“Evaluating framework of transport system performance on urban development”
Dimitriou holds Doctorate in Transport demand forecasting; MSc in Infrastructures Environmental Planning; MSc in Transport Planning & Management; and Diploma (equivalent to 4 years BA & 1 year MSc) in Civil Engineering (sector of transportation).

He is Associate Professor in Management and Quantitative Analysis in Transport Infrastructures Development, providing dedicated courses and research in fields of transport economics, decision making and risk assessment (Dept. of Economics, Democritus University of Thrace, Greece).

He has long experience in field of transportation, delivered many projects in planning, operation, management, business development and economics. He published over 150 papers in referred journals, editions, international conferences and he has elected in executive positions in professional associations and committees of expert.

He is the Chairman of the BoD in Athens International Airport (since 2016) and he was Chairmen of the BoD and CEO in Athens Transports Organisation (2010-2012).
Outline

- Characteristics of integrated transport
  - Concept
  - Socioeconomic impact footprint
  - Planning and Management challenges

- Socioeconomic impact footprint
  - Integrated transport impact
  - Benefits and challenges

- Key drivers towards performance
  - Evaluation framework
  - Case study outputs

- Concluding remarks
  - Discussions
  - Recommendations
Integrated Transport System Concept

“Development of an reliable transfer system between air and ground transports”

as a tool:

- Control the demand in landside area
- Control the demand in terminal building (e.g. arrivals, check-in desks, etc.)
- Decrease the environmental impacts
- Increase the revenues
- Optimum allocation of resources
- Fair pricing
- Improve the level of service to passengers
- Reduce the travel time to/from airport
- Increase the security and safety
- Reduce/Control the environmental impacts
- Increase the PT attractiveness
Transport services integration socioeconomic footprint

Transport demand growth

- Increase FDI
- Increase labor market
- Improve accessibility
- Lead to economic development
- Lead to Welfare

Dimitriou 2107; INTECH: Mobility, Tourism & Travel Behavior

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Impact of ground transports to urban development

Increased reliability of operation

- Fewer delays
- High load factors
- Low emissions

- Fewer crew
- Fewer rolling stock
- Reduce fleet size

More reliable and Efficiency services

Less travel time

- Shift of pax from cars to mass transits
- Reduce road congestion

Reduce ops cost
- Attractive fares
- High LoS

Lower investments
- Min land/yards

New pax attracted

- Additional revenues
- Greater public substitute to transit
- Attract/generate pax - traffic
- Benefits for new & present pax

Lower impacts on environment

- Improve attitude towards PT

Transit operator

Interchanges – Hubs – Station operators

City

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Transport sector key business planning variables

**Strategy**
- New market development
- Regulation / protection vs deregulation
- Funding – capitals leverage
- Socioeconomic impact

**Competitiveness**
- Regulatory framework
- Monitoring/Review performance
- Analysis of the competition
- Provide information to users/market

**Planning**
- New business (routes, destinations, etc)
- Business viability (risk sharing, incentives)
- Intellectual property (new business)
- Benefits return to society (CSR)

**Innovation**
- New Products - services
- IT – ITS – SMART Business
- Artificial Intelligence – machine learning
- Research (SU)

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Dimitriou et al., 2017; IJESRT, 6(1)

Dimitriou et al., 2018; Transportation proceedings, Elsevier

Dimitriou, 2016; Infrastructure Governance, OECD

Dimitriou, 2017; GACS II, ICAO, Athens

Dimitriou, 2017; Mobility as a service, UNECE, Geneva

Dimitriou, 2017; NGAP, ICAO, Canada

Dimitriou, 2018; New Skills, Economist, Athens
Transport sector key benefits adopting integration

- Increase of traffic (passengers and cargo)
  - low cost services
- Take the benefits of network operation
  - Provide accessibility
  - Promote non-transport activities
- Socializing
- Take the benefits of technological innovation:
  - new technologies (ITS)
  - AI applications
Key challenges towards integration

RECONCILING MULTIPLE STRATEGIC TRANSPORT OBJECTIVES

National policy frameworks
Green Growth
Intl. & inland connections
Gateway capacity
'B assure'd funding
Business models
Strategic planning / eval.

OBJECTIVES FOR 2030
CURRENT POSITION

Source: OECD 2015

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Conflicts and challenges towards integration

The supply - demand dilemma

2 ways to tackle delays cause for the transportation/ground access system:

- increase capacity
  - new infrastructures increase capacity, but attract more demand, which quickly leads to the need for still more capacity,

- manage demand
  - deals with measures restraining demand such that it fits within the limits of existing capacity, e.g. pricing methods: cordon, zone, toll pricing and traffic charge applications
Evaluation of integrated transit system performance and attractiveness

Criteria

- Travel Time (compare PT / road access system)
- Access Speed (compare PT / road access system)
- Productive capacity (T-system offered capacity over time)
- Fares (compare pricing policies)

Research outputs

Recommendations

**Action plan towards integration**

1st level
- Identify the public policy goals for integrated transport system
- Breakdown the market needs & their relationship with the existing transport system

2nd level
- Develop strategies and define quantitative measures

3rd level
- Establishing a data gathering and monitoring system

4th level
- Evaluate access system management performance
- Evaluate operation performance of the integrated transport system - network

5th level
- Sharing information to the local, national and international authorities and institutions
- Sharing information to the users of the system

Key issues to create an airport access strategy by level of actions

Main difficulties, such:
- Many stakeholders
- Many different views and prospects
- Difficult define optimum access system and performance
- Establish measures of operation and financial performance between different systems
- Develop an integrated system or a process to monitor performance
- Determine quality and safety measures

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I appreciate for your attention.

QUESTIONS?

For more details contact: ddimitri@econ.duth.gr

Dimitrios J. DIMITRIOU
Planning, Management & Economics in Transport
Dr./Professor Associate, Dept. of Economics, DUTH, Greece

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