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## Investment Potential of the Krasnoyarsk Agglomeration Development

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*The subject of this research is the investment potential of the Krasnoyarsk agglomeration development. The purpose of this research is to study the current state and the prospects of the agglomeration development as in the future this territory can be analyzed as a large megalopolis. The article gives an analysis of investment activity on the agglomeration territory; it demonstrates that the main object for investments is Krasnoyarsk. Other municipalities experience "pinpoint" investments aimed at realization of projects in the field of public healthcare, education, municipal and urban engineering, power engineering and transport. The Krasnoyarsk agglomeration development requires complex realization of organizational, regulatory, resource and financial measures. It is necessary to foster the development of four areas: urban regulation and housing construction, organization of public transport service, social sphere development and organization of labor and employment market.*

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*Research area: economics.*

Investment resources are the most important sources of social and economic development of the Krasnoyarsk agglomeration as regards both the city and districts economy. At the same time, both the amount of investments and their structural distribution by sources and funding streams are significant too.

### **Analysis of investment activity on the Krasnoyarsk agglomeration territory**

As the analysis of investment activity in the agglomeration shows, the amount of investment

in the fixed capital of enterprises is increasing. During 2010-2016 the increase in investments in the Krasnoyarsk agglomeration accounted for 47.6 % for the agglomeration in the whole and for Krasnoyarsk in particular – 44.9 %.

The structure of investment in cities and districts of the Krasnoyarsk agglomeration (as of 2016) is presented in Table. 1.

The main investing area for the Krasnoyarsk economy is real estate transactions. The share of investments in this sphere of activity is constantly growing and amounts to about 1/3 of the total investments. This situation is largely explained

Table 1. Structure of investment in fixed assets in the Krasnoyarsk agglomeration by types of economic activity, mln. rub. (2016)\*

Activities	Krasnoyarsk	Divnogorsk	Sosnovoborsk	Berezovsky district	Emelyanovsky district	Mansky district	Sukhobuzimsky district
Total investment	100	100	100	100	100	100	100
Manufacturing enterprises	8.6	7.7	1.6	8.2	7.6	-	-
Production and distribution of electricity, gas and water	20.9	71.8	7.5	9.7	26.1	1.1	10.2
Wholesale and retail trade	3.2	-	30.2	-	9.5	-	16.7
Transport and communication	18.4	4.6	13.1	32.4	29.2	77.7	9.4
Financial activities	1.4	-	9.9	4.0	-	-	-
Operations with real estate	30.1	-	10.0	-	-	6.1	-
Education	3.0	6.5	7.8	11.0	6.0	11.0	26.7
Healthcare and social services	4.2	5.4	9.9	32.7	5.2	3.8	18.9
Other activities	10.2	4.0	10.0	2.0	15.4	0.3	18.1

\*Compiled by the author on the basis of [http://www.krasstat.gks.ru/wps/wcm/connect/rosstat\\_ts/krasstat/ru/municipal\\_statistics/krsnMstat/main\\_indicators/](http://www.krasstat.gks.ru/wps/wcm/connect/rosstat_ts/krasstat/ru/municipal_statistics/krsnMstat/main_indicators/)

by that the population invest their money in buying real estate in order to protect their funds and savings from depreciation.

If in Krasnoyarsk the priority investment areas are infrastructure, real production and social sectors, the main objects for investing are in the social sphere. Socially significant objects are being massively built in the city, e.g. shopping and entertainment centres, sports facilities, schools and preschool institutions (see Table 1). At the same time, the industrial production sector is not attractive for investment. Despite a certain upward trend, the share of investment in the city manufacturing companies does not exceed 9 %. The municipal and transport amenities have become the investing priority areas in Krasnoyarsk.

Investments in the development of other municipal districts of the Krasnoyarsk agglomeration have been focused. So, for example, the main objects of investment in

Divnogorsk have been objects of housing and communal services, in Sosnovoborsk – trade facilities and in Berezovsky district – transport facilities and communications, etc.

Investigation of the investment distribution across the Krasnoyarsk agglomeration has shown that the bulk of investment in fixed assets is made in Krasnoyarsk (93 % of the total investment in the Krasnoyarsk agglomeration). The share of other municipal entities is extremely small.

This situation is explained by the fact that in the towns and rural areas of the Krasnoyarsk agglomeration economic development has slowed down. Once large industrial enterprises in Divnogorsk and Sosnovoborsk have ceased to exist. They have been replaced by small and medium-sized enterprises for the production of building materials, furniture and foodstuffs.

The characteristics of investment activity on the territory of the Krasnoyarsk agglomeration

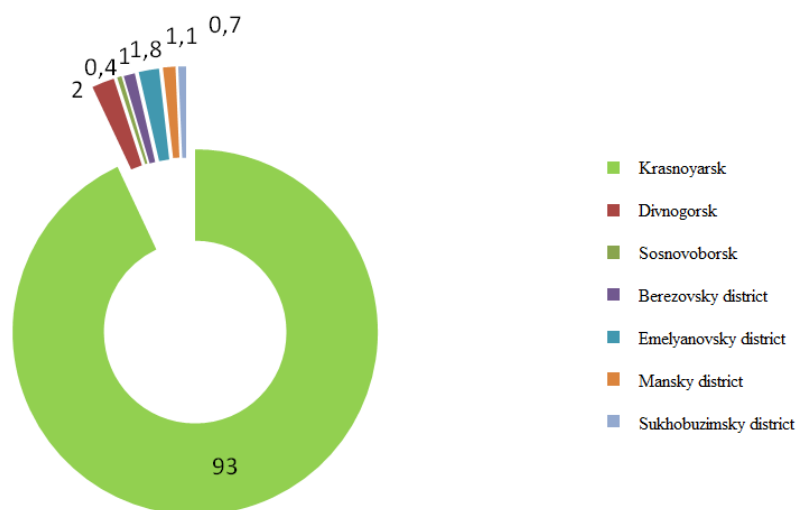


Fig. 1. Distribution of investment in the Krasnoyarsk agglomeration

can be improved with an analysis of the investment sources.

The main sources of investment in fixed assets of the agglomeration enterprises and municipal organizations are their own and borrowed funds. Their share grew from 73.3 % in 2010 to 84.8 % in 2016. At the same time, the share of borrowed funds is growing at a faster pace and amounts to 50 % or more in certain periods. So, for instance, in 2016 the share of owned funds as an investment source was only 23.6 %, and this of borrowed funds – 56.4 %.

Thus, the analysis of the current state of investment activity on the agglomeration territory allows us to draw the following conclusions:

1. In Krasnoyarsk and other agglomeration municipal entities there is an irrational sectoral structure of investment, where the largest share in the total investment volume in fixed assets falls on real estate transactions, the housing construction and transport infrastructure. Investments in the real sector, in particular, in manufacturing enterprises are insignificant.

2. The main direction of investment in fixed assets is building and construction (except for houses), i.e. the liabilities part of fixed assets.

3. There is a non-optimal scheme of funding sources, where the emphasis is on

borrowed funds. Under conditions of volatility of the national currency and changes in the Central Bank policy this can lead to a lack of investment.

4. There are no favorable conditions in the cities and districts of the Krasnoyarsk agglomeration for foreign investors. As a result, foreign investment is negligible, most of such investments are direct (not portfolio).

#### **Implementation of investment projects for the agglomeration development**

The promising development of the Krasnoyarsk agglomeration is to a large extent related to the implementation of investment projects in various areas. Most investment projects are realized in such sectors as healthcare, physical education and sports (due to the Universiade 2019), transport, municipal and urban engineering, power industry, agriculture, woodworking industry, mechanical engineering, metallurgy and innovation.

The implementation period for most projects is limited – until 2020.

Currently, 54 projects for a total amount of about 152 795.2 million rubles are being either designed or executed. The distribution of

investment projects by industry and activities is presented in Table 2.

As follows from the list of investment projects implemented on the territory of the Krasnoyarsk agglomeration, the largest number of them concern sports facilities, which must have been built by the beginning of the Universiade, i.e. until 2018. Their implementation will cost more than 23 billion rubles. The second place in terms of the number belongs to power industry. These projects are aimed at the modernization, technical re-equipment and construction of new energy infrastructure facilities. It is planned to spend about 20 billion rubles on running these projects.

The prevalent project is the creation in Krasnoyarsk of the newest production of rail freight transport systems with lightweight bodies made of aluminium alloys. It will require spending more than 80 billion rubles. This is a long-term project to be finished by 2025.

Another megaproject, implemented in Krasnoyarsk, is the completion of the construction of the rolling complex of the Krasnoyarsk Metallurgical Plant.

We should note the growth in the number of healthcare projects. They are associated with the reconstruction and building of specialized medical institutions of regional importance (regional oncological dispensary, regional clinical hospital, medical centre in the Universiade Village, etc.). Approximately 18 billion rubles will go for these projects.

Territorial distribution of investment projects for the Krasnoyarsk agglomeration development in 2020-2030 is in Table 3.

An analysis of the distribution of investment projects across the Krasnoyarsk agglomeration shows that 76 % of the total number of investment projects are being implemented in Krasnoyarsk. The remaining projects are being carried out in the Emelyanovsky, Sukhobuzimsky and Berezovsky districts, and in Sosnovoborsk and Divnogorsk. For the Mansky District there are no investment projects to be conceived.

This proves that the investment attractiveness of the municipal entities that make up the Krasnoyarsk agglomeration is highly differentiated and the main territory for

Table 2. Distribution of investment projects by industry and activity type in the Krasnoyarsk agglomeration\*

Industry	Number of projects	The amount of financing, million rubles
Healthcare and social services	4	18 004.7
Physical education and sport	22	23 418.9
Transport	5	7993.7
Housing and utilities	1	123.5
Power industry	15	19 897.9
Agriculture	1	8.5
	1	Data not published
Mechanical engineering	1	80 500
Metallurgy	1	Data not published
Woodworking industry	2	Data not published
Innovative sphere	1	2848.0
Total	54	152 795.2

\*Compiled by the author on the basis of <http://www.krskstate.ru/press/news/invest/0/news/62833>

Table 3. Territorial distribution of investment projects for the Krasnoyarsk agglomeration development\*

Industries and activities	Krasnoyarsk	Divnogorsk	Sosnovoborsk	Berezovsky district	Emelyanovsky district	Mansky district	Sukhobuzimsky district
Healthcare and social services	3						1
Physical education and sport	21				1		
Transport	3			1	1		
Housing and utilities							1
Power industry	10	1	1	1	2		
Agriculture							2
Mechanical engineering	1						
Metallurgy	1						
Woodworking industry	1		1				
Innovations	1						
Total	41	1	2	2	4	-	4

\*Compiled by the author on the basis of <http://www.krskstate.ru/press/news/invest/0/news/62833>

attracting investments for the period until 2020-2030 is Krasnoyarsk only.

#### **The mechanism of the Krasnoyarsk agglomeration development for the period until 2030**

The development of the Krasnoyarsk agglomeration necessitates an active spatial policy based on stimulating regional growth points for territories with medium and low levels of regional development which can essentially improve the spatial model of the Krasnoyarsk Territory. This implies taking a number of measures aimed at modernizing existing enterprises and developing new ones within the framework of regional industrial clusters, stimulating the development of services and overcoming infrastructure constraints.

Among other things, the stimulation of agglomeration development and the formation of a full-fledged suburban economy will make it possible to have the most efficient use of the social and economic potential of each municipal

entity in the Krasnoyarsk agglomeration. This will lead to:

- improvement of transport and logistics infrastructure thanks to optimization of the spatial development model for each territory;
- expansion of the housing and industrial construction area at the expense of the territories included in the agglomeration;
- development of processing agricultural production in the rural areas of agglomeration and construction materials industry in the suburban areas;
- realization of innovative potential thanks to the Krasnoyarsk educational and research base, including the use of scientific capabilities of SFU and KSC (Krasnoyarsk Scientific Centre) of the SB RAS.

In a generalized form, the measures for the Krasnoyarsk agglomeration development are presented in Table 4.

The main priorities of the Krasnoyarsk agglomeration investment development until 2030, in our opinion, should include the following:

Table 4. Measures for the Krasnoyarsk agglomeration development until 2030

Direction	Activities
<b>Methodological support of agglomeration development</b>	
Preparing the methodological recommendations for the development of the Krasnoyarsk agglomeration in the new economic conditions	<ul style="list-style-type: none"> <li>• Singling out agglomeration as a controlled object</li> <li>• Forming the relationship between the agglomeration and the competence of local self-government bodies of the districts making up the agglomeration</li> <li>• Defining the functions of the state administration bodies and the Krasnoyarsk agglomeration municipal entities in managing the urban agglomeration</li> <li>• Developing the recommendations on the management model and the administration bodies structure in the Krasnoyarsk agglomeration</li> </ul>
<b>Legal and regulatory framework</b>	
Adoption of the regulatory and legal acts of the Krasnoyarsk Krai which will regulate the development of the Krasnoyarsk agglomeration	<ul style="list-style-type: none"> <li>• Making proposals on integration of the documents on agglomeration territorial planning into the system of territorial planning documents of the Krasnoyarsk Krai</li> <li>• Developing the strategic directions for the Krasnoyarsk agglomeration development in the new economic conditions</li> <li>• Defining top-priority directions for the development of municipal entities included in the Krasnoyarsk agglomeration until 2030</li> </ul>
<b>Institutional regulation</b>	
Creation of a coordination centre for the Krasnoyarsk agglomeration development	<ul style="list-style-type: none"> <li>• Development and approval of the provision on the creation of a coordination centre for the Krasnoyarsk agglomeration development</li> <li>• Establishment of institutional management bodies for the development of agglomeration processes in each of the municipal entities</li> </ul>
<b>Resource provision</b>	
Development of the investment development programs for the Krasnoyarsk agglomeration until 2030	<ul style="list-style-type: none"> <li>• Making the list of priority directions and of the agglomeration branches financed from budget</li> <li>• Determining the scope and timing of the investment projects for the Krasnoyarsk agglomeration development</li> <li>• Setting up preferences and benefits for the investors realizing top-priority agglomeration development projects</li> <li>• Defining the conditions for granting free land for the implementation of agglomeration development projects</li> <li>• Development of guarantees to ensure the rights of Russian and foreign subjects of investment activity aimed at the Krasnoyarsk agglomeration development</li> </ul>

1. City planning and housing construction.
2. Organization of public transport services.
3. Development of the social sphere.
4. Organization of the labor and employment market.

For each of the selected directions, it is necessary to develop a system of measures to ensure their realization (Table 5).

The development of the Krasnoyarsk agglomeration can happen according to one of three scenarios: inertial, basic and moderately optimistic.

The inertial scenario in general implies the preservation of the established negative trends and economy regulating mechanisms, the continuous lack of investment, the slowed implementation of new investment projects in the face of deteriorating conditions for the enterprises' competitiveness.

The basic scenario presupposes using opportunities to improve the existing until 2016 economic trends. This means that the investment climate may become favourable for Russian and foreign investment, inflation rates may decrease noticeably, while federal budget revenues may

Table 5. Investment development of the Krasnoyarsk agglomeration (selected priorities)

Direction	Activities
City planning and housing construction	<ul style="list-style-type: none"> <li>• Development of Krasnoyarsk as an agglomeration “core”: business, industrial, innovative, cultural and sports centre</li> <li>• Development of programs for residential development of municipal entities included in the Krasnoyarsk agglomeration</li> <li>• Development of unified standards for the development of social and engineering infrastructure for municipal entities included in the Krasnoyarsk agglomeration</li> <li>• Removal of environmentally unsafe industrial enterprises outside the Krasnoyarsk agglomeration</li> <li>• Usage of the free (non-occupied) lands to optimize the spatial development of municipal entities included in the Krasnoyarsk agglomeration</li> <li>• Development of construction enterprises and related industries</li> </ul>
Organization of public transport services	<ul style="list-style-type: none"> <li>• Development of high-speed transportation services for the population of the Krasnoyarsk agglomeration</li> <li>• Development of Krasnoyarsk as a transport and logistics hub of interregional importance</li> <li>• Development of a new scheme for passenger and cargo transport development in the Krasnoyarsk agglomeration</li> </ul>
Development of the social sphere	<ul style="list-style-type: none"> <li>• Creation of conditions for high quality and accessible medical care for the Krasnoyarsk agglomeration population</li> <li>• Construction of new medical institutions, including specialized ones</li> <li>• Development of new forms of educational services</li> <li>• Development of mobile and distant forms of cultural services for the population</li> <li>• Development of tourism and recreation in each municipal entity included in the Krasnoyarsk agglomeration</li> </ul>
Organization of the labour and employment market	<ul style="list-style-type: none"> <li>• Introduction of the labour market segmentation system in the Krasnoyarsk agglomeration</li> <li>• Regulation of commuting activity by developing the productive capacity of each municipal entity</li> <li>• Development of the professional training system aimed at personnel in large municipal entities</li> </ul>

Table 6. Procedure to realize the basic scenario of the Krasnoyarsk agglomeration development

Direction	Means
<b>Resource provision</b>	
Investment from the federal, regional and municipal budgets	<ul style="list-style-type: none"> <li>• Making lists of top-priority directions and branches financed from budget</li> <li>• Determination of the scope and timing of the investment programs financed by budgetary funds</li> <li>• Development of priority forms of investment (capital investment; investment in equipment, technologies, land plots, etc.)</li> </ul>
Owned and borrowed funds of investors (legal entities and individuals)	<ul style="list-style-type: none"> <li>• Defining types of benefits and preferences for investors</li> <li>• Development and adoption of criteria for granting benefits and preferences to investors in top-priority industries (projects)</li> <li>• Adoption of conditions ensuring availability of free land for investment and possibility of using unfinished construction objects and unoccupied (empty) premises owned by the city</li> </ul>
Foreign investment	<ul style="list-style-type: none"> <li>• Creating conditions for a favourable investment climate</li> <li>• Development of guarantees to ensure the rights of foreign investors</li> </ul>
<b>Legal and regulatory framework</b>	

Table 6. Continue

Direction	Means
<b>Legal and regulatory framework</b>	
Strategy of social and economic development of municipal entities until 2030	<ul style="list-style-type: none"> <li>• Taking strategic directions for the development of municipalities in the sectoral context</li> <li>• Defining priority directions of investment activity at the expense of all investment sources</li> </ul>
Investment passports of all municipal entities in the agglomeration	<ul style="list-style-type: none"> <li>• Formation and realization of social services commissioning through specific investment objects</li> <li>• Defining conditions for the investment projects implementation</li> <li>• Annual adjustment of the investment activity directions taking into account external and internal changes</li> </ul>
Investment agreements with investors	<ul style="list-style-type: none"> <li>• Determining the procedure for the investment projects examination</li> <li>• Developing the procedure for preparing and making investment agreements</li> <li>• Developing the mechanism for monitoring the investment agreements implementation</li> <li>• Providing the investors with financial and legal guarantees</li> </ul>
<b>Financial regulation</b>	
Tax allowances	<ul style="list-style-type: none"> <li>• Developing the procedure and conditions for the provision of tax allowances and other benefits to legal entities and individuals involved in the investment activities implementation in the agglomeration</li> </ul>
Guarantees from municipalities	<ul style="list-style-type: none"> <li>• Defining the procedure and conditions for investment activity of private investors in respect of the objects located on the territory of the Krasnoyarsk agglomeration</li> <li>• Developing the mechanism for guarantying the rights of investment activity subjects</li> </ul>
Investment competitions	<ul style="list-style-type: none"> <li>• Defining the mechanism and conditions for organizing and conducting investment competitions for the each specific investment project</li> <li>• Organizing the certification procedure for investment projects participating in the investment competition</li> </ul>
<b>Institutional regulation</b>	
Analytical centre for the investment activity organization	<ul style="list-style-type: none"> <li>• Developing the provision on the creation and operation of Krasnoyarsk analytical centre for the investment activity organization</li> <li>• Forming the unified register of the agglomeration investment projects</li> <li>• Creating the unified database on the investment activity subjects on the agglomeration territory</li> <li>• Creating the unified database on the infrastructure of investment activities in the agglomeration (banks; investment and lease companies; consulting centres, etc.)</li> </ul>
Guarantee (collateral) fund	<ul style="list-style-type: none"> <li>• Developing the provision on the formation of the guarantee (collateral) fund</li> <li>• Defining conditions for making collateral (pledge) fund</li> <li>• Forming the conditions for granting guarantees from the collateral fund (backed by the borrowed funds, in case of a failure or withdrawal of a participant from the project to make up for the lost funds)</li> </ul>
Information and methodical support	
Investment projects website	<ul style="list-style-type: none"> <li>• Developing the conditions for the formation and support of the investment projects website</li> <li>• Defining the terms of the website financing</li> </ul>



Table 6. Continue

Direction	Means
Conferences, seminars, special fairs	<ul style="list-style-type: none"> <li>• Organizing and holding seminars, conferences and fairs on investment activity</li> <li>• Organization of a wide coverage of seminars, conferences and fairs on investment activities in the mass media and on the city administration website</li> </ul>
News bulletin	<ul style="list-style-type: none"> <li>• Creating a single reference book on the Krasnoyarsk agglomeration investment activity</li> <li>• Organization of publishing propaganda and analytical materials focused on the investment activity</li> </ul>
Monitoring and control over investment activity	
Analysis of investment activity	<ul style="list-style-type: none"> <li>• Organizing regular analysis of investment processes, regardless of the funding source used for the investment projects</li> <li>• Identifying the obstacles and threats to the investment activity implementation</li> </ul>
Control and regulation of the timing of the investment projects implementation	<ul style="list-style-type: none"> <li>• Organization of control over the investment activity implementation for all objects, regardless of the funding source and the investment direction</li> <li>• Implementing the activities to monitor the timing of investment projects and identify the reasons for the failure to meet deadline</li> </ul>
Adjustment of investment plans	<ul style="list-style-type: none"> <li>• Implementation of activities to adjust investment plans for projects financed by budget</li> <li>• Developing the measures to be taken by the administration of the agglomeration municipal entities to encourage investment activity</li> </ul>

grow, creating a real opportunity to implement large-scale investment projects.

The moderately optimistic scenario concentrates on the development of innovation potential, improvement of agglomeration enterprises' competitiveness, actualization of structural changes due to taking a set of measures to accelerate economic growth, carrying out large innovative and technical projects in the agglomeration.

At the present stage of economic development, the implementation of the basic scenario is the most likely option.

To implement the basic scenario for the Krasnoyarsk agglomeration development we strongly need resource, legal, financial, institutional and methodological regulation.

The main elements of the basic scenario realization for the Krasnoyarsk agglomeration development are presented in Table 6.

The use of the proposed procedure will ensure the rapid development of the Krasnoyarsk agglomeration, so that by the end of 2030 the Siberian centre will have become a place of the economic growth with developed industrial, transport and logistics, scientific and educational potential.

## **Инвестиционный потенциал развития Красноярской агломерации**

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*Предметом данного исследования является инвестиционный потенциал развития Красноярской агломерации. Цель работы состоит в изучении современного состояния и перспектив развития агломерации, которая в будущем может рассматриваться как территория большого мегаполиса. В статье приведен анализ инвестиционной деятельности на территории агломерации, показано, что основным объектом для инвестиций является город Красноярск. В остальных муниципальных образованиях осуществляются «точечные» инвестиции для реализации проектов в области здравоохранения, образования, жилищно-коммунального хозяйства, энергетики и транспорта. Для развития Красноярской агломерации требуется реализация комплекса мероприятий организационного, нормативно-правового, ресурсного, финансового характера. Основной упор должен быть сделан на развитие четырех направлений деятельности: градорегулирование и жилищное строительство, организация транспортного обслуживания населения, развитие социальной сферы, организация рынка труда и занятости населения.*

*Ключевые слова: агломерация, развитие, инвестиции, инвестиционный потенциал, механизм, приоритеты инвестирования.*

*Научная специальность: 08.00.00 – экономические науки.*

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