



# Co-Creation of mobility plans (MaaS-bundles)

Onsite Matchmaking,

Interreg Europe

Thessaloniki, 29 June 2022

Dr. Georgios Georgiadis,  
Assistant Professor,  
Transport Engineering Laboratory,  
Aristotle University of Thessaloniki

# Transport Engineering Laboratory

6<sup>th</sup> floor

Main Building  
of Faculty of  
Engineering



- ✓ 1 of the 21 Laboratories at the Civil Engineering Department

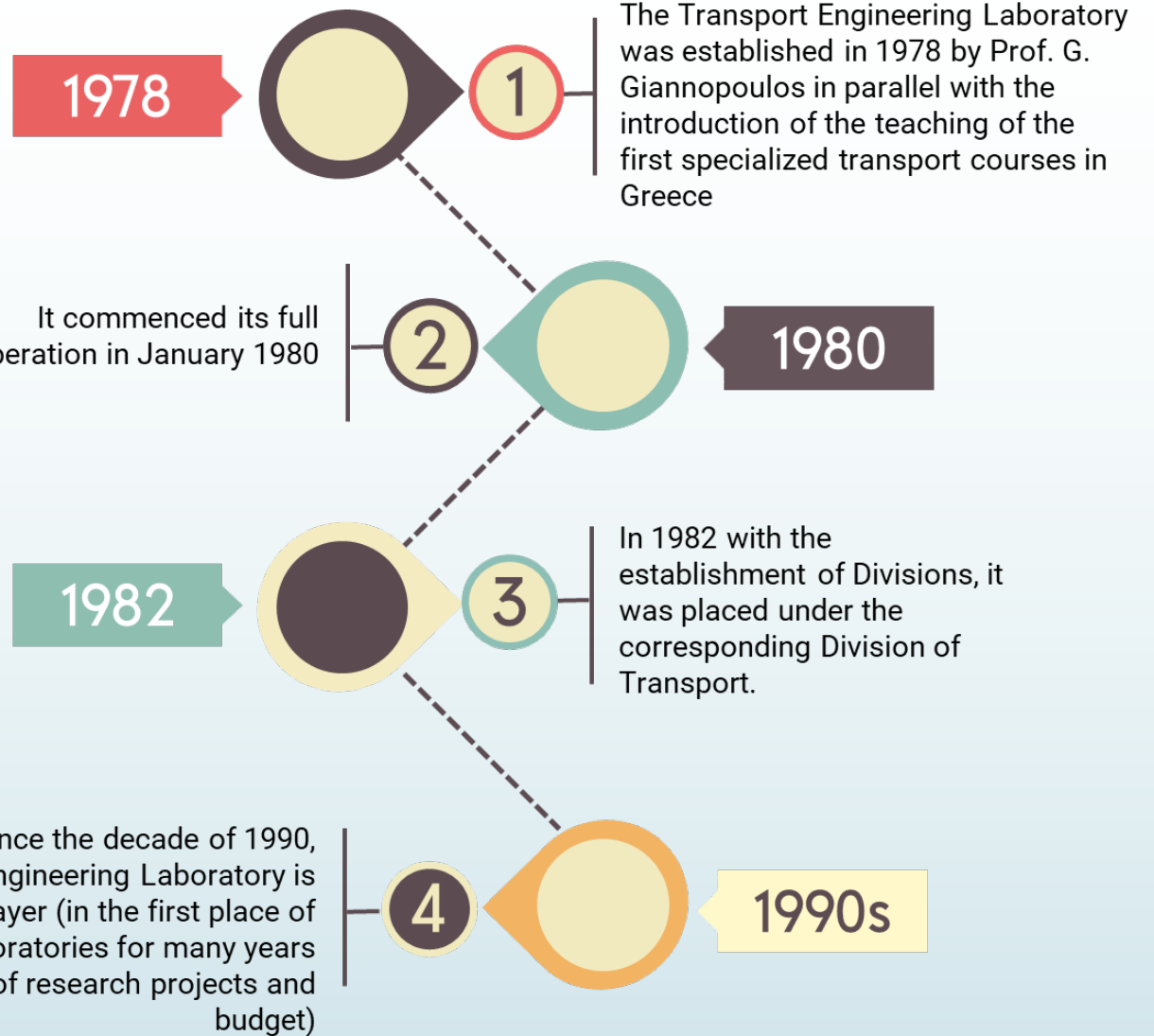
TRANSPORT  
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European Union | European Regional Development Fund



- Onsite matchmaking, 29 June 2022: Co-creation of mobility plans (MaaS-bundles)
- Dr. Georgios Georgiadis, Assistant Professor, Transport Engineering Laboratory, Aristotle University of Thessaloniki

# Transport Engineering Laboratory- Relevant projects



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# What is the best way of co-designing MaaS subscription mobility packages to induce changes in the user's behaviors?

## Insights from Central Macedonia

Poor availability of transport modes: Emphasize combined use of shared modes with PT

### Public Transport:

- Only bus (urban, suburban routes)
- Metro to open in 2023
- No sea/coastal transport services
- No Demand Responsive Transport Services (except paratransit)

### Ride-sharing and carpooling

- No private/public provider/coordinator or supporting institutional framework. Very low acceptance.
- No mobile apps valid in Thessaloniki.

### Ride-hailing

- Widely known platforms, such as Uber, Lyft etc., did not enter the local market due to legislation prohibitions and relevant reactions from taxi businesses.

### Taxi

- No provision of pooled services. An impressive utilization of smart apps for booking a taxi.
- Many taxi private companies with potential conflicting business models for such a small market of Thessaloniki.
- Concerns over ridesharing and MaaS due to regulatory weaknesses [1]

Car-sharing Non existent so far

### Bike-sharing and E-scooters:

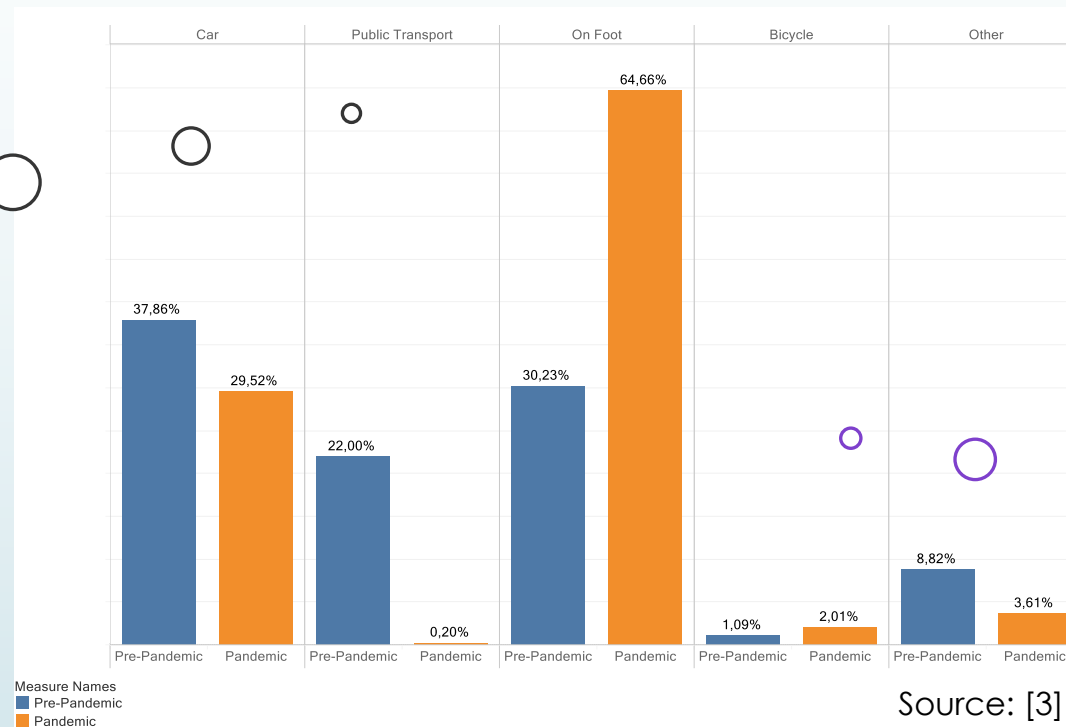
- A promising market with considerable expansion and acceptance. Recent legislation framework.
- Relatively unregulated in terms of area of services and collaboration with local urban mobility authorities

Greater use of shared modes is associated with greater use of PT and lower car ownership rates [2]

# What is the best way of co-designing MaaS subscription mobility packages to induce changes in the user's behaviors? Insights from Central Macedonia

Sustain the positive aspects of travel behavior change due to COVID-19 restrictions

1 out of 3 PT users are expected to reduce PT post-pandemic [4]



Cycling and e-scooters skyrocketed right after the relaxation of measures

## What the role of public authorities in promoting these mobility models? Insights from Central Macedonia

**TRANSPORT AUTHORITY OF THESSALONIKI S.A (TheTA)** established in 2017

- ❑ Development, Coordination, Monitoring of all road, rail, sea/coastal passenger public transport services within the Regional Unit of Thessaloniki (~ 1 mil. residents)
  
- ❑ Should act as the **local strategic integrator** in terms of
  - ❑ defining mobility strategy for the Region,
  - ❑ aligning the business models of all urban mobility providers,
  - ❑ invest and fund technology assets and entrepreneurships,
  - ❑ concentrate and exercise responsibilities for the integration of multimodal infrastructures and services,
  - ❑ developing a trustworthy collaborative environment for data sharing and dispute resolution

# What the role of public authorities in promoting these mobility models? Insights from Central Macedonia

## TRANSPORT AUTHORITY OF THESSALONIKI S.A (TheTA)- Current Legislation and Institutional Framework

### Strengths

- Authority responsibilities over all current and future public transport services
- Coordination with taxi services (hubs)
- ITS applications for providing urban mobility information channels and quality of service improvement measures
- Manage e-ticketing system and coordinate the distribution of ticket sales
- Design park-and-ride stations. Responsibility to initiate and fund expropriation process for capturing necessary land properties for mobility hubs
- Request and obtain access to micromobility data from providers

### Weaknesses

- Excludes suburban railway services from TheTA's scope (important for commuting within Central Macedonia)
- Can act as a strategic integrator only for state-owned public transport companies and its subsidiaries
- No effective alignment of strategic, tactical and operational decisions for other than PT modes
- No responsibilities are foreseen for more complicated levels of MaaS integration, i.e. book and pay for a single multimodal trip, subscription packages for bundles of mobility services (except for providing multimodal travel planners app).



# Should the strategy of subsidising public transport be re-thought and become user-focused?

## Insights from Central Macedonia

- ❑ Public transport services are subsidized by central government funds (coverage of operational costs and low ticket prices)
- ❑ Any MaaS bundle scheme that contains PT use would be (in)directly subsidized
- ❑ MaaS schemes suffer from high set-up costs (vehicles, technology) and low margins due to competition from private car
- ❑ Attract higher ridership for MaaS via rewarding loyal customers and gamification as a means for subsidizing sustainable urban mobility behavior
- ❑ Involvement of private sector businesses to secure additional revenue streams (improvement of accessibility, joint campaigns, marketing, utilization of mobility hubs)



## References

- [1] Igoumenidis, P., Politis, I., Georgiadis, G., & Kopsacheilis, A. (2020). "Investigating the potential of ride-sharing services in Thessaloniki, Greece", 2nd International Conference "Intermodal Transports: Innovations in Planning, Management, Business Development & Decision Making", 12-13 March 2020, Alexandroupolis, Greece.
- [2] TCRP Research Report 188: Shared Mobility and the Transformation of Public Transit (2016)
- [3] Politis, I., Georgiadis, G., Papadopoulos, E., Fyrogenis, I., Nikolaidou, A., Kopsacheilis, A., ... & Verani, E. (2021). COVID-19 lockdown measures and travel behavior: The case of Thessaloniki, Greece. *Transportation Research Interdisciplinary Perspectives*, 10, 100345. <https://doi.org/10.1016/j.trip.2021.100345>
- [4] Tsavdari, D., Klimi V., Georgiadis, G., Fountas, G., Basbas, S. (2022). The behavior of Public Transport users in the era of COVID-19: The case of Thessaloniki, Greece. *Social Sciences* (under review)



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Contact: [ggeorgiadis@civil.auth.gr](mailto:ggeorgiadis@civil.auth.gr)