# Review of cinemas in Belgorod and Stary Oskol.

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#### 1.Introduction

### 1.1. Background.

This paper provides a comparative overview of cinemas in the cities of Belgorod and Stary Oskol.

- Belgorod is the administrative center of the region with a population of 400,000 people, covering an area of 151.3 sq. km
- the industrial city of Stary Oskol with a population of 224,000 people, total area 200.8 sq. km

## 1.2. Problem.

A preliminary assessment requires a general understanding of the number, location and identification of possible previously unaccounted for indicators of entertainment infrastructure in the named cities.

# 1.3. Interests.

Based on the data obtained, an understanding will be obtained about the development of this type of entertainment services in these cities and about satisfaction in needs and about possible development. This study will help in the intention of large movie theater chains in determining the strategy of their presence in the region.

# 2. Data acquisition and cleaning.

#### 2.1. Data sources.

The data for this work was obtained from wikipedia.org and the bulk of the locations of the cinema theatre venues was generated using the API Foursquare.com.

## 2.2 Data cleaning

As a result of the selection, 5 cinemas were selected in Belgorod and one in Stary Oskol. After a detailed study of the data, as a result, 4 cinemas were obtained in Belgorod and 1 in Stary Oskol.

#### 2.3 Feature selection

The data obtained is clearly presented in the images below.



# **Stary Oskol**



### 3. Methodology

In this project, the selection was made for the selection of data on cinemas of the two largest cities in the Belgorod region. The selection of data was carried out within a radius of 10 km from the conditional city center. Based on the data obtained with the help of Foursquare, a visual display of the results was performed for further analysis.

# 4. Analysis

The data obtained clearly demonstrate the level of presence of the cinema industry in the cities of Belgorod and Stary Oskol. In Belgorod, there is one cinema per 100,000 people in Stary Oskol per 200,000. In Belgorod, the uneven distribution of cinemas within the city is clearly expressed.

### 5. Results and Discussion

Based on the analysis obtained, it can be concluded that the network of cinemas in Belgorod and Stary Oskol is underdeveloped and conveniently located. Taking into account the average statistical requirement of 1 cinema for 20,000 people in these cities, a significant expansion of the cinema network is necessary. For Belgorod, satisfaction in the needs of this type of entertainment is 25% for Stary Oskol 10%. Stary Oskol is more promising in comparison with Belgorod, since this industry is much less developed.

# **6. Conclusion**

The purpose of this project was to determine the stage of development of the cinema network in order to help stakeholders get a visual idea of the prospects for opening new cinemas. After calculating the distribution of cinemas based on Foursquare data, we first identified the locations of cinemas that warrant further analysis (Belgorod and Stary Oskol) and then generated a collection of locations.

The final decision on the optimal location of the new cinema will be made by stakeholders based on the specific characteristics of the areas

and locations in each recommended area, taking into account additional factors such as the attractiveness of each location (proximity to a park or water), noise level / proximity to main roads., property availability, prices, social and economic dynamics of each area, etc.