



Portfolio CESUR-NUA

Centre for Urban and Regional Systems

Core scope Urban Planning and Environment-NUA

Urbanism and Environment (NUA) is one of the work nuclei of CESUR, an academic centre dedicated to interdisciplinary research, focusing on Urbanism and the Environment, Systems Engineering and Transport Systems.

The main objectives of the Urbanism and Environment Nucleus (NUA) are:

- *to contribute to the excellence of CESUR;*
- *to develop innovative interdisciplinary approaches to sustainable urban and regional development;*
- *to engage in quality educational programmes (graduate courses, MSc and PhD);*
- *to progress on indicators related to publication, seminars and training courses;*
- *to liaise with international networks on the main research topics with a view to future research activities.*

In 2010 the research group continued their efforts to increase the number of publications and improve its research activity.

*The **(NUA) group** concentrated its work on three main research areas:*

- a) Urban Planning and Management;*
- b) Landscape Planning and Regional Development.*

This research was carried out in articulation with thesis orientation, as well cooperation with foreign universities and research centres.

The group maintained, and will maintain, its engagement in projects providing a direct service to the community, especially in cases where the project area or data collected may contribute to more in-depth knowledge of the main research topics. This engagement has primarily taken the form of cooperation with the city council planning departments and consultancy to private firms.

With a view to improve the relationships with others universities and the public administration the group will continue to pursue its programme of international workshops, seminars and courses on the main areas of research.

Prof. Antunes Ferreira

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0. Introduction

CESUR - Centre for Urban and Regional Systems – is a research unit operating within Lisbon's Instituto Superior Técnico (IST) belonging to a network of research units supported by the Foundation for Science and Technology (FCT), which reports to the Ministry of Science and Technology.

This mission has involved the development of an open approach that promotes:

- A wide range of projects aimed at solving specific problems of public and private entities.
- Advanced research to improve understanding and modeling of real systems, as well as improve existing methodologies for the formulation of public policy and planning, designing and managing systems.
- Increased training of young colleagues who follow this approach and offered training for supervisors, managers and technicians from public and private organizations to improve their professional practices.
- A diversified cooperation with leading national and international institutions.

Therefore, these four types of activities are not different or even conflicting in internship programs, but to adopt an integrated and interdisciplinary approach that goes CESUR since 1975, promoting a new culture of innovation and change management across multiple distributed knowledge networks. During these three decades, many achievements have been obtained to understand and solve the problems of modern society, to develop new scientific knowledge to improve the methodologies and practices adopted in Portugal in the EU or elsewhere, with thousands of colleagues benefited from the training offered by CESUR.

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CESUR includes three nucleuses of work:

- Infrastructure and Transportation Systems Policy;
- Systems and Management;
- Urbanism and Environment (NUA).

CESUR currently offers the facilities and the resources enabling both teachers belonging to the Institute's 'Urbanism, Transportation, Road Infrastructure and Systems Section', as well as, to teachers and researchers from outside the Institute, or even the University, if acknowledged as correspondents, to fully carry out research programmes. The Unit also fosters cooperation with students – particularly Civil Engineering, Territorial Engineering and Architecture students – thus enhancing the advantages of a critical thinking mass. Graduate students are thus introduced into a research and investigation environment.

This Portfolio concentrates on the work developed by NUA, the research unit belonging to CESUR whose scope focuses on the areas of Urbanism and the Environment.

1. Centre for Urban and Regional Systems – CESUR

Coordinator	Professor João de Quinhones Levy
Data of establishment of the Centre	1975
Major scientific areas	<ul style="list-style-type: none"> • Systems Engineering • Transport Systems • Urbanism and Environment (NUA)
Type of research	Theoretical, methodological and applied
Scope	<ul style="list-style-type: none"> • Civil Engineering and Urban and Regional Planning
Postgraduate activities:	Coordination of multiple masters programmes, ad hoc coordination of a masters programme at UTL, orientation of masters and doctoral theses.
Scientific dissemination activities:	Specialization courses, organization of conferences seminars and workshops
Basic training of researchers:	Civil Engineers, Planning Engineers, Architects, Landscape architects.
Library	An integral part of the library and the Department of Civil Engineering and Architecture.

History: The centre was created in 1975 as an interdisciplinary platform for research aimed at solving problems of regional and urban planning, transport and operational research. The creation of the centre was a collaboration of three schools, with the initial intention of supporting a graduate programme, which in 1978 became a Master's in Urban and Regional Planning at the Technical University of Lisbon. Then it became a centre of the Technical University of Lisbon, before being integrated into Instituto Superior Técnico, due to the formation of own centres by researchers from other schools at UTL.

Composition: The centre is made of all faculty members of the section of Urban Development, Transportation, Highway and Systems at the Department of Civil Engineering and Architecture at Instituto Superior Técnico. It also includes teacher-researchers from outside the Technical University of Lisbon accepted by the Centre as correspondents.

Description of researchers: 50% of the senior researchers gained their PhD degrees abroad; the other 50% have PhDs from IST. All researchers maintain contacts and collaborations with foreign universities.

Researchers from abroad: The centre regularly has a number of researchers and academics from abroad.

Internal collaboration: *There is a high level of joint participation in the different areas in research and services. The Scientific Committee meets three times a year, with each area presenting the results of their research, allowing for the exchange of information and possibility of discussing on-going projects in each area.*

External collaboration:

National: *ISCTE; Universidade Aberta [Open University]; Católica University; Engineering and Architecture Schools, University of Porto; Faculty of Social and Human Science, New University of Lisbon; Faculty of Science and Technologies, University of Coimbra; Faculty of Humanities, University of Lisbon; Algarve University; Aveiro University; Instituto Superior de Psicologia Aplicada; Local and regional government.*

Internacional: *Politécnico di Milano, Uni. Bologna, Italy; T.U. Berlin, Stuttgart Technik Architektur, Uni. Bonn, Uni. Kaiserslautern, Germany; University of Copenhagen, Denmark; Université Libre de Bruxelles, Université de Mons-Hainaut, Belgium; École Architecture de Bordeaux, École Nationale de Travaux Publics de l'État de Lyon, Institut d'Urbanisme de Paris, Université de Paris-Dauphine/LAMSADE, France; École Polytechnique Fédérale de Lausanne, ITEP, Switzerland; Escuela Técnica Superior de Ingenieros de Caminos, Canales y Puertos de Madrid, Universidad Politécnica de Cataluña, Spain; Faculdade de Arquitectura da TU Delft, T.U. Eindhoven, The Netherlands; Liverpool University, School of Architecture, Heriot-Watt University; School of Built Environment at De Montfort University of Leicester, University of Lancaster, University of Strathclyde Business School, United Kingdom; University College Dublin, Ireland; University of Ulster at Jordanstown, Northern Ireland; Colorado State University, Massachusetts Institute of Technology, North Carolina State University, University of Berkeley, University of California, United States; N.T.U. Athens, T.E.I. of Piraeus, Athens, Greece; Mimar Sinan University and Yildiz Technical University, Turkey; Eastern Mediterranean University, Turkish Republic of Cyprus; IBAM - Instituto Brasileiro de Administração Municipal, Universidade Federal de Mato Grosso, Universidade Federal de Santa Catarina, Universidade Federal do Rio Grande do Sul, Pontifícia Universidade Católica de São Paulo, Universidade de Mackenzie de São Paulo, Universidade de Pernambuco, Brazil.*

There has also been significant collaboration with companies resulting in projects for the provision of services.

Impact of research on education: *Particular impact in terms of updating the contents and curricula of disciplines. In addition, the masters and doctoral programs are the responsibility of the CESUR research members, for all disciplines related to transport, urban infrastructure, urban and regional planning, urban administration and management and operational research from the integrated masters in Architecture and Civil Engineering; the Master's degree in Territorial Engineering (2nd cycle), and the Master in Urban and Regional Planning (MUOT), which are coordinated by the department of Urbanism, Transport, Highway and Systems of the Department of Civil Engineering and Architecture at Instituto Superior Técnico.*

Advanced training: *The centre participates in training courses through FUNDEC.*

Funding: *Foundation for Science and Technology, Directorate General for Spatial Planning and Urban Development and Portuguese Environmental Agency.*

Secretarial Support: *The section has four secretaries who supports the centre and are funded by Instituto Superior Técnico.*

Governance: *The Centre has an Executive Committee that manages the administrative centre, promotes proactive actions, pointing out research projects to develop or enhance and attempts to define research priorities, despite the great scientific and organizational autonomy enjoyed by the areas of R & D.*

It also has a Scientific Committee which is composed for all doctorates, which with the propose of evaluation all scientific activities carried out in this centre. To maintain a balanced spun up, a part of the funding aims the direct support to research and for acquisition of literature.

This research centre has two main tasks; reporting of activity, participation in research projects in several areas and the centre promotion, and another centred in the research projects of each main area of R & D.

Organizational culture: *The organizational culture focuses on the scientific areas of the grouping of members in and around, which develops further the spirit of the group and the discussion of ideas.*

Group activities: *Regular meetings three times a year for presentations and discussion of the work in each scientific area.*

Leadership: *The president is elected by all doctorates that belong to the centre. The president of the centre is more an administrative manager and facilitates joint measures than a coordinator of a research strategy for the centre.*

2. NUA - Staff

	FUNCTION	Research Unit
Ana Júlia Pinto	Student member	NUA
Ana Luísa Brandão	Student member	NUA
Ana Morais de Sá	Assistant	NUA
Ana Margarida Catana	Specialist member	NUA
António Ricardo da Costa	Researcher	NUA
Maria Beatriz Condessa	Researcher	NUA
Fernando Nunes da Silva	Researcher	NUA
Ana Isabel Loupa Ramos	Researcher	NUA
Joana Castro e Almeida Gonçalves	Assistant	NUA
João Coelho dos Reis	Research grant holder	NUA
Joaquim Paulino Pereira	Researcher	NUA
Jorge Batista e Silva	Researcher	NUA
Jorge Manuel Gonçalves	Researcher	NUA
José Antunes Ferreira *	Researcher	NUA
Maria da Graça Saraiva	Researcher	NUA
Maria de Fátima Bernardo	Specialist member	NUA
Maria Joana Castro e Almeida	Assistant	NUA
Maria Susana Neto	Specialist member	NUA
Manuel da Costa Lobo (Prof.)	Researcher	NUA
Natália Teixeira Gonçalves	Research grant holder	NUA
Pedro Brandão	Researcher	NUA

***Supervisor**

3. Provision of services - NUA

Evaluation of the scientific activities performed, consultancy, provision of expertise and provision of related services. This portfolio contains brief descriptions of some of the projects that have been carried out by the core NUA in the recent years; the projects are explained in greater detail in the following pages.

Project	Supervisor
3.1 Urban Planning and Management	
<i>Transport Study and Detailed Plans for São João da Caparica</i>	<i>Prof. Jorge Batista e Silva</i>
<i>Urban Study for the “Algés-Loures” Axis</i>	<i>Prof. Fernando Nunes da Silva</i>
<i>Studies for Urban Planning and Renewal of the Railway Zones in Entroncamento</i>	<i>Prof. Fernando Nunes da Silva</i>
<i>Urban Studies for the City of Sines – Advisory</i>	<i>Prof. Fernando Nunes da Silva Prof. José Antunes Ferreira</i>
<i>UNOP 1 and UNOP 2 (Tróia) - Road Network and Transport System</i>	<i>Prof. Fernando Nunes da Silva</i>
<i>Study on Pedestrian Support Systems for Lisbon’s Downtown Areas</i>	<i>Prof. Fernando Nunes da Silva</i>
<i>Territorial Monitoring System for the Municipality of Palmela</i>	<i>Prof. Jorge Batista e Silva</i>
<i>“Alcântara-Aeroporto/Gare do Oriente” and “Falagueira-Santa Apolónia”</i>	<i>Prof. Fernando Nunes da Silva</i>
<i>Detailed Plan for the “Monte da Rocha” Dam</i>	<i>Prof. Fernando Nunes da Silva</i>
<i>Revision of the Municipal Plan of Tomar</i>	<i>Prof. José Antunes Ferreira</i>
<i>Polis Programme in Costa da Caparica – Accessibility and Transport System</i>	<i>Prof. Fernando Nunes da Silva</i>
<i>Revision of the Municipal Plan of Sines</i>	<i>Prof. José Antunes Ferreira</i>
<i>Revision of the Municipal Plan of Almada</i>	<i>Prof. Fernando Nunes da Silva Prof. José Antunes Ferreira</i>
<i>Urban Development Feasibility Study for Amieira</i>	<i>Prof. Fernando Nunes da Silva</i>
<i>Revision of the Municipal Plan of Santiago do Cacém</i>	<i>Prof. Antunes Ferreira</i>
<i>POLIS Strategic Plan - Costa da Caparica</i>	<i>Prof. Jorge Batista e Silva Prof. Fernando Nunes da Silva</i>
<i>Acrópole XXI</i>	<i>Prof. Fernando Nunes da Silva</i>

3.2 Landscape Planning and Regional Development	
<i>Road Network Plan for the Municipality of Palmela</i>	<i>Prof. Jorge Batista e Silva Prof. Fernando Nunes da Silva</i>
<i>Sustainable Mobility Project</i>	<i>Prof. Fernando Nunes da Silva</i>
<i>State of the Environment. Report for the Year 2003</i>	<i>Prof. Fernando Nunes da Silva</i>
<i>Manual of Methods and Techniques for Sustainable Urban Development</i>	<i>Prof. Fernando Nunes da Silva</i>
<i>Territorial Transformation and Location Dynamics – New Centralities in the Lisbon Metropolitan Area</i>	<i>Prof. Fernando Nunes da Silva</i>
<i>Implementation Plan for the National Strategy for Sustainable Development (PI-ENDS)</i>	<i>Prof. Fernando Nunes da Silva</i>
<i>Strategic Evaluation and Monitoring of PROTAML. (Regional Plan for the Metropolitan Area of Lisbon)</i>	<i>Prof. Fernando Nunes da Silva Architect Hipólito Bettencourt</i>
<i>Portuguese Annual Statistics. Chapter - Urban Planning</i>	<i>Prof. Fernando Nunes da Silva</i>
<i>Planning of the Road Network and Accessibilities for the Municipality of Vila Franca de Xira</i>	<i>Prof. Jorge Batista e Silva Prof. Fernando Nunes da Silva</i>
<i>Urban Development Strategy for the Border Areas of Elvas/Badajoz</i>	<i>Prof. Fernando Nunes da Silva</i>
<i>Environment Report 2007</i>	<i>Prof. Fernando Nunes da Silva</i>
<i>North West Hospital Location Study</i>	<i>Prof. Beatriz Condessa</i>
<i>Dwelling Dynamics in Lisbon</i>	<i>Prof. José Antunes Ferreira</i>
<i>Study for the Secondary Level of the Road Network of the Municipality of Almada</i>	<i>Prof. Jorge Baptista e Silva</i>

3.1 Urban Planning and Management



Transport Study and Detailed Plans for São João da Caparica



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Start: September 2004

End: September 2005

Description: Technical support for the Strategic Plan and four Detailed Plans for environmental enhancement and urban renewal for the area of São João da Caparica / Trafaria, namely:

-Support for the achievement of the following Detailed Plans: Urbbrasol; Trafaria Forest; Monte da Caparica and FFH.

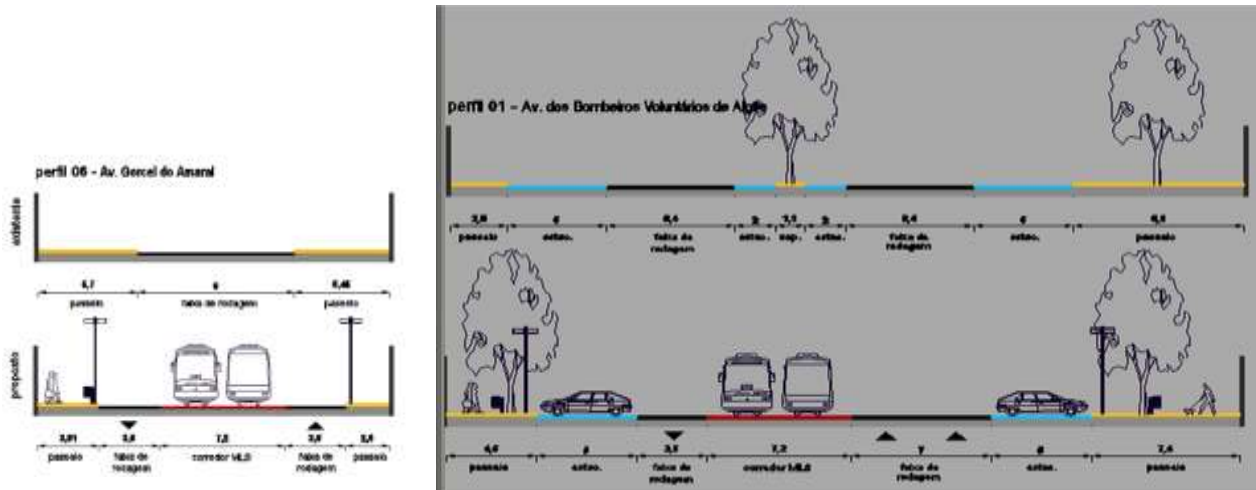
- Consultancy to the “Parque Expo” technical team.

Client: PARQUE EXPO

Supervisor: Prof. Jorge Batista e Silva

Other members of the team: Prof. Fernando Nunes da Silva, Prof. Paulino Pereira, engineers Rita Soares and Alexandra Gomes.

Urban Study for the “Algés-Loures” Axis



Start: January 2003

End: July 2003

Description: Urban Study for the Algés-Loures Axis.

Client: Metropolitano de Lisboa, EP

Supervisor: Prof. Fernando Nunes da Silva

Studies for Urban Planning and Renewal of the Railway Zones in Entroncamento



Start: June 2002

End: August 2003

Description: Studies for urban planning and renewal of the railway zones in Entroncamento. The programme was aimed at assessing the urban potential of the area, and proposing and developing a coherent urban structure that enables the use of those places as a multifunctional space for urban functions, taking into account the needs of expanding the urban agglomeration of Entroncamento and creating new residential areas and new retail space and urban facilities to support the population.

Client: INVESFER

Supervisor: Prof. Fernando Nunes da Silva

Other members of the team: architect Francisco Serdoura, engineer Vera Gonçalves, engineer Vanda Lopes, architect Rita Castel' Branco and architect Susana Raposo

Urban Studies for the City of Sines – Advisory



Start: January 1999

End: March 2007

Description: Provision of advice and assistance in terms of planning and urban management, as well as in the development of a social housing policy. This work aims to support the implementation and urban management of the municipal plans, namely: Detailed Plan for expansion of the North Zone; Detailed Plan for expansion of the South Zone; Plan for the Historic Centre of Sines; Detailed Plan of the camping site and surroundings.

The urban plan for the historic centre of Sines seeks integration into government programmes, namely the POLIS, PROCOM, REHABITA and RECRIA.

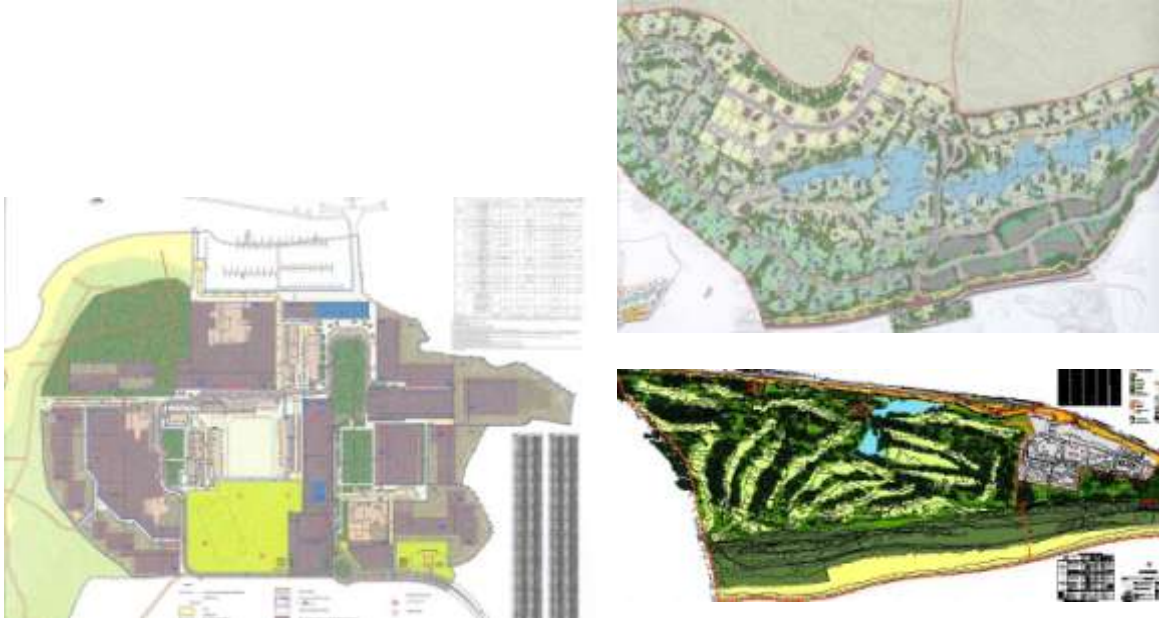
The definition of a system for implementing and financing the urban operations identified in the Detail Plans of the expansion areas of Sines is also required.

Client: City Council of Sines

Supervisors: Prof. Fernando Nunes da Silva, Prof. José Antunes Ferreira

Other members of the team: architect Francisco Serdoura, engineer Vanda Lopes, engineer Paula Brandão, architect Carlos Marques da Costa

UNOP 1 and UNOP 2 (Tróia) - Road Network and Transport System



Start: January 2001

End: May 2004

Description: Development of solutions to the road network, transport system and parking for the Detailed Plans of UNOP 1- Urban Settlement and UNOP2- Tourist-Urban Centre.

- Define the concept of movement, transportation and parking to be adopted.
- Define a prior solution for the mapping of the road network and directions of movement, as well as the location and design of parking.
- Present a proposed layout of the road network, transport system, movement and parking, with the definition of the respective cross-sections and elements of design.

Client: OA – Oficina de Arquitectura

Supervisor: Prof. Fernando Nunes da Silva

Other members of the team: engineer Joana Castro e Almeida

Territorial Monitoring System for the Municipality of Palmela



Start: November 2002

End: January 2004

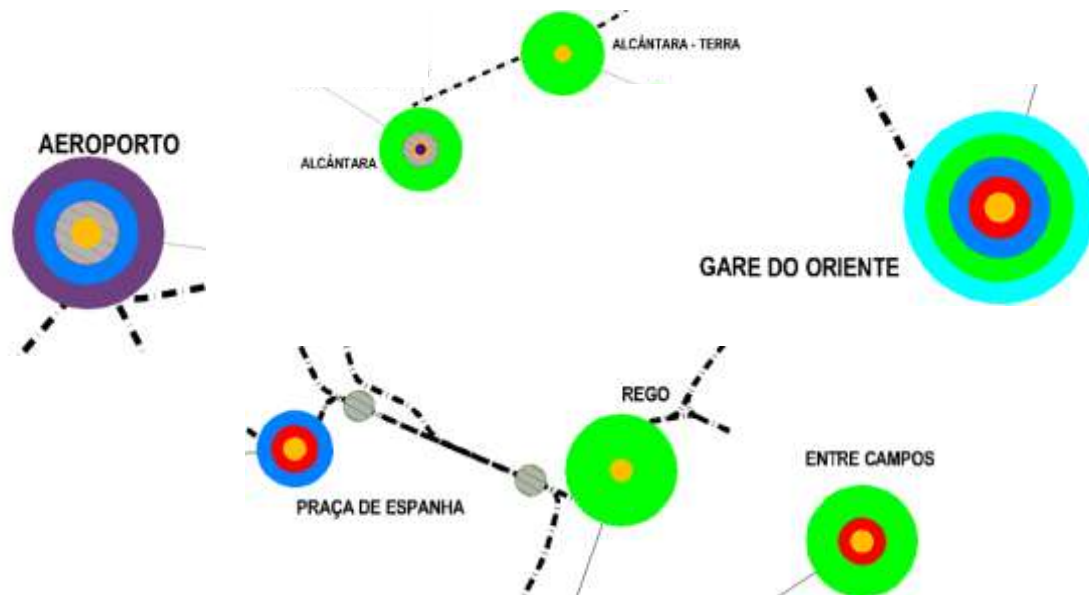
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Description: This project had the main purpose of identifying an extensive set of indicators for monitoring the territorial performance of the municipality considering the social, economic, environmental and urban development dimensions with a view to supporting: a) the creation of a municipal territorial observatory; b) the regular preparation of a spatial planning state report (REOT) in order to provide data and useful information to support the revision of the Municipal Master Plan (PDM) and other planning tools. This work was based on extensive consultation with different technical areas of the City Council, using “post it sessions” and cognitive maps, that identified six areas of concern (population and environment, planning, municipal and urban management, economic structure, social equipments, social cohesion) and a total of 180 monitoring indicators to be based on the regular elaboration of 23 thematic maps.

Client: Municipality of Palmela

Supervisor: Prof. Jorge Silva

Other members of the team: engineer Paula Brandão

“Alcântara-Aeroporto/Gare do Oriente” and “Falagueira-Santa Apolónia”

Start: December 2002

End: February 2003

Description: Evaluation of the layout of the Collective Public Transport Systems (TCSP) in Lisbon: Alcântara - Airport/Gare do Oriente and Falagueira - Santa Apolónia.

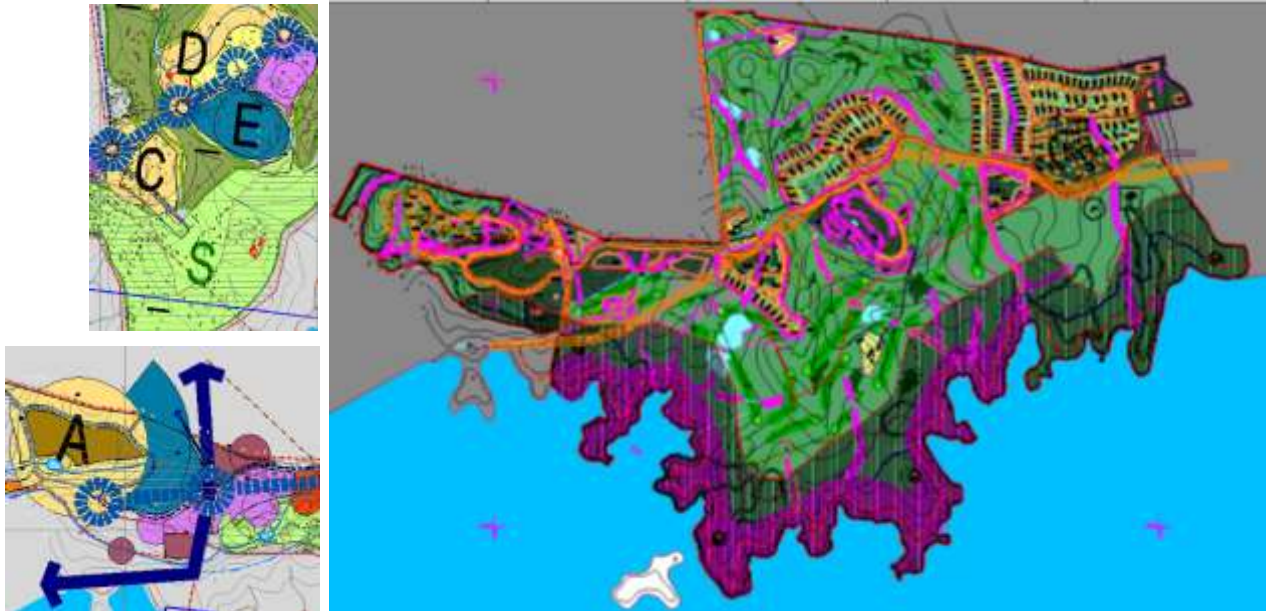
Study the potential urban operations related to the proposed transport system and spatial planning connected with the areas affected by it, within the evaluation process of the TCSP trace in Lisbon: Alcântara-Aeroporto/Gare do Oriente and Falagueira – Santa Apolónia.

Client: CARRISTUR

Supervisor: Prof. Fernando Nunes da Silva

Other members of the team: engineers Vanda Lopes and Vera Gonçalves.

Detailed Plan for the “Monte da Rocha” dam



Start: September 2002

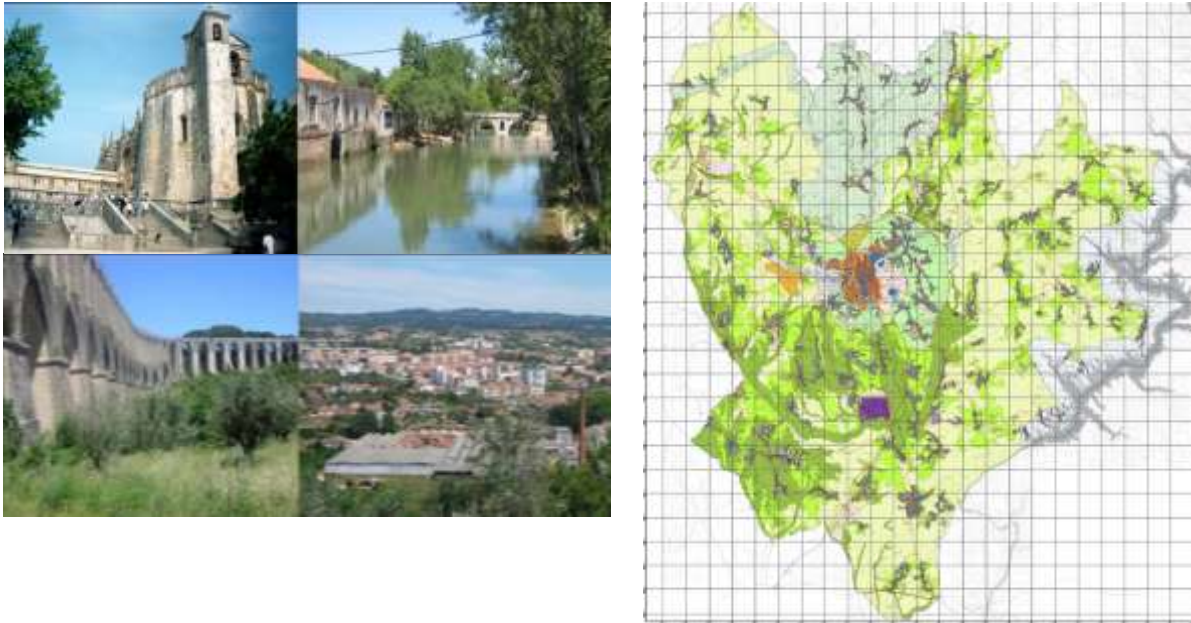
End: June 2003

Description: Spatial planning for Monte da Rocha dam, in order to boost local tourism and help to promote the urban development of the municipality.

Client: Ourique City Council

Supervisor: Prof. Fernando Nunes da Silva

Other members of the team: architect Francisco Serdoura, landscape architect Graça Saraiva, engineer Vanda Lopes, architects Pedro Balejo and Rita Castel’Branco and Dr. Manuel Reis Ferreira

Revision of the Municipal Plan of Tomar.

Start: February 2007

End: -

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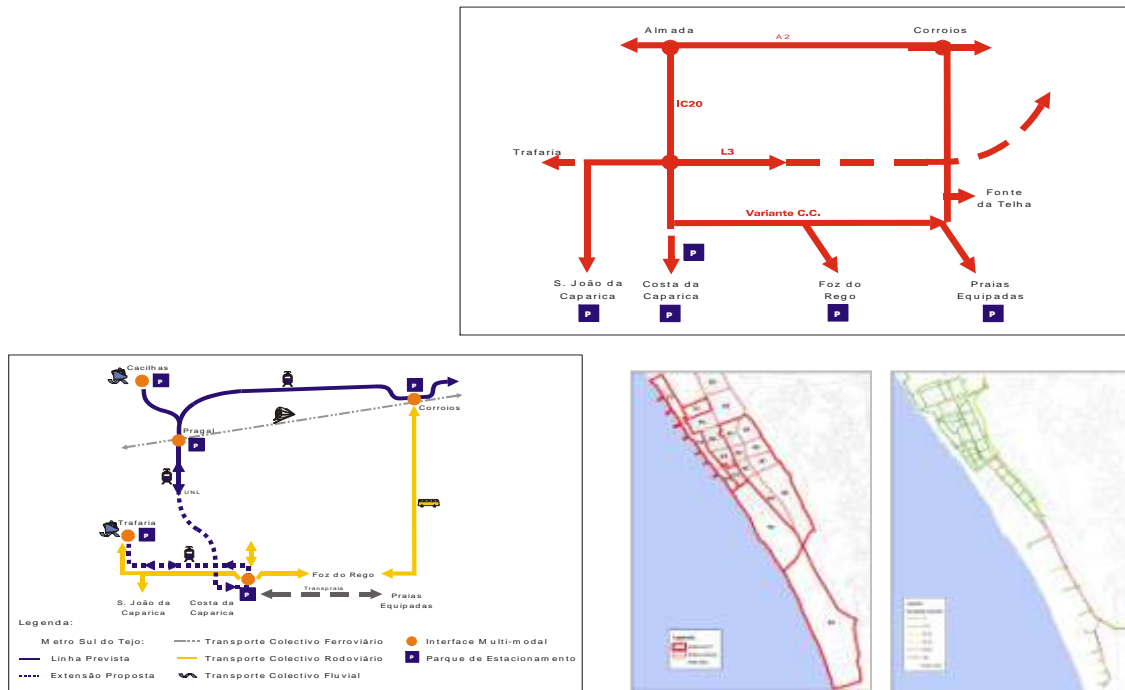
Description: The revision of the Municipal Plan is anchored in the Portuguese land management legal framework 'RJIGT', which establishes the obligation of municipalities to revise their municipal master plans 10 years after their entry into force. The scope of work corresponds to that established in the RJIGT. It focuses on the need to reconcile the strategic objectives set by the city council with the system of use of the soil and its classification. The work includes consultancy in the procedures for monitoring, consultation, participation, approval, ratification and publication of the Plan.

Client: Tomar City Council

Supervisor: Prof. José Antunes Ferreira

Other members of the team: Prof. Beatriz Condessa, Prof. Isabel Ramos, Prof. João Levy, Prof. Jorge Gonçalves, engineers Joana Castro e Almeida Gonçalves, Pedro Pinto, João Reis, Dr^a Rita Marinho

Polis Programme in Costa da Caparica – Accessibility and Transport System



Start: July 2007
End: October 2007

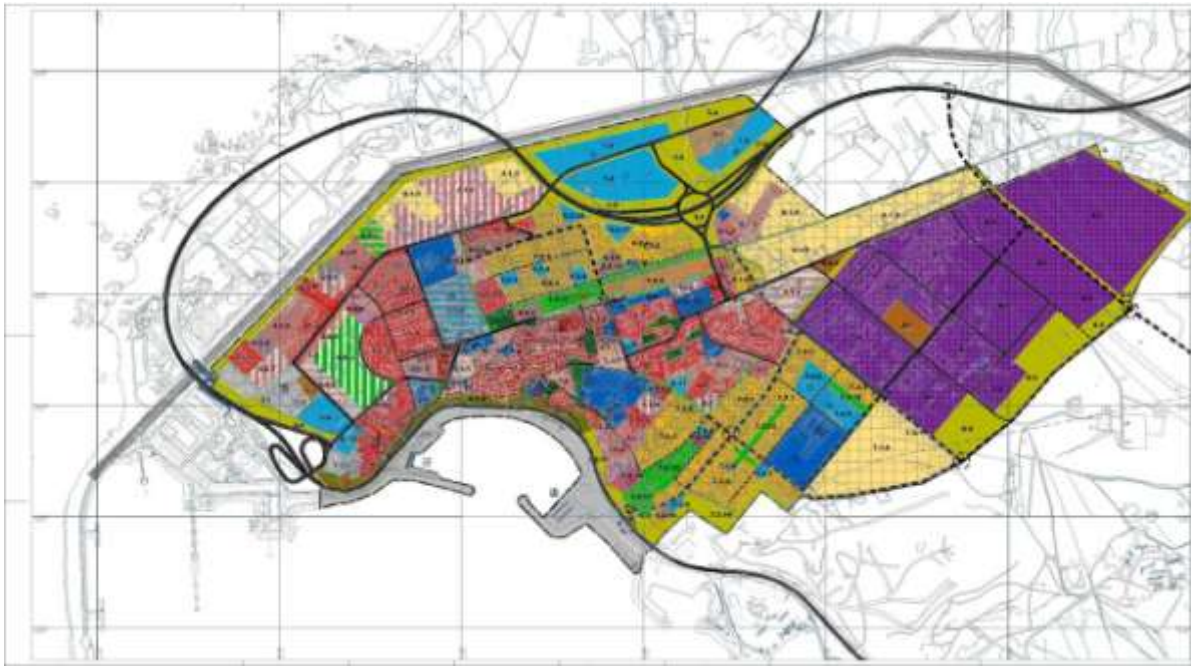
Description: Study for the Costa da Caparica accessibility, transport, and parking system. The first phase of this study is the updating of the results of the Strategic Plan, which would lead to a re-evaluation, based on the information available now, of the transport systems proposed. In a second phase, the proposed transport system would be supported with the results of an investigation and parking surveys undertaken in the summer of 2007.

Client: CostaPolis - Sociedade para o Desenvolvimento do Programa Polis na Costa da Caparica, S.A.

Supervisor: Prof. Fernando Nunes da Silva

Other members of the team: engineers Rita Soares and Sandra Caetano

Revision of the Municipal Plan of Sines



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Start: June 2007

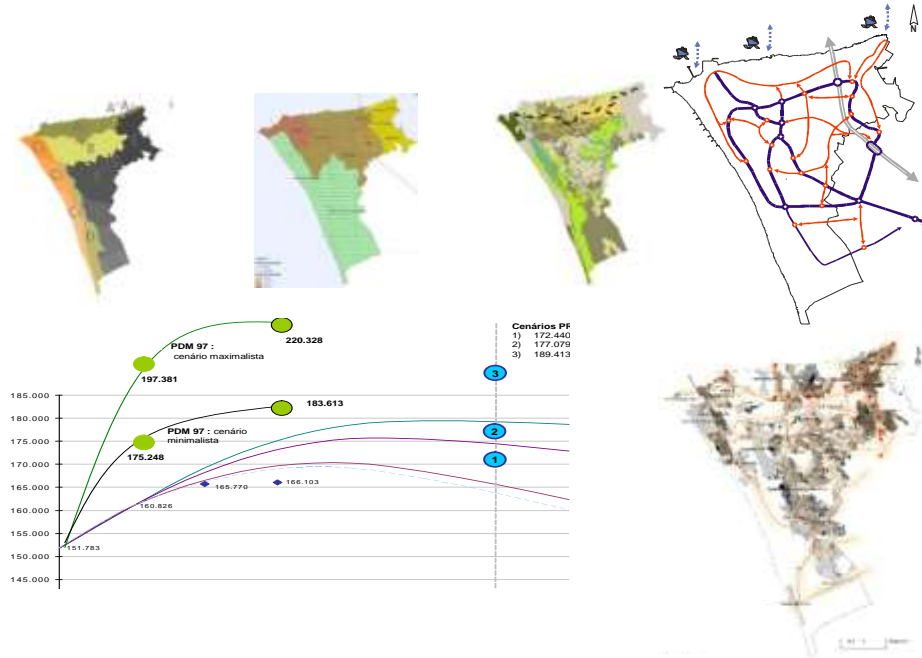
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Description: The study followed the legal procedures for the Revision of a Municipal Plan. The aims of the work are: elaboration of studies on the regional and municipal context, exploring the valences this relationship may result in terms of image, economic scale and culture. This led to the enhancement of the structural and strategic plan, from the perspective of the management plan. One of the great concerns in conducting this study was to place particular importance on public participation.

Client: Sines City Council

Supervisor: Prof. José Antunes Ferreira

Revision of the Municipal Plan of Almada



Start: October 2007

End: -

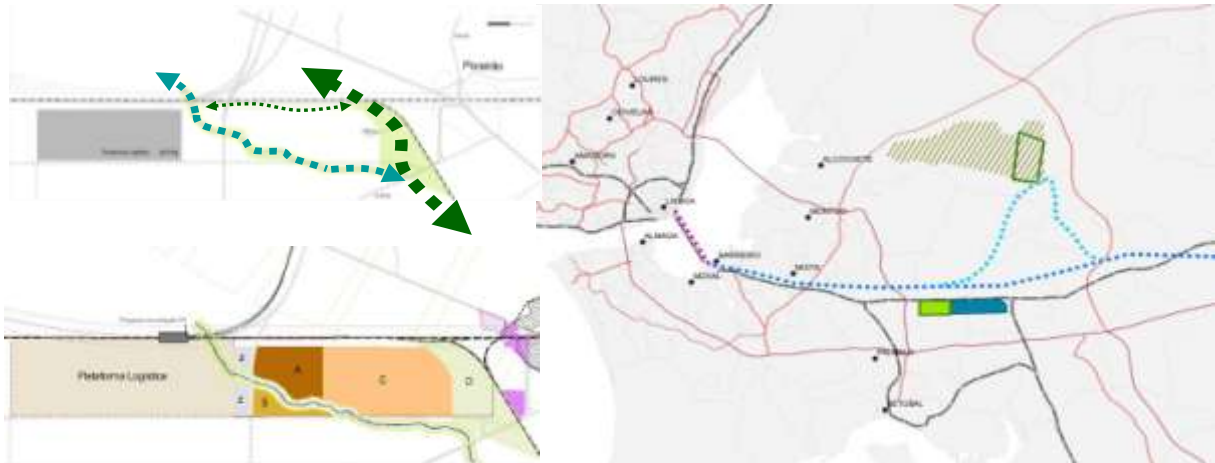
Description: Providing support services for the work of the Municipality of Almada in the field of Planning and Land Management, in particular regarding the revision of its Municipal Plan; providing consultancy and team coordination assistance in order to provide Almada City Council with the tools and reference documents to implement the revision of the Municipal Plan, as well as ensuring the drafting of technical reports relating to the available specialties.

Client: Almada City Council

Supervisor: Prof. Fernando Nunes da Silva, Prof. José Antunes Ferreira

Other members of the team: Prof. Jorge Gonçalves, Prof. Isabel Loupa Ramos, engineers Rita Soares and Paulo Cambra

Urban Development Feasibility Study for Amieira



Start: July 2008

End: October 2009

Description: Urban viability study for a 653 ha property located in the zone of Poceirão, municipality of Palmela. The study aims to: identify and characterize the constraints to changing the current land use to further urban use; evaluate the urban potential of the property in the framework of the legal restrictions and guidelines and their integration into the foreseen urban system for the Peninsula of Setúbal; define possible scenarios of land use and urban mix, taking into account the urban and functional framework; quantify the resulting urban benefits, as well the associated development costs; systematize the legal and administrative steps to be taken, in order to obtain planning approval for an eventual urban project.

Client: GESFIMO

Supervisor: Prof. Fernando Nunes da Silva

Other members of the team: Prof. Jorge Gonçalves, Prof. Isabel Loupa Ramos, engineers Paulo Cambra and Rita Soares

Revision of the Municipal Plan of Santiago do Cacém

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Start: July 2008

End: -

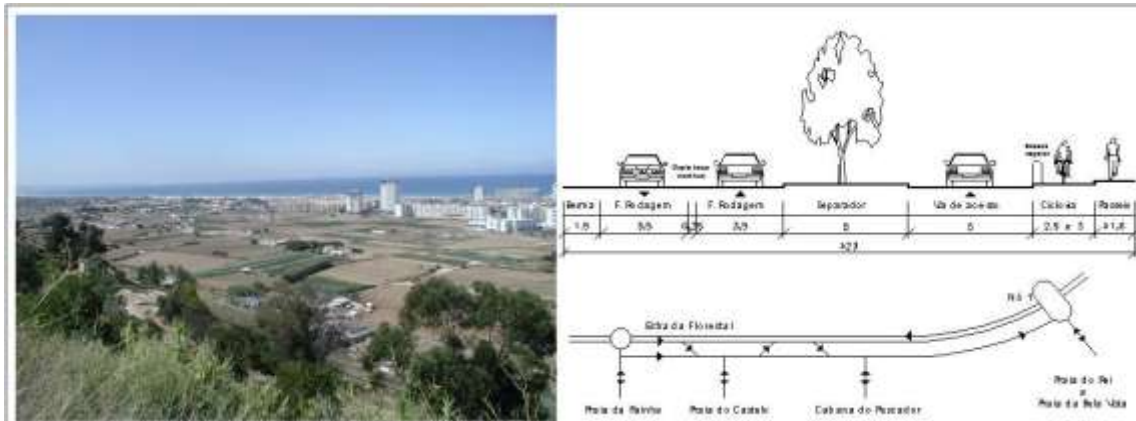
Description: *The study looks at the legal procedures regarding the content of a Municipal Plan and the methodologies used for its preparation and its presentation. The approach to this territory, with a strong geographical and functional relationship with Sines, follows the concept of the previous study. The main concern is the integration and coordination of the structural and strategic components on an inter-municipal scale, from the perspective of the management plan. The study is expected to be finished in July 2011.*

Client: Santiago do Cacém City Council

Supervisor: Prof. Antunes Ferreira

Other members of the team: Prof. José Antunes Ferreira, Prof. João Levy, engineers Duarte Leal, Natália Gonçalves and João Reis

POLIS Strategic Plan - Costa da Caparica



Start: January 2001

End: April 2001

Description: This work is part of the preparation of the Strategic Plan for Costa da Caparica, as part of the POLIS Programme, and focus on Transport and Accessibility. The main aims are: developing a concept for individual accessibility and mobility and public transport to Costa da Caparica, establishing the general principles for automobile circulation, pedestrian zones and the parking policy for the central core of the area; definition and brief description of the alternatives in public transport, which may be developed as part of the Detailed Plan for the core area of Costa da Caparica.

Client: PARQUE EXPO

Supervisor: Prof. Jorge Silva, Prof. Fernando Nunes da Silva

Other members of the team: Prof. Jorge Batista e Silva, engineers Rita Soares and Paula Brandão.

Acrópole XXI



Start: November 2009

End: December 2010

Description: Consultancy for the development of the studies on accessibility and parking needed to implement the Acrópole XXI project.

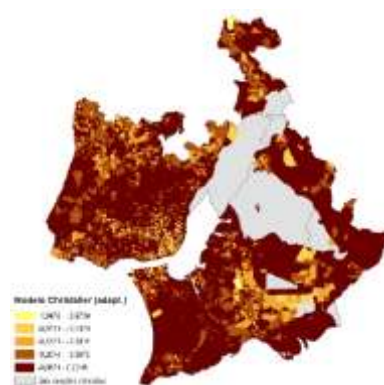
Programme: The consultancy work sets out to support the development of studies on accessibility and parking necessary for implementation of the Acrópole XXI project. The work was carried out in collaboration with Évora City Council staff and consisted of: 1) definition of the concept of mobility for users of the area, covering both motorized (public and private) and non-motorized means of transport; 2) definition of the parking policy to be adopted (offer and location) as well as the arrangements for operating in parking (at the surface and in parking structures); 3) supporting the implementation of the adopted solutions (access circuits for automobiles and pedestrians, public transport and parking) for the intervention area, as well for the surrounding area affected by it; 4) characterization of the control systems for automobile access.

Client: Évora City Council

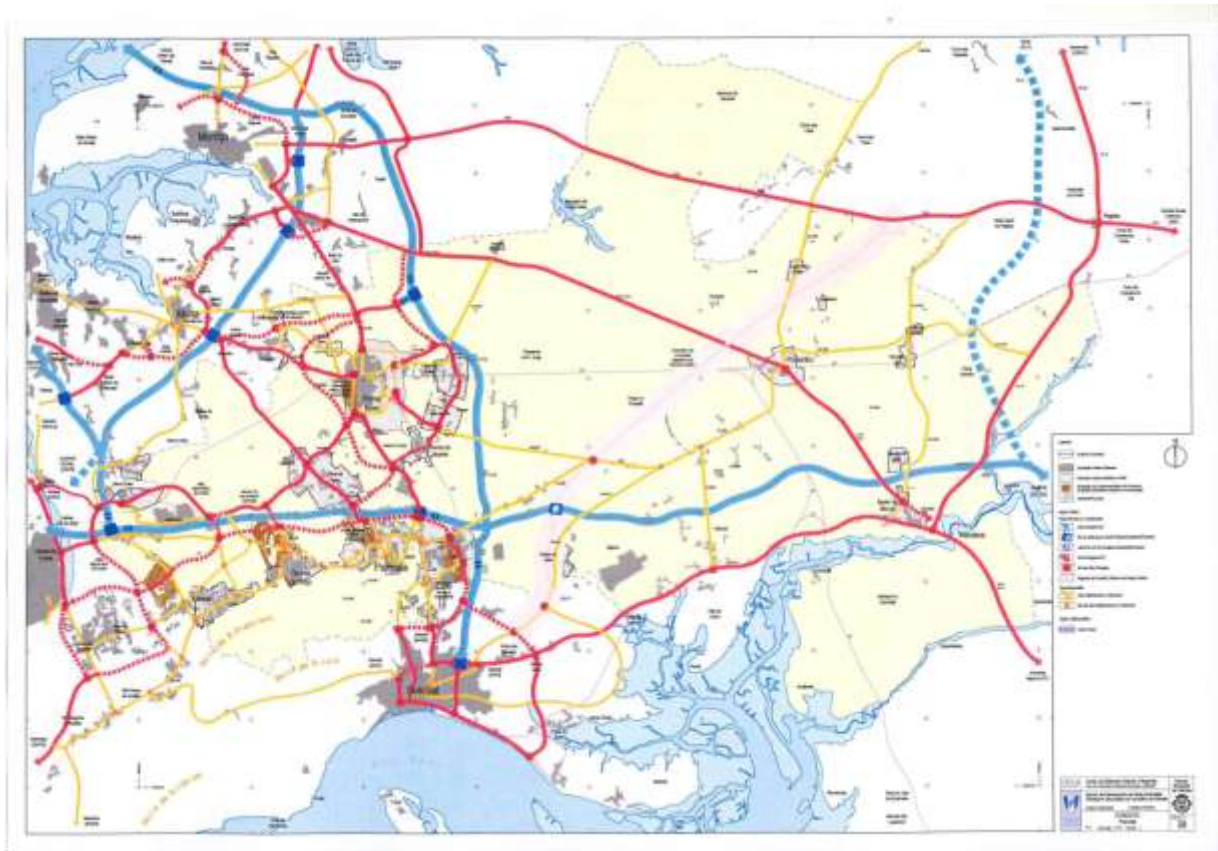
Supervisor: Prof. Fernando Nunes da Silva

Other members of the team: engineers Rita Soares, Paulo Cambra and Renata Lajas

3.2 Landscape Planning and Regional Development



Road Network Plan for the Municipality of Palmela



31

Start: September 2002

End: September 2004

Description: This work was carried out within the scope of the prior studies that preceded the revision of the Palmela's Master Plan. The main purpose was to design a road network concept at the different hierarchic levels that would improve its territorial coherence in articulation with the local urban and land use policy and the regional/ local transport systems policy.

Client: Palmela City Council

Supervisor: Prof. Jorge Baptista e Silva, Prof. Fernando Nunes da Silva

Other members of the team: engineer Rita Soares

Sustainable Mobility Project



Start: March 2005

End: June 2009

Description: Technical support for the elaboration and implementation of management plans for sustainable mobility, including the development of guidelines for practical application and implementation of concrete actions in this field.

Client: Institute of the Environment

Supervisor: Prof. Fernando Nunes da Silva

Other members of the team: engineers Alexandra Gomes, Rita Soares, Ana Júlia Pinto and Dr. Heitor de Castro

State of the Environment. Report for the year 2003



Start: July 2004

End: December 2004

Description: Preparation of the chapters on Energy and Transport. Proposal of Parameters for a Sustainable Development base in Portugal. Supervising and monitoring the research carried out at the Institute for the Environment.

Client: Institute for the Environment

Supervisor: Prof. Fernando Nunes da Silva

Manual of Methods and Techniques for Sustainable Urban Development



Start: June 2004

End: June 2005

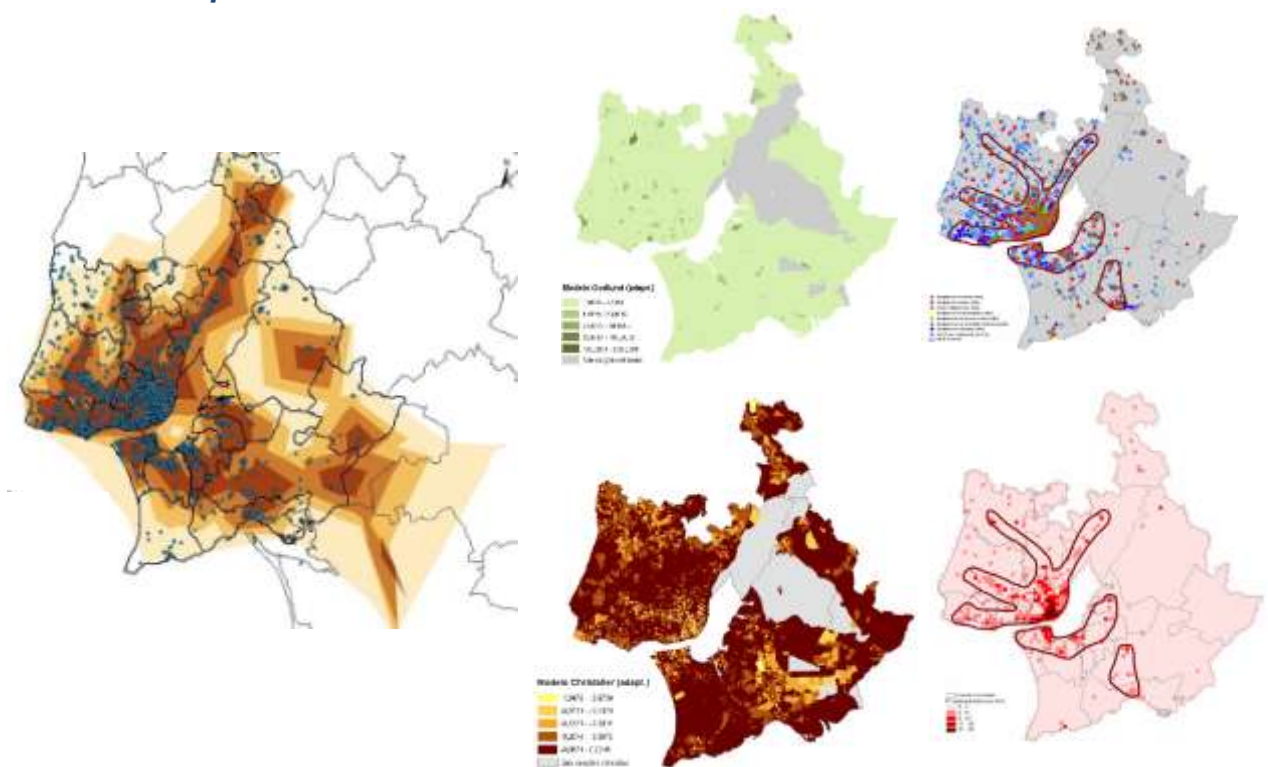
Description: The handbook covers several aspects: urban design, mobility, accessibility, infra-structures, building construction, and landscape elements. The economic and social viability of the proposals are also focused. Several examples from the Polis programme are also referenced. It was also considered essential to address the issues of public participation and the monitoring of the urban space, both fundamental conditions for ensuring the continued compliance of the requirements of sustainability. The selection of a set of indicators updates technical content of this aspect.

Client: PARQUE EXPO

Supervisor: Prof. Fernando Nunes da Silva

Other members of the team: Prof. João Levy, Prof. Manuel Correia Guedes, Prof. Jorge Baptista and Silva, Dr. Clara Landeiro, landscape architect Isabel Ramos, architects Nuno Ventura and Rui Florentino

Territorial Transformation and Location Dynamics – New Centralities in the Lisbon Metropolitan Area



35

Start: September 2004

End: September 2007

Description: Totta/UTL/01 is a Research Project on the "Dynamics of Location, Transformation of the Territory and New Centralities in the Lisbon Metropolitan Area: What is the Role for Public Policy?". The College of Integrated Studies at UTL has created a line of funding for a research project on the dynamics of metropolitan areas, focusing on the Lisbon Metropolitan Area. The central focus of the project is to examine the role that public policy instruments currently available to the central government and local state may have in achieving strategic planning objectives, such as those recently listed in the PROTAML.

Participating institutions: Faculty of Architecture, Institute of Social and Political Sciences, School of Economics and Management, IST – CESUR

Supervisor: Prof. Fernando Nunes da Silva

Implementation Plan for the National Strategy for Sustainable Development (PI-ENDS)



36

Start: November 2003

End: May 2004

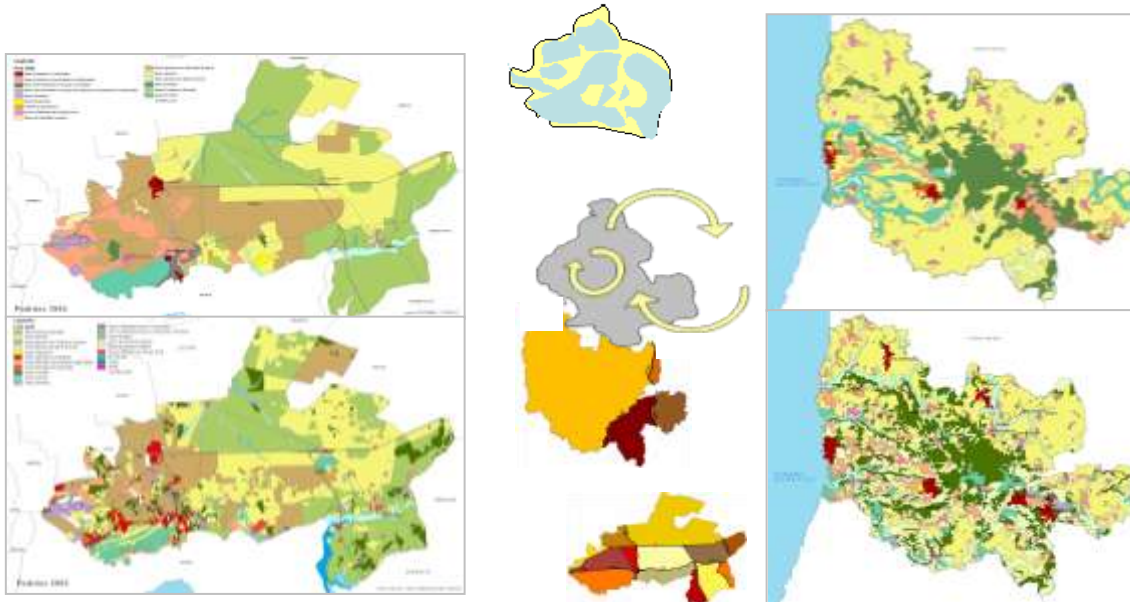
Description: Monitoring and technical assistance in the scope of the Implementation Plan for the National Strategy for Sustainable Development (PI-ENDS). Collect the contributions from the different groups working on the report. Prepare a set of indicators to monitor the implementation of ENDS. Production of the report summary.

Client: Institute for the Environment

Supervisor: Prof. Fernando Nunes da Silva

Other members of the team: Prof. Graça Saraiva, landscape architect Isabel Ramos, Dr. Clara Landeiro, Prof. Manuel Brandão Alves, Prof. José Manuel Henriques and engineers João Teixeira and Susana Neto

Strategic Evaluation and Monitoring of PROTAML. (Regional Plan for the Metropolitan Area of Lisbon).



37

Start: March 2005

End: March 2006

Description: Supervision of and technical consultancy to the CCDR-LVT team with respect to the assessment of the PROTAML aims. This study consisted in developing strategic evaluation and monitoring methodologies and defining monitoring indicators, mainly related to land use change, transport systems and mobility. Output analysis and recommendations to update regional strategy and the PROTAML revision process were also required. Detailed evaluation centred on three case studies: Palmela, Mafra, Odivelas.

Client: CCDR-LVT by protocol with IST-CESUR.

Supervisor: Prof. Fernando Nunes da Silva (for CESUR) and architect Hipólito Bettencourt

Other Members of the Team: Prof. Jorge Batista e Silva, Prof. Beatriz Condessa, engineers Rita Soares and Alexandra Gomes for CESUR and Filipa Monteiro

Portuguese Annual Statistics. Chapter - Urban Planning.



Start: June 2005

End: October 2005

Description: Preparation of the "Planning" chapter for inclusion in the Statistical Yearbook of Portugal 2004.

Client: National Statistics Office

Supervisor: Prof. Fernando Nunes da Silva

Other members of the team: engineer Ana Sá

Planning of the Road Network and Accessibilities for the Municipality of Vila Franca de Xira



Start: July 2005

End: July 2006

Description: The territory of this municipality has been cut through by longitudinal road and rail infrastructures that act as strong barriers to the normal urban interactions. This effect is reinforced by a difficult topography in the western and interior zones. The purpose of this work was to plan a future conceptual scenario for the road network, considering different hierarchic levels, in order to prepare new future roads, layout extensions or changes, to express node articulation needs, new interfaces, and measures to break the multiple barrier effects, thus improving cohesion and coherence between different urban spaces.

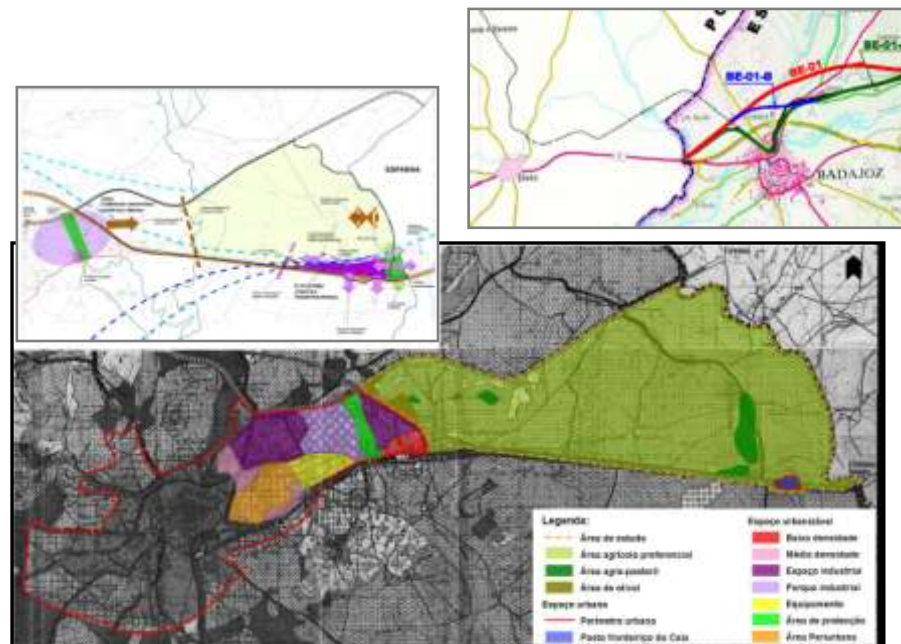
Programme: To plan a conceptual scenario for the road network of Vila Franca de Xira

Client: Vila Franca de Xira City Council

Supervisor: Prof. Jorge Silva, Prof. Fernando Nunes da Silva

Other members of the team: engineer Rita Soares

Urban Development Strategy for the Border Areas of Elvas/Badajoz



Start: April 2006

End: July 2006

Description: Drafting the Strategic Framework for the Development of the Transition Area - City of Elvas/Spanish border

Programme: This study includes the assessment of the position of Elvas in the urban system and in the freight transport networks. It also includes:

- 1) to study the relationship between the demographic and economic dynamics of Elvas/Badajoz;
- 2) to characterize and evaluate the biophysical components in the studied areas;
- 3) to evaluation of the model for the expected land use described in the Municipal Plan of Elvas and its relation to the expected growth in the Badajoz General Urban Plan.

As a result, strategic guidelines are proposed for the occupation of the transition area of Elvas/Badajoz, which hold the integration of local and regional development with the planning and the preservation of existing natural values as priorities.

Client: CCDR Alentejo

Supervisor: Prof. Fernando Nunes da Silva

Other members of the team: Prof. Amílcar Arantes, engineers Joana Castro e Almeida, Alexandra Gomes and Ana Júlia Pinto and landscape architect Isabel Ramos

Environment Report 2007



41

Start: October 2007

End: January 2009

Description: *Report on the State of the Environment, 2007 (REA 2007)*

Programme: *Technical and scientific consultancy on the elaboration and revision of the indicators used in the Report on the State of the Environment of 2007 (REA 2007). The technical and scientific advice also includes: drawing up the technical chapters relating to the energy and transport sectors of the report; supporting the dissemination of the REA 2007; the design of the possible platforms for communication of environmental information; support for the development of a system of indicators for monitoring the urban waste policy in Portugal.*

Client: *Portuguese Environment Agency*

Supervisor: *Prof. Fernando Nunes da Silva*

Other members of the team: *Prof. João Levy, Dr. Carlos Correia da Fonseca, engineers Catarina Venâncio and Inês Gervásio.*

North West Hospital Location Study



Start: July 2009
End: October 2009

42

Description: This study aims to determine the best location for the future hospital to serve the North West sub-region, which includes the municipalities of Alcobça, Bombarral, Caldas da Rainha, Nazaré, Obidos and Peniche.

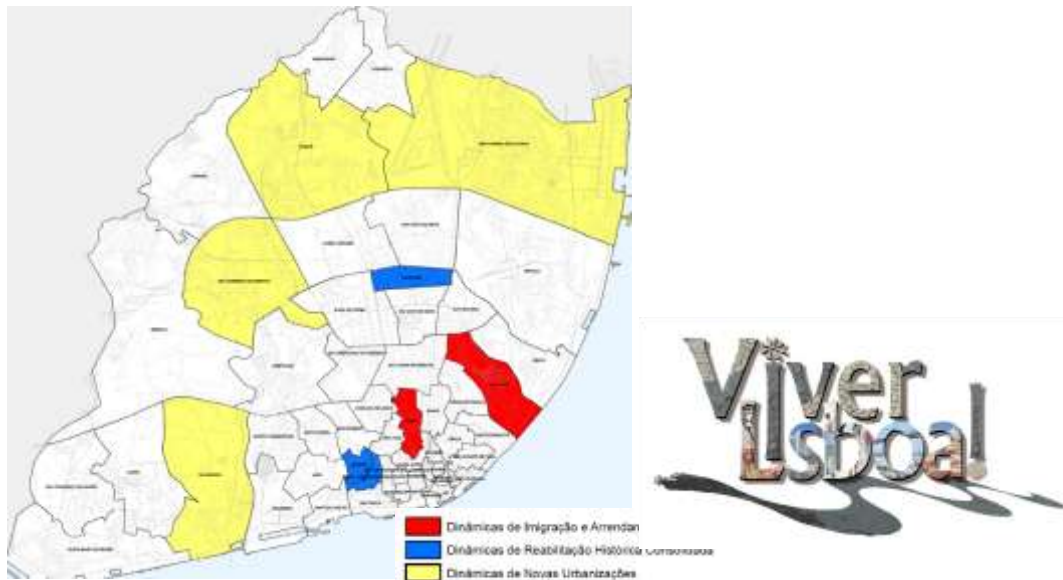
Programme: The project included the following phases: (1) analysis of previous studies to substantiate, the construction of a new hospital in the North West and its location in terms of coverage and accessibility, including accessibility for different places indicated by the councils of Alcobça and Caldas da Rainha; (2) identification and selection of the most relevant variables and indicators for the demarcation of the alternative location; (3) collection and processing of information, characterization and evaluation of alternative locations, with the objective of developing a matrix of advantages and disadvantages for each location; and (4) writing the final report justifying the alternative selected location.

Client: Central Administration Health System (ACSS)

Supervisor: Prof. Beatriz Condessa

Other members of the team: Prof. Jorge Gonçalves, Prof. Antunes Ferreira and engineer Paulo Cambra

Dwelling Dynamics in Lisbon



Start: July 2009

End: October 2009

Description: Providing urban managers with accurate information on the residents of the selected areas, giving them key elements for decisions on housing policy.

Programme: Evaluating the perceptions and behaviour of residents and non-residents in the selected areas of Lisbon with regard to the issue of housing.

Methodology: approaching the different groups with different strategies, using the following line of work:

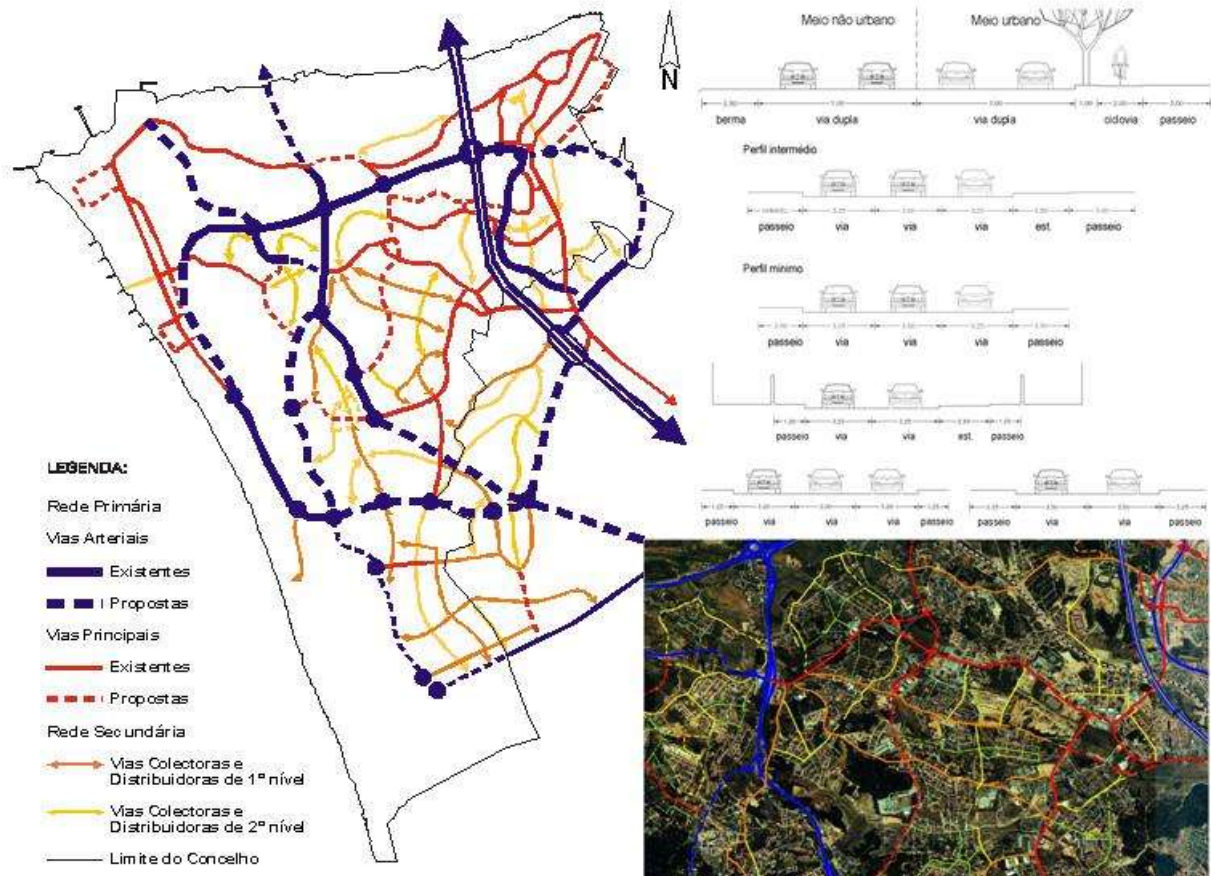
- 1) selection of contrasted areas; construction of the survey forms directed at individuals with questions on families, housing and urban environment for both residents and non-residents;
- 2) identification of the main changes in the analyzed areas in recent years, using direct observation and mapping;
- 3) launching and receiving the surveys;
- 4) literature, documentary and statistical review;
- 5) entering and processing information gathered;
- 6) preparation of comprehensive products: cartography, frames, graphics, profile types, level of representativeness of the produced sample;
- 7) crossing with other sources of information.

Client: Lisbon City Council

Supervisor: Prof. José Antunes Ferreira

Other members of the team: Prof. Jorge Gonçalves

Study of the Secondary Level of the Road Network for the Municipality of Almada



Start: 2004

End: 2006

Description: This project set out to achieve an extensive description of the municipal road network, in terms of road and urban functions and geometric and morphologic attributes, in order to identify the main accessibility and mobility problems. This first step preceded a proposal of a new road network concept for this municipality with special emphasis on the inner region and on the secondary level of the road network that link the primary level with the local levels.

Client: Almada City Council

Supervisor: Prof. Jorge Baptista e Silva

Other members of the team: engineers Rita Soares, Margarida Teles and Paula Brandão, architect Nuno Ventura Bento, Prof. Fernando Nunes da Silva