Athens, 16 June 2002

Towards delivering sustainable urban regeneration projects: The case of Athens

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Outline

1. Mobility today in Athens
2. City of Athens Vision
3. Athens Great Walk, Pilot Implementation
4. Lessons, Challenges, Conclusions

Mobility today in Athens

- The average speed for passenger cars in the morning peak, estimated at 32 km/h (Athens Traffic Restrictions area, January-May 2022)
- The peak hours in the city centre during weekdays extend from 8 a.m. till 20 p.m. and the most congested day is Friday
- Approximately 18.000 taxis are operating in Athens
- Constant decline in the number of vehicle kilometres of buses (-15% from 2010 to 2018)
- Stable passenger ridership in the metro system during last years
- Micromobility is emerging since 2019
- The pandemic highlighted the need to:
  - ✓ increase the level of service in public transport
  - ✓ increase public space
  - ✓ support active travel modes (cycling, walking)

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).

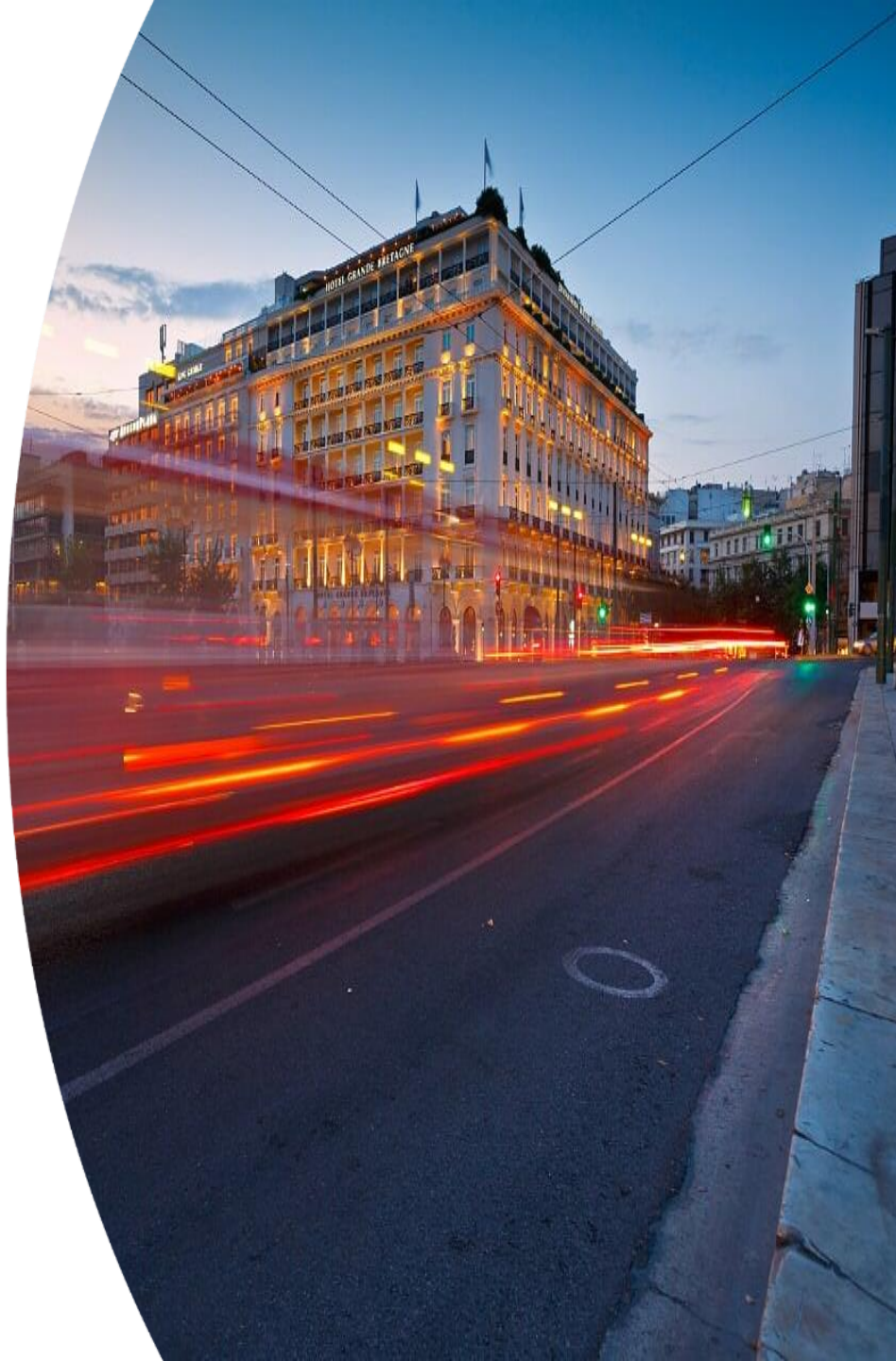
City of Athens Vision

Safe, Green and Efficient Transport for all

New, enhanced quality of urban mobility in Athens, with:

- effective, comfortable, green and safe transportation,
- new stimulus for commerce and tourism,
- reinforcement of the novel, contemporary image of the city and the new Urban Development Plan

following the latest Sustainable Urban Mobility developments, which emphasize strengthening Public Transportation and prioritizing walking and cycling



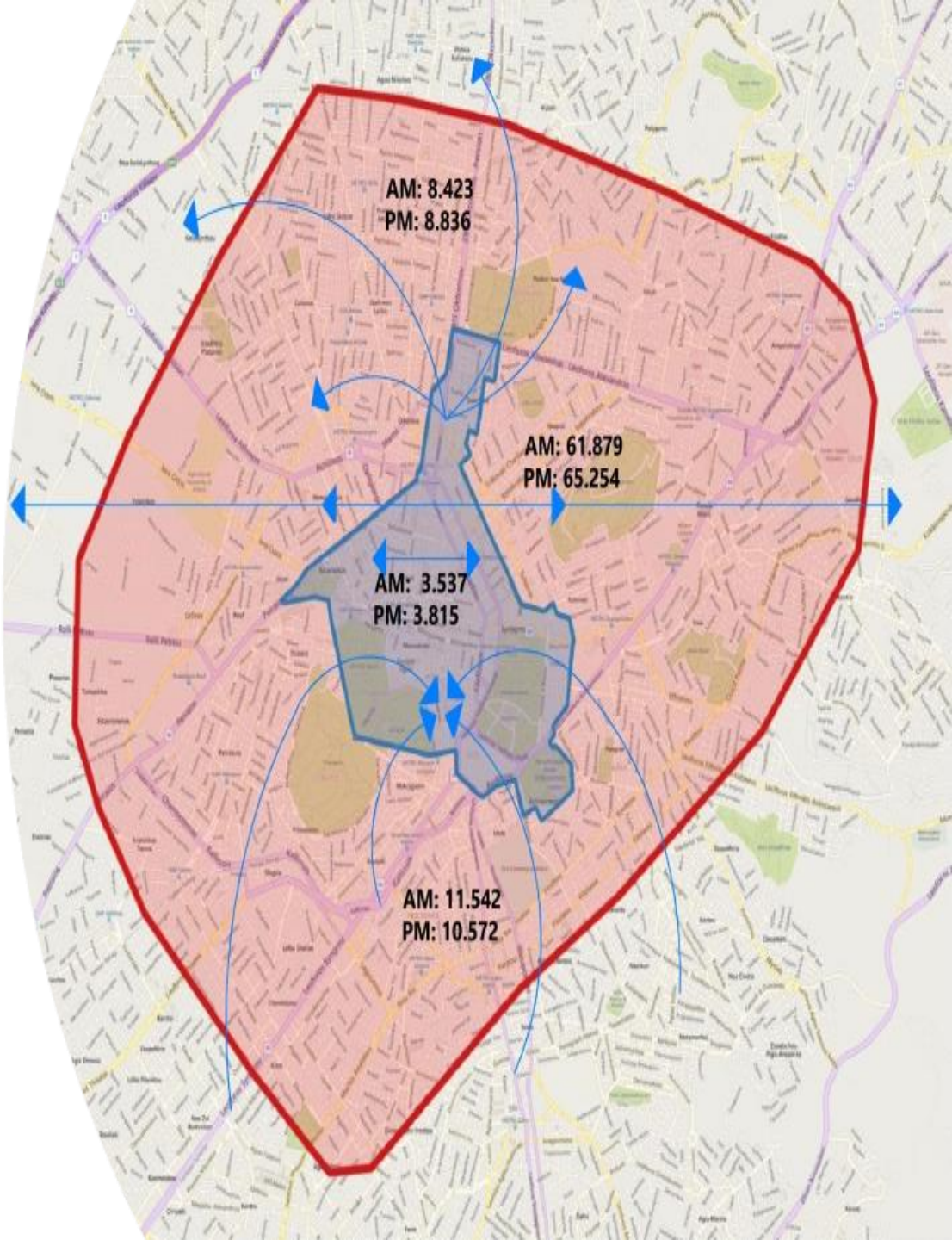
Athens Great Walk

Reform public space for the promotion of public transport and active travel modes

- Harmonized with the Sustainable Urban Mobility Plan of Athens and the related trends in European cities
- Promoting public transport, walking and cycling through new bus, pedestrian and cycle lanes as well as mixed traffic with low speeds
- Wider and safer sidewalks in central axes to increase accessibility
- Streets / areas free of private vehicles
- Parking arrangements, for private vehicles, taxis, motorcycles and people with disabilities

Traffic Impact Study

- Analysis of the current situation in the city of Athens and the Greater Athens area
- Examination of alternative traffic management schemes using the NTUA Traffic macro and micro simulation models for Athens (Aimsun)
- Calculation of Key Performance Indicators for car traffic, public transport, bicycles and pedestrians - Selection of the best scenario
- The model predictions were successfully validated during the implementation



Mobility Performance Indicators

Passenger car traffic		Scenario B3	Scenario B4	Scenario B5	Scenario B6
ΔA1	Vehicle-hours for private transport (study area)	↑ +7,2%	↓ -22,6%	↑ +4,3%	↓ -22,5%
ΔA1	Average vehicle speed (study area)	↓ -18,1%	↓ -3,1%	↓ -13,5%	– -0,4%
ΔA2	Level of Service (study area)	↓ -7.8%	↓ -4,2%	↓ -6,7%	↓ -5,5%
ΔA2	Level of Service (total)	– +1.8%	↑ +3,7%	– +1.1%	↑ +3,6%
ΔA3	Travel times on selected road axes within the study area	↑ +18,1%	↑ +3,1%	↑ +13,5%	– +0,4%
ΔA3	Travel times on external road axes	– +0,4%	↓ -5,0%	– +0,9%	↓ -4,1%

PT - pedestrians		Scenario B3	Scenario B4	Scenario B5	Scenario B6
ΔA4	Urban reforms on road axes (total)	↑ +9ha.	↑ +9ha.	↑ +8.4ha.	↑ +8.4ha.
ΔA4	Streets with limited access to passenger cars	↑ +4.7ha.	↑ +4.7ha.	↑ +4.7ha.	↑ +4.7ha.
ΔA5	Bus lanes (affecting 50+ bus routes)	↑ +3,76km	↑ +3,76km	↑ +2,57km	↑ +2,57km
ΔA6	PT average speed (Panepistimiou st.)	↑ +28%	↑ +35%	↑ +32%	↑ +37%
ΔA6	PT average speed (Akadimias st.)	↑ +22%	↑ +26%	↑ +23%	↑ +27%
	PT ridership		↑ +8,7%		↑ +7,8%

Pilot Implementation

- In June 2020, a pilot implementation of a subset of the interventions was decided, following the example of several cities worldwide on the occasion of the pandemic :
  - to support active travel modes during the pandemic,
  - to assess the mobility interventions in practice,
  - to initiate a live public consultation and dialogue based on pilot results
  - to guide travelers towards better mobility behaviour
- The subset of interventions implemented were:
  - Increase of sidewalks in streets with high pedestrian traffic
  - Exclusive lanes for pedestrians and cyclists
  - Exclusive bus lanes
  - Motorcycle, taxi and disabled parking management
- The evaluation of the pilot implementation led to useful adjustments for the final engineering

Evaluation of Interventions

Advantages

- Decrease of the share of passenger cars on Panepistimiou St. (-12%) with a corresponding increase of taxis (+6%) and motorcycles (+6%)
- Improved Level of Service for bus and trolley passengers, as they do not have to get on/off between taxis and other illegally parked vehicles
- Significant increase in walking on central Axes and the area around the center of Athens (+50%)
- Increase in cycling in and around the city centre
- Removal of illegally parked cars and taxis from busy roads without provoking public reactions
- Reduction of car traffic speed on central roads with positive impact on safety and comfort of vulnerable road users
- Significant reduction of traffic noise and air pollution

Disadvantages

- Temporary (4 weeks) traffic congestion on a number of road axes in and around the city centre such as:
  - Panepistimiou St.
  - Vas. Amalias Av.
  - Vas. Konstantinou Av.
  - Alexandras Av.
- Traffic conditions on the majority of the road axes significantly improved after 3 months, at similar levels as before the pilot implementation

- **The implementation of the final project design is ongoing and its first phase will be delivered within the summer of 2022.**

Road Safety Improvements

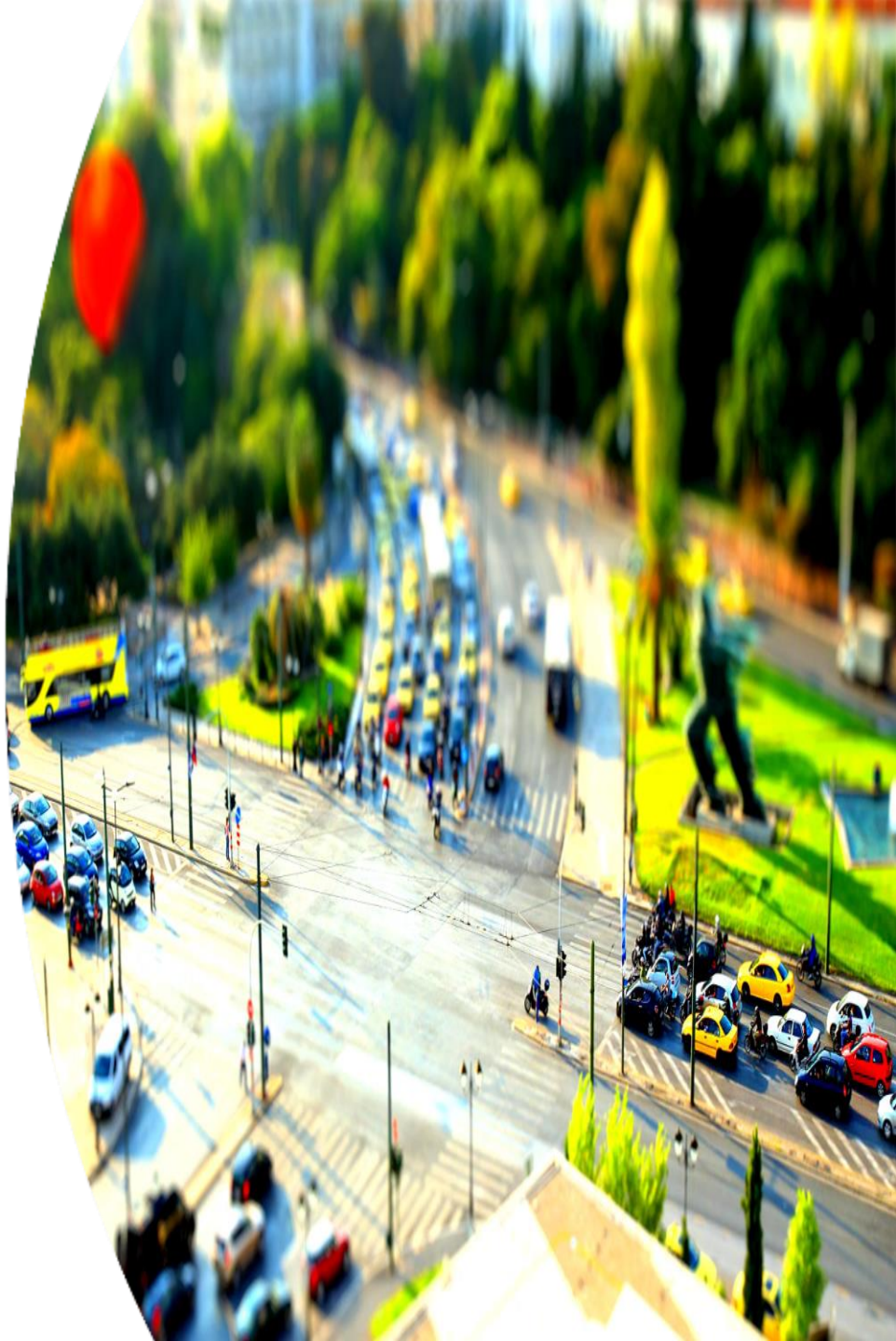
- Expected great safety improvement from the suggested introduction of 30 km/h speed limit
- New infrastructure for better protection of VRUs (PTW, cyclists, pedestrians)
- No accidents were observed during the pilot implementation due to:
  - Appropriate design of the interventions
  - lower average speed
  - reduction of speeding
- Development of a new culture for safer behaviour of all road users

Lessons learned & Future Challenges

- Motivate citizens to participate in public deliberation to collectively shape the future of Athens mobility
- Build broad alliances with individuals, interest groups, private and public sector to further develop sustainable mobility (public transport, cycling, walking, micromobility)
- Make Athens a living example of continuous sustainable mobility and quality of life improvement
- Continue (and ramp up) the collection of quality mobility data in order to keep supporting and further promote evidence based decision making

Conclusion

- The goals and predictions of the new traffic and parking interventions in the context of Athens Great Walk, are fulfilled with a relatively fast adaptation of traffic to the new conditions
- For the first time, the focus on sustainable mobility policy is on people and the environment, in contrast to the unilateral priority in private car traffic
- Changes in the habits of citizens were observed by shifting to more environmentally friendly modes of transport
- These encouraging results provide an opportunity for the expansion of the new sustainable urban mobility policy in all areas of the City of Athens, aiming at the gradual implementation of an integrated network of bicycle lanes and more comfortable walking



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