Proposed Operating Model for the Metropolitan Transport Authority of Attica

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Artificial Intelligence for Road Safety and Mobility Workshop

8th UN Global Road Safety Week

Athens, 15 May 2025

DECADE OF ACTION FOR ROAD SAFETY 2021 - 2030

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- Ministry of Infrastructure and Transport :

ΕΛΛΗΝΙΚΗ ΔΗΜΟΚΡΑΤΙΑ
ΥΠΟΥΡΓΕΙΟ ΥΠΟΔΟΜΩΝ ΚΑΙ ΜΕΤΑΦΟΡΩΝ

- Duration of the project:

  May 2022 – July 2023

- In cooperation with:

KPMG

Background

- The Attica transport system is currently fragmented, involving multiple overlapping authorities with unclear boundaries, without a proper centralised body coordinating planning, execution, and performance evaluation.
- Traffic congestion, accidents, energy consumption, and pollution have worsened in recent years, partly due to reliance on private vehicles post-COVID.
- Data collection and monitoring systems are inadequate, limiting decision-making capacity.
- International models (e.g., in Budapest, Frankfurt, Toronto) show that centralized metropolitan authorities improve efficiency and service quality.
- The need for a Metropolitan Authority stems from the goal to enable holistic transport planning, crisis coordination, and integrated infrastructure management.

Objectives

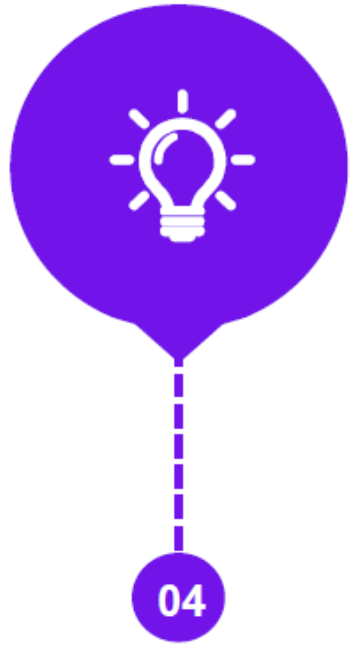
1. **Unify governance** over public transport in the Attica region by consolidating fragmented responsibilities under a single authority.
2. **Coordinate strategic planning, operations, and monitoring** across all public transport modes and stakeholders.
3. **Improve transport efficiency and reliability through centralised** decision-making and oversight.
4. **Enhance service quality** for commuters through better route planning, traffic management, and intermodal connectivity.
5. **Enable data-driven management** by integrating real-time traffic and operational data systems (including the Traffic Management Center).
6. **Support environmental sustainability** by promoting public transport use and reducing reliance on private vehicles.
7. **Establish transparent governance** with clear accountability mechanisms and stakeholder involvement.
8. **Facilitate access to EU funding** by aligning with the objectives of programs like ESPA 2021–2027.
9. **Prepare the system for future challenges**, such as digital transformation, mobility as a service (MaaS), and climate adaptation.

Methodological Approach

Address current and future transport and mobility needs, with a strong focus on improving the service experience for commuters in the Attica region.

Improve the allocation of responsibilities among all involved institutions, aiming for better coordination and collaboration between stakeholders.

Redesign the system with an emphasis on creating a **centralized and unified traffic management system** in Attica, along with a **clear framework for accountability and transparency** toward citizens.



Enhance the operational effectiveness of all involved entities through the **establishment of a new Unified Metropolitan Transport Authority**.

Methodological Approach

Proposed Framework and Method for Organisational Structure Design

- Within each segment of the framework, additional tools and templates are available to support organisational design initiatives.
- The framework is intended to be scalable and adaptable to meet the diverse needs of specific organisational design initiatives.
- It can be applied using a low-, medium-, or high-intensity approach, depending on the depth and complexity required.

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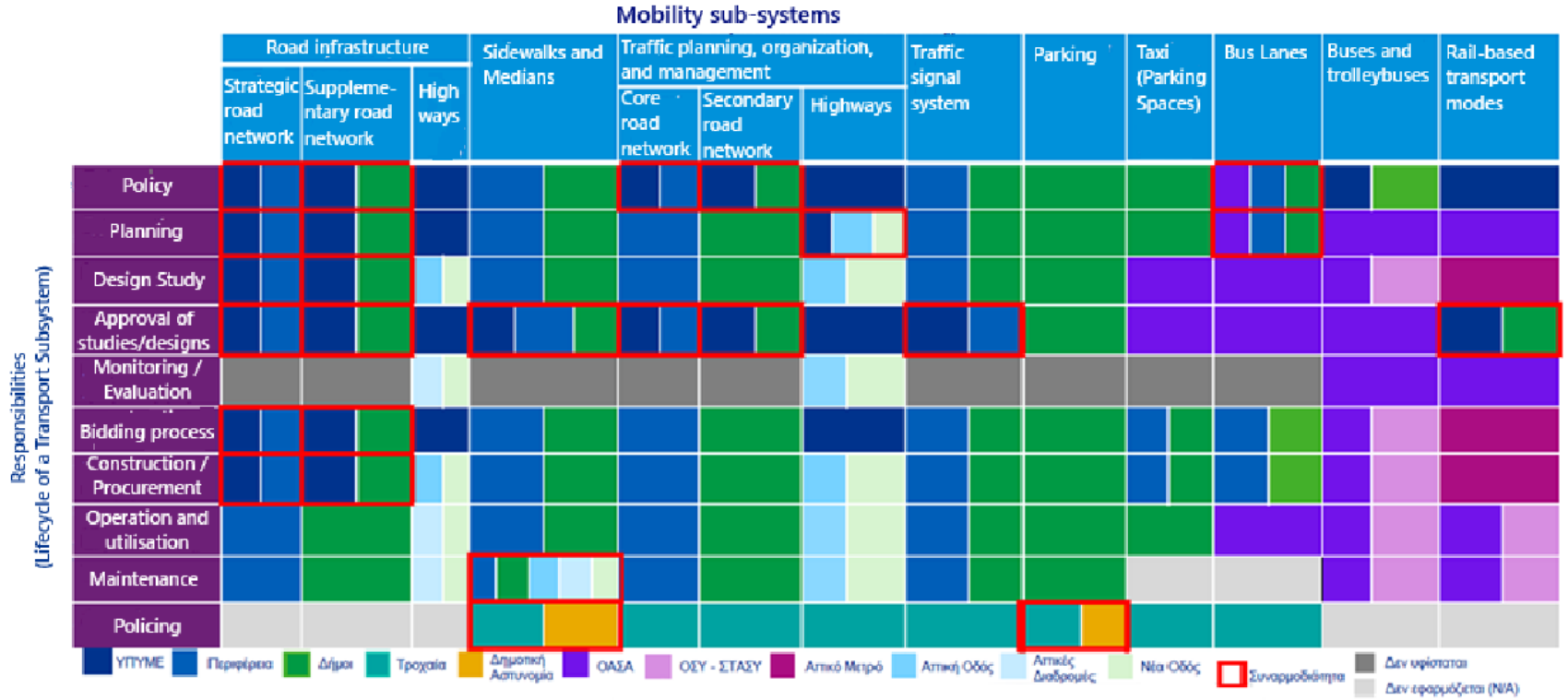
Existing Transport System in Attica



The Metropolitan Transport Authority is a commitment to safer, smarter, and more humane mobility. By unifying fragmented systems and placing people at the center of urban planning, this project aligns with the global vision of 'Streets for Life', where transport is not just about movement, but about dignity, access, and sustainable urban living.

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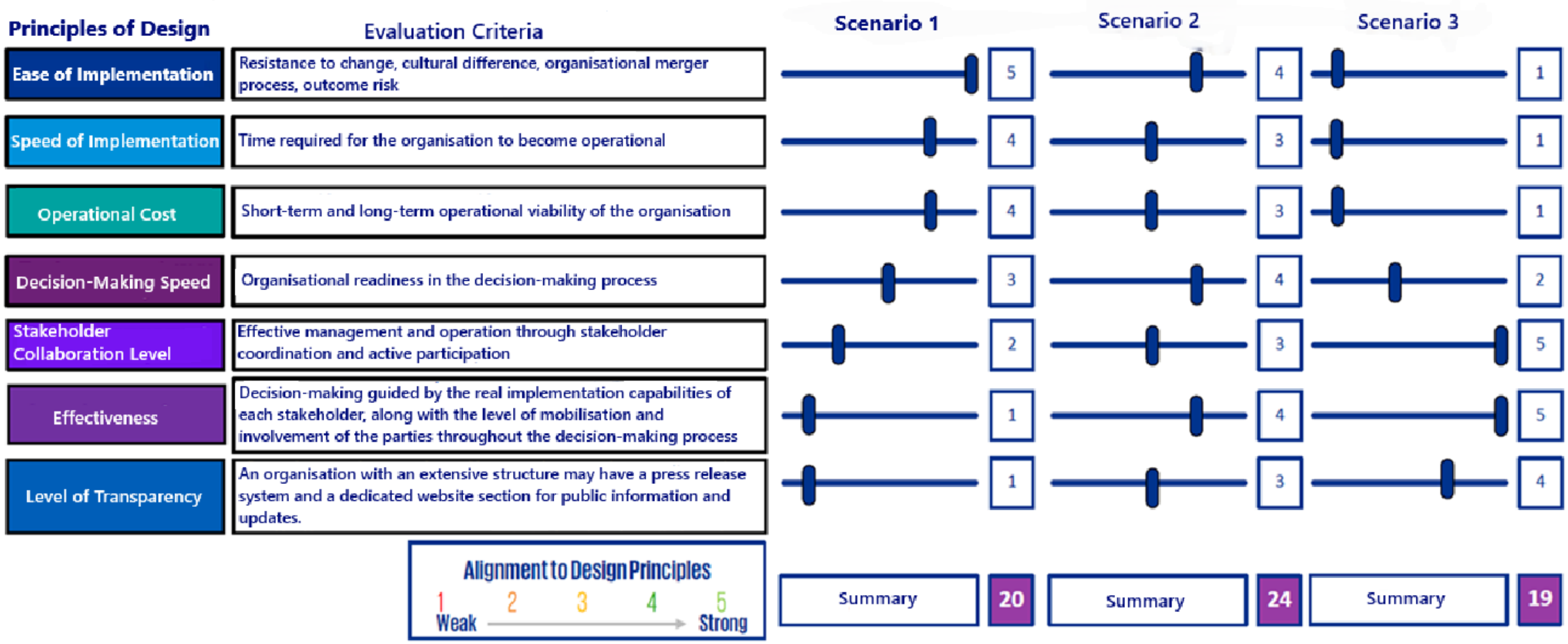
Assessment and Comparison of Proposed Organisational Structures



Evi Koliou, The AMetropolis project

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Expected Results

- A unified, centralised governance structure that eliminates fragmentation and improves coordination among transport authorities.
- Better public transport services with increased reliability, frequency, and integration across different modes (bus, metro, tram).
- Real-time data monitoring and reporting systems to support planning, performance evaluation, and user information.
- Greater transparency and accountability, with clear responsibilities and measurable performance indicators.
- Stronger ability to respond to emergencies, manage disruptions, and adapt to new technologies or mobility trends.
- Environmental improvements through reduced traffic congestion and increased use of sustainable transport modes.
- More efficient use of public resources by eliminating overlapping responsibilities and streamlining operations.

Scientific and Social Impact

- Introduces data-driven planning by integrating real-time monitoring and big data analytics into transport management.
- Fosters collaboration across disciplines (urban planning, traffic engineering, ICT, environmental science).
- Improves daily commuting conditions for millions of residents by enhancing service quality and reliability.
- Enhances accessibility for vulnerable groups (e.g., elderly, persons with disabilities) through better design and integration.
- Promotes public trust through greater transparency, accountability, and responsiveness in transport governance.
- Contributes to public health and safety by reducing accidents, pollution, and time spent in traffic.
- Supports a shift toward sustainable urban living, aligned with citizens' environmental and quality-of-life expectations.

Future Challenges

1. **Complex Stakeholder Coordination:** Aligning priorities across ministries, municipalities, operators, and the Region of Attica will require sustained collaboration and political will.
2. **Cultural Shift in Governance:** Transitioning from fragmented management to centralised, performance-driven governance may face internal inertia or a lack of readiness.
3. **Data Integration & System Interoperability:** Combining and standardising data from multiple legacy systems across agencies is technically and operationally challenging.
4. **Funding Stability:** Ensuring long-term financing for staffing, IT systems, and service enhancements - especially after initial EU funding periods.
5. **Public Acceptance and Awareness:** Gaining public trust and usage of the improved services will require visible benefits and clear communication.

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