

INTERNATIONAL BAIKAL  
WINTER UNIVERSITY OF URBAN PLANNING DESIGN



Urban Planning designers | Urban economists | Transportation engineers | Architects | Ecologists | Social scientists | Geographers | Surveyors

# WU BOOK

WINTER UNIVERSITY

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IRKUTSK | RUSSIA

## SUBURBANIZATION

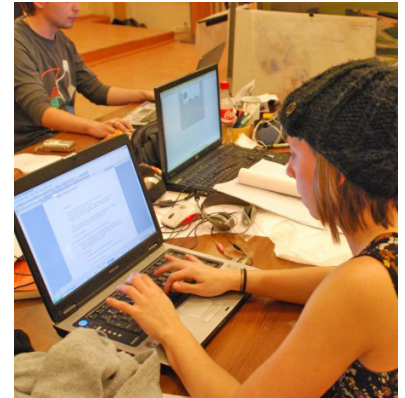
ECOLOGY OF SUBURBAN SETTLEMENTS

13<sup>th</sup> SESSION OF WINTER WORKSHOP



11 FEBRUARY  
4 MARCH  
2012

## ABOUT US



**Baikal International University of Urban Planning Design** was founded in 1999 on the initiative of Irkutsk administration, jointly with Irkutsk State Technical University and with the assistance of planning institutes and public organizations. The principle of carrying out creative workshops of the WU of Urban Planning is based on the experience of Summer Workshops of the European University of the Urban Planning (Cergy-Pontoise, France), where the original procedure and strategy of holding summer workshops was created. These workshops have been holding all over the world for more than 29 years.

### THE MAIN GOAL

of the annual workshops is to create competitive programs and implement them in the work of design groups, comprising young specialists with different vocational training, representatives of different countries and cultures that come to see each other for the first time.

This program is an original model of training of young specialists of different professions related to the city and its districts development.

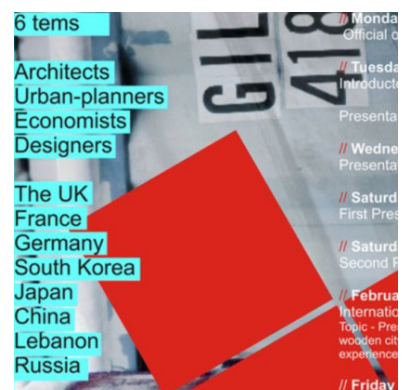
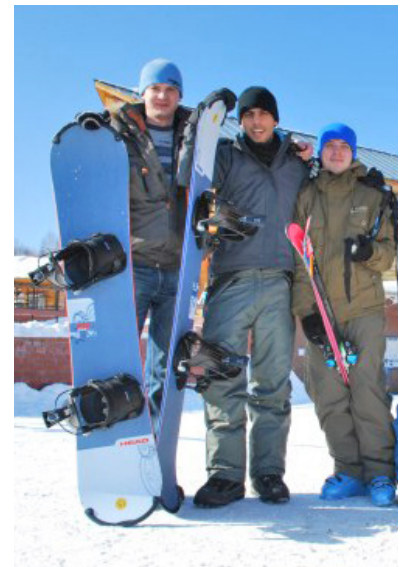
Having no analogues in Russia, WU gives the opportunity to the participants of workshops to reach a new higher level of conceptual thinking in the qualitative sense, exceeding the bounds of traditional education.

The program also allows exchanging of vast experience in mastering analytic and designed approaches in the framework of international interdisciplinary partnership, in the work with dynamically developing urban planning systems of Siberian cities.

**The settled „Image“ of WU was formed as a multi-purpose centre of raising the international level of professional skills.**

The members of International Jury appreciate professional scientific practical amount of projects produced by international teams.

**Over 12 years more than 1000 young specialists, assistants, experts, members of international Jury, representatives of 42 universities from 23 countries took part in our innovation educational programs (France, The UK, Germany, India, Sweden, Spain, Italy, China, South Korea, Lebanon, Mexico, Mongolia, Norway, Russian Federation, Turkey, Brazil, Switzerland, The USA, Japan, Bulgaria, Georgia, etc.)**



## THE CITY OF IRKUTSK

Irkutsk was founded in 1661 and got its name after a stockade town founded by Cossacks in the mouth of the river Irkut. The 6th of July is considered to be the birthday of the city. In 2011 there was celebrated the 350th anniversary of Irkutsk. In 1682 the city became the center of an independent province, four years after that it got the city status accompanied by the seal and the coat of arms.

### POPULATION

size - over 1 mln. people taking into account Irkutsk-Angarsk-Shelekhov agglomeration. Irkutsk is an administrative center of Irkutsk region. Its population is over 600 thousand people. It's populated by about a hundred nationalities; the most numerous are Russians, Ukrainians, Tatars, Jews, Byelorussians, Buryats, Armenians and Tadjiks. Irkutsk has four administrative districts - Pravoberezhny, Ochyabrsky, Sverdlovsky and Leninsky. Now Irkutsk occupies the area of 28 thousand hectares.

### IRKUTSK - the middle of the Earth

is the oldest city of Siberia and has unique and various architecture, interesting history, century-old cultural traditions, strong scientific and educational potential.

Since ancient times it was the center of trade routes crossing, the largest transport hub in the east of Russia. Thanks to diligence of active Irkutsk merchants who have laid a caravan road through Mongolian steppes to the rich states of South East Asia, in the end of the XVII century Russian and international trade started to concentrate here.

Nowadays Irkutsk continues to follow these traditions, supporting mutually advantageous trade relations with a number of states. Business partners of Eastern Siberia capital are the Ukraine, Canada, Croatia, Italy, Germany, France, the Great Britain, Sweden, Finland, Israel, India, Japan, Mongolia, China, Korea, the USA and other countries. It's not by chance that for the sixth time the capital of Angara Region is a placher of the Baikal Economic Forum.

International contacts, business cooperation with foreign partners, long-term experience of economic and cultural interaction make the city attractive for carrying out of such forums. Affinity of Baikal is one more powerful argument in favor of Irkutsk.

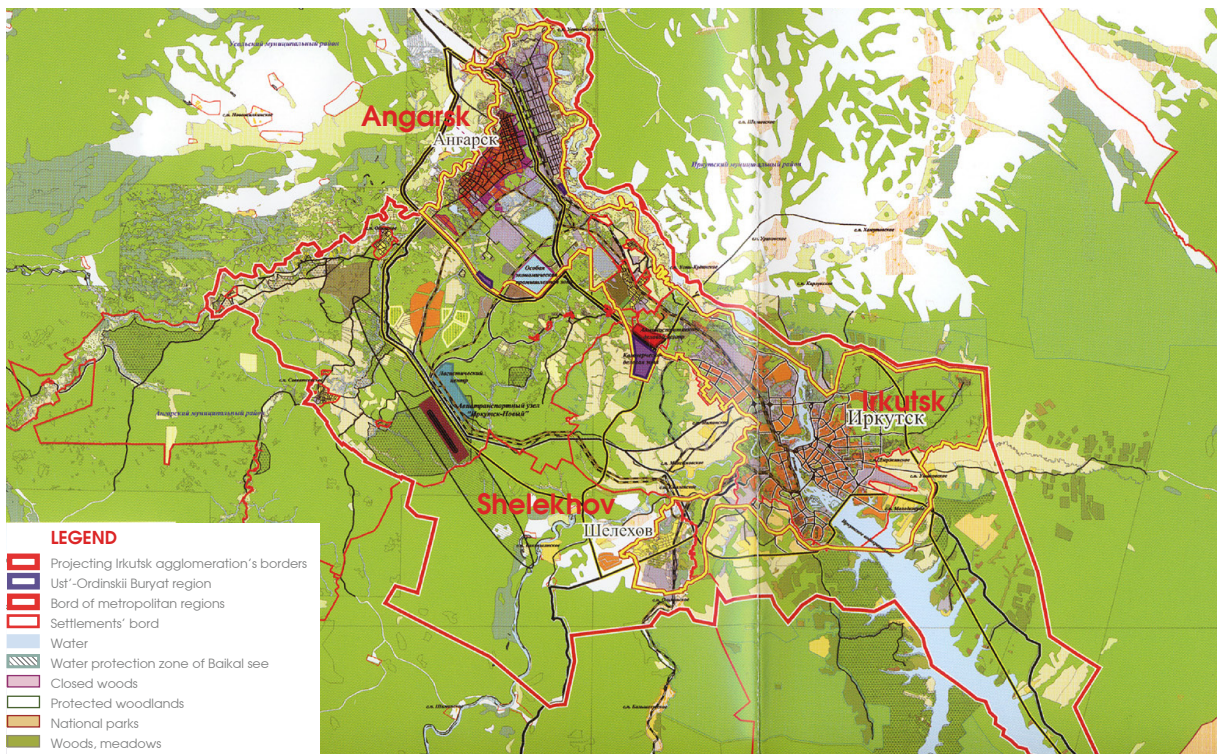
### GEOGRAPHY and CLIMATE

Irkutsk (52' 17" NL, 104' 16" EL) is located approximately at the same latitude as Orenburg, Saratov, Voronezh, Warsaw and Berlin. It's located on the bank of Angara River, 68 km away from Baikal (village Listvyanka). The climate in Irkutsk is acutely continental, changeable and dry.

Acute changes of night and day temperatures are typical for it. In the last two years there were observed some climate anomalies (snowfall in the end of May, 2010 and in June, 2009, general decrease of average monthly temperatures in winter of 2009-2011). For a long time short summer, long winter and autumn were an obstacle for the development of all-the-year-round tourism.



## SUBURBANIZATION. ECOLOGY OF SUBURBAN SETTLEMENTS AND THE CITY



### ACTUALITY

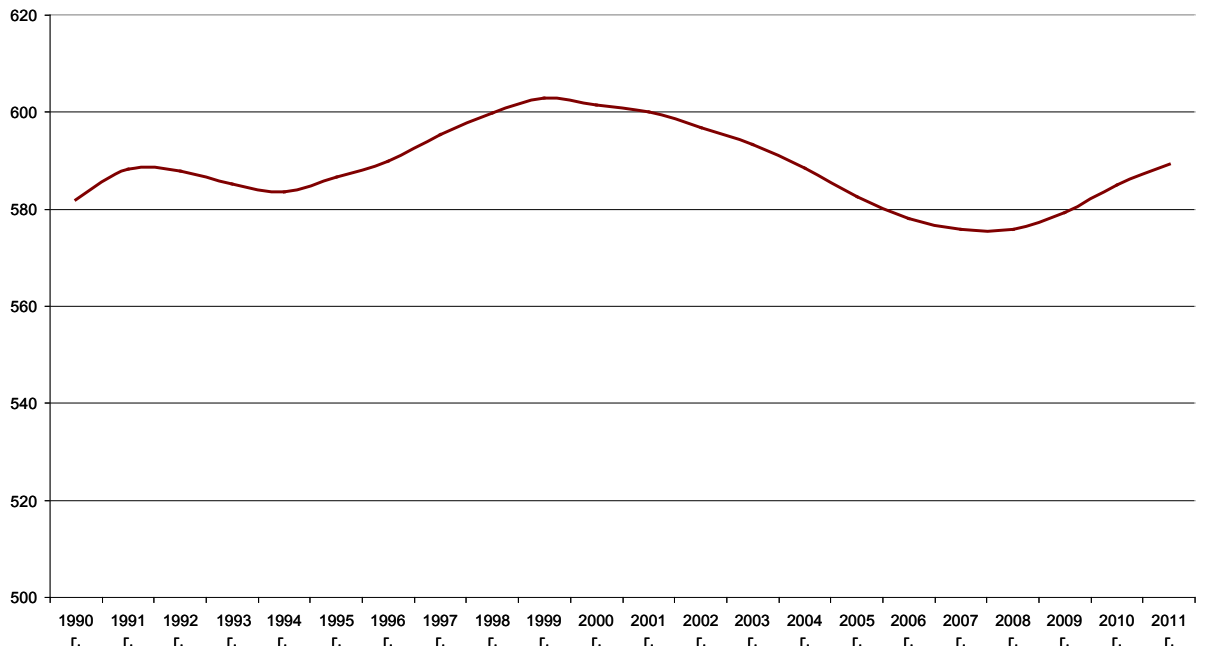
Last 10 years, the suburbanization - the process of intense development of suburbs, became one of the new urban planning problems and a new challenge at the same time. Irkutsk municipal region was affected by suburbanization more than any other region. City inhabitants move to suburbs to combine occupation in the city with better ecological conditions and agricultural life-style away from big city. Last 10 years the region population became 1,5 times more populated. The main factors of suburban development are the increased level of motorization and population mobility, distance employment possibilities and bad ecology in cities.

Moreover, there's not enough territory for comprehensive development in cities of all sizes nowadays. The city growth is made by spot development, causing discontent of people who live nearby. At the same time, there are a lot of sizeable suburban territories which are being used not efficiently enough.



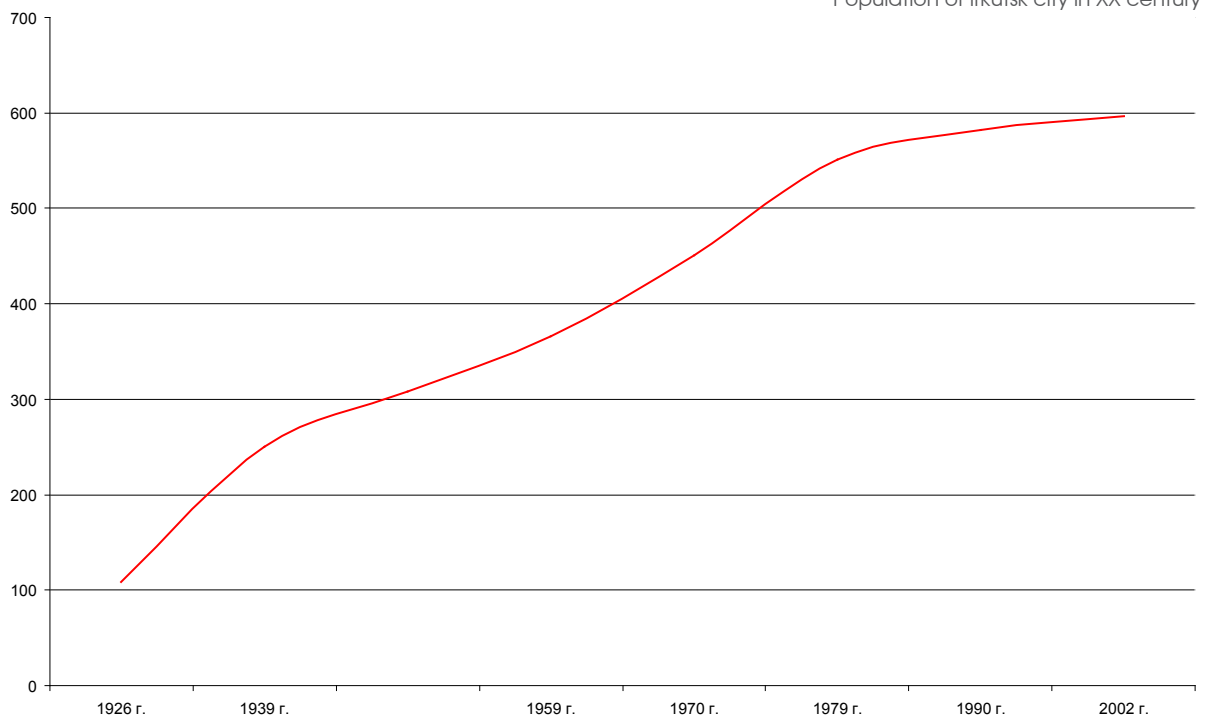
## SUBURBANIZATION. ECOLOGY OF SUBURBAN SETTLEMENTS AND THE CITY

Population of Irkutsk city 1990-2011



Today, in the conditions of increase migration from Siberia, Far East and North territories of Russia into its European part, one of the main reasons, that keep people on their native land, is „the quality of life” or „the city environment suitability for living”. The concept of „the quality of life” is tightly connected to the possibility for people to use all advantages of the land they live on, such as getting enough of fresh air, man-made greenery or natural environment (recreation), having affordable habitation which is appropriate to their needs and financial possibilities, existing in bright and picturesque environment, having wide variety in the employment market or „living in a friendly environment”. The suburban development is one of the most agreeable ways for attaining the high quality of life.

Population of Irkutsk city in XX century



## SUBURBANIZATION. ECOLOGY OF SUBURBAN SETTLEMENTS AND THE CITY

However the suburban development creates a number of challenges.

One of the most important conditions for maintenance of suburban attractiveness for development is keeping and improving the quality of environmental conditions. Nevertheless there's a danger of suburban uncontrollable developing, which can cause forest extermination, soil, air and water pollution, noise and electromagnetic pollution. It all causes bad condition for living and destroys all advantages of suburbs.

Modern and perspective development of suburban territory is far behind the city in terms of placing new employment places. It forms significant transport streams „city-suburb“, makes conditions of transport accessibility worse and creates environmental problems.

The suburban development should take into account solving common with cities communal problems: domestic waste placement and recycling, water supply resource protection, measures against unwanted anthropogenic and nature changes (soil erosion, swamping and underflooding, emergencies and so on).

### AIMS OF SESSION

The aim is the elaboration of principles and parameters for urban planning on a priority basis of preserving the quality of environment.

### GOALS | PROBLEMS OF SESSION

It is recommended to:

- 1) give the prognosis for suburban development on terms of vast variety of settlement forms and types.
- 2) examine suitability and proportions of using different types of urban and rural development (multistoried, medium-storied, law-storied, with high density or low density).
- 3) elaborate variants of solving questions of inter-rural social, cultural and household service.
- 4) substantiate structure and principles of forming the general urban and suburban transport system, proportions of perspective development of private and public transport, public transport diversity.
- 5) suggest perspective methods and forms of plumbing and heating installations in suburban settlements in order to provide sustainable nature management.
- 6) examine possibilities for creating new places of employment in suburban areas.

