# DETAILED INFORMATION ON ATHENS METROPOLITAN AREA

### *Population growth*

In the last decade (1991-2001) the total population in Greece increased slightly (by 6.8%) reaching 10,964,020 inhabitants. There are only six Greek cities with population over 100,000 inhabitants. Athens is by far the largest with well over 3 million while Thessaloniki the second largest barely reaching 800,000 and the other four (Patras, Herakleion, Larissa and Volos) are between 100,000 and 250,000 people. It is evident that only Athens can compete as a metropolitan area at an international level although Thessaloniki can also assume a regional (southern Balkan peninsula) role.

Of the major urban centres of Greece, population change in the medium size cities (Herakleion, Larissa and Patras) is well above the national average indicating a certain degree of dynamism for these cities. On the contrary, population change in the Metropolitan areas of Athens and Thessaloniki is below the national average, Athens possessing the lowest growth rate among all cities in the last two decades indicating perhaps that a saturation stage has been reached.

In relative terms Athens holds a major role. Provisional data from the 2001 population census of Greece (at the level of municipality) reveal that one third of the total Greek population still lives in the Athens Metropolitan Area. This percentage has remained stable over the last two decades. This confirms the dominance of Athens as the major concentration of people in the country.

The population of Athens Metropolitan Area increased during the last decade also by 6.8% reaching 3,761,810 inhabitants. Inside this area, the Athens Urban Area also increased and reached 3,187,734 inhabitants representing thus almost 85% of the total. Population in the rest of AMA (Rest of Attica) increased by 27.4% and reached 574,076 inhabitants. This population change is considerably higher than that of the Athens Urban Area and far above the national average. Such rapid growth may be attributed to suburbanization as a result of new infrastructure projects in the area associated with the location of the new Athens international airport which provided also significant employment opportunities and a major boost to the development of the area.

An examination of the absolute and relative (percentage) change of the population for the period 1991-2001 in the municipalities of the Athens Urban Area, reveals that the majority of municipalities experienced growth. The highest positive change in absolute terms is observed in relative terms in the affluent communities on the south-eastern coast of AUA (86.7%). However, the central core (the City of Athens) experienced decline (losing 26,558 inhabitants) suggesting a continuing suburbanization. Minor decline was also observed in several of the immediately surrounding the core municipalities probably as a result of suburbanization and the expansion of commercial and other activities outward from the core, displacing residences. These developments confirm the general patterns observed in other large cities of the world.

Overall population densities increased slightly (reaching an average of 6,979 people per sq. km. in 2001). There are wide differences in terms of population density within AUA.

The most highly populated with 23,080 inhabitants / sq. km., areas form part of the central dense core of AUA. Densities declined in the last decade, more or less following population changes, suggesting an overall lowering of pressures in the centre of the Athens Urban Area, also confirming the general density gradient rule elsewhere in the world.

From a general perspective of growth patterns the following can be summarized:

- There is a movement towards the peripheral municipalities located in the north and the south of AUA. The western (and south-western) part (mostly working suburbs and mixed industry) is already urbanized, an area of lower infrastructure, services and standards of living, therefore not highly attractive to new development.
- Municipalities with high population and considerable density are the ones loosing population in the last decade.
- Municipalities with low population and low population density at the edge of the urbanized area are in most cases attracting new inhabitants.

**Migration has played a decisive role in overall population growth during the past decade**, so it deserves a closer look even at the urban level. The number of registered migrants in the country is 797,091 while it is suspected that at least as many are present without official registration. Almost half of them (376,732)) live in Athens Metropolitan Area representing 10% of the total population. The increase of population is not evenly distributed among the various municipalities. On the contrary there are significant variations of the number of immigrants between different municipalities in the Greater Athens Area. The largest number of immigrants is concentrated in the City of Athens (140,626), representing 18.9% of the population..

### Economic profile of Athens Metropolitan Area (AMA)

Today the Athens Metropolitan Area (AMA) contributes more than one third to the total Gross Value Added of the country (about 38% in 1995 which slightly decreased to 36% in 1998). The structure (sectoral composition) of the AMA economy is quite differentiated in comparison to the rest of the country. The tertiary sector is estimated approximately at 81% (70% in the country) for the same period, while the primary sector represents around 1% in AMA while the corresponding figure for the country is 9%. The secondary sector is below the corresponding national percentage (17.5 for the AMA versus 22% for the country). Overall the AMA has a sectoral structure corresponding to a relatively more modern economy in comparison to the country as a whole.

The branches of the tertiary sector in the AMA have similar or higher contribution in the total GVA compared to the corresponding percentages for the county. The branch which has the highest contribution, in AMA, is public administration –defence and social security, which reaches 11%, while for the country is around 7% of the total GVA. In the secondary sector all branches in AMA show smaller contributions in comparison to those for the whole country. For example manufacturing is approximately 10.5% while for the whole country the respective figure is 12.5%. Manufacturing however, is highly concentrated in the adjacent to AMA prefectures of Viotia and Corinthia, which for many researches are part of the broader Athens Metropolitan Region.

Undoubtedly the tertiary sector is the leading sector of the economy in the Athens Urban Area (AUA) and the AMA. Income and gross value added from the service industry was steadily increasing in the period 1995-1998. The AMA is classified as a service dominated and fast growing region according to a recent study of the European Commission.

The sectors with significant and increasing contribution to the economy of the Athens Metropolitan Area are:

- Real estate, renting and business activities
- Wholesale and retail trade; repair of vehicles and household goods

Some other sectors of comparable significance are:

- Transport, storage and communication
- Hotels and restaurants
- Financial intermediation

Two specific branches from the secondary sector can be underlined as major contributors:

- Construction
- Manufacturing

*Education in AMA*

During the past decades decentralisation has led to the development of several Universities at the periphery. Today there are 18 Universities (and 235 Departments), 8 (and 74) of which respectively are located in AMA. From a cursory view the above figures indicate an unfavourable situation for AMA, but further analysis indicates that one out of every two students (50% or 296,520) studies in Athens. The same situation exists for the post-graduate studies since 48% of all students (25,744) study in Universities located mainly in Athens. However, the figures presented (see annex) refer to registered students. Recent studies have revealed that there is a number of registered students who have abandoned their studies.

Regarding the distribution of the various areas of study are: Humanities 22,3%, Economics 18,2%, Sciences 15,1%, Engineering 11,3%, Medicine 5,9%, Law 5,5%.

*Science parks*

Technological Parks of Greece are designed to help productive industries to restructure their activities so as to take better advantage of new technologies and ultimately become competitive. Based on this approach, the General Secretariat for Research and Development has established four Technological Parks (one in every major city) one of which is also in Athens. Funding the activities of research centers is based on a competitive basis according to their contribution to the overall development of research and technology in the country as a whole.

The AMA the Technology Park "LEUKIPPOS" is hosted in the National Centre for Scientific Research 'Democritos'. The Park was created in 1990 with the initial aim to promote and diffuse technological culture in Greek businesses, industries and the public sector, as well as the creation of new small sized companies in the sector of advanced technology.

***Labour market (Socio - Economic issues)***

Comparing sectoral employment figures between the European Union, Greece and AMA reveal many differences. The service sector is dominant at the national level (60.5% in the year 2000) but is far below the European average (66.5% for the same year). Conversely, AMA's employment rate in the service sector is 74.5%, the highest amongst all Greek regions and well above the European average.

Employment rates of the population aged 15-64 are also below the European average both for Greece and for the majority of regions. AMA's employment rate (54.8) is also below the national (57.4) and the European average (63.8).

Employment performance of AMA is much higher than the European average. AMA actually belongs to the quartile of regions with the 'lowest' employment rates and high employment growth during the period 1996-2000. It is the only Greek region that converges with the European average.

The sectoral distribution of employment (1998) indicates that in the AMA there are 1,484,155 employed persons representing 37.7% of total national employment. The largest part of employment in Financial Intermediation is concentrated in AMA (63.2%). Other significant employment generators in AMA contributing significantly to national employment are: Real Estate with 55.2%, Transport and Communication with 54%, Health and Social Work with 51.3%, Manufacturing with 45.5% and Public Administration with 47.9%.

Unemployment rate in AMA is much higher in comparison to the national figure as well as the European average. In the year 2000 unemployment rate in AMA was 12.2%, while the corresponding rate at national level was 11.1, and at the European level 8.4.

The percentage of population aged 15-64 is comparable to the European as well as to national average. Contrary to that, the percentage of population less than 15 years is below the European average both for Greece and AMA.

One of the strong comparative and competitive advantages of AMA is the educational qualifications of persons aged 25-29. For the year 2000 the percentage of high-educated people in AMA is by far well above the national average for Greece and comparable to the European average. As the role of human capital in the development process becomes fundamental, Athens seems to gain a significant prerequisite for future development.

### *The main characteristics of the Greek Housing Market*

There is a high rate of homeownership at 80% of all households. Owners often purchase their own plot of land, arrange for their home to be built and live there for much of the rest of their lives. Traditionally, limited recourse has been made to mortgage finance.

Changes have been occurring over the past decade. Rising living standards and a greater availability of mortgage finance have increased the significance of housing development companies in the large cities. The first half of 1990s, however, saw a severe depression in the housing market and marked falls in house-building. There was a partial revival from 1997 but high real interest rates kept the market subdued for the rest of the 1990s. Subsequently, the market rebounded.

Data are extremely hard to come by. In particular, there is no general price information and only a little on house – building through which to judge market developments. The residential market is reported to be active and mortgage markets have been expanding at record rates. Demand is strong in the capital and transactions activity robust.

Several areas in greater Athens have seen stagnation in demand and prices, particularly in the more expensive residential areas in the Northern and Southern suburbs. Residential lands is highly priced in these areas and the size of houses is large (over 200 $m^2$). Stronger demand is still reported for houses up to 120$m^2$ across the Attica Region, but this is not been translated into higher prices, which are now in the region of 1200 to 1800 euro per $m^2$.

Prospects for the Athens residential market in 2003 are good. Demand is expected to become stronger in the centre of Athens, especially as regeneration projects are on stream. Suburban demand will also be underpinned by ongoing infrastructure projects, such as the extension of the Metro.

There have been considerable improvements in housing standards in recent decades, particularly in the large prosperous cities. Even so, a large part of the existing housing stock of 4.6 million dwellings has physical inadequacies – roughly a fifth of homes are believed to be sub-standard. There are also many houses in the provinces that are vacant due to population migration to the larger urban centres. Moreover, flats of less that $60m^2$ are common, but they are unsuited to the needs of the typical four-person family and around a third of households face severe constraints. Overall, it is believed that 30% of the current owner occupied stock empty, of poor quality or far too small.

In the big urban centres, the most common way of buying a dwelling is to purchase an existing home. Around 40% of the existing owner households acquired their home in this way. Another option is to have one built on an owned plot. Around a third of owner households did this. There are important regional differences in the share of new building. In the urban conglomerations of Athens and Thessalonika, given their already built-up character, the purchase of an existing house is more usual, while, in other urban centres with populations of above 100.000, new building is more frequent (rising to almost a half of all owner occupiers compared to the national average of a third).

The second source is through a bank loan (21% of households, though this is now rising), while only 10% use funds from selling a previous property. The final 8% consists of mainly low-income people, who say that they had only borrowed from members of the family or friends. Thus, low-income households rarely resort to other forms of borrowing. Using loans is much more common when buying an existing dwelling than in the new built sector. Not surprisingly, therefore, outstanding housing mortgages form a small share of national income and the country has the lowest outstanding mortgage to national income ratio in the EU.

The most important problem of high cost and inadequate supply is to be found in the rental sector, which in Greece is completely private. Since 1980, the share of rented accommodation in the housing market has been falling steadily. For example, between 1988 and 1994 the rental sector, at the national level, decreased from 23% to 20% and in Athens from 33.5% to 31.8%. Over the same period, the share of spending on rent in total household consumer expenditures rose from less that 15% to 20%, and for those on lower incomes to 25% figures unprecedented in Greece.

*Structure of Housing Production: Specificities and Problems*

Production of housing in Greece is characterised by the coexistence of a business sector based on small units of production and a ''self-housing'' sector, which, although it is gradually losing importance is still powerful. ''Self – housing'' consists of a building erected to order of the owner of the building is usually small in size, and may be nothing more than a one-family home.

The sector of housing production by businesses is made up of numerous units small in size, employing few persons, with limited own capital an a minimum of technical equipment. Only recently (after 2000) big (real estate and construction) companies are showing interest in this sector.

*State Interventions and Support*

Direct state intervention in the production of housing is particularly limited; it is exercised exclusively through the housing programmes of the Workers Housing Organisation addressed to the special category of those insured by the Foundation of Social Security (IKA), including provision of housing with favourable repayment terms.

The most important interventions of the public sector of direct and indirect regulations is through financing of households by special credit institutions, interest rate subsidy for purchase of first homes, and through the system of tax exemptions.

### *Transport and infrastructure*

The primary road network of the Athens Metropolitan Area has a total length of 2,380 km with 51 underpasses. The average density of the network is 5.5km/ $km^2$ of urban area while average speeds are 18 km/hour for the areas inside the Athens ring, 22 km/ hour for peri-urban areas, 30 km/ hour for suburban areas and 48 km/ hour for non urban areas. Inside the Athens road ring, 58,440 parking spaces are offered of which 33,380 are along the road network (22,010 concern illegal parking). The total demand for parking spaces is 65,440 thus there is a 7,000 deficit.

At this moment Athens conurbation (3.800.000 inhabitants) consist of an extend of the following sub-systems:

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|---|---|---|
| Motor - bus network | 6.942 km – 312 routes | in private bus-lanes 48km (other 12.5km programmed) |
| Trolley – bus network | 356 km – 22 routes | |
| Metro network | 50km – 3 routes | (48 stations) |
| Tramway/ LRT network | 24km – 3 routes | (47 halts) (the 95% of the total length in private right of way) |

Suburban railway network 118 km – 3 routes

The Athens International Airport is connected with Athens by suburban railway, metro and express buses and with Korinthos by suburban railway. All the main regional centres of Athens Basin and Attica Prefecture are connected (or is planned form the Athens Master Plan to be) with Athens and Piraeus by the rail-based public transport system (metro, tramway, suburban railway) which is under development and extension.

The construction of by-pass regional motorways, restriction measures for car traffic and pedestrianisation in targeted areas, the extension of bulanes, the priority to Public Transports, the construction of Park and Ride site in the regional stations of the urban and suburban railway network, the integrated ticketing system (through ticketing) and the appropriate policy for parking (compatible to the targets of Athens Structural Plan) are some of the tools for the reorganization of Transport System within the Urban Re-development plan which is foreseen within the implementation of the Athens Structural Plan.

Regarding transfers, in a total of 8 million daily, the modal split is the following:

41% public transports and specific buses

47% private cars

8% taxi

4% motorcycles

Ten years ago the modal split was worse for public transports vs private cars (31% and 39% relatively). The reason why public transports increased their percentage in the overall number of transfers (urban-suburban), despite the latter has also been increased, is the dramatic improvement of the Public Transports Infrastructure and rolling stock and the Integrated demand Management which was done by the Athens Public Transports Authorities in cooperation with the Ministries of Transports and Public Works – Environmental Protection – Urban and Regional Planning. The above mentioned procedures were based in the Athens Structural Plan as it was revised in 1991 and 1999, within the upgrading needs of the continuous operational plan and in connection of the preparation of the ''olympic transportation plan'' for the Games 2004.

Total number of transfers within Athens Greater Area has been increased more than 30% last 15 years. Every year more than 100.000 private cars area added to the total fleet and there are also 16.500 taxis. So the above mentioned measures were urgent to cope with Athens pollution and traffic problem and are to be continued.

### *Environmental planning for AMA*

Initially, environmental policy priorities were specialized in the Structural Plan of Athens (SPA) while its operational part was mostly described in the "Attica SOS" program implemented by the Hellenic Ministry for the Environment, Spatial Planning and Public Works (1996 – 2002).

The specific program aimed at improving environmental conditions in the Attica region where Athens resides and included interventions at local and regional scale in the thematic areas of air, water, waste, traffic, noise, land planning, urban development, environmental awareness and legislation. Several actions were identified, contributing towards this goal such as the:

- Establishment of a special area concentrating the activities of wholesale trade
- Establishment of a technology–research park at Lavrio
- Reduction of atmospheric pollution through specific measures (i.e. replacing old vehicles, improving the quality of fuel, etc.)
- Construction of the metro, the tramway and the suburban railway
- Upgrading of road infrastructure (external ring, main road axis Stavrou-Elefsinas-Spaton, etc.)
- Regulation of land uses of supra local functions of commerce and administration along the main urban road axes like the Kifissias, Messoghion, Syngrou and Piraios avenues.

- The integration/ unification of the Athens' archaeological sites into a park

**In parallel**, the aforementioned national priorities in parallel with the specific needs for the environment of the Athens metropolitan area shape environmental policy and action at the regional level as described in the Operational Program for the Attica Region (2000 – 2006). Specifically:

- Water resource management; A major component of environmental policy was the provision of a central waste water treatment plant, already in operation, which has improved dramatically the quality of coastal waters in the last few years or so.
- Solid waste management; initiatives and projects in relation to infrastructure and equipment for recycling, collection and transportation, establishment of landfill sites.
- Protection of biodiversity and natural habitats; restoration of urban and coastal areas, support of green and recreation areas, protection and promotion of habitats and areas with high ecological value.
- Forest management; Actions include: widening of forest road network, precautionary and forest protection projects (i.e. creation of special zones), works against soil erosion, elaboration of management of plans, etc.

The connection of activities between the private and public sector in environmental protection issues remains exceptionally limited. Overall there is emphasis on traditional sectoral/ thematic approaches to environmental policy rather than an integrated framework with a strong spatial component.

Regarding monitoring mechanisms for environmental projects and activities, despite fragmented improvements, a uniform, cohesive and systematic monitoring mechanism has not been established. Furthermore, significant bureaucratic and technical problems still remain for the approval of environment terms.

Also, in view of the preparation of Athens Olympics of 2004, a ''Strategic Action Plan'' was prepared and implemented for the ''Aesthetic and Functional Improvement of Athens Metropolitan Area'' involving Central and Local Agencies, Public and Private bodies. This program was mainly concerned with actions improving the Public Space (i.e. façade Renewal, Urban Green enhancement and public squares, etc) and is still going on with great success.

### *1.11.Opportunities and bottlenecks: SWOT analysis on AMA`*

| **Strengths** | Weaknesses |
|---|---|
| Broader Issues<br>Participation of the country in the EE<br>Favorable geographical position for business activities in the East Mediterranean, Middle East and the Balkans<br>Relatively low inter-regional inequalities | Broader Issues<br>Eccentric position in respect to the “core” European markets<br>Disproportionate weight of AMA in relation to the national scale (almost 40% of the total population etc.) |
| Socio-Economic<br>Amelioration of the macro-economic environment in Greece<br>Relatively modern economy (as indicated by the sectoral structure)<br>Increasing (although still timid) cooperation between public-private sector in the context of major public projects (mainly development of technical infrastructure for transportation, etc.)<br>Relatively satisfactory degree of social cohesion<br>Low criminality | Socio-Economic<br>Relatively small number of seats of multinational enterprises<br>Restricted economic base at a national level<br><br>**Low foreign direct investments**<br>Incomplete institutional context, which impedes further development of public-private partnerships for major projects<br>High unemployment rates (over both the national and the European averages) |
| Resources and spatial structure<br>Rich historic heritage and concentration of archaeological monuments<br>Mild climate which favors easy lifestyle outdoors activities<br>Extended coastal zone, suitable to a great extent for tourism development and recreation<br>Lack of certain excesses of the “mainstream” post-war European urbanization (extremely exclusive zoning, massive social housing buildings of low quality)<br>Recently (since the beginning of the 90s), relative amelioration in some environmental parameters (water and, partially, air pollution) | Resources and spatial structure<br>Persisting environmental problems (noise, waste and, partially, air pollution)-Problems of quality of life<br>Lack of identity (destruction of recent architectural heritage) and weak “image of the city”<br>Traffic congestion problems and crucial deficit of car-park space (both in the commercial zones and the residential areas)<br>Extensive Urban sprawl and uncontrolled development, and high percentage of illegal building<br>Rapid Urbanization of coastal areas<br>Lack of open spaces/parks and loss of forests<br>Illegal building<br>Substantial areas with very high residential densities (despite a not excessive overall density at the metropolitan region level) |
| Human capital<br>High educational attainment of persons aged between 25-59 (higher than the EU15 average) | **Human capital**<br><br>**Low (below the EU-15 average) percentage of population aged less than 15 years** |
| | Management<br>Lack of an administrative or even of a coordinating |

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| | mechanism at the Metropolitan level<br><br>**Insufficient management –limited use of modern tools (emphasis on institutional and planning tools)** |
| ***Opportunities*** | ***Threats*** |
| <u>Broader changes</u><br>The enlargement of the European Union<br>Proximity to emerging economies (Balkans and the area of Black Sea)<br>Amelioration of the geopolitical “climate” in the Balkans<br>Very good relations and cooperation with East Mediterranean countries | <u>Broader changes</u><br>(Possibly) Future deterioration of the geopolitical “climate” in the Balkans and/or the Middle East |
| <u>For Economic Development</u><br>Significant investments for the 2004 Olympic Games (as well as international promotion)<br>Very substantial available resources from the 3rd Community Support Framework (CSF)<br>Major interventions aiming at the protection and enhancement of cultural heritage (e.g. unification of archaeological sites). It is expected that they will have positive impacts not only on the quality of life but also on economic development | <u>For Economic Development</u><br>Further shrinkage of the manufacture base due to the intensified competition in the European economic area<br>Delay in the progress of 3rd CSF and, possibly, loss of a part of the available amounts<br>Inertia of public sector<br>Persisting structural problems in the “real” economy<br>Failure to capture the benefits of the post-Olympic phase |

***Sources:***


1. *Population and Socio-Economic Profile: National Census 2001*
2. *Housing: Athens Metropolitan Regional Review – University of Thessaly, Laboratory of Urban and regional Planning 2002*
3. *Transportation: Yearly survey of the Organization for Public Transport of Athens – March 2005*