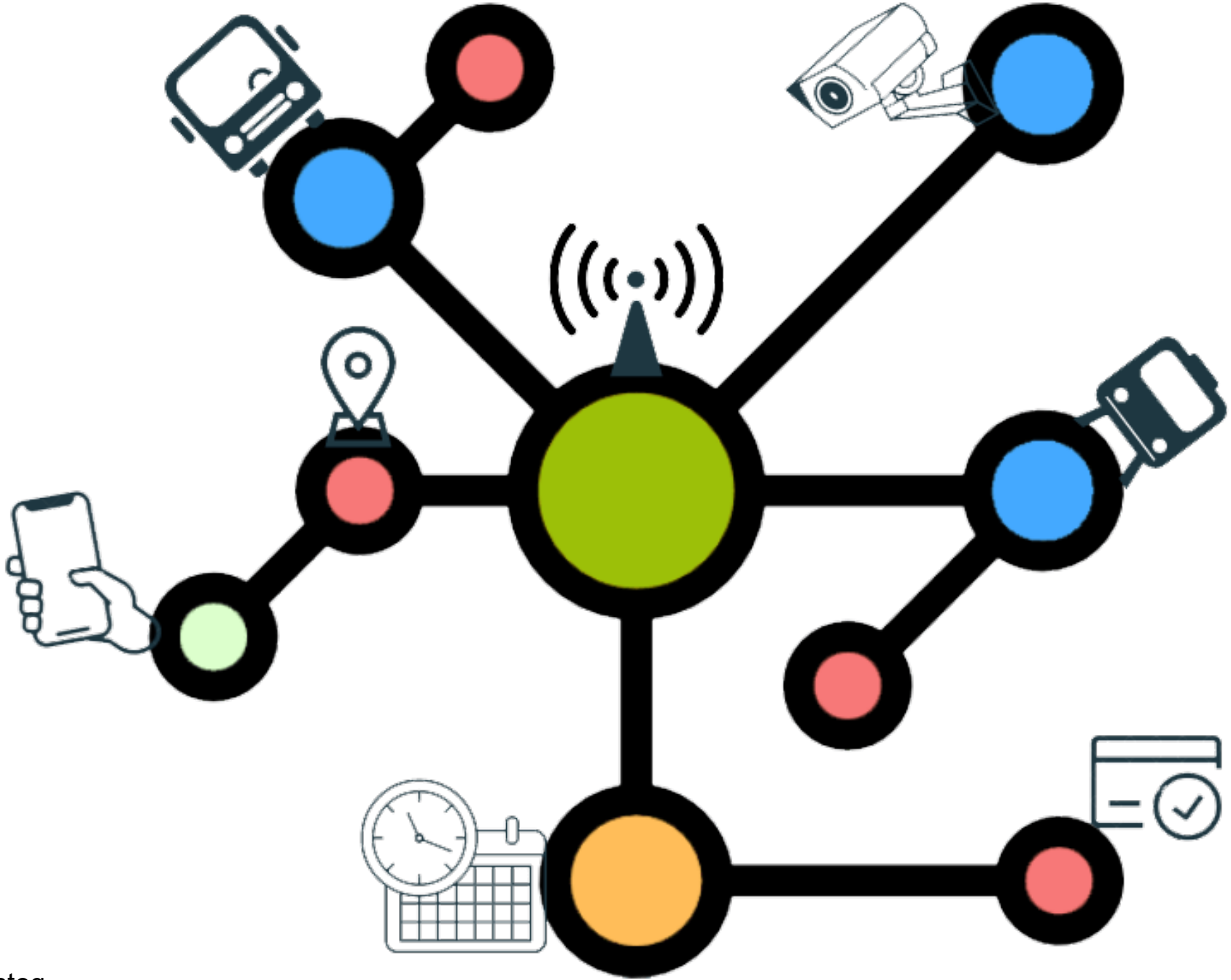
**<u>Economic benefit related taxes and charge</u>**
1. Employer payroll or occupational tax
2. Land value capture

**<u>Broad based taxes</u>**
1. Retail and sales taxes
2. Property taxes
3. Personal income taxe

**<u>Alternative way of funding</u>**
1. Station rent
2. Advertising


# Large events are an opportunity to develop public transport

©David Ramos/Getty Images Europe/Getty Images

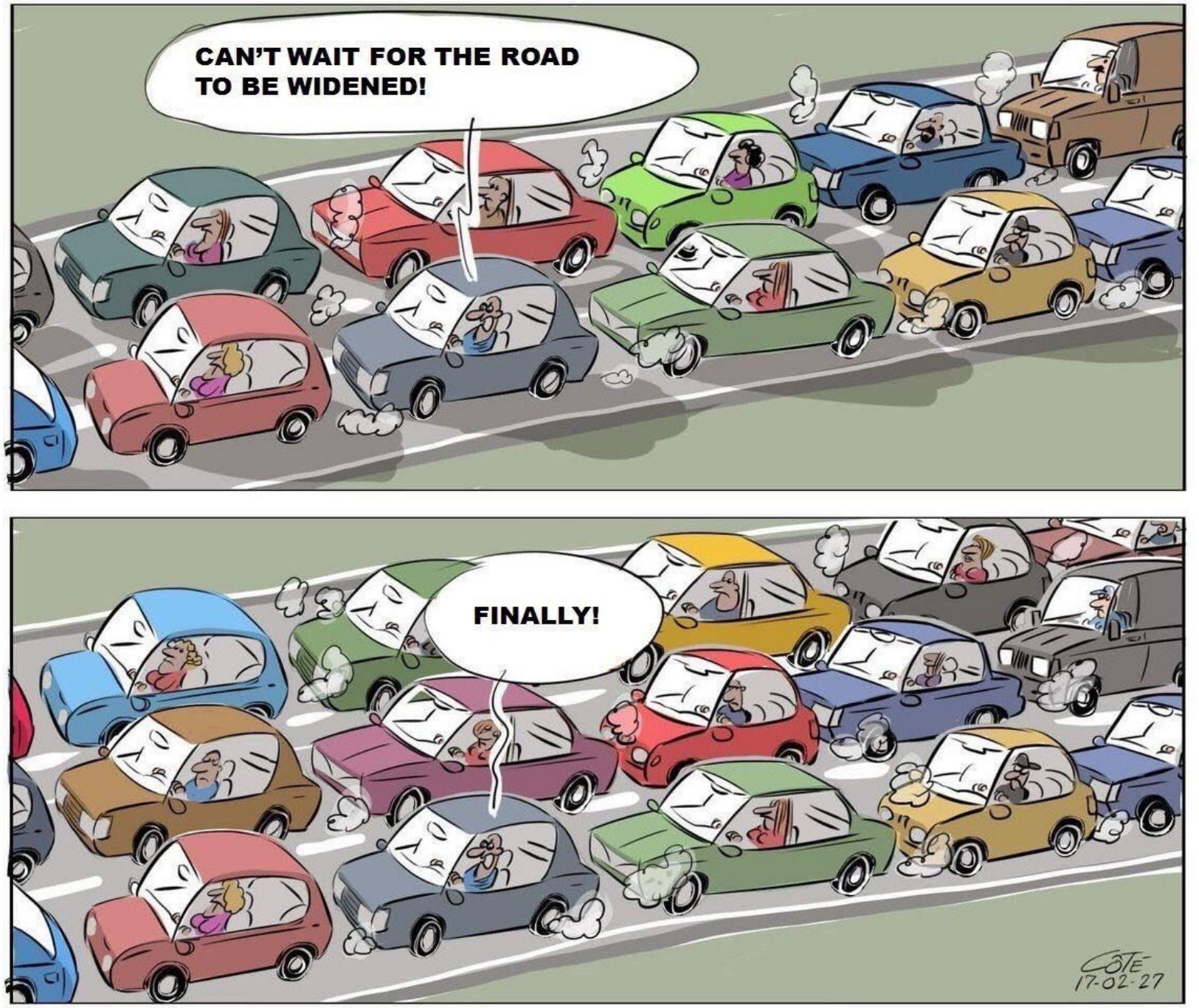


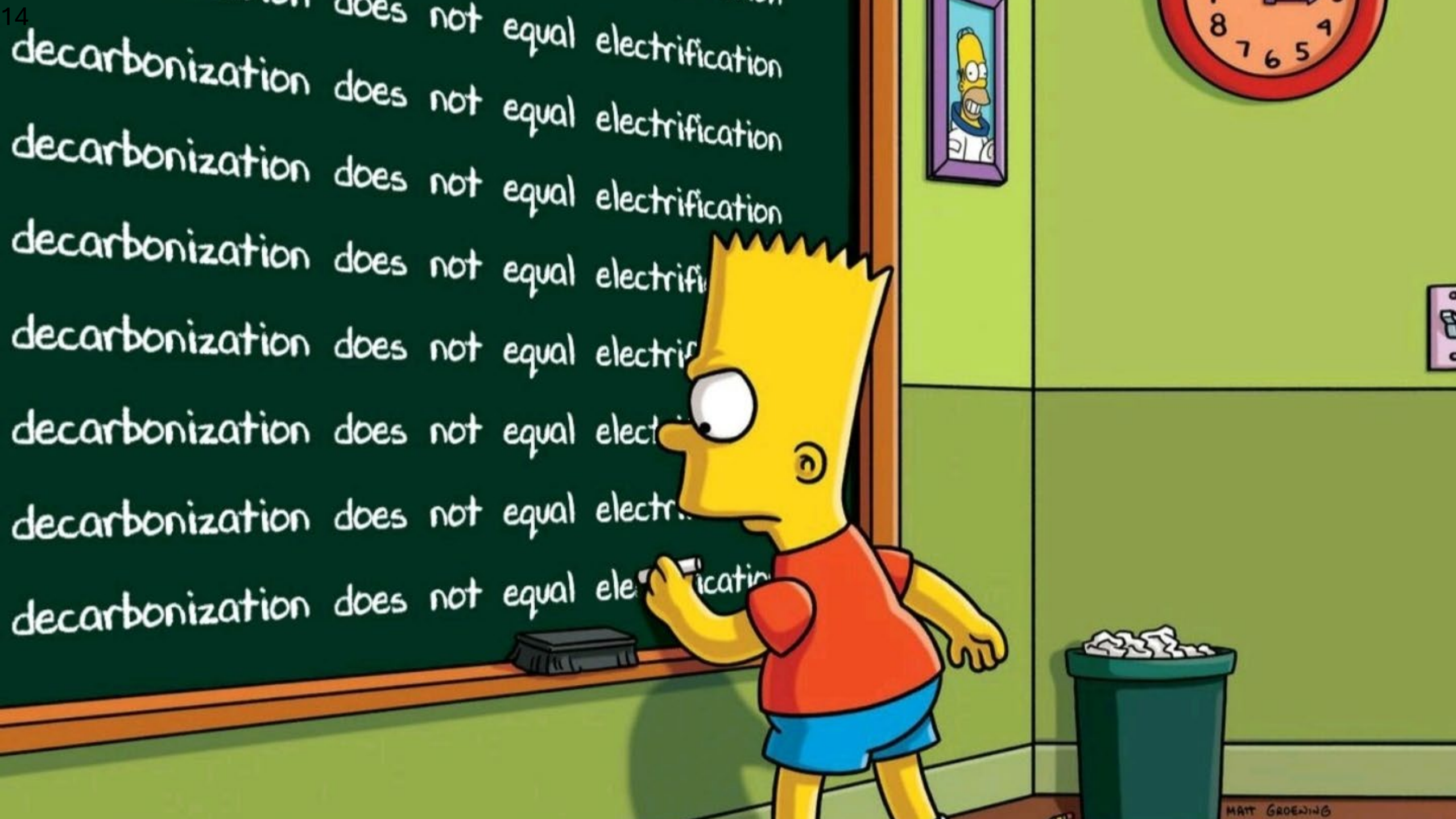
# Digital applications are deployed at multiple levels

©Tronteq

**There are in these buses as many people as in all cars around them.**

#MovePeopleNotCars


CAN'T WAIT FOR THE ROAD TO BE WIDENED!
FINALLY!
COTE 17-02-27


does not equal electrification
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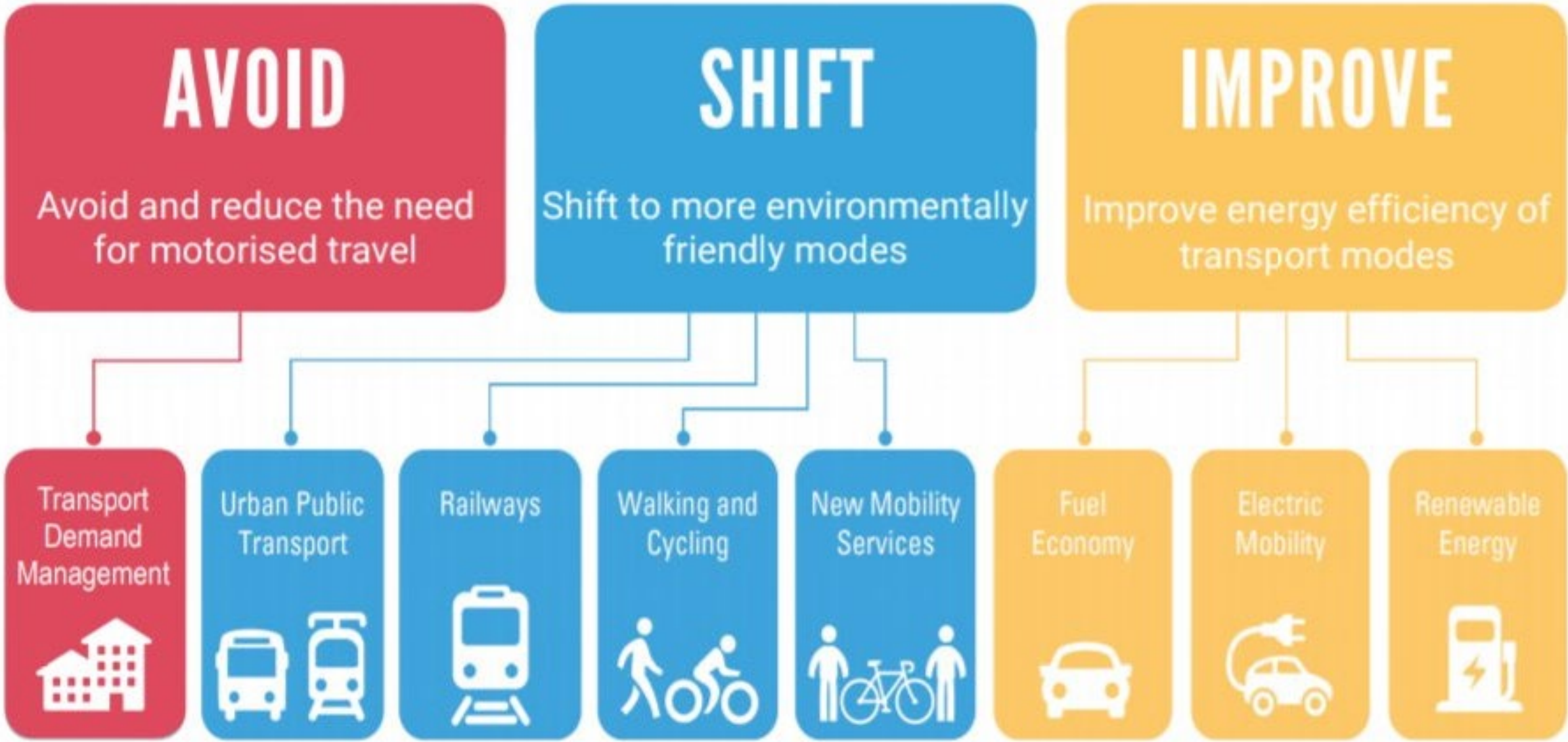
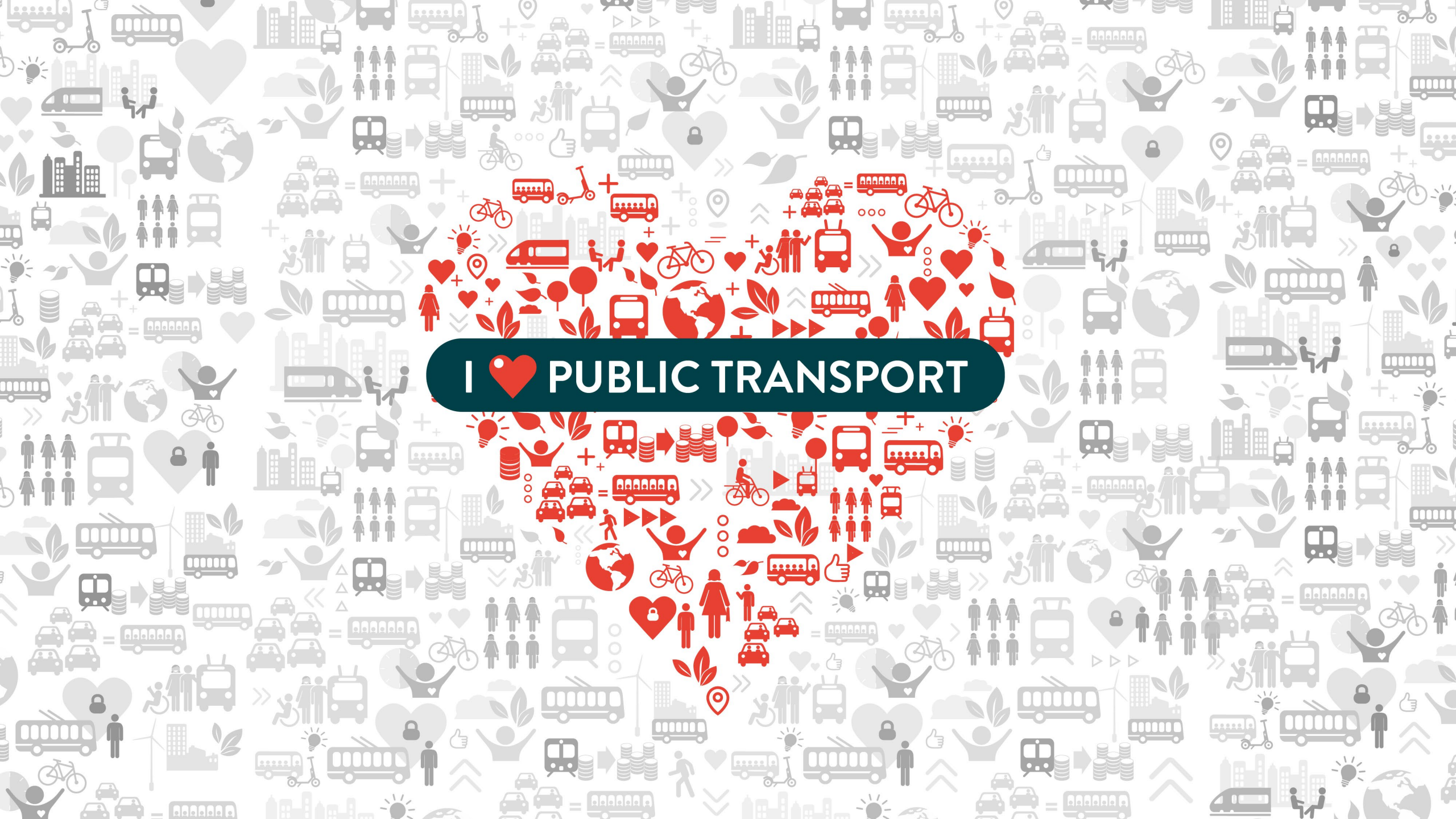

AVOID
Avoid and reduce the need for motorised travel
SHIFT
Shift to more environmentally friendly modes
IMPROVE
Improve energy efficiency of transport modes
Transport Demand Management
Urban Public Transport
Railways
Walking and Cycling
New Mobility Services
Fuel Economy
Electric Mobility
Renewable Energy


Gupta Plywood & Steel

# Public Transport is an Investment


I ♥ PUBLIC TRANSPORT