

# A Survey of Internet Based Information Sources on Urbanism

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**Abstract** — In the context of rapid technology development, followed by Internet spreading worldwide, the amount of information related to urban development is remarkably increased. Information access and exchange, associated with speed, updating, storing and price, are replaced by Internet caused problem of website selection. This paper represents a selection of Internet based information sources on urbanism. The aim is to enable urbanism experts to cope with the numerous on-line available contents. Internet sources are, according to their contents, classified into: information communication technologies, planning, on-line available magazines and books, best examples, associations and institutions, international documents and civic networks.

The significance of Internet sources is recognized not only as a professional urban planning information base, but also as an important application tool in contemporary urbanism. Examples of understanding the increasing function of Internet in developing urban planning and its participation procedures in governing, are presented as well.

## I. INTRODUCTION

Information Communication Technologies applications (ICT), and especially Internet, are becoming an important factor in cities' and regions' development. Internet enables quick exchange of information, while cheap and accessible communication devices approve large practice. The impact of Internet on city progress is two folded. Firstly, its rapid development causes revolutionary changes in cities' special-functional organization. Secondly, it enables better (quicker, cheaper and unlimited in time and space) approach to greater quantity of information and finer governing coordination of city development representatives.

If urban planners activity is defined as preparation for the approaching future, the fulfillment of this task needs a constant study of new technology changes and their consequences on city functioning. It also comprises skilled and highly educated urban planners that are able to apply new communication technologies.

The role of ITC, and especially Internet, as a resource of urbanism database are the main focus of this paper. Problems

of such a research are numerous because contemporary problems of urbanism are rapidly increasing and therefore cannot be considered as a whole. Recognition of Internet importance as a database resource will help planners who are in constant search of new experiences and ideas in their profession.



Fig. 1. Future city development

## II. INTERNET AND CITY DEVELOPMENT

### A. Internet as a Source of Information

*Contemporary urbanism experts must take active part in Internet construction. They need to absorb skills of designing cyber space and help to build this monument of modern time. These experts should never forget that although the network structure celebrates the power of technology, it is still for men, and just men, to use...*

Search of cyberspace, in order to find the best sites dealing with urbanism, seems to be a never-ending job. The problem is not only finding necessary information, but recognizing the right one as well. This difficulty is even more emphasized in subjects that cannot be easily systematically listed, and where data basis of context, effectiveness of presentation and design, are not strictly specified.

Subject of urbanism and planning is just like that. Therefore, organizing a list of high quality sites found on the web has to be done according to a desirable goal. The aim of this paper is to make a list that will serve as a starting point for further search, a starting point for all professionals and nonprofessionals that are interested in contemporary applications of Internet based sources on urbanism. While using these listed sites, planners can easily analyze current

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trends, or get some practical training in finding necessary organizations, people and theory examples. The listed application demonstrates a practical way for valid expertise and experience in finding information on urbanism issues. They can be also used as a basic learning tool to help search the web for common technological, social, environmental, economic and specialized problems in urbanism.

The listed samples are selected depending on the performed variety of represented data that describe different development and practice subjects about urban planning. These sites are considered to be an essence of urbanism links on Internet library, and in that way the best examples of information about:

- Information communication technologies
- Planning
- On-line available magazines and books
- Best examples
- Associations and institutions
- International documents
- Civic networks

All the presented sites were active in November 2002. They are collected by use of Internet search directories such as Goggle, Yahoo and Alta Vista. The sites are different in available content, information, types of interactive communication, structure, mode of presentation and referent users. All of these presented sites aim to serve Internet recognition as a potential source of information and knowledge, necessary for further efficient city planning development.

### B. City's Network Examination

*City networks with flexible spaces, which reorganize simultaneously together with residential demands, must be a future design obligation that will respond to the concerns of modern community...*

City is a complex and live organism, with constantly

constant demand for information. The quest for information joined residents, organizations and their knowledge, and formed present city's network communities. While forming these networks and expanding the number of contacts between people, the cities increased their social values.

The major task of this century is to construct new tools that will help people eager for knowledge in a complex city society. In the new world, which is becoming increasingly networked, all cities are subjects to similar influences and are confronted with similar problems. Our task is to find a single, all embracing solution of these problems. By doing that, we shall manage social and ecological demands of city development, and recognize present planning chances and their economic potentials.

### C. Choice of Sources

*An Internet information search demands skill and invention. It is like the knowledge of a language - many can speak it, still few can write a poem ...*

The influence of Internet on life and work is considerably complex. The changes are manifested in different activities (education, transactions etc.) and enable cultural diversity on one side and global governing on the other. In all mentioned areas, Internet serves more as a supplement than a complete substitution of the existing medias. The use of Internet is first adapted to the present patterns, and then introduced to urge innovations and changes.

The basic problem of all researches has always been the access to information. The problem of Internet based search is of a different nature. The access to information is very easily and creatively maintained. Today the challenging task is not the access, but the choice of quickly changing and increasing information multitude. This constant selection is integrated in our search as well. At the beginning of every data search, researchers face two problems:

- How to recognize information?

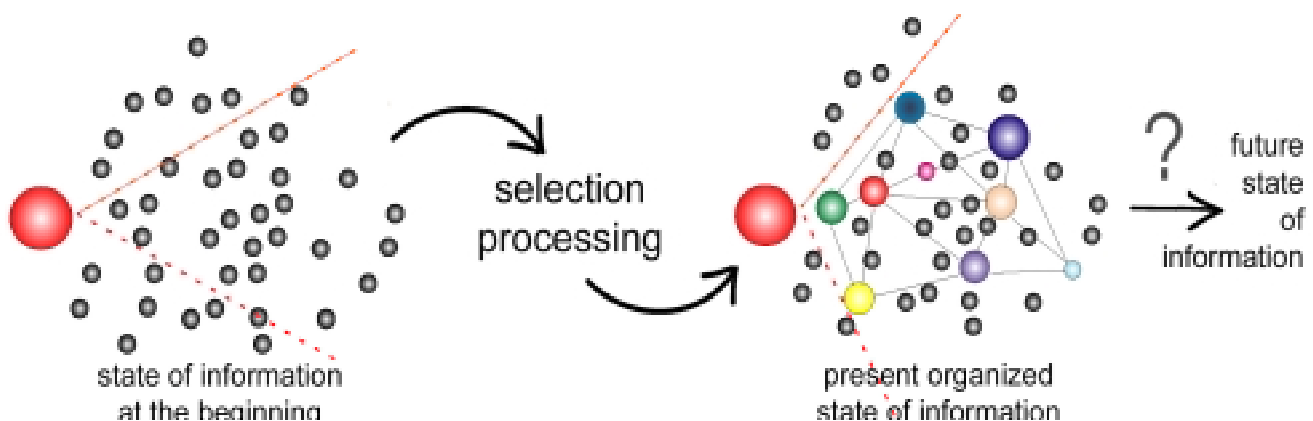


Fig. 2. How to recognize and organize information?

speeding changes caused by new technological achievements. A new digital city within a city is an appearing phenomenon of a communication technology era. Nature and characteristics of this digital city community are not completely recognized, but the amount of knowledge about them is rapidly increasing.

Today we know that the digital network emerged from a

- What is the necessary relevant knowledge for this recognition?

The solution of these problems is the same as in the classical methods of research. The recognition of data must be performed by referent sources selection. This selection is usually done by choice of authors (persons and institutions),

content, proper area of research, or by a researcher's impulse. The novelty of Internet is that there is the possibility of key words search. This search can easily organize huge available information basis. The difficulty of key words approach is that a considerable previous knowledge is needed. Only when data content is acquired, sources can be recognized and the information identified. Therefore, the quality of Internet search depends mainly of the researcher's knowledge and skill.

#### D. Internet Importance

*Internet is a continuation of the physical world that surrounds us. In that way it contains information about all the existing activities ...*

The speed of Internet development is exceptional. Sometimes it is said: "An Internet year is like a dog year, changing approximately seven times faster than normal human time."

Within a consumer network that is rapidly enlarging, changes of Internet are of a constant nature. Needs for fast and effective information process and exchange are even more emphasized by the amount of available information on the Internet.

Governments and markets are not in a favorable situation because their duty is to respond to consequences of globalization, to force transformation, harmonization and integration of local communities into a unique one. The system of standards, which is used to organize relations of the participants, is developing together with the progress of the international market. At the end, there is a modern worldwide governing organization that demands an interactive cooperation network at all local levels, and vice versa.

The same process is happening in the domain of urbanism development. An interactive teamwork of architects, urbanism

will solve the existing crises in urbanism.

Information communication technology, and Internet as the leading present media, are the requested turning point that can achieve global participation and easy monitoring at the same time. Because of that, Internet will be more applied in future urbanism planning, and surpass all contemporary political and governing program application.

### III. INFORMATION SOURCES

#### A. Existing sources

*Modern Internet theory knowledge of science and technology enables us to work more freely. This new acquired knowledge has a rich potential to make everything we imagine possible to construct. Without this knowledge we shall never reach our true capacities...*

For controlling urban development, it is necessary to be constantly informed and supplied with new knowledge. With the aim of finding new information knowledge about ideas, facts, assumptions and technical solutions, urbanism experts search all the existing sources.

Two kinds of existing information sources on urbanism can be separately distinguished today:

- Classical sources
- Internet based sources

Classical information sources are considered usually to be published papers (bibliographies, books and magazines) and scholarly works (educational systems, advocacy planning, public debates). For these sources, synchronized participants' presence and time of activity are needed. Time is lost in organizing classical learning activities, and these arrangements always cost money. Classical information materials also demand a certain amount of professional vocabulary and

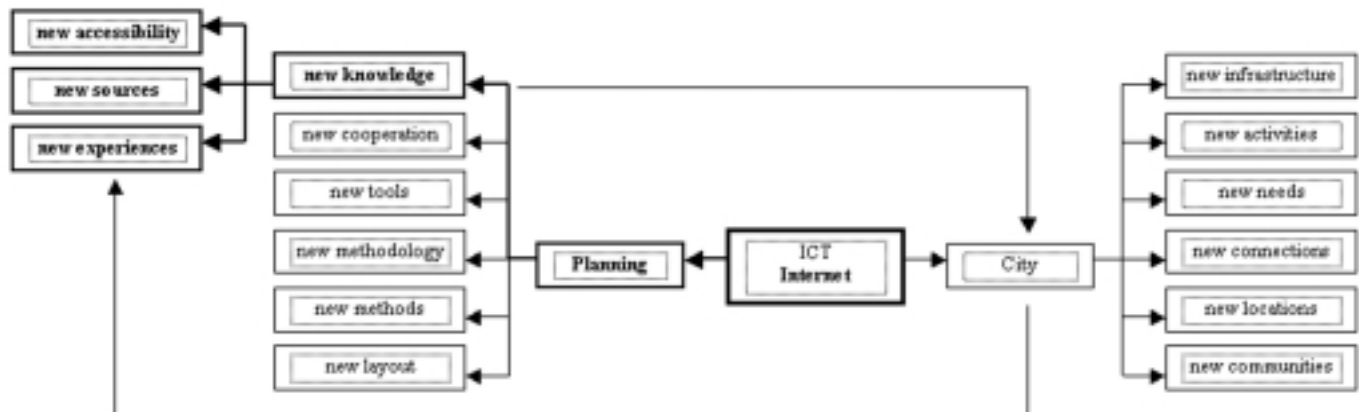


Fig. 3. The role of Internet in urban planning

experts, residents and governing bodies is required for each new design plan. This strict rule of collaboration, with the increasing professional competition, is even more stressed. Increasing information speed and new results processing, have become more important than the quality of the results themselves. Because of this, planners are looking for fast professional communication techniques of cooperation that

therefore cannot be easily understood by nonprofessionals. This way, classical information sources are accessible just to a selected group of experts, for a short period of time. Also, by the time the experts get information, they are out of date. Present definition of a community as a united information source, makes the classical methods of acquiring knowledge on urbanism, old fashioned.

Today, the fact that every kind of information is on-line, helps Internet sources overcome this problem and surpass the classical method of learning. This fact is more emphasized because Internet sources enable efficient processing by use of visual presentation, which is accepted in urbanism. Further more, Internet successfully achieves direct contact among participants looking for knowledge. That way, it gives new information not existing in classical sources.

Advantages of Internet based information sources are characterized by the following attributes:

- accessible – information is easily entered and stored
- intensive – content of information is active and focused
- interactive – in search for information it is always necessary to react
- illustrative – possible multimedia presentation in information listing

The listed attributes enable experts to make on-line sources that are communicative and cooperative. These sources are more effective, comfortable for use, have more participants and can achieve constant contacts of the participants.

Internet based information sources should be focused on interactive participants relationship. They can debate about different topics, and find new references, opinions and questions at the same time. A new model of research can be made in the virtual world. That model creates new forms, spaces and situation.

### B. Participating on Internet

*Building a virtual space according to real objects around us is very inventive. Vivid problems origin from the fact that external objects can be imagined, but still these objects somehow cannot be seen in cyber space...*

How can Internet be applied on urbanism, not just as an information source, but as a decision-making planning process as well?

Although the residents of a city cannot really choose urban planning designs and zone maps, nevertheless, an informative presentation can largely motivate and encourage residents participate in city development planning.

This passive participation is called spartal-planning participation, and is used as a commercial decision-making planning instrument. Internet application gives citizens an opportunity to express their opinion and to discuss. Through this engagement, they can indirectly create and choose plans. This participation is also very useful for planners gaining new ideas for future urban development.

This informative presentation, explaining the content of urban governing and increasing transparency of the procedure, seems to have developed new interactive communication channels. Now the question is, what are the new creative possibilities of these presentations and where are their limits? These questions can hardly be answered because of the suitable referent examples lack. Urban experts hope to develop an Internet model planning presentation, where all residential demands are analyzed and accomplished simultaneously.

### C. Selection of Internet Based Information Sources

*Every selection is challenging, because it might reflect our lack of*

*taste and measure...*

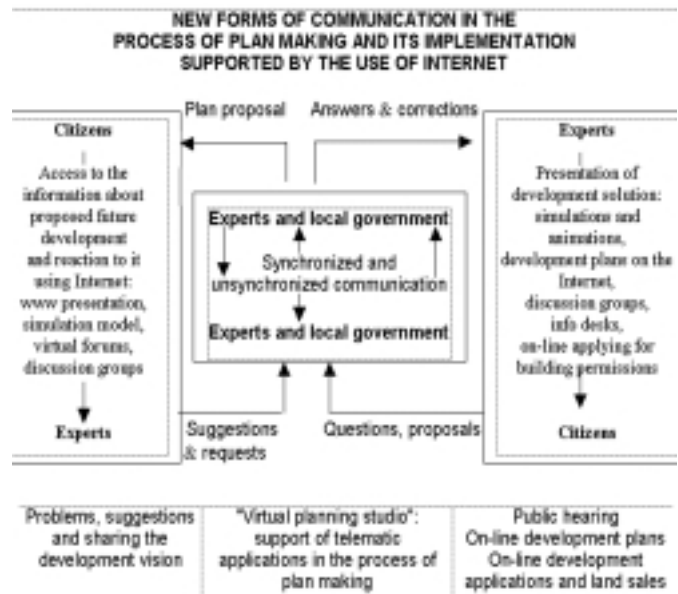


Fig. 4. Algorithm of participation

Selection of information is difficult in every Internet research. The problem is to recognize valuable resources and then, to present them. This paper focuses on providing urban planning site list that can serve as a background in further planning. The problem of such a list, as everything concerning Internet is, that the list must be constantly updated and can never unite all specified sources.

Because huge Internet information on urbanism contents is available, the selection must be strictly specified. The presented survey of information is listed in categories, with the aim to give an overlook of the entire Internet found subjects. This way the list can help planners develop search skills and encourage them to try out new technologies. Experts who support and expand Internet usage may implement the acquired experience afterwards.

#### 1) Information Communication Technologies Sites

Information communication technologies sites are separated from strict urbanism sites because the topic of ITC is considered to be especially important for further development of urban planning systems. The ITC sites are usually restricted just to Internet and therefore are a category for themselves. The listed sites explain changes directly provoked by ITC in the city, and give information about different Internet based communication technique. These sites also contain topics about computer application in urban planning and design (Civic Networks, Simulations, Virtual reality, Modeling).

#### 2) Planning Sites

This site selection lists data that cover a large field of different topics on urbanism. It includes different sites that can support Internet urbanism search. The content of the sites is various, but the area of sites' research is usually concentrated on all urban planning activities and actions. The listed planning sites are the central category of our register.

### 3) On-Line Available Magazines and Books

This group of sites lists selected on-line available published texts (bibliographies, books and magazines) on contemporary urban development. They are recognized as the most significant theory examples and can be downloaded on the Internet as a whole.

### 4) Best Examples

This site selection is especially important, because it shows various achieved Internet usage experiences on urbanism from different parts of the world. The listed sites also enable insight into practical use in different contexts. This practice is even more emphasized because contemporary urbanism urges global unification. The listed sites present a group of particular examples that are best results of implementation. The intention is also to show the increasing number of Internet urbanism applications and their successful practice in various social and economic environments.

### 5) Associations and Institutions

The associations and institutions group of sites presents the most important international institutions. Information about some significant plans, strategies and global programs of urbanism development are contained in these sites.

### 6) International Documents

This selection presents published documents on urban development. The sites contain only documents that are accepted by the majority of experts and outline basic strategic plan making.

### 7) Civic Networks

The best examples of Civic Networks (CN), as a particular application of Internet in city governing, are represented in this selection. The sites are parts of an organized system that provides information collecting and exchange, which enables cooperation of city residents. They are the only existing fully adapted Internet planning applications and are especially important examples of Internet based urbanism.

## IV. A LIST OF INTERNET BASED INFORMATION SOURCES ON URBANISM

*A site must always be adapted to time, place and needs of the consumer...*

The survey of information is listed according to the previously explained categories. The presented information consists of the most significant websites that can serve as a search database for urban planners. These websites are the essence of urbanism websites and are the best examples of Internet implementation. Please, review the list and send your comments about the sites you like best.

## A. Information Communication Technologies

### 1) Online Planning



Url: [casa.ucl.ac.uk/online.htm](http://casa.ucl.ac.uk/online.htm)

A website covering different issues relevant of developing a planning system on Internet, and this system's impact on urbanism.

This website aims to cover various examples of Internet based technology, which have wide range of implications on urban planning and design. The site is a best place to get information about all kinds of traditional and new web formats used in urban design and modeling. Because of the detailed analyses of different data exchange techniques, this site is useful practical application for architects and planners.

### 2) Collaborative Spatial Decision-Making



Url: [faculty.washington.edu/nyerges/csdm.h](http://faculty.washington.edu/nyerges/csdm.h)

Author: T. Nyerges

An on-line paper that describes future developments of Internet based decision-making in urbanism. It contains information related to the emerging field of research, which involves group-based problem structuring, and applications of digital spatial information facilitated in urbanism - called Collaborative Spatial Decision-making computer technologies.

This website is a central information point, linked to different cities. It contains topical areas like geographic information systems (GIS), spatial decision support systems (SDSS) and spatial decision support systems for groups (SDSS-G), multi criteria decision modeling (MCDM), group support systems (GSS), decision support systems (DSS), computer-supported cooperative work (CSCW) and human-computer interaction (HCI).



### 3) UrbanSim



Url: [urbansim.org](http://urbansim.org)

Author: Metropolitan Planning Organizations

The website presents information about the simulation game called Sim-city. Urban Sim is a software-based simulation model for integrated planning and analysis and is very useful for planners. Experts can "test out" urban development strategies, and learn more about corporation and interaction of market land use, transportation, development and public policy.

This website contains information, description, papers, and what is most important, downloads of different test policy issues. It also contains alternative governmental plans and policies interesting for the planning process.

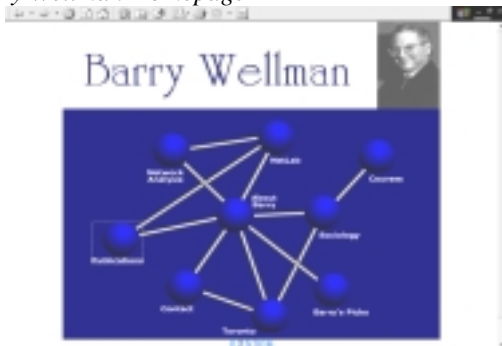
### 4) The World Foundation For Smart Communities



Url: [smartcommunities.org](http://smartcommunities.org)

The site lists contemporary ideas and theory problems concerning the phenomenon of Internet, which developed present network communities. The illustrated reports consider if smart networked communities are the future of the cities.

### 5) Barry Wellman Homepage



Url: [chass.utoronto.ca/%7EWellman/main.html](http://chass.utoronto.ca/%7EWellman/main.html)

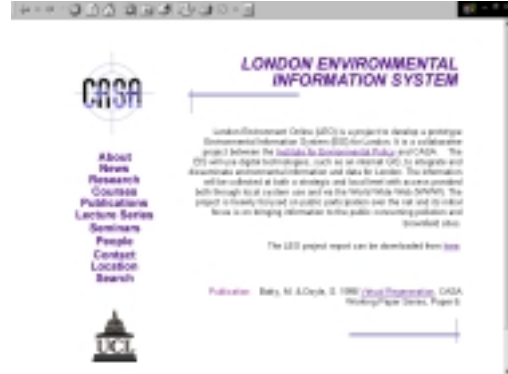
Author: B. Wellman

The website studies Information Communication

Technologies and their impact on community, communication, computer technology and society. It is a survey of researches and lists many tutorials about these topics. The site is very useful for society strategies planning in cities and regions.

### B. Planning

#### 1) Casa



Url: [casa.ucl.ac.uk/env.htm](http://casa.ucl.ac.uk/env.htm)

Author: University College London, S. Doyle

Center for Advanced Spatial Analysis website (CASA) is a search center for advanced spatial analysis. In other words it is a review of 3D city modeling.

The website contains information about developing computer technologies and disciplines, which deal with space design. It is about integration of two apparently diverse fields, architectural history and computing. The site has different interesting directories such as Town Centers, Geographic Information Systems, Based Modeling, Spatial Decision and Planning Support Systems and Internet research on the planning system.

#### 2) Cyburbia



Url: [cyburbia.org/index.html](http://cyburbia.org/index.html)

Author: D. Tasman

Cyburbia (formerly called PAIRC - The Planning and Architecture Internet Resource Center) contains comprehensive directories of Internet resources relevant to planning, architecture and urbanism.

This website focuses on cities, their metropolitan areas and has impact on government policies, private sector actions and national trends of building safe environments. The site also contains related mailing lists, newsgroups and several interactive message areas. It is considered to be an interactive information presentation for professional architects, urbanism

planners, public authorities, journalists and planning companies.

### 3) Planetizen



Url: [planetizen.com](http://planetizen.com)

This website is the best source of urban planning news, job opportunities, commentary and events. The site provides links to professional associations, publications and data on urbanism. It exchanges the information for interested public, developing a planning information base.

### 4) Yahoo Directory Of Urban Studies about Planning



Url:

[dir.yahoo.com/SocialScience/UrbanStudies/UrbanPlanningandDesign](http://dir.yahoo.com/SocialScience/UrbanStudies/UrbanPlanningandDesign)

A core directory service of the web's search engine that searches Internet for websites related to urbanism. A very important searching site that contains simple information about the most popular planning and design sites. This directory is a starting point for gaining nonprofessional information, and therefore is often used by people just interested in the subject of urban planning and governing.

### 5) Rudi- Recourse urbanism design information



Url: [rudi.net/news.cfm](http://rudi.net/news.cfm)

This on-line library offers high quality text content, reference sources and directory information about good practice in urban design. The website contains full text documents and valuable expert contacts, related to urban design. This site includes significant unique items and information that are difficult to locate, and can fill gaps about urban design practice. Although the site provides strictly professional information, it can serve the public as well.

### 6) Planum



Url: [planum.net/webcompass/menu.html](http://planum.net/webcompass/menu.html)

A literature search website that lists new topics in urbanism, planning and governing. The search is based on finding archives, journals, news and associations on the web. The importance of this site is that it contains planning related publications with plans, projects, policies, laws, lists of public bodies and planner firms. The website can be listed in German, and is very useful for gathering literature information.

### 7) Planners network



Url: [plannersnetwork.org/index.html](http://plannersnetwork.org/index.html)

Author: C. Hartman, T. Angotti

The site contains all the latest issues on urban planning. It lists magazines, case studies and working papers. The website illustrates urban management as a part of the international task of creating large-scale governments that control rapid urban growth. This site is useful for planners because it is a short course of specialized training programs, consultancy and research on urban management.

## 8) About planning



Url: [planneronline.homestead.com/NewPlanningMeridian.html](http://planneronline.homestead.com/NewPlanningMeridian.html)

A catalogue website that contains general information about different urbanism sources: publications, essays and new. Lists some 3 million websites, and among them especially interesting sites about land use planning, growth management, comprehensive planning, smart growth and new urbanism theory.

## 9) New Urbanism -Professional And Research Links



Url: [netsense.net/~terry/newurban.htm](http://netsense.net/~terry/newurban.htm)

Author: J.Terry

This website contains helpful information about classical and on-line publications in urbanism. It has over 150 links to projects, people, articles, book reviews, organizations and other resources concerning planning. The site is interesting because it has a strong design component of direct references to New Urbanism issues such as urban sprawl, sustainability, growth management, downtown revitalization and transportation.

## 10) Royal Town Planning Institute

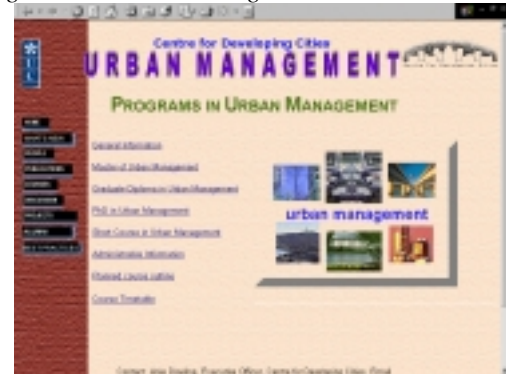


Url: [rtpi.org.uk](http://rtpi.org.uk)

Author: Royal Town Planning Institute

The website promotes public participation in planning through environmental education, award schemes, publications and aid schemes. This site lists advices, publications and policies. It is useful for planners and people engaged in community planning. It brings together professional town planning associations and institutes, and presents the new English vision of planning.

## 11) Programs In Urban Management



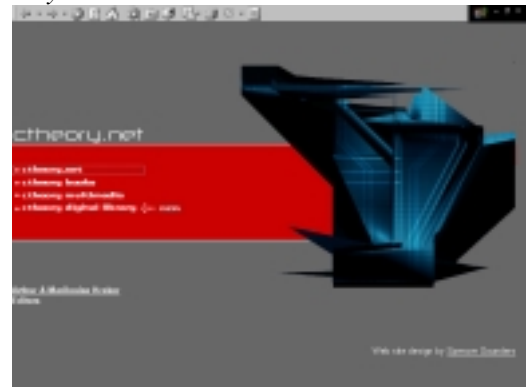
Url: [cities.canberra.edu.au/CCourses.htm](http://cities.canberra.edu.au/CCourses.htm)

Author: Center For Developing Cities:

The website contains various materials concerning contemporary global politics and its impact on the city. This site is especially important for planners because it has designs and their explanations. It can serve as a short course and special training program on urban management as a part of the major international task of urban growth in the developing World.

## C. On-Line Available Magazines And Books

### 1) Ctheory



Url: [ctheory.com](http://ctheory.com)

Author: M. Kroker

This on-line magazine has a list of articles related to new contemporary theories of understanding the web. Among these articles, some new issues related to Internet urbanism applications and their method of global implementations are included. These fragments of new topics can be very interesting for on-line urban planning theory.



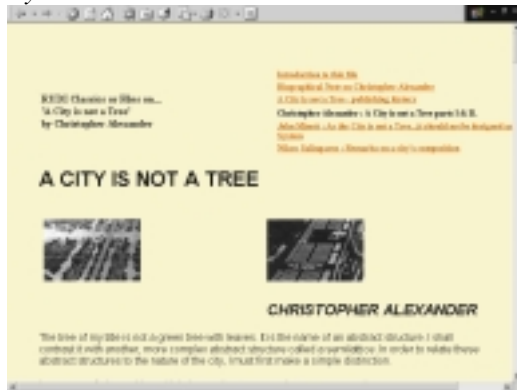
## 2) Urbanistica



Url: [planum.net/journals/ns-uri.html](http://planum.net/journals/ns-uri.html)

An online magazine that promotes, regulates and diffuses the studies of planning in Italy. This magazine has significant autonomous texts suggesting guidelines to overcome the planning crisis. It shows the differences of singular solutions and illustrates how to deal with urban problems in the future. This magazine is also important because it reflects the roots of planning metropolitan and regional areas and is a good theory practice.

## 3) A City Is Not A Tree



Url: [rudi.net/bookshelf/classics/city/alexander/alexander1.shtml](http://rudi.net/bookshelf/classics/city/alexander/alexander1.shtml)

Author: C. Alexander

A book website concerning new planning theories and future planning problems. This book presents newly developed conflicts that emerged after introducing global interactive planning concepts. The site is important for public more interested in complex theoretical questions and continuous exchange of information between different professions.

## 4) City Of Bits

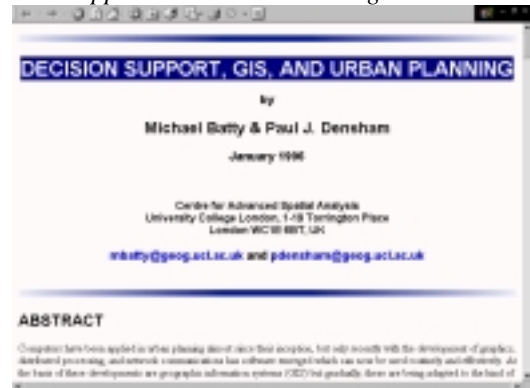


Url: [mitpress2.mit.edu/e-books/City\\_of\\_Bits/index.html](http://mitpress2.mit.edu/e-books/City_of_Bits/index.html)

Author: W. Mitchell

The website contains an international anthology of urban planning. This key book explains early ideas about possible influence of the computer information revolution on planning structures. The book was the first paper to introduce basic concepts of communication technologies, from which many are still used today. The significance of this site is that it describes the development of interactive urbanism, which is today accomplished by Internet.

## 5) Decision Support And Urban Planning



Url: [geog.ucl.ac.uk/~pdensham/SDSS/s\\_t\\_paper.html](http://geog.ucl.ac.uk/~pdensham/SDSS/s_t_paper.html)

Author: M. Batty, P. Densham

This on line paper describes new developments of on-line decentralized decision-making software, showing all what is now possible in planning. The issue of importance, is the effective use problem of the emerging graphic, processing and network communicational software in practical urbanism.

This site can be used for learning spatial decision support systems (SDSS), planning support systems (PSS) and on geographic information systems (GIS) program applications.

## 6) The Environmental Documents



Url: [changenet.sk/epce/docs.htm](http://changenet.sk/epce/docs.htm)

The site contains download texts from books: “A Decade of Nurturing the Grassroots” and “Caring for the Land”. These books research history and changes concerning the new idea of the Environmental Partnership in Eastern Europe. The text lists problems of rural development, community revitalization and development of a vital civil society in the post Communist societies. This site is useful for planners because it provides an informal look at some impressive issues of the Eastern region.

## 7) An International Anthology of Articles, Conference Papers and Reports



Url: [library.cornell.edu/Reps/DOCS/homepage.htm](http://library.cornell.edu/Reps/DOCS/homepage.htm)

Author: J. Reps

An outstanding online bibliography of materials documenting the history and development of urban planning. The collected work in this site is equivalent to a 600-page book, containing journals, conference reports, books, official documents and other written sources used in urban planning. This site was originally established to serve educational purposes, but now to serve academics and professionals to read historic planning papers.

## D. Best Examples

### 1) Best Practices



Url: [bestpractices.org](http://bestpractices.org)

A magnificent database of different solutions for social, economic and environmental problems of the urbanizing world. Analyzing current trends this website lists best-implemented examples of contemporary theories in reality. It demonstrates the practical ways in which public, private and civil society sectors are working together to improve governance that supports economic development, save the environment.

The website is the best practice for finding information on current human settlement issues and other case study materials.

### 2) Public Space



Url: [cccb.org/espurb/index.htm](http://cccb.org/espurb/index.htm)

Author: Centre de Cultura de Barcelona

The website tries to provide an information resource and platform of debate for everybody interested in regeneration of urban public spaces in European cities. In that way, this site serves as an Internet archive on urban design. Its database is organized by nations, cities and types. Every file has maps, descriptions and pictures of the designs. This site is interactive, so urban experts can chat and debate about city's public spaces. It can be listed in Spanish as well.

### 3) Barcelona Economic And Social Strategic Plan



Url: [bcn2000.es](http://bcn2000.es)

Author: Barcelona planning institute

A site containing a strategic metropolitan plan of Barcelona, with all the authors, ideas and work. This site serves to consolidate Barcelona as a dynamic European metropolis, and is an example for other Spanish and Mediterranean cities.

What's more important, are the sites' downloads of all the attended papers such as agendas, bulletins, inscriptions, surveys of governing bodies, documents and plans.

### 4) Goshen Us 33 Study



Url: [bsu.edu/web/CBP/projects/goshen/default.htm](http://bsu.edu/web/CBP/projects/goshen/default.htm)

Author: Ball State University

The website lists community based projects and tutorials with different environmental problem subjects. It presents student works of solving traffic problems in the town of Goshen. The site is very illustrative because it contains imaginative and controversial examples of relieving traffic problems, and is therefore useful for planners.

### 5) Your Town Planning & Design Studies Handbook



Url: [bsu.edu/web/CBP/resources.htm](http://bsu.edu/web/CBP/resources.htm)

Author: J. Segedy

The website is a guide for community based planning approach that can solve problems, and plan future. It illustrates techniques such as land analysis, issue identification, assessment needs, strategic planning, consensus building and communication network enhancement. The site explains how to use theory-planning supplements on different themes within an educational University setting.

### 6) Cheshire County Council



Url: [cheshire.gov.uk/cheshpln/la21/home.htm](http://cheshire.gov.uk/cheshpln/la21/home.htm)

Author: City Council

This website represents Cheshire's introduction of Agenda 21 and the making of Community Strategy programs as a related project. The site has chapters that serve central government, local government, business and non-government groups. It is a useful example of establishing local strategic partnership in the community, with further links to different organizations.

## 7) City Council Of Winchester



Url: [winchester.gov.uk/la21/sustainablewinch.htm](http://winchester.gov.uk/la21/sustainablewinch.htm)

Author: City Council

The website is the best example of how to implement Agenda 21 at a local level environment. Because this site aims to educate citizens of Winchester, it can be used as a guide that explains sustainability to nonprofessional.

For planners it is a good implementation example of the new theory of sustainable city planning, already checked. The site is also an interactive information network with services, plans, documents, governing information and city guides.

## 8) Agenda 21 For The Baltic Sea Region



Url: [ee/baltic21](http://ee/baltic21)

Author: Governmental in the Baltic Sea Region

The website illustrates sustainable development in the Baltic Sea Region, encompassing economic, social and environmental programs. This site provides general detailed introduction information of cooperation in this field. It is important for planners because the Baltic Sea Region is the first region in the world to adopt common goals for sustainable development, and so is the best website example in practice. The site covers different goals and an action program for sustainable development in various sector fields.

## 9) Professional and Research Links



Url:

[umanitoba.ca/faculties/architecture/cp/Pages/student&carres.html](http://umanitoba.ca/faculties/architecture/cp/Pages/student&carres.html)

Author: University of Minnesota

The website intention is gaining professional experience and extending involvement in practice during students planning education. It provides students with links for planning studies and further urbanism careers. It is the best place for finding connections to professional planning organizations, governments, development agencies, on line libraries and indexes. This website also lists directed studies, internships, mentors and interaction with professionals.

## E. Associations and institutions

### 1) Un-Habita



Url: [unhcs.org/](http://unhcs.org/)

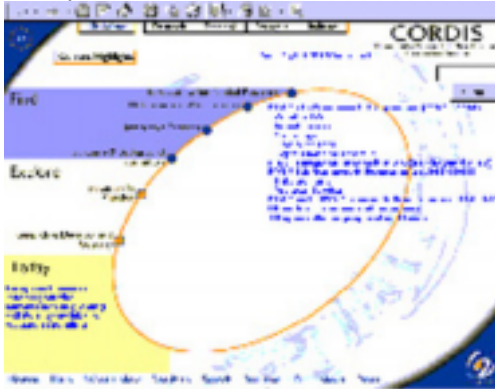
Author: United Nations Human Program

This website shows the contribution of the UN in implementing sustainable ideas in urbanization. The site contains different publications, catalogues and declarations.

It serves global urban monitoring and is useful for getting practical information, policies and programs concerning world wide human settlements.



## 2) The Europe Union - Community Research And Development Information Service



Url: [cordis.lu/en/home.html](http://cordis.lu/en/home.html)

A main website of the European Union that lists all actions of the Union. The site gives access to information databases (documents, declarations, published papers) of all new projects and researches concerned with European development.

The site is useful for defining general strategies in urban planning.

## 3) Activities Of European Union



Url: [europa.eu.int/pol/ener/index\\_en.htm](http://europa.eu.int/pol/ener/index_en.htm)

The website lists all programs of the European Union that indicate sustainable development being a key factor of Europe's competitiveness and economic development. This site is useful for planners because it contains all legal regulative and laws. It also introduces issues of trans-European energy networks that influence Third World countries relations.

## F. International documents

### 1) Agenda 21



Url: [un.org/esa/sustdev/agenda21.htm](http://un.org/esa/sustdev/agenda21.htm)

Author: United Nations

This website contains whole Agenda 21 declaration of the

United Nations Conference on Environment and Development (UNCED) held in Rio de Janeiro, 1992. This document is a comprehensive plan of actions on global, national and local levels. The declaration is essential for planning and is already adopted by more than 178 governments.

### 2) The Habitat Agenda

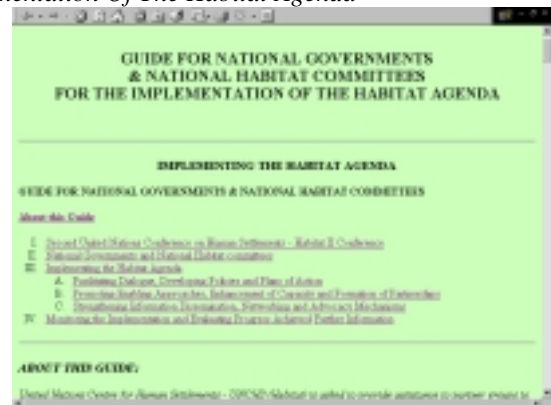


Url: [unchs.org/unchs/english/hagenda/index.htm](http://unchs.org/unchs/english/hagenda/index.htm)

Author: United Nations

The website contains program draft papers from the Istanbul Declaration on Human Settlements Conference. These papers explain commitments and strategies for human settlements development implementation that are interesting for planners. Topics concerning sustainable development, adequate settlement shelter and healthy productive environments are listed as well. This website is a good example of a global document that aims to help people living in poverty and others belonging to vulnerable and disadvantaged groups. The site can be listed in French, Spanish and English.

### 3) Guide For Governments And Committees For The Implementation Of The Habitat Agenda



Url: [unchs.org/unchs/english/hagenda/natcoms.htm](http://unchs.org/unchs/english/hagenda/natcoms.htm)

This Committees For The Implementation Of The Habitat Agenda website can assist partner groups to establish guidelines for national and local monitoring and evaluate the implementation of the Habitat Agenda.

The site explains how to mobilize and balance resources of support, and finds partners for financing the use of national strategies at local plan level. The site also lists different authorities, associations and civil society organizations that can help planning and governing strategies implementing the Habitat Agenda.

#### 4) Johannesburg Summit 2002 -Planning And Governing Problem



Url: [johannesburgsummit.org](http://johannesburgsummit.org)

Author: World Summit of Sustainable Development

The United Nations website presents declarations of the Johannesburg Summit. The main issues are difficult planning challenges -including improving people's lives and conserving natural resources of the world growing in population and demands. The site can be used to download all the important documents, high light actions, programs and news of implementing sustainability.

#### 5) Urban 21



Url: [urban21.de](http://urban21.de)

Author: A. Muller, G. Stellmann

The website contains a final declaration of topics and goals, which were discussed at the Global Conference of the Urban Future. This site can help experts to be fully aware of the existing worldwide city problems. It lists problems, new trends, principles, priorities and actions of the future governing that supports the improvement of living and environmental conditions in urban areas.

#### 6) Partnership For Central Europe



Url: [changenet.sk](http://changenet.sk)

This website serves international environmental protection and sustainable development partnership of Eastern countries. The site contains useful strategic planning information and region programs in order to provide fast, effective and non-bureaucratic financial and technical support for local environmental action. It also lists topics such as landscape stewardship, sustainable rural development, energy alternatives, advocacy, greenways for central Europe and cross-border programs.

#### G. Civic networks

##### 1) Civic Networks



Author: Epitelio Network

Url: [eurosur.org/epitelio/urbanas.htm](http://eurosur.org/epitelio/urbanas.htm)

The website introduces basic concepts of Urban Civic Networks. It lists best examples of implementations and texts that explain how to create Civic Networks. This site has interactive mailing applications and is available in Italian, English and Spanish.

## 2) Amsterdam



Url: [amsterdam.nl](http://amsterdam.nl)

Author: City Government

Amsterdam city government is the first to recognize the possibility of Internet decision-making, so this site is a well checked implementation of a Civic Network site.

The website is a very useful example because it is not for residents' use, but for others interested as well. The site presents Amsterdam from various aspects, and allows participation of residents in governing.

## 3) Bologna



Url: [ccomune.bologna.it](http://ccomune.bologna.it)

Author: La Rete Civica di Bologna

This website is the best example of a Civic Network that informs residents about different urban developing problems in their city. Not only that this site gives access to information, it also offers cooperation possibilities of citizens and government. The website also lists various illustrative subjects for planners.

## 4) Singapore



Url: [ura.gov.sg](http://ura.gov.sg)

Author: Urban development Authority of Singapore (URA)

This website contains information about developing plans and programs of Singapore. It is a useful example of how a city planning program can have all activities converted into computer media on the Civic Network.

This site gives insight into the citizen information mechanism and transparency of Internet public planning.

## V. ISSUE OF IMPORTANCE

*The Web is a skilled game of numerous data under the technological sun...*

Fundamental significance of on-line communication urbanism is already recognized. The experience of searching Internet base sources on urbanism shows that there are improvements of communication possibilities considering the number of returned information. But the evaluation and experience of present application show that Internet based sources in future will not replace classical planning information forms of sources. Generally, Internet usage in urbanism is to be extended as a media tool application.

The fact that a large quantity of urban planning information can be provided by Internet shows that certain information overload can occur.

This can be stopped if more direct and accurate listing tools are applied. However, the experience indicates that the use of Internet should not be regarded with too much joy. There are still large parts of population who are nervous about using Internet or have no access to it. The Internet participation in urbanism will be considerably affirmed by the next generation of professionals.





Fig. 6. Future demands on urbanism?

## VI. CONCLUSIONS

This paper opens a series of questions about the significance of Internet, not only as a professional urban planning information base, but also as an essential application tool in contemporary urban planning.

Internet enables new communication techniques and new ways of increasing knowledge about urbanism issues. It gives an insight to different ways of understanding various subjects, and in that way, contributes to finding more accurate solutions. If applied in urban planning, Internet can improve professional practice as well.

Internet urges internal professional communication allowing data distribution, and also sets new community improving planning criterion.

The study of different Internet base sources allows gaining new experience, which can be afterwards easily implemented in practice. Further more, Internet sources offer great opportunities for urban planning that is completely up to date. At the same time, classical forms of planning must also be maintained. They should be primarily improved and not strictly replaced by Internet on-site urban planning applications.

A survey of Internet based information sources on urbanism is not just a data foundation but also a diversity of new information forms. Different progress levels and Internet material values are easily recognized, and therefore, it is necessary to urge urbanism experts to define Internet development strategies.

Internet application in urban planning must be supplemented by an extra professional component in future. Greater effectiveness of the future application will encourage the next generation of urbanism experts to develop new usage of Internet as a managing tool, which actively participates in planning.

For understanding applied Internet methods possible measures may be introduced:

- promoting encouraging campaigns
- discovering new fields and opportunities of research (governing and implementation)
- developing specific projects focused on single problem solving
- training new experts

- establishing global practices

Some of the presented facts and ideas of this paper may help urbanism experts to recognize the quality and importance of Internet based urbanism information sources. Regarding this role of Internet, this paper may stimulate further research in urbanism.

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