

European Reference Indicators for Public Facilities and Services. Approach to an Integrated Production in Reference Values for the Basic Social Services Infrastructure

Maria Lluïsa Marsal Llacuna, Nadia Fava

(Maria Lluïsa Marsal Llacuna, Universitat de Girona, Escola Politècnica Superior. Departament d'Arquitectura i Enginyeria de la Construcció. Àrea d'Urbanisme. Campus Montilivi. Edifici Politècnic III. Despatx 132 c/ de la Universitat de Girona, s/n. 17071. Girona. Spain. luisa.marsal@udg.edu)

(Nadia Fava, Universitat de Girona, Escola Politècnica Superior. Departament d'Arquitectura i Enginyeria de la Construcció. Àrea d'Urbanisme. Campus Montilivi. Edifici Politècnic III. Despatx 132 c/ de la Universitat de Girona, s/n. 17071. Girona. Spain. Nadia.fava@udg.edu)

1 ABSTRACT

Public services should 'live' in public facilities allocations. According to this, one must fit into the other; in the same way as citizens should find an answer in the residential park offer or production activities seek their location in the industrial areas.

This high level of engagement needed is not produced. Services and facilities coexist in an historical isolation.

In addition to this, while services are provided by administration, facilities are at proposal of the town plans. In this context, how can they keep a good relationship? How planning guarantees enough land to allocate public services?

Of the great range and variety of public services, some of them are recognized in the countries constitutional texts as essential or universal citizen's rights. All State Main Texts of different European Nations protect the right of their citizens to enjoy -at least- a good public education, quality in provision of health services and enough offer in assistance to persons. These services, which could be labeled as 'public basics', are widespread respected and unquestioned, thus an acceptable level must be provided by administrations. This minimum threshold in basic public services should be understood as a common European level, in order to give a reference point to governments for the provision of public services.

Basic public services are strictly connected to people because of their essential and universal nature. Services, whose necessity remains unmodified although race, culture, education, nationality, etc. of users' changes. Their universal nature allows the possibility to express them in values per capita, so indicators are possible and needed.

Same thing with facilities; there is a minimum amount of basic public facilities that must be preserved and protected, according to the constitutional texts of European Countries.

The aim of the ongoing research is to obtain indicators for basic public services and basic public facilities, all expressed in values per capita, which will enable both subjects to be viewed in relation to each other in order to discover if they work together.

A methodology for the equivalence of service and facility indicators will be also obtained. The final step would be the production of 'basic recommended values' as European Reference Indicators for Public Facilities and Services which gives the name to the research.

2 SCIENTIFIC CONCEPTS OF THE RESEARCH

Today's Europe must deal with important and structural challenges: the rapid globalization, the climate change or the progressive ageing of its population, to stat just a few significant ones. In addition, the present economic crisis has added even more pressure to these already complex issues.

The "Lisbon Strategy for Growth and Job, towards a green and innovative economy" addresses these challenges with goals such as stimulating growth and creating more and better jobs, while making the economy greener and innovative.

The economic downturn has stopped labour market growing and turned the Agenda measures into more fiscal actions, believing on stimulation of private parties as the most effective way to keep people at work. Parallel to these 'emergency' economic solutions, big investment efforts have been made to maintain Lisbon Strategy's goals concerning infrastructures, research and innovation.

An updated strategy for Europe is needed, a new agenda capable of performing a complete recovery from the crisis. Promptly, the EU 2020 strategy is under construction. First available agenda drafts emphasize the idea of learning and profiting from the current crisis in a way that leads us to a reinvent economy with high

standards of sustainability for both social and natural resources. Innovation and knowledge are the basis to build this new economy, hand in hand with an EU renewed society.

To the construction of this new European scenario, we, as investigators, must contribute fully conscious of the extreme efficiency required, from now on, to manage social and economic resources.

The current research develops a complete methodology on how to make European public social infrastructure more efficient –which means, investing less with better results- thanks to a new integrated vision of public services in such public facilities.

Innovations in economic aspects must not forget public investment. Enhancing the administration's level of investment in general infrastructure it's mandatory -despite of the crisis itself- in order to face the negative social effects brought about by the economic downturn.

Recent exercises and efforts, on behalf of the administration, to re-launch private economy, introducing innovative mechanisms in the stagnant –even recessive– markets, must be matched with there on public version.

Research and innovation policies, concerning the service sector, must be introduced not only fully aware of the market's real dimension, but also conscious of the real social needs. So far, service's provision has been designed from the supplier's –public or private- point of view, not from the receiver's –citizens- needs.

The current European 'hands-on' managing economic and social efficiency implies taking notice of citizens updated needs when providing social goods (mainly services) in social infrastructures (facilities as service's 'containers').

As private actors do with their business, administration must rethink its products and public realm management, as a private company at the edge of its economic sustainability, would do.

The needed efficiency in public goods delivery and social infrastructures will come from a new vision which integrates both, in a way that service's market dimension matches facility's built stock.

This completely new vision is the key target of the ongoing research. Focusing on the Lisbon strategy measure of social sustainability, it will seek for efficiency on the public side, for both services and facilities.

This implies a previous understanding that a minimum common EU level of welfare is the basis for a European social sustainability.

With this aim, standards (planning indicators) are proposed as the most efficient way to illustrate levels of social and economical sustainability as well as to put into practice monitoring processes.

The research will demonstrate, with indicators and from different countries, the importance of public facilities and service's joint program and planning. This is the way to ensure a real and efficient administration contribution to the economic and social sustainability goals of the Lisbon 2020 strategies.

3 TECHNICAL CONCEPTS OF THE RESEARCH

Public services should 'live' in public facilities allocations. According to this, one must fit into the other, the same way as citizens should find an answer in the residential stock offer or productive activities seek their location in the industrial areas. If the described necessary matching don not exist, problems arise. For instance, taking residential as example, homeless people or, conversely, over-occupied homes are evident socioeconomic problems of weak social groups, while, in other urban areas, residential stock is empty.

In the industrial world, company's needs sometimes can't find a location in the initially intended area. As a difference with residential stock, other causes exist, apart from the economic ones, which promote companies delocalization: legal possibilities of countries, bonuses or extra conditions offered by governments, etc.

As for services, something similar happens but with the difference that public offer exists in this segment of activity. The coexistence of public and private offer is something exclusive to the tertiary or services sector. The sole exception, found in the residential sector, being the public housing experiences started in the 30s in some European countries, as a social answer to post World Wars destruction scenarios. Although the promotion of social housing increases day by day, it has turned into a public/private co-payment, far away from the quoted figures fully financed by governments.

The service sector includes the public services offer -necessarily located in public sites- and the private one (which corresponds strictly to the tertiary sector), exclusively allocated in private plots and buildings. As a primary explanation of the public-private dual offer we can say that, in general, where the public offer doesn't arrive, the private one does, understanding the lack of the public sector as a business opportunity for the private one. Also true is that, apart from covering this public services 'gaps' (normally concerned with 'new services' related to 'new social needs'), there are -in some services- a duplicity of offers explained by some improvements introduced by the private sector. If the coverage of 'gaps' is related to quantity, the dual

offer is related mainly to quality and innovation. Here, the private offer an alternative to the obsolete, poor, or badly maintained services, public provided, which do not satisfy some or all citizens.

This strong relation between public-private services hides important dangers. In public services provision, administration (normally local governments), develops a social function, guaranteeing -at least- the essential services, the basis of the welfare state. Starting from the most basic ones -related to nets- such as electricity, water, gas, etc. to others -nodal-, such as schools, sport fields, hospitals and so on.

Of the wide range and variety of public services, some are recognized in the different country's constitutional texts as essential or universal citizen's rights. All State Main Texts of different European Nations protect the right of their citizens to enjoy, at least, a good public education, quality in provision of health services and enough provision of assistance to persons. These services, which could be tagged as 'public basics', are widespread, respected and unquestioned, thus an acceptable level must be provided by administrations. This minimum threshold in basic public services should be understood as a common European level, in order to give governments a reference point for the provision of public services.

Basic public services are closely related to people, due to their essential and universal nature, witch remains unmodified despite race, culture, education, nationality, etc of there users. Their universal nature allows the possibility to express them in values per capita, so indicators are possible and needed.

As previously stated, public services are necessarily located in public plots and buildings, which are commonly called public facilities. Thus, production of public social infrastructure (facilities) must fit/match the public services provision, especially for the described basic ones. For example, educational services need to find a location solution in public plots classified as educational, otherwise administration will need to spend additional money to obtain the necessary plots, an extra cost that sometimes is not possible and will impede its construction. When governments don't have such extra money, private promoters appear with the aim of building it, on sites designated as private facilities. It must be said that private offer is necessary and healthy, as citizens want to choose, especially the ones that can pay more.

But there is a minimum amount of basic public services that must be preserved and protected, according to the constitutional texts of European countries. If services must fit in basic public facilities previously obtained, thus facility indicators are also needed.

The aim of the research is to obtain indicators for basic public services and correspondent public facilities, all expressed in values per capita, which will enable both subjects to be viewed in relation to each other,

thus discovering if, together, they work out correctly. A methodology for the equivalence of service and facility indicators, to compare results in different consortium countries, will also be obtained. The final step of the research would be the production of basic recommended values, as European reference indicators for public facilities' planning and services' programming.

4 RESEARCH BEYOND THE STATE-OF-THE-ART

As it will de showed public facilities and public services can both be found as research objects but with limited or inexistent relation between them. The research will break down this unnecessary separation. Public services take place at public facilities gaining this desirable fitting even more importance when referring to the basic service categories, health, education and assistance to persons.

Results of research projects, indicators production and scientific publications on similar works –at national and international levels– are here described in order to better understand and situate de relevance of the present research.

4.1 Research Projects

To begin with, we refer to the projects of the Seventh Framework Programme¹, under EUROSTAT host, and also to the ones subject to the SERVPPIN² project of the 'European Association for research on services.

European Projects, presently in progress, focusing on different aspects related to services have been found. For instance, the project Contribution of public and private services to European growth and welfare, and the

¹http://epp.eurostat.ec.europa.eu/portal/page/portal/research_methodology/research/seventh_framework/projects_and_links

² http://www.reser.net/The-SERVPPIN-project_a389.html

role of public-private innovation networks³ which analyzes the segregation between public and private services. The project focus on public-private innovation networks as an important organizational model to develop, produce and deliver new and improved services, with positive impacts on growth and contributions to welfare. The research consists in an in-depth analysis of case studies covering major services such as health, transport and knowledge intensive services.

Another project concerned with the preservation and improvement of welfare is Globalization, investment, and services trade⁴. It also aims to generate tools for policy-makers and businesses in Europe; instruments that will be produced by a team of European researchers addressing international trade and Foreign Direct Investment (FDI) in the service sectors. Their main objective is to integrate this network in the communitarian policies, in such a way that makes it possible to change the old management of the service sector with non-tradable outputs.

On the other hand, on the subject of social infrastructures (or facilities) interesting projects could also be found, but still not related to services contained in them. Here, the Preparatory phase project for a major upgrade of the Council of European Social Science data archives (CESSDA)⁵ must be highlighted.

As a central issue, the project aims to establish a European Research Observatory for the Humanities and Social Sciences (EROHS), to be built upon the existing data and resources which, systematically organized, will promote synergy and coherence. Thus, access to the existing European and national data will be more efficient and effective, structuring and linking data resources already available. In addition to this, existing data -indicators and standards- will be improved and their documentation exhaustively developed, to enhance scientific quality and interoperability potential.

This interesting project, though concerned with the development of new indicators (especially in less developed countries) and with improved access to the existing ones (mainly for Northern European countries, already data provided), focuses only on the strict sense of 'demographic and cultural' data,

provided by the administrative census of museums, collections, libraries, linguistic corpora and citation indexes. Therefore, information and data regarding health, education and assistance to persons is excluded from the project.

The project is framed in the call for the ESFRI Roadmap, which identifies new Research Infrastructure (RI) of pan-European interest, corresponding to the long term needs of the European research communities, covering all scientific areas, regardless of possible location. The ESFRI roadmap is an interesting on-going process; it will be periodically updated and its subsequent revisions will be considered by the different Member states, as well as by the European Commission, to better define priority projects to be supported at national and community level.

Another project found was Research infrastructures and their structural dimension within the European research area⁶, based on the Lisbon Strategy, whose initial aim was to make the EU "the most dynamic and competitive knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion, and respect for the environment by 2010" (Lisbon, 2000). The project (a conference) aims to clarify the challenges and opportunities, at regional, national, or international levels, which could be related to the development of research infrastructures (understood as 'tools of research') of pan-European character (including the e-infrastructure).

It also takes into account the 2004 review of Lisbon's objectives that enforce the initial strategy, giving more impetus to growth and employment, in hand with the promotion of social/ environmental objectives and highlighting the contribution of such Infrastructures (e.g. impacts on industry, sustainable development, employment, etc.). The main goal is to produce recommendations to improve the financial engineering of research infrastructures, for their construction and sustainable operation. As opposed to the previously discussed projects, this one establishes a relationship between data services and the supporter facility, but

³ *ServPPIN* (SSH-2007-1.2-02: The implications of developments in the *service* economy for the European economy. Project start date: 2008-02-01)

⁴ *GIST* (PEOPLE-2007-1-1-ITN Marie Curie Action: "Networks for Initial Training". Project start date: 2008-09-01)

⁵ *CESSDA-PPP* (INFRA-2007-2.2-01 Preparatory phase for the projects in the 2006 ESFRI Roadmap. Project start date: 2008-01-01)

⁶ *INFRASTRUCTURE-ERA* (7th FWP- INFRA Research Infrastructures. Project Start date: 2007-12-01)

from the specific perspective of construction and sustainable building work. This approach, although interesting, is far from the viewpoint sought in the ongoing research.

Another project, European social survey infrastructure preparatory phase⁷, which participates in the same call, also addresses the production of social infrastructure (facilities) indicators but, like the others, without regarding the connection to the services located within. The project translates the results of the European Social Survey into updated data and a sustainable research infrastructure. As all projects included in the call INFRA-2007, research infrastructures should be understood as the so called 'research tools', like statistics, indicators, standards, etc.

The European Social Survey (ESS), together with the European Value Study, the International Social Survey Program, the Luxembourg Income, the Employment Study, the European Advisory Group on Language Engineering Standards and the European Social Science Data Archives (CESSDA), conform European programmes and institutions producers of research infrastructure, focused on cultural and population aspects, thus there is a gap in indicators related to health, educational and assistance facilities available to people.

The current research will cover this lack of joint indicators for both facilities and services, focused on the basic categories (health, education and assistance to persons). As previously explained this is the main goal, as well as evaluating their degree of correspondence with each planning system. Unique reference indicators for facility and services matching will be provided, which could be used by EU members as recommendations, attending to some adjustments according to each country's planning system and power structure. The international nature of the project permits the extension of the resulting indicators to non-EU countries.

Examining European research projects illustrates the non-integrated work with services and facilities and the greater distance between indicators. The existence of data standards for some facilities, mainly the ones related to culture, has also been shown. As for services, the listed projects do not show the existence of such indicators (the main concern being the possibilities that could be offered by public and private networks). But indicators for services exist; as for facilities, they appear only for demographic and cultural fields and never connected with the supporter facility. To find them we have to move to institutions depending on the European Council, UNESCO, OCDE or the UN.

Furthermore, as for facilities, service indicators are not produced for basic categories (health, education and assistance to persons). For these basic services, few indicators, and not fully representative, are listed in the EUROSTAT data service, corresponding to the annual welfare reports that members submit to the EU Commission.

4.2 Data and Entities producing, revising and maintaining it

In reference to services and related to demographic and cultural fields, in particular services such as archives, libraries or museums, different organizations produce reference values for the service design. The International Council on Archives, and specifically the Committee on Descriptive Standards, offers such indicators. The International Federation of Library Associations and Institutions plays the same role for the library service. For museums, the International Council of Museums provides reference service values.

All these values are presented, in an integrated way, at the Council of Europe web page -<http://www.coe.int>⁸ and some indexes extracted from countries reports are presented at EUROSTAT site - <http://epp.eurostat.ec.europa.eu/portal/page/portal/eurostat/home/>.

Social references can be widely consulted at MISSOC the EU's Mutual Information System on Social Protection witch provides detailed, comparable and regularly updated information about national social protection systems -<http://ec.europa.eu/social/main.jsp?catId=815&langId=en>.

The International Council on Social Welfare, dedicated to social development and depending on UNESCO, also provides indicators and standards for some social services - <http://www.icsw.org/>.

⁷ *ESSPREP*. (INFRA-2007-2.2-01, Preparatory phase for the 2006 ESFRI Roadmap projects. Project start date: 2008-02-18)

⁸ International Council on Archives -<http://www.ica.org/>; Committee on Descriptive Standards - <http://www.icacds.org.uk/eng/home.htm>; International Federation of Library Associations and Institutions -<http://www.ifla.org/>; International Council of Museums -<http://icom.museum/>

Similar information can be found for sport services, as the International Council of Sports Science and Physical Education and the Council of Europe, both founded on the principles described in the Letter of Sport, produce indicators that can be used by administrations for sport services plan and provision - <http://www.icsspe.org/> -.

But once again, for basic services such as education, health and assistance to persons, specific organizations that produce indicators cannot be found, we must to refer to indexes appearing at EUROSTAT.

4.3 Evidence of Data indicators and common actions need

4.3.1 About Education

The need for more education data, indicators and common actions is shown by the European Commission when launching Council resolutions working on actions such as:

- Creating White Papers like the 'Teaching and learning towards the learning society`.
- Promoting works on quality like the Centre for Educational Research and Innovation (CERI).
- Taking indicator's initiatives such as the 'International Indicators of Educational Systems (INES)' or the 'Evaluation of Educational Achievement (IEA)'.
- Promoting European cooperation in matters as the 'Into the new millennium', developing new working procedures in the education and training field.
- Supporting associations working on transparent quality assurance systems, like the 'European Association for Quality Assurance in Higher Education (ENQA)', the 'European University Association (EUA)', the 'European Association for Institutions of Higher Education (EURASHE)' or the 'National Unions of Students in Europe (ESIB)'
- Supporting the European Centre for the Development of Vocational Training
- Developing European programmes such as: 'Action programme on education'⁹; 'Programme of pilot projects for the improvement of the transition from school to working life'; 'Erasmus'; 'Comett'; or 'Youth for Europe (YES)'
- Also supporting European Networks such as the (EURIDYCE): Education Information Network in the European Community.

These initiatives can be viewed in their original context of Council Conclusions or Council Resolutions in the following extracts:

Council Conclusions of 22 September 1997¹⁰ on the communication concerning the White Paper 'Teaching and learning towards the learning society'¹¹.

Council Conclusions of 16 December 1997¹², on the evaluation of quality in school education, having regard to Article 126 of the Treaty establishing the European Community.

Council Resolution of 17 December 1999¹³ concerning 'Into the new millennium', developing new working procedures for European cooperation in the field of education and training

Notices that that the development of a Europe of knowledge and the promotion of lifelong learning both have become shared overall objectives, as an outcome of the Treaty of Amsterdam as well as the EU's Agenda 2000 document. Both resulted in an increase in the importance placed on education in skill and information-related policies, including those which contribute to economic competitiveness and employment in the European Union.

Recommendation of the European Parliament and of the Council of 15 February 2006¹⁴ on further European cooperation on quality assurance in higher education.

⁹ 9 February 1976

¹⁰ 31997Y1004

¹¹ 97/C 303/04

¹² 31998Y0103

¹³ 32000Y0112

¹⁴ 32006H0143

Recommends that member states encourage representatives of national authorities, the higher education sector and quality assurance and accreditation agencies, together with social partners, to set up a "European Register of Quality Assurance Agencies" based on national review and to define the conditions for registration as well as the rules for management of the register.

4.3.2 About Education health and assistance to persons

Data pertaining to health and assistance to persons on EUROSTAT is less extensive. The need for more information (statistics, indicators, etc.) for European countries is also present at the European Council Resolutions and Conclusions, through initiatives similar to the ones for education services:

- European Cooperation on health and nutrition, adopting the 'Programme of Community action in the field of public health (2003-2008).
- Cooperation with WHO (programmes and projects administered by the United Nations), OECD ('System of Health Accounts and collection of data not covered by the Community Statistical Programme'), ECDC ('European Centre for Disease Prevention and Control'), promoting patient safety and health services quality by helping to develop 'European cooperation and collaboration between competent authorities and relevant stakeholders'; national statistical authorities cooperation in the implementation and further expansion of the 'System of Health Accounts in the EU' (in cooperation with the OECD and the WHO).
- European common requirements for the integration of health protection requirements in Community policies
- European common terminology, ensuring health protection in all Community policies and activities
- European promotion of Studies for mental health
- Indicators development through documents such as: 'First phase set of EU health indicators', 'Health Indicators (ECHI)', 'Healthy Life Years Indicator by socioeconomic categories using the standard EU methodology' or 'Healthy Life Years Indicator'
- White papers like 'White Paper on nutrition and physical activity' and the 'Report on Contributions to the Green Paper'.

These initiatives can be viewed in their original context in the following extracts:

Council Resolution of 20 December 1995¹⁵, on the integration of health protection requirements in Community policies.

Council resolution of 18 November 1999¹⁶, on the promotion of mental health.

Council Resolution of 2 June 1994¹⁷, on the framework for Community action in the field of public health.

Recalls that emphasis should be done on the encouragement of enhanced cooperation between Member States and coordination of their activities in liaison with the Commission. Previously on 1 December 1993 the Commission forwarded to the Council a communication on the framework for action in the field of public health in the light of the entry into force of the Treaty on European Union.

Council resolution of 18 November 1999¹⁸, on ensuring health protection in all Community policies and activities.

Council Resolution of 14 December 2000¹⁹, on health and nutrition.

Invites the Commission to continue to cooperate with the relevant international organisations, in particular the WHO, to ensure effective coordination of activities and avoid any duplication.

Decision 1786/2002/EC of the European Parliament and of the Council of 23 September 2002²⁰, adopting a programme of Community action in the field of public health (2003-2008).

¹⁵ 31995Y1230

¹⁶ 32000Y0324

¹⁷ 31994Y0617

¹⁸ 32000Y0324

¹⁹ 32001Y0123

²⁰ 32002D1786

Stats that cooperation with third countries and the competent international organisations in the sphere of health, such as the WHO, the Council of Europe and the OECD, should be fostered, not only in the field of collecting and analysing data (including indicators) but also in the field of cross-sector health promotion, in order to ensure cost effectiveness, avoid overlapping of activities and programmes and enforce synergy and interaction.

Commission Decision of 25 February 2004²¹, adopting the work plan for 2004 for the implementation of the programme of Community action in the field of public health (2003 to 2008).

Commission Decision of 10 February 2006²², adopting the work plan for 2006 for the implementation of the programme of Community action in the field of public health (2003-2008).

Commission Decision of 12 February 2007²³, adopting the work plan for 2007 for implementation of the programme of Community action in the field of public health (2003-2008).

4.4 An overview from scientific publications

Regarding scientific publication, almost the same absence of relation between public facilities and public services working within is revealed²⁴, with the exception of a single work with quite similar approaches.

Nevertheless all articles, once again, remark that issues related with public facilities and public services governance are currently on the political agenda.

Concerning 'public service' provision, in the article "Municipal Service Provision Choices within a Metropolitan Area"²⁵ the authors investigate the decision of municipal governments to out source the provision of public services during the 1980s and 1990s. It extends previous empirical work on outsourcing by distinguishing the type of outsourcing used (e.g., public, private, or other types of providers). Institutional characteristics and fiscal stress are found to play an important role in explaining service choices. It indicates that outsourcing was more common for poor cities than for wealthier ones (as it had already been said in other research works quoted earlier) with the former often relying on government agencies and the latter opting for privatization. Still no reference to the facilities that support these services is made.

Another reference on the subject of public services provision, either by public or private ownership is "Building and managing facilities for public services"²⁶ which adds "the desirability of bundling the building and management operations, (...) whether it is optimal to allocate ownership to the public or the private sector". Modelling alternative institutional arrangements for building and managing facilities for provision of public services, including the use of the Private Finance Initiative (PFI), explores the effects on innovative investment activity by providers. It also examines how the case for PFI is affected by the (voluntary or automatic) transfer of ownership from the private to the public sector when the contract expires. Asset specificity and service-demand risk play critical roles.

Research on 'public facilities' has been more plentiful, but still with a rather different approach, more concerned with size and the optimal location. As the article "Welfare analysis of the number and locations of local public facilities"²⁷ witch develops a model with a finite number of households and congestible local public goods where the level of provision, the number of facilities and their locations are all endogenously determined. Proving that an equal-treatment identical-provision second-best optimum exists, where all

²¹ 32004D0192

²² 32006D0089

²³ 32007D0102

²⁴ In an overview of the major research publications for the last 5 years:

Urban Studies, at <http://www.sagepub.com/journalsProdDesc.nav?prodId=Journal201866>; Urban Affairs Review at

<http://www.sagepub.com/journalsProdDesc.nav?prodId=Journal200784>;

Journal of Urban Economics at http://www.elsevier.com/wps/find/journaldescription.cws_home/622905/description#description;

Regional Science and Urban Economics at

http://www.elsevier.com/wps/find/journaldescription.cws_home/505570/description#description;

and Public Management Review at

http://www.informaworld.com/smpp/title~mode=abstracting_a_indexing~tab=summary?content=t713926128;

As well as Google Scholar's first 100 results for the same key words entry.

²⁵ Joassart-Marcelli, Pascale (University of Massachusetts-Boston); Musso, Julie (University of Southern California); Urban Affairs Review, Vol. 40, No. 4, 492-519 (2005)

²⁶ Bennet, John and Iossa, Elisabetta; Department of Economics and Finance, Brunel University, UK, 2005

²⁷ Berliant, Marcus; Peng, Shin-Kun; Ping, Wang; Regional Science and Urban Economics, Volume 36, March 2006, Pages 207-226.

households are required to reach the same utility level, the provision of local public good is required to be the same at all facilities, and all facilities must serve the same number of consumers. Such an optimal public facility configuration may be concentrated (single site) or dispersed (multiple sites), depending on congestability, commuting cost and household preference parameters.

Still on this subject, the "Public Facilities Planning"²⁸ book it's a reference with a different angle, also taken into account by the research, addressed from the planning field. It brings together a careful selection of the major works in planning relate to the provision of public facilities - such as recreation grounds, parks and sports arenas. The opening sections present classic, theoretic papers that lay both the general and the specific foundations for why some facilities are treated outside of the market. Key topics such as institutional issues, the role of the private sector, and the assessment and evaluation of public facilities planning and financing are then examined. Finally, the volume looks at some of the more novel approaches that are emerging in the provision of public facilities, and concludes with a selection of case-studies that demonstrate the application of a set of planning approaches.

As for indicator issues on local government²⁹, "Identifying barriers to the application of standardized performance indicators in local government" exposes the experience of local governments in many countries who are implementing administrative reforms within the framework of New Public Management (NPM) in order to improve the quality and productivity of public services. The use of performance indicators and benchmarking facilitates evaluation of efficiency regarding the provision of

such services and favours the acquisition of better practices. The problems that may arise in the introduction of performance indicators in local government mainly concern the consensual design and standardization of indicators for various entities, the method to be used for calculations and the selection of analytical criteria to be applied to the values obtained. In this article, we identify obstacles that may be encountered in achieving a standardized definition of performance indicators within local government and, on the basis of learning from the practical experience of several large city councils in Spain, formulate strategies to resolve these problems, taking note of the viability and real efficacy of the solutions adopted.

Finally, it must be pointed out similarities between the research and the "Examination of floor area ratio in residential district in terms of the service level of public facilities – An example of Hu-Wei-Liao readjustment area in Tainan City"³⁰ research, for it's approach to the need for standards, or ratio, and it's relation with planning development

As it also remarks "A lot of articles have discussed the related factors in developing floor area ratio, but there is no model that includes the service level of public facilities and floor area ratio at once". The starting point for this research was the consciousness that the population and various economic activities in Taiwan have concentrated in cities and that in the past, the uses of land and buildings were primarily controlled by limiting the building coverage ratio and building height. Therefore, there were some problems in the areas with high-degree urbanization, including the overuse of lands, the excessive concentration of population, the significant lack of public facilities, etc. In 1992, the government enforced a law, which provided counties/cities with two options: accepting the standard floor area ratio, or developing detail plan on their own. The control of floor area ratio in Taiwan has existed for about seven years, and the problems above have been partially solved in some places. But the control took into consideration only the largest area of buildings, not the base's impact on the environment, the sufficiency of public facilities around the base, the mixture of land use, and so on. And the plan was not based on local requirements, so it has led to new challenges, such as the space development and urban development. First of all, this study will apply gravity model to evaluate the probability of public facilities service usage. And its result can be used to calculate the occupant load and influenced range of the public facilities. At the same time, the result can be applied to analyze the maximum of land development and to set up the most suitable scale of the floor area ratio. This study will explore the questions of floor area ratio control and urban planning development. Through these items, such as the probability, influenced range and occupant load of the public facilities service, it will set

²⁸ Edited by Kiminami, Lily; Button, Kenneth and Nijkamp, Peter; Cheltenham, UK, Edward Elgar Publishing, 2006.

²⁹ Navarro Galera, Andrés; Ortiz Rodríguez, David; López Hernández, Antonio M.; Public Management Review, Volume 10, 2008, pages 241 – 262.

³⁰ Cho, Ming-ying; Master's Thesis 2009.

up a model for the service level of public facilities. The result of the model can be a reference to the draft of floor area ratio.

5 EVIDENCE

To sum it all up, it can be said that theoretical indicators in services and facilities exist, but in a non-integrated way. These standards/indicators mainly appear in cultural and demographical fields. For basic services we must refer to indicators coming from specific Council initiatives that partially cover the areas of education, health and assistance to persons. Basic facilities have a less promising scenario: no indicators exist, other than those for facilities relating to cultural aspects.

The integrated production of indicators for services and facilities launched by the research will help to cover the gaps described. Production that will add new value since information will be obtained from the analysis of existing urban areas, not from theoretical or ideal values. The contrast between the announced theoretical values with those coming from the 'city calculation' will provide extremely interesting information.

Another relevant step of the research will be a second contrast between the existing facilities and services and the ones planned - plan vs real city - revealing inadequacies at both levels: plan/services and plan/facilities.

Ongoing research aims to obtain common European references in the provision of services in facilities, independently of the social model of each country, contributing, at the same time, for the vital undertaking which represents the extension of the EU to new members.

The research converges in what is intended by the Club of Rome, in their ongoing project Identifying strategic research directions on network and service infrastructures under the hypothesis of a disruptive paradigm concerning global societal developments (PARADISO) . This aims to identify strategic research directions on network and service infrastructures in the hypothesis of a disruptive paradigm concerning global social developments. This possible paradigm shift, which more and more analysts are evoking worldwide, is based on the vision that, in order to avoid major worldwide crises, all countries (developed, emerging, and developing ones) will need to agree, sooner or later, on an alternative way forward, and make their social development models converge.

The EU is, undoubtedly, the world's best placed power to proactively promote this new concept of progress, based on revised social, environmental and economic objectives: true sustainable development, more sustainable economic growth, more equally shared resources, and, as the final goal, the well-being of people around the world.

To this we will add the research on facilities and services needed to support these new objectives, and more precisely the service's infrastructure network to be developed.

6 REFERENCES

- JOASSART-MARCELLI, Pascale (University of Massachusetts-Boston); MUSSO, Julie (University of Southern California); „Municipal Service Provision Choices within a Metropolitan Area“ in *Urban Affairs Review*, Vol. 40, No. 4, 492-519 (2005)
- BENNET, John and IOSSA, Elisabetta; "Building and managing facilities for public services". Department of Economics and Finance, Brunel University, UK, 2005
- BERLIANT, Marcus; PENG, Shin-Kun; Ping, Wang; "Welfare analysis of the number and locations of local public facilities" *Regional Science and Urban Economics*, Volume 36, March 2006, Pages 207-226.
- KIMINAMI, Lily; BUTTON, Kenneth and NIJKAMP, Peter (Editors) "Public Facilities Planning" Cheltenham, UK, Edgard Elgar Publishing, 2006.
- NAVARRO GALERA, Andrés; ORTIZ RODRÍGUEZ, David; LÓPEZ HERNÁNDEZ, Antonio M.; "Identifying barriers to the application of standardized performance indicators in local government" in *Public Management Review*, Volume 10, 2008 , pages 241 – 262.
- CHO, Ming-ying; "Examination of floor area ratio in residential district in terms of the service level of public facilities – An example of Hu-Wei-Liao readjustment area in Tainan City" Master's Thesis 2009.