SUSTAINABLE MOBILITY IN MALTA

How do we get there?

Clean Energy for EU Islands
Energy Academy Malta
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PhD SUSTAINABLE MOBILITY

INTRODUCTION

RESEARCHER AND CAMPAIGNER ON MOBILITY & CLIMATE

- Always an islander: originally from the island of Texel (Netherlands)
- Background in Environmental Sciences and Policy (BSc, MSc)
- PhD in Sustainable Mobility (Melit.) on the topic of bicycle sharing and promotion of cycling in Southern European island context
- Climate Campaign Coordinator at Friends of the Earth Malta – focusing on climate, energy & mobility
- Researcher at the Institute for Climate Change and Sustainable Development (UM) – active travel + sustainable mobility

WHAT ABOUT TRANSPORT AND MOBILITY?

TRANSPORT

- Transport exists to provide for the movement of people and goods and for the provision and distribution of services.
- Transport is a derived demand: it takes place because other activities are taking place.
- The specific purpose of transport is to fulfil a demand for mobility.

MOBILITY

- Mobility refers to the ability to move between different locations of activities.
- Mobility depends on the transport system, transport mode and accessibility.
- Accessibility can refer to the accessibility of a place: "how easily certain places can be reached", or the accessibility of people, "how easily one can reach the location of an activity (work, leisure, etc.)".

THE TRANSPORT PROBLEM

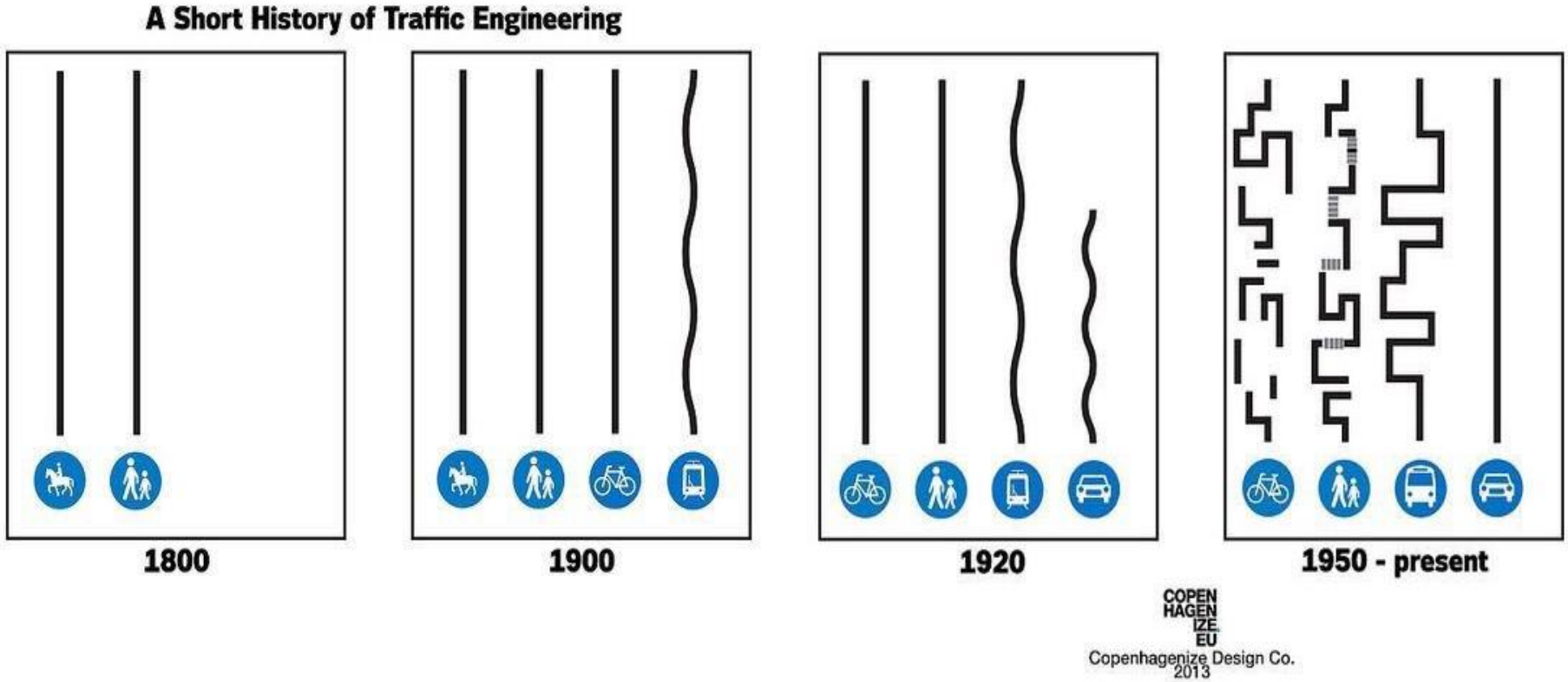
SEVEN DIMENSIONS OF TRANSPORT PROBLEMS:

1. TRAFFIC FLOW AND CONGESTION ISSUES
2. INSUFFICIENT PUBLIC TRANSPORT CAPACITY DURING PEAK DEMAND
3. OFF-PEAK INADEQUACY OF PUBLIC TRANSPORT
4. ACCESSIBILITY ISSUES FOR PEDESTRIANS AND CYCLISTS
5. ENVIRONMENTAL IMPACTS: LOCAL AND GLOBAL POLLUTION, LAND UPTAKE
6. ACCIDENTS AND ROAD SAFETY CONCERNS
7. PARKING DIFFICULTIES AND ILLEGALITIES

(Thomson, 1977)

THE TRANSPORT PROBLEM

TRANSPORT BIAS: PLANNING PRIMARILY FOR CARS



http://www.copenhagenize.com/2013/01/a-short-history-of-traffic-engineering.html

TRANSPORT MODES IN MALTA

MODAL SHARE

NATIONAL HOUSEHOLD TRAVEL SURVEY 2021

Car (driver)	76%
Car (passenger)	8%
Walking	8%
Public transport (bus)	5%
Public transport (ferry)	0.4%
Cycling	0.5%
Other	1%

Increase in car (driver) from 60% in 2010 to 76% in 2021

Walking share remained the same compared to 2010

Bus use decreased from 11% in 2010 to 5% in 2021 (but absolute use increased!)

Cycling almost doubled, from 0.3% in 2010 to 0.5% in 2021

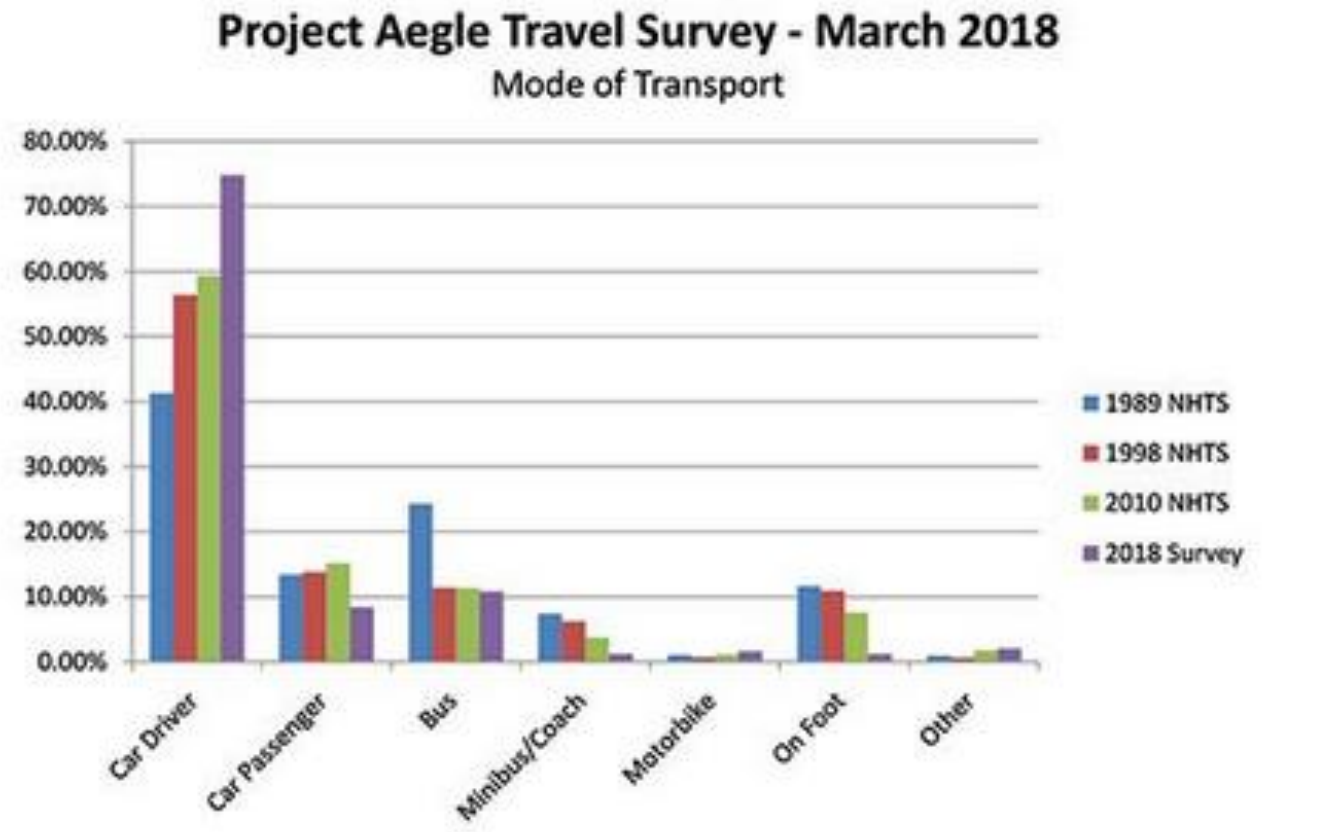
Notes:

Still an impact of Covid-19 pandemic on shared / public transport

Public transport use by visitors/tourists not included

TRANSPORT MODES IN MALTA

OVERALL TREND GOING IN THE WRONG DIRECTION…



Survey 2018 (n=250), by Prof. Maria Attard for Project Aegle Foundation
https://paf.mt/car-usage-increases-from-74-6-to-83-2-between-2010-and-2018/

ENERGY IN TRANSPORT

Transport needs energy as an input, but fossil fuel based energy use leads to:

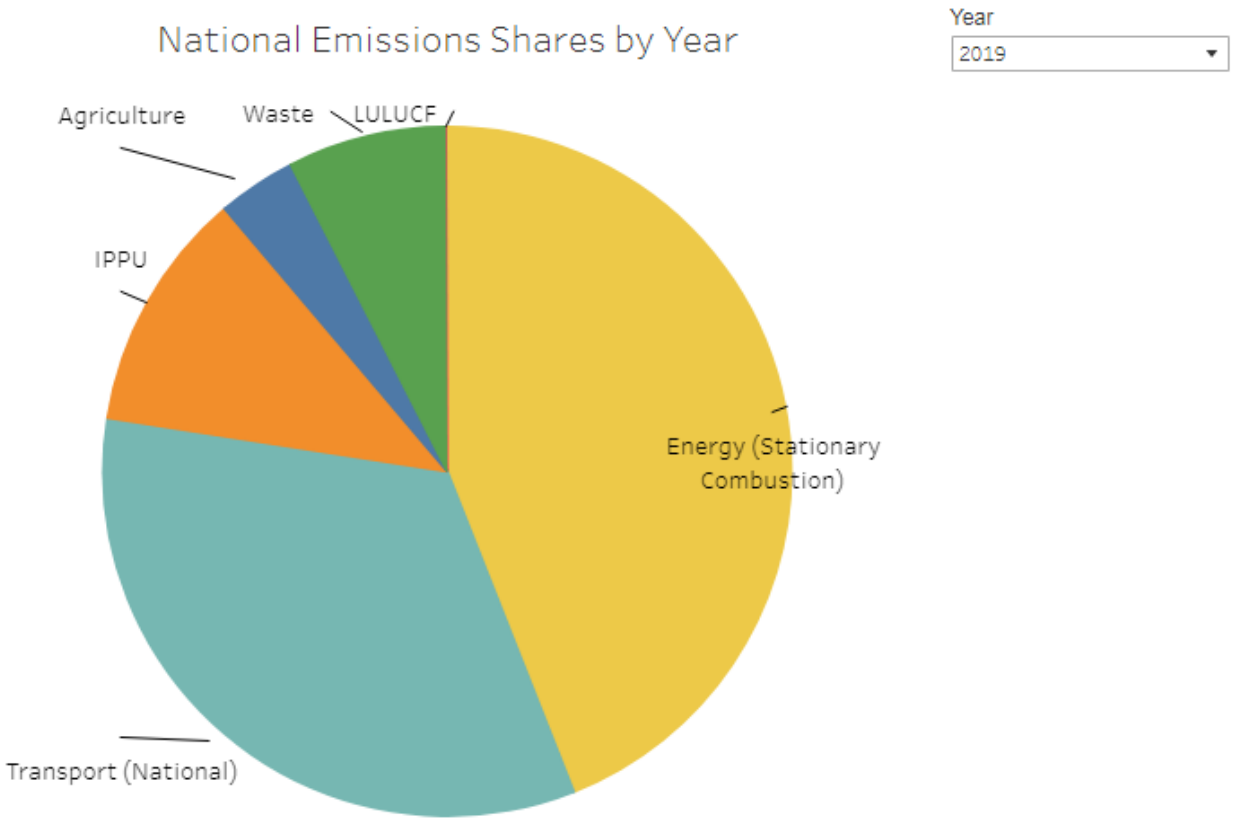
- **Fuel demand**
- **Global greenhouse gas emissions**
- **Local air pollutants**
- **Impacts on health (pollution, lifestyle)**

Energy consumption by sector in Malta:
(2016 data, NECP 2019):

- **Transport 55.5%**
- **Services 20.3%**
- **Households 13.4%**
- **Industry 9.7%**
- **Other 1.2% (fishing, agriculture, other)**

EMISSIONS FROM TRANSPORT

Transport is responsible for 33% of national greenhouse gas emissions



https://mra.org.mt/climate-change/ghg-mitigation/

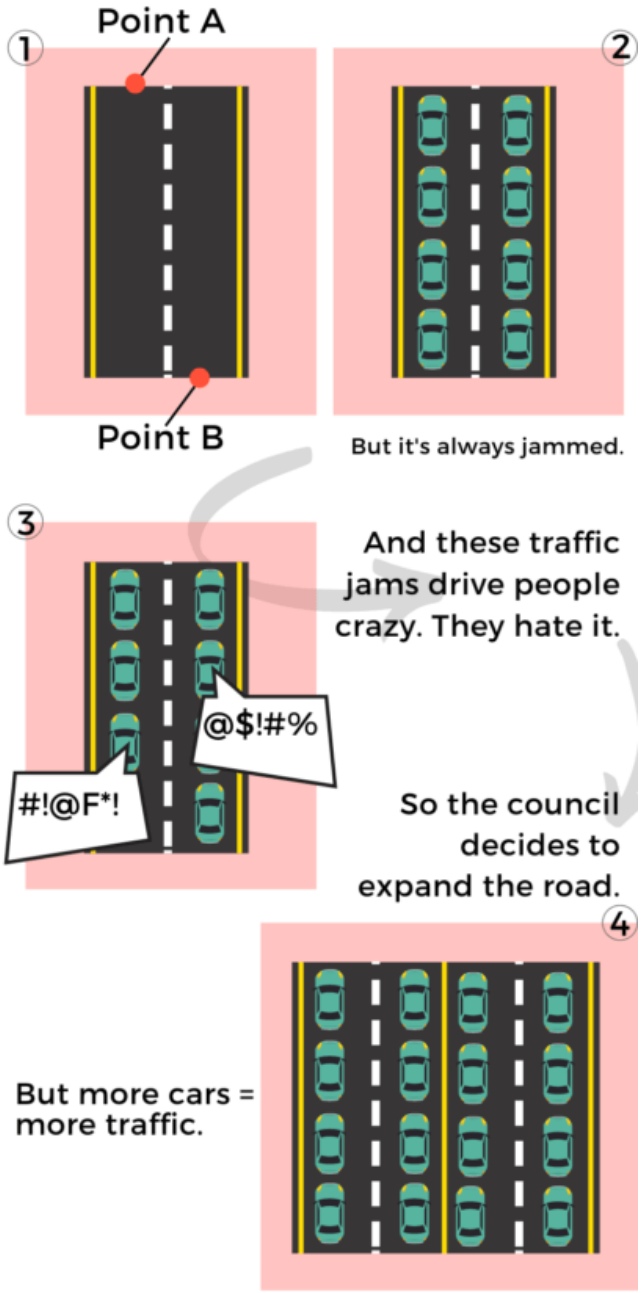
INDUCED DEMAND

The traditional response to traffic congestion:

- **focus on the supply side of the problem**
- **build new infrastructure to increase the capacity in order to meet demand.**

Unfortunately, this provides only temporary relief: when capacity is extended, additional vehicle traffic is attracted.

This effect is called induced demand.



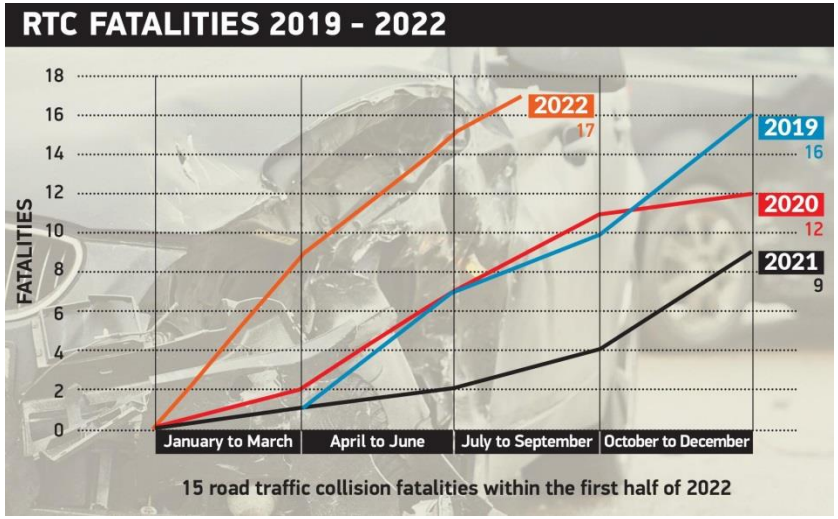
UNSUSTAINABLE MOBILITY IN MALTA

- **AVERAGE DAILY NEW VEHICLES ON THE ROAD:**

  30 – 40 VEHICLES (NSO 2021/2022)

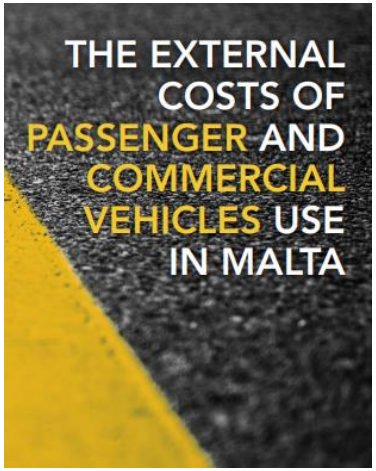
- **MILLIONS SPENT ON NEW ROADS CAUSING INDUCED DEMAND, NOT SOLVING THE PROBLEMS**

- **A SURGE IN CRASHES AND ROAD SAFETY CONCERNS**



EXTERNAL COSTS OF TRANSPORT

STUDY OF THE EXTERNAL COSTS OF TRANSPORT IN MALTA ESTIMATED **OVER 300 MILLION €** YEARLY EXTERNAL COSTS (2020), INCLUDING ACCIDENTS, NOISE, AIR POLLUTION, CLIMATE CHANGE AND CONGESTION (ATTARD ET AL., 2015)



OTHER EXTERNAL COSTS:

- HIGH COST OF FREE PARKING: A CAR IS PARKED 95% OF THE TIME
- 50% OF PUBLIC SPACE IS TAKEN UP BY ROADS
- IMPACTS ON MENTAL AND PHYSICAL HEALTH

SUSTAINABLE MOBILITY

THE TERM **SUSTAINABLE DEVELOPMENT** WAS COINED BY THE BRUNDTLAND COMMISSION IN 1987 AND WAS DEFINED AS **"DEVELOPMENT THAT MEETS THE NEEDS OF THE PRESENT WITHOUT COMPROMISING THE ABILITY OF FUTURE GENERATIONS TO MEET THEIR NEEDS"**.

THE OBJECTIVE OF **SUSTAINABLE MOBILITY** IS THE PROVISION OF A TRANSPORT SYSTEM THAT:

1. **MEETS THE BASIC ACCESS AND MOBILITY NEEDS OF PEOPLE, INCLUDING ACCESS TO ECONOMIC OPPORTUNITIES, NOW AND IN THE FUTURE**
2. **OFFERS A CHOICE OF TRANSPORT MODES THAT PROVIDE EQUITABLE, AFFORDABLE AND EFFICIENT MOBILITY OPTIONS BENEFITTING ALL MEMBERS OF THE COMMUNITY**
3. **IMPROVES GENERAL QUALITY OF LIFE BY REDUCING ENVIRONMENTAL IMPACTS FROM TRANSPORT, SUCH AS EMISSIONS, NOISE, WASTE AND LAND USE CHANGE.**

SUSTAINABLE MOBILITY IN PRACTICE

AVOID

Avoid the need for travelling, by reducing trip length through mixed and compact urban planning, or by substituting trips, for example through online communications or video conferencing.

SHIFT

Shift to low-carbon mobility modes, such as active transport, public transport and shared mobility modes.

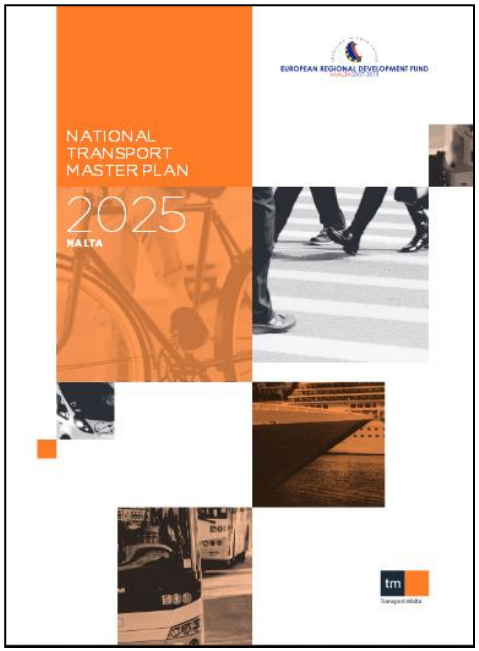
IMPROVE

Improve vehicle and fuel technologies, by promoting electric, hybrid or hydrogen vehicles in place of those using petrol and diesel fuels.

TRANSPORT POLICY IN MALTA

TARGETS FOR 2025 (TRANSPORT MASTER PLAN 2025)

- MODAL SHARE OF CAR (DRIVER) BACK TO 1990 LEVEL AT 47% (IN 2021 AT 76%!) + OF ACTIVE MODES INCREASED TO 11% (IN 2021 AT 8.5%)
- 20% HYBRID/ELECTRIC VEHICLES (IN 2022 AT 1.7%)
- 50% ZERO EMISSION URBAN LOGISTICS (IN 2022?)



WITH 3 YEARS TO GO, WE ARE NOT ON TRACK AT ALL…

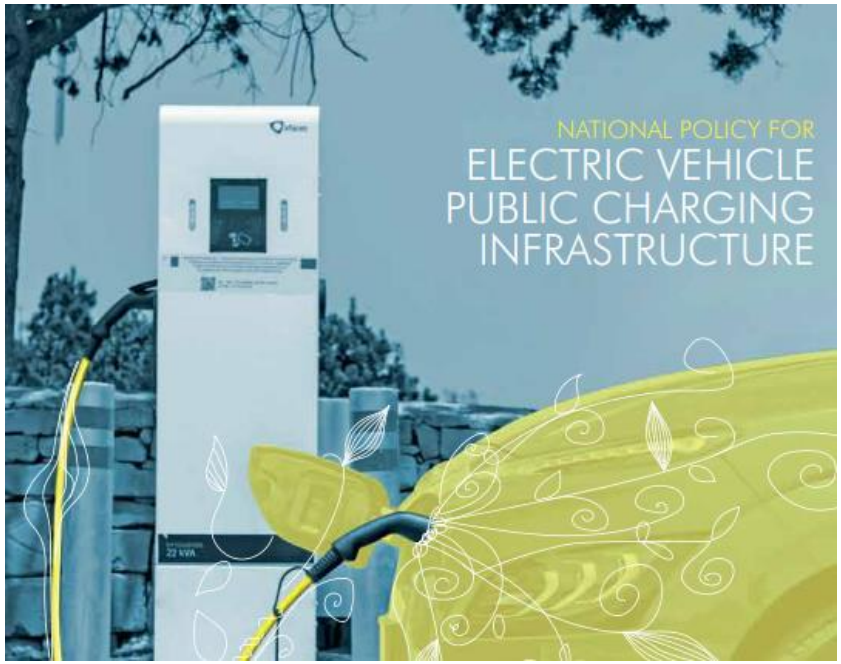
ELECTRO-MOBILITY DRIVE

- **2013 Malta National Electromobility Action Plan**
- **2021 Policy for Electric Vehicle Public Charging Infrastructure**

Transport Malta offers financial incentives to citizens, Local Councils, NGOs and businesses in order to purchase low emission vehicles.

Some questions that arise:

- **Where is the energy coming from? (long tailpipe problem)**
- **What about all the other problems associated with car dependence?**



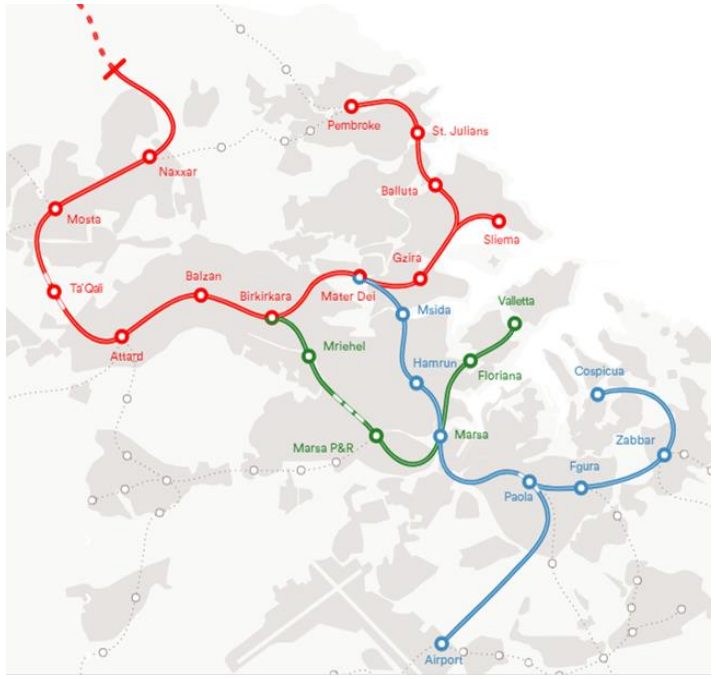
A METRO FOR MALTA?

Metro Malta proposal

- Mass transport solution presented by government in October 2021
- Three lines, 25 stations
- Estimated 15-20 years to build
- €6.2 billion projected cost

Some questions that arise:

- How feasible and realistic is the proposed cost and timeline?
- What will be done to curb congestion and pollution in the coming 15-20 years?
- How does the metro connect with other public transport and serve other localities?
- What complementary measures are needed to shift private car use?



SOME INVESTMENT IN WALKING AND CYCLING?

POSITIVE EXAMPLES:

dense urban fabric with shared street space, pedestrianisation in certain shopping/leisure areas, a segregated cycling and foot path.

NEGATIVE EXAMPLES:

unconnected cycling path next to arterial road, painted green cycling lanes on roundabout perimeter, illegal parking on cycling path.

BUT A LACK OF POLITICAL WILL?

AUGUST 2022

Efficiency for cars comes first, then bicycle lanes will be included if there is space – Transport Minister

MARC GALDES

The Minister for Transport, Aaron Farrugia, expressed how their primary aim is for roads to be safe and more efficient for cars. Then, if there is space for a bicycle lane, they will include it.

The Malta Independent asked him about the cycling NGO *Rota*, and why its proposal for a safe bicycle lane that utilises space efficiently for Mgarr Bypass had been ignored.

Farrugia responded by stating that he does not agree with this NGO, on the basis that they want to accommodate the cyclist over the cars on the road.

"Our roads are not highways, therefore, either we accommodate the bicycle in the small space that we have, or we don't accommodate it", he said.

"Until today our aim has been to make sure that our roads are safe, to keep our cars moving at pace, and then when we can accommodate bicycles, we will also do this", he stated.

Continued on page 2

Nothing more can be done to accommodate bicycles, Aaron Farrugia says

Continued from page 1

He made it clear that his primary concern were the cars on the road. He further said that it is not possible to offer more space for bicycle lanes, without neglecting the cars on the road.

However, he only focused on the width of the bicycle lane, and not on the other problems that arise. When asked about the problem of bicycle lanes not being segregated from the road, or the obstructions that are present, he did not address those issues and continued to stress that nothing more can be done.

Although he claimed to understand the challenges of bicycle users, as he rides a bicycle himself, he continued to stress the idea that there was nothing more they could do, in order to be able to accommodate the bicycles further.

> *"I understand the constraints of the country. The infrastructure is what it is, the small size of our country is what it is, therefore, one should try to accommodate as much as possible."*

When asked about what had happened to the National Cycle Policy, which was launched in 2018 but was never implemented, he responded by saying that the policies are good and well researched, but once again he stressed that in places like Malta, one cannot expect the government to offer more than they are already offering to help cyclists in Malta.

"I understand the constraints of the country. The infrastructure is what it is, the small size of our country is what it is, therefore, one should try to accommodate as much as possible."

12 · 7 AUGUST 2022

NEWS

People walking, cycling and taking public transport can come first

Transport Minister Aaron Farrugia was quoted saying that "efficiency for cars comes first" and that "there was nothing more they could do to accommodate cycling further"

DR SUZANNE MAAS

HAS our new Transport Minister already forgotten what he – presumably? – learned in his stint as Environment Minister over the past few years? Climate change is here, now! Carbon emission reductions need to be ramped up drastically and immediately, as per Malta's obligations under the global Paris Agreement of 2015 and the European Green Deal, 55% reduction of greenhouse gas emissions by 2030 and net carbon neutrality in 2050 in the EU.

The New EU Urban Mobility Framework (2021), which guides EU member states' mobility policy, stresses the urgency of the climate crisis and the need to "shift away from the current approach to improve traffic flow, and instead move to an approach based on moving people and goods more sustainably, with a focus on strong public transport, promotion of active mobility, and zero-emission urban logistics".

Today, road transport contributes to one third of total greenhouse gas emissions in Malta. To stop fuelling the climate crisis and reduce carbon emissions, as well as the impact of air pollution on public health, road safety concerns and diminishing public space for anyone outside a car, we need to move away from planning only for cars.

But no, our Transport Minister says that "efficiency for cars comes first". For the past decades we have seen investments in wider and further roads for cars, and there is nothing efficient about it. Building more roads and parking for cars only leads to more cars.

This is a vicious and endless cycle termed 'induced demand' and is a simple story of supply and demand: increasing the capacity for cars on the road increases the amount of cars on the road. This phenomenon is well documented in the literature, based on examples from all over the world, and can be observed clearly in Malta as well, where new bypasses and flyovers have not resolved traffic congestion or parking issues at all.

Exactly because Malta is small and space is limited, we need to invest in cleaner and leaner modes of transport. The car is the least space efficient mode of transport of all! The average commute in Malta is only 5.5km, therefore we need to invest in direct, safe, comfortable, attractive and connected infrastructure for walking and cycling, so that the choice to go on foot or by bicycle for short trips is easy and obvious. This is not about "accommodating cyclists over the cars on the road" as the Minister said, but about envisioning, devising and implementing a sustainable mobility policy for the country.

The EU guidelines on Sustainable Urban Mobility Plans (SUMP), a plan which is currently in the works for the principal urban area in Malta, stress the need to address the transport sector to tackle the climate crisis, with a primary focus on public transport, walking and cycling. And yes, such a plan should also seek to regulate and reduce private car use in a city, especially in its centre(s).

This is being done around Europe, where (local) governments have woken up to the harm that excessive private car use is causing their cities and citizens. Cities such as Paris, Milan, Barcelona and Seville are reducing access and space for cars, and investing in public transport, active mobility and green public spaces instead. Or look at the inspiring mobility policy of Rimini in Italy, which was shown as a case study in Transport Malta's own recent workshop on 'Enabling a shift towards sustainable transport modes' as part of their updating of the Transport Master Plan.

Even the government's own Low Carbon Development Strategy (2021) identifies active transport (walking, cycling) as a high priority policy area for the short term to reduce carbon emissions in Malta.

From my own PhD research on the promotion of cycling as a mode of transport in Southern European cities I found that road safety is the main barrier for people cycling, in Malta and many other similar cities. If the Minister wants to make our roads safer for everyone, efforts should focus on reducing large differences in mass and velocity of different transport modes; reducing travel speed to a maximum of 30 km/h and applying traffic calming where roads are shared between cars and vulnerable road users, and providing safe, separated infrastructure where the speed is higher.

There are many things the Minister can do to promote cycling and other forms of sustainable mobility. Here are some to get started:

- Invest in decent pavements to promote walking for local trips, with adequate widths, safe crossings and green infrastructure to provide shade and mitigate noise and air pollution.
- Apply traffic calming principles in town centres and residential roads, to create safe spaces for walking and cycling, where cars are guests.
- Dedicate space to efficient and reliable public transport and increase the connectivity between the bus and ferry networks.
- Publish the long overdue National Cycling Policy announced in the Transport Master Plan of 2016. Appoint a cycling commissioner/committee and set up the Cycling Malta platform proposed in the draft National Cycling Strategy, and task them with the creation of a comprehensive cycling network and the creation of cycling infrastructure standards and guidelines.
- Reduce speed limits and road widths, to discourage over-speeding; the most efficient way to improve road safety!
- Stop relying on a shift to electro-mobility as the only sustainable mobility policy. It will not be enough to reach our carbon emission reduction targets, and certainly will not resolve the other problems associated with too many cars: traffic, parking, take up of public space and road safety concerns.

There are professionals in Malta who can advise the government and the Transport Minister on real, effective and efficient sustainable mobility policy and planning, such as the Institute for Climate Change and Sustainable Development, and NGOs like Rota and Friends of the Earth Malta, alongside many others who have been promoting policies for healthy liveable urban areas. Together we can create a real sustainable mobility future for Malta, to improve quality of life, public health and public spaces. We are here to help and make this a reality.

If the Minister really does not know what else he can do to promote sustainable mobility, maybe he should consider handing in his resignation; a Minister for Transport is not a Minister for Cars.

Suzanne Maas holds a PhD in Sustainable Mobility (Melit.) from the Institute for Climate Change and Sustainable Development at the University of Malta. She is the Climate Campaign Coordinator at Friends of the Earth Malta and an active member of Rota.

HOW DO WE GET TO SUSTAINABLE MOBILITY IN MALTA?

A FEW RECOMMENDATIONS

- Invest in decent pavements to promote walking for local trips, with adequate widths, safe crossings and green infrastructure
- Apply traffic calming principles in town centres and residential roads, to create safe spaces for walking and cycling, where cars are guests.
- Dedicate space to efficient and reliable public transport and increase the connectivity between the bus and ferry networks.
- Publish the long overdue National Cycling Policy announced in the Transport Master Plan of 2016.
- Create a national parking policy to tackle the use of public streets and free up space for more efficient modes of transport (public, active).
- Create an action plan for the implementation of a mass transport system, focusing also on short-term solutions such as BRT (bus rapid transit).
- Reduce speed limits and road widths, to discourage over-speeding.
- Increase enforcement on the roads to tackle dangerous driving.
- A shift to electro-mobility is part of the solution, but cannot be the only sustainable mobility policy.

THANK YOU!

Any questions?

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