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ΕΛΛΗΝΟΓΑΛΛΙΚΟ ΕΜΠΟΡΙΚΟ & ΒΙΟΜΗΧΑΝΙΚΟ ΕΠΙΜΕΛΗΤΗΡΙΟ

15 December 2021

Towards safer, smarter and greener mobility in Athens

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Presentation Outline

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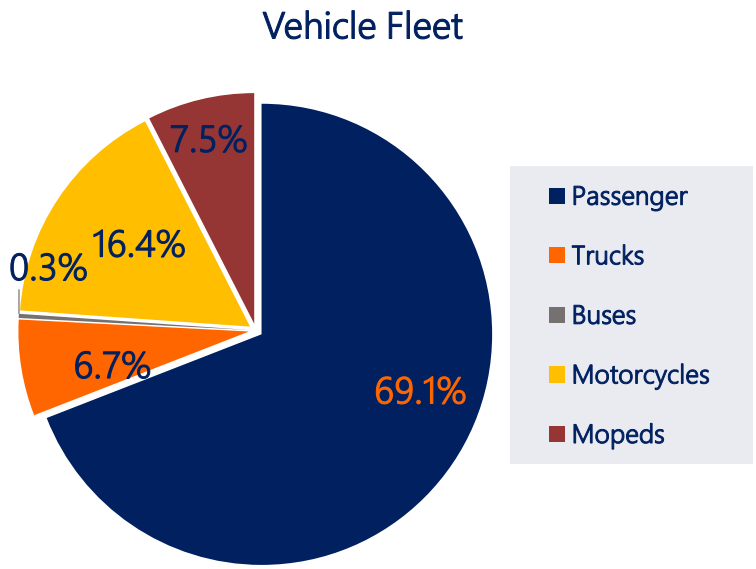
2. Inertia leads to chaos
3. Key tools for sustainable traffic management
4. Innovative initiatives in the EU
5. Mobility as a Service
6. Smart Cities
7. The need for effective monitoring
8. Conclusions

Mobility in Athens (1/3)

- The city of Athens, has a population of 664,046 people and an area of 38.96 km^2
- Athens metropolitan area has a population of 3,090,508 people and an area of 412 km^2
- Total road infrastructure 868 km / Pedestrian network 48 km
- Passenger cars constitute 69% of the total vehicle fleet, while two-wheelers constitute 24%
- Approximately 14.000 taxis are operating in Athens

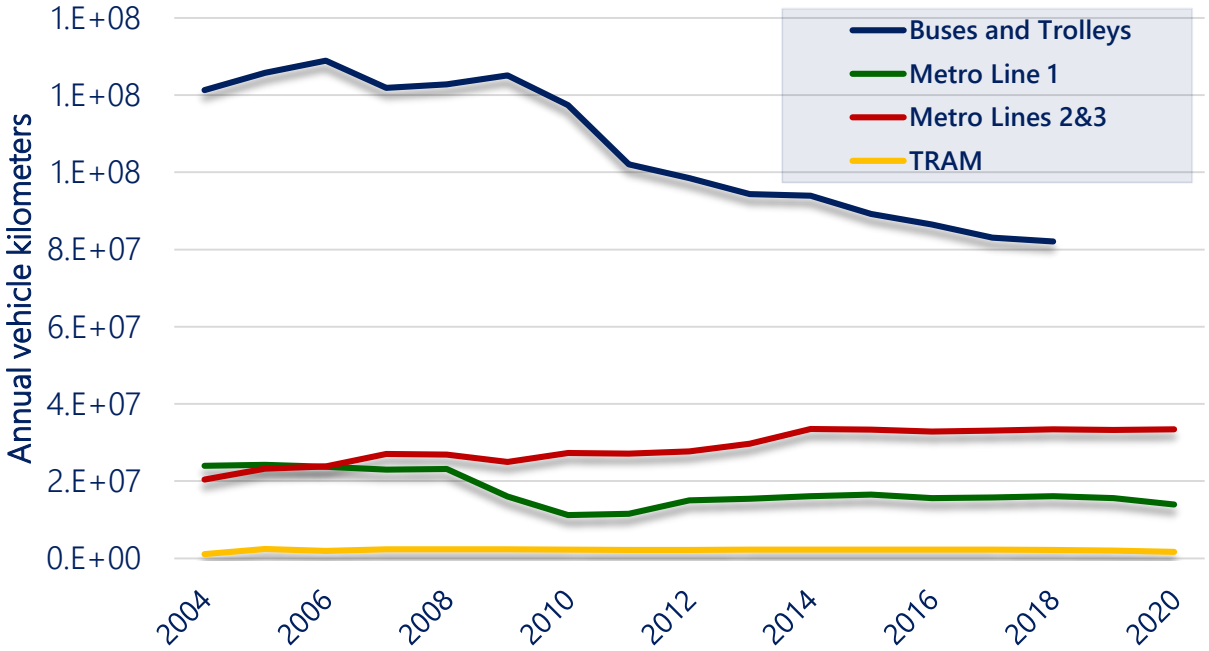


Mobility in Athens (2/3)

- In 2019, Public Transport fleet consisted of 1.725 thermal and 291 electric buses
- Reduction in the number of vehicle kilometres of Public Transport Means (-15% from 2010 to 2018)
- Increase in annual vehicle kilometers in Attica Tollway from 2014 to 2019, followed by a remarkable decrease in 2020 due to the Covid-19 mobility restrictions

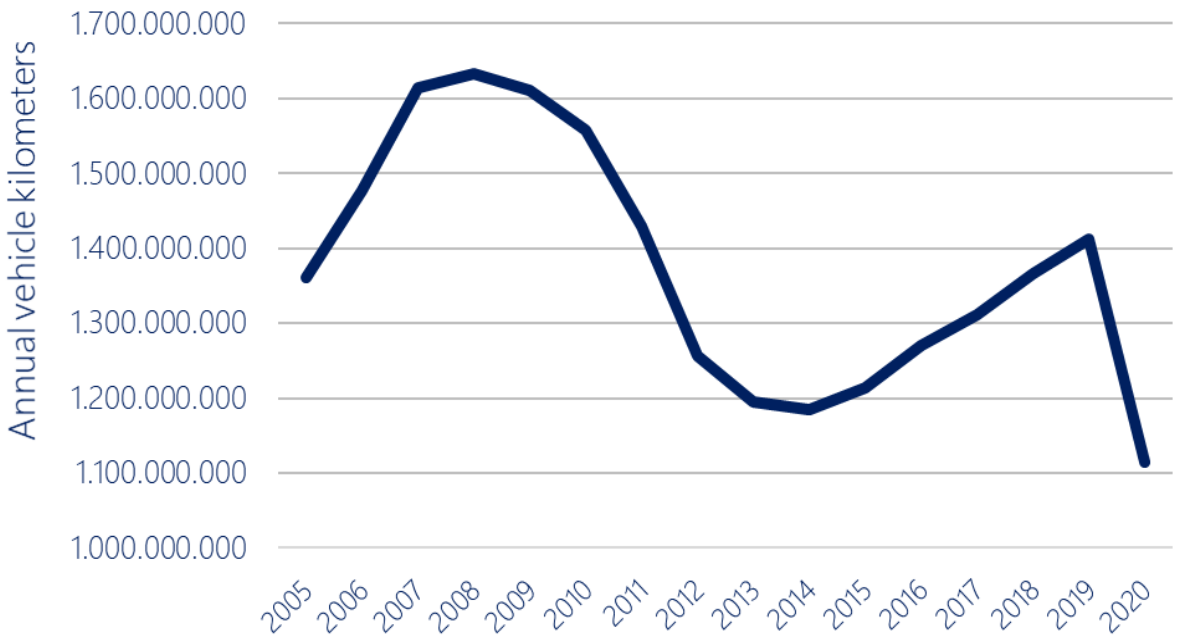
Annual vehicle kilometers of Mass Transit System

Source: OASA, Data processing: NTUA



Annual vehicle kilometers in Attica Tollway

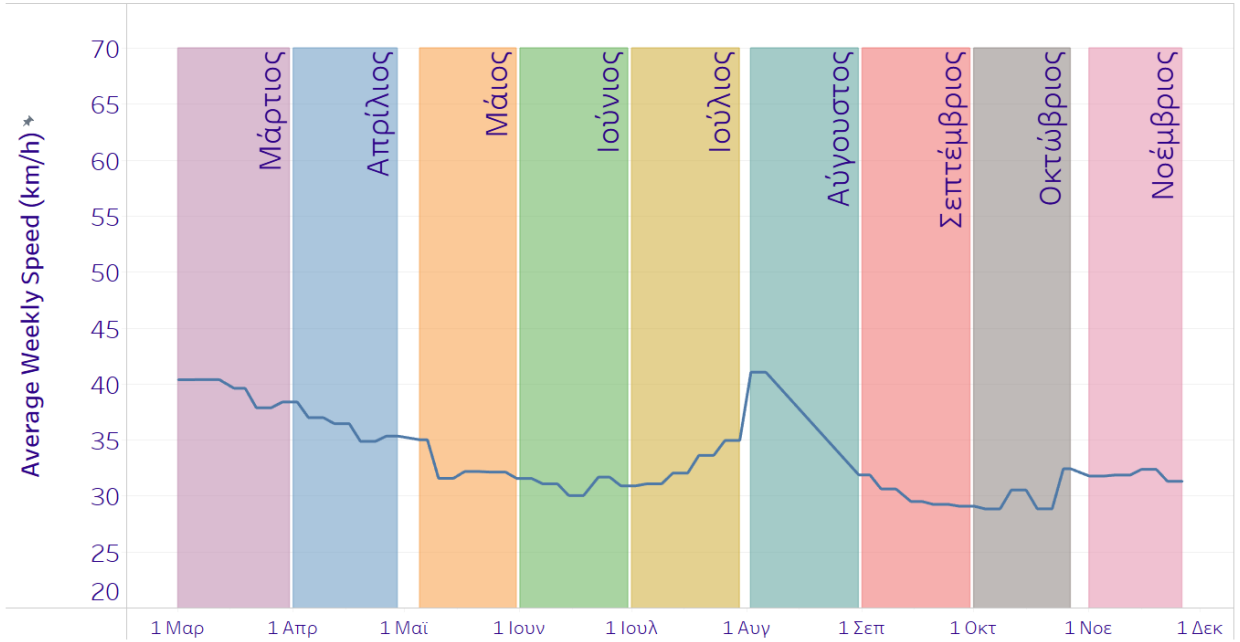
Source: Attica Tollway, Data processing: NTUA



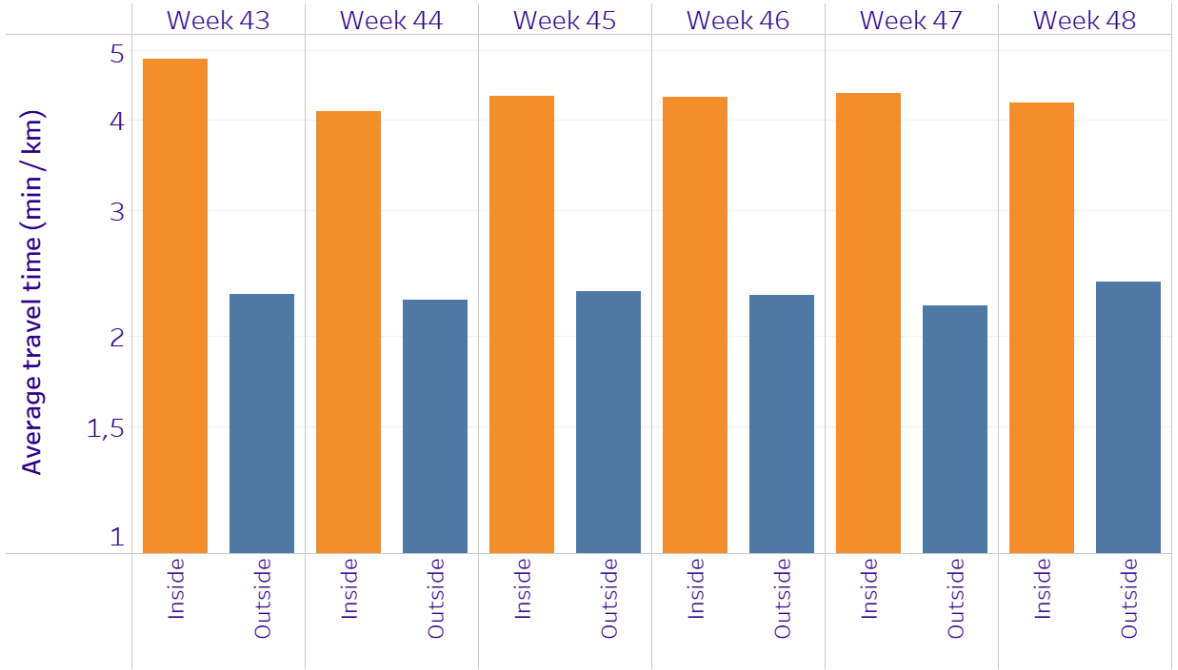
Mobility in Athens (3/3)

- Average traffic speed inside Athens traffic restriction zone (Daktylios) during the spring of 2021 was high due to COVID traffic restrictions
- It was significantly reduced in May and June 2021, and dropped to its lowest point in September and October 2021
- Average speed increased and travel time decreased (10-16%) since the reinstatement of the traffic restrictions (24/10/2021 – week 44). Traffic conditions outside the traffic restriction zone were not significantly altered.

Evolution of average weekly speed within Athens "Daktylios" (2021, hours 8:00-21:00)



Average travel time inside and outside Athens "Daktylios" (last six weeks, 08:00-19:00)



Inertia leads to Chaos

- Traffic in Athens is deteriorating and traffic congestion is expected to further increase if no immediate action is taken
- Unfortunately, the decade of financial crisis and the COVID-19 pandemic were missed opportunities to push sustainable mobility
- In several European cities the key tools for sustainable traffic management (especially during the pandemic) are the sincere support of Public Transport, integrated Parking Management policies and the systematic promotion of Active Mobility (cycling, walking).

Key tools for sustainable traffic management

- Public Transport (PT) provides the most efficient and safe way of mass mobility
- Existing PT systems can be made significantly more attractive by enforcing bus lanes and increasing frequency.
- Targeted Parking Management can significantly affect transportation demand and mode choice
- Unorganized short and long term parking leads to increased traffic congestion, thus there is immediate need to implement integrated and targeted parking management systems
- Switching from private cars to Active Travel Modes (cycling, walking) has a significant positive contribution to short-distance travelling, provided the necessary public space

Other innovative initiatives throughout the EU

- The need to create socially distanced urban transport and to recover public space boosted the transition towards sustainable mobility in many EU cities
- Intensive increases of cycle lane networks (i.e. Paris, London, Barcelona) taking space from passenger cars have been implemented, despite backlash from motorists
- Public Transport and shared cycle integration schemes have been implemented (i.e. Prague) in order to facilitate first and last mile trips
- Cargo bike schemes for short distance urban deliveries have dramatically increased (Belgium, Germany, Portugal, UK and more), relieving traffic congestion and reducing short-term parking needs

Mobility as a Service

- Mobility as a Service (MaaS) combines several transport modes and commercial mobility services (PT, ridehailing, bikesharing, carsharing, taxis) into a unified, multimodal mobility offer
- In addition to reducing congestion, MaaS schemes can reduce user transport costs, emissions, and increase accessibility
- Infrastructure as well as legal changes are essential in order to support MaaS schemes in Athens:
  - Facilitate the physical combination of transport modes: e.g., install bike-sharing docks next to public transport stations or better connect bus lines and train lines
  - Create the appropriate regulatory framework for the negotiation between of PT operators and innovators / MaaS providers
  - Create appropriate data sharing frameworks that will help MaaS flourish and PT operators improve their services
  - Encourage the development and pilot testing of user-friendly mobile-phone apps for booking, real time information, payment, etc. taking into account people of different ages and abilities
  - Provide alternative, non app-based ways of using the service, e.g., use of a card for booking, ability to pay with cash.

Smart Cities

- A Smart City is a place where traditional networks and services are made more efficient with the use of digital solutions for the benefit of its inhabitants and business
- The smart transformation of mobility in Athens requires sustained and open-minded efforts going beyond MaaS:
  - Boosting the uptake of zero emission vehicles
  - Encouraging innovation and the use of data and artificial intelligence (AI) for smarter mobility
  - Working towards achieving climate neutrality in key areas of the transport sector
  - Enhancing accessibility, fairness and justice in mobility for all
  - Stepping up transport safety and security across all modes, in line with EU strategic goals

The need for effective monitoring

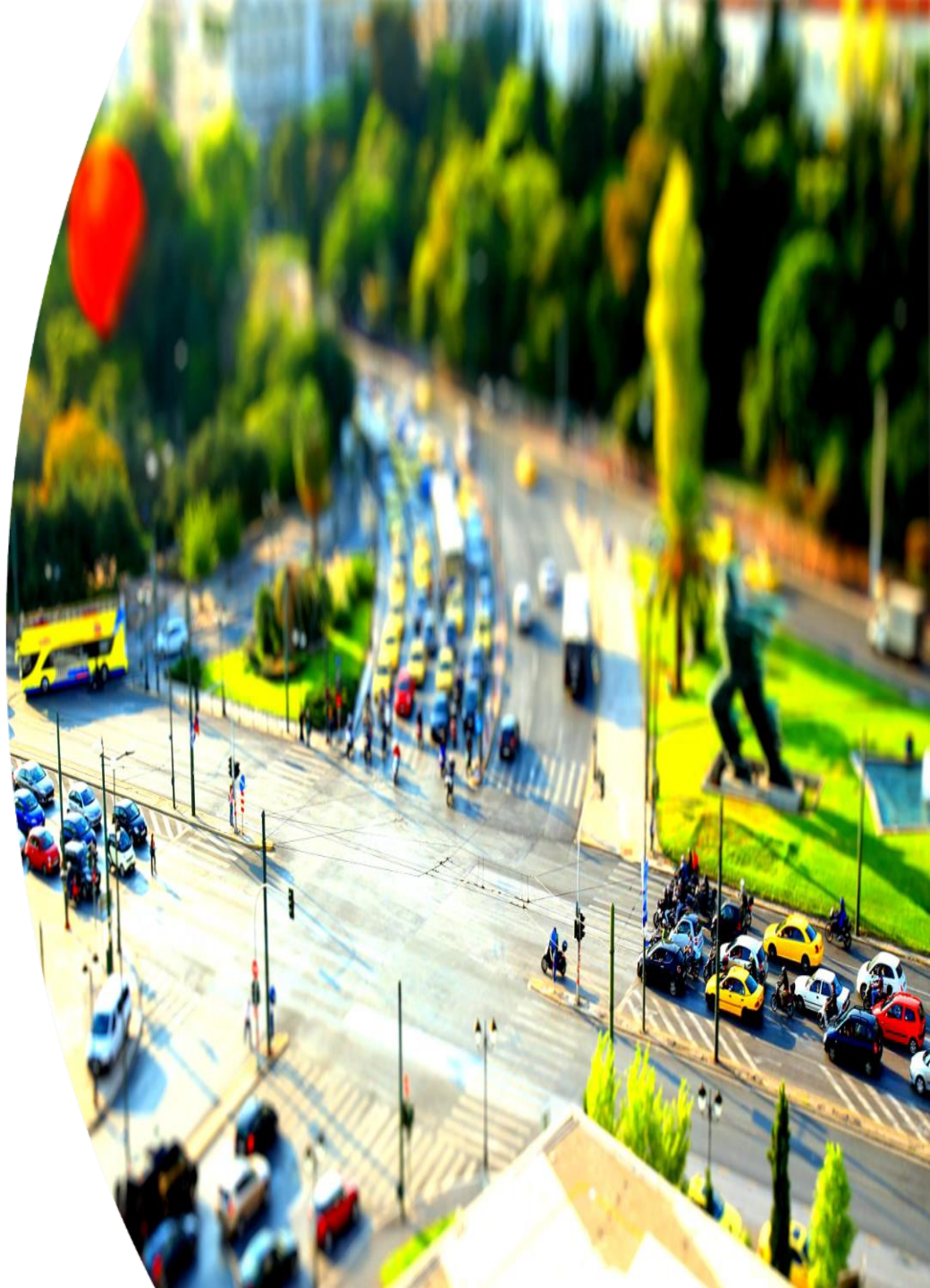
- Currently, important mobility data for Athens are either sparsely collected or not collected at all. As a result, mobility interventions are only made reactively (instead of proactively), while citizens and policy-makers have limited information on the state of the urban transportation system

- The systematic collection, processing, analysis and dissemination of mobility data through is a fundamental pre-requisite.

  - Scientific evidence for better decision support
  - Up to date relevant information to citizens, media, business and decision makers
  - Support for more effective public consultation

Conclusions

- If no immediate action is taken traffic conditions in Athens are expected to continue deteriorating
- Traffic restrictions such as “Daktylios” bring temporary benefits (if they are strictly enforced) but they are not sufficient in the long term
- Public Transport needs to be intensively and sincerely supported
- Integrated and targeted parking management systems need to be implemented
- Active travel modes need to be continuously supported and urban space management needs to be constantly re-evaluated
- Promising innovations need to be tested (bike sharing, other MaaS schemes, cargo bikes)
- The transformation of Athens into a smart city requires constantly rethinking urban mobility and public space in the light of the latest technological and social developments



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