

## FINAL REPORT

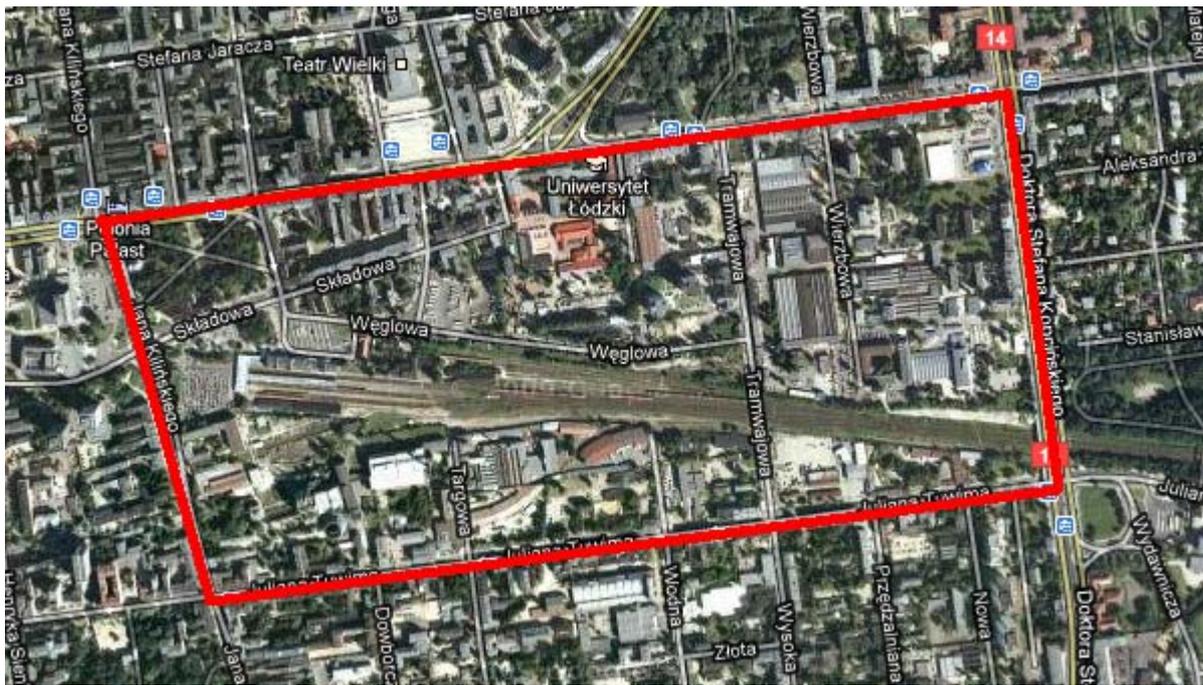
# NEW CENTER OF ŁÓDŹ PROJECT

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**Table of contents:**

Introduction.....	03
Brief history of Łódź.....	05
Methodology.....	07
Case studies.....	08
Glasgow.....	08
Liverpool.....	12
Barcelona.....	16
Bilbao.....	20
Essen and Ruhr area.....	23
Lille.....	27
Conclusions regarding to Łódź.....	34
Summary of case studies.....	37
Analysis of existing state.....	39
Cultural and historical values of developing district.....	39
Description of existing state.....	40
Analysis of the quality of buildings.....	59
Valorization.....	60
Analysis of SYSTRA Project.....	66
General information.....	66
Analysis of surroundings and spatial structure.....	67
SYSTRA solutions for spatial arrangement.....	72
Public-private status of the existing state.....	73
Spatial and communication solutions.....	78
Public-private partnerships, SYSTRA concept.....	82
Summary of SYSTRA concepts.....	86
Project, proposition by students.....	88
Details of the project.....	100
Final Conclusions.....	112
Promotion of Łódź.....	119
Appendix.....	120
Bibliography and references.....	120

***Introduction:***

Project New Center of Łódź considers the renovation of the area of Łódź Fabryczna station and the neighboring district of over 90 ha (almost 900 000 m<sup>2</sup>) surrounded by four streets: Tuwima street on the south, Narutowicz street on the north, Sienkiewicza street on the west and Kopcińskiego street on the east.

The aim of this project is to propose the most reasonable solution for the spatial, functional, dimensional and economical conception of usage of above mentioned district.

The composition of the area of interest consist of future multimodal communication node (Łódź Fabryczna station), special culture zone (SSK), art zone (SSS), Festival Congress Hall and Kobro Market.

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The feasibility study which was done for the needs of the EC1 Project considers:

- building of multimodal communication node for regional trams and buses from local and long-distance transport
- creation of high speed trams and preparation to create the fast underground connection around the city for regional transport
- formation of underground parking space and services
- renovation of technical infrastructure
- building of SSK, SSS, Festival Congress Hall and Kobro Market

Initiation of the project enables Łódź to overcome its problematic sectors which are mainly public sector, communication, and presence of the proper city center, promotion of city culture, origin and monuments and redevelopment of the existing state.

Formation of New Center of Łódź will help to form the city center as a defined place. In the previous ages all cities had their main markets which were the starting points for the social life and relationships. Because Łódź lacks of such a place, the main street, Piotrkowska Street, tries to substitute and adopt function of market. However mostly due to its linear composition and not enough space it only partially behaves as the social space. New Center of Łódź will be an area facilitated with Kobro Market and special zones that would help to form social life and simultaneously would connect other function.

Project hopes that this assumption would be more underlined by the multimodal communication node which would be the place of exchanging commuters and passenger and which would form atmosphere of the proper city center. Moreover it is assumed that the area will become the cultural and entertainment zone what should help the city's manufacture and further development of the city itself and its region. Formation of the communication node would contribute to the creation of integrated and safe system of municipal and regional transport with high quality services. All that will obey European Union and national standards not only for the transport itself but also for even environmental issues.

This project is quite a big challenge for Łódź and a task which might be difficult to fulfill. The way in which the New Center has to be constructed is not strictly defined so that it must contain all possible functions however the most important factor should be basing on the

cultural aspects of the city. This factor gives reason for the development of the infrastructure and is attractive for people who don't live in Łódź. Other thing is to get an impact on people's perception of the city. That means designing such a center and such environment that will result in keeping people in the town and in some way preventing the situation of emigration because of better work offers and better living conditions.

Culture is also some kind of the result that comes out from the communication and interpersonal contacts. However these might be hard to obtain if citizens will not pay attention to the pedestrian kind of transport. Using public transport and communication facilities like cars restricts public perception and prevents form possibility of meeting people and the social life. In order to prevent such a situation the whole project focuses on formation of public spaces and green areas which would be commonly used by citizens and passengers. Creation of safe and attractive pedestrian environment would result in attendance in cultural and art zones what in some way would lead to city promotion. If the proper promotion strategy will be introduced to the city's life then gaining the title for prestigious award of European City of Culture may be possible as well as promotion of Poland in the European and global market.

Will the project help in the others sectors of the city development? Surly it will. Firstly it will have a beneficial effect on the typical architecture of Łódź and secondly it may help to maintain the atmosphere of the city origin. Łódź is known from its history and its industry. Having lot of monumental buildings like 'Księży Młyn' or 'Biała Fabryka' or even the new 'Manufaktura complex', city may show how connecting the history with modern art is possible.

All that points are expected from the New Center of Łodź Project and realization of future development strategy and analysis of project is discussed in the further parts of the report.

## **Brief history of Łódź.**

Łódź is the city located almost in the center of Poland. That indicates the fast communication in every direction of the country. Łódź is known to be the fourth biggest city in Poland in accordance to the area (293,25 km<sup>2</sup>) and the third in Poland regarding to amount of people (742 387 inhabitants). These are statistic values from 31.12.2009. Due to its unique character and history, Łódź tries to gain the prestigious award of European City of Culture in year 2016.

	<i>Area (km<sup>2</sup>)</i>	<i>Percentage</i>
<b>Total</b>	293.25	100 %
<b>Urbanized area</b>	135.19	46.1 %
<b>Agriculture</b>	126.10	43 %
<b>Forests</b>	28.45	9.7 %
<b>Other</b>	3.51	1.2 %

Table 01. Current functions of Łódź districts.

As we can see from the table show below majority of the area is urbanized however the proportion of areas of buildings and greenery is almost ten times smaller. That indicates that environmental factors are very important for the city. The greenery includes not only parks but also forests and other green complexes. Nowadays there exist 34 parks from which 11 are supposed to be the nature monuments and are especially protected.

## **Timeline.**

- 1820 since this year Łódź became an industrial capital. The development of factories like “Biała Fabryka” had influenced the city economy and helped to overcome its internal unemployment problems. The same was obtained after opening the railway station (Fabryczna Station) which ensured the connection between Łódź and Koluszki. This resulted in fast and easy access to the city and enabled people from countryside to find working places in new factories. It was also beneficial for the potential investors because they not only gained the cheap workforce but also the increase of workers enabled the fast development of existing factories. The main investments were created by Scheibler, Grohman and Poznański.
- 1872 the initiative of Karol Scheibler resulted in first banking investments and became an opportunity for Jewish, German, Russian and Polish people for starting their businesses. That was the pioneer actor of creation nowadays the Four Culture Festival. Influence of these cultures is still visible in Łódź mainly in the aspect of architecture of old industrial buildings, religious objects or even cemeteries. The main industry considered textiles and chemicals.
- 1906 – formation of railway connection with the German railways in the eastern part of the city was formed. However even this opportunity did not affect the still not developed infrastructure as Łódź was under the control of German and Russian influences.

- 1914-1939 in these time lot of people had emigrated and since then even a small investments in Łódź were no take into consideration because they seemed to become an not-promising ventures.
- 1939-1945 in the times of II World War Łódź was under influences and regime of German. Not only the name of the city was changed for *Litzmannstadt* but also the nomenclature of all streets and most important institutions in the city were changed as well. Population of over 200.000 Jewish inhabitants were isolated and only 877 of them survived until the end of war. That was the first factor which led to the city depopulation. Another one was the emigrations which are estimated to be 444.000 inhabitants in general.
- After 1945 – as the population of Łódź inhabitants have decreased from over 670.000 to about 300.000 it also affected the industry. However the revitalization of destroyed buildings was undertaken and then the new investments were localized in the center of Łódź. Because these times ere supposed to bring peace the education processes were taken into consideration as well. Several schools and universities were formed. The education and refugees inflow resulted in development of the city and shortly after war what helped the private investor to localize their companies in the city. But the textile and chemicals industry lost its significance and city tried to develop other branches of industry.
- Nowadays Łódź population is equal to 750 125 inhabitants however it is still decreasing what is explained by emigration caused by better working conditions in other cities or even abroad.

## **METHODOLOGY – PLAN OF WORK ON THE PROJECT.**

### **12.03.10.**

Defining the main assumption of the project and the calendar of each meeting was made. As the general view of project was seen and accepted the location of the area of New Center of Łódź had to be seen. That included site visit which the main aspects of the project were examined. Main problem which were automatically observed, was the future green area and the connection of the south and north part of the city. Other thing was the condition of existing buildings and finding a new function for existing and renovated ones. During the site visit all the area was seen and then lot of conclusions and new propositions were taken into consideration.

### **15.03/22.03.10.**

Defining the main problems of New Center and then finding the best solution by doing case studies analysis. That concerned examination of several chosen cities as the urban and environmental redevelopment that would become a matrix for activities done in Łódź. The examined cities were Glasgow, Liverpool, Barcelona, Bilbao, Essen and Lille. For each city a short presentation was done which briefly described changes in the cities manufacture, economy and infrastructure. Analysis of existing state was done for Łódź. That included the analysis of streets, view axis, condition of buildings on the area of interest and also social issues. Examination of SYSTRA feasibility study and finding the best solutions for the city.

### **09.04.10**

Consideration of all gathered information and formation of proposition for renovation and usage of the new designed area.

### **12.04/16.04.10**

Workshops on the project, examination of work that was done so far.

### **29.04.10**

Midterm evaluation of the project. Presentation of main goals of the project as well as its assumptions, case study and existing state and SYSTRA analysis. Writing the midterm report.

### **30.04.10 – 20.05.10**

Proposition of the solution for Łódź were formed so that the work on the final report might be done. Gathering all the essential information and revision of all work. Also considering new ideas and proposition for the city and area promotion.

### **30.05 - 07.06.10**

Survey among the students ion dormitories were done so that to the final report ideas of non-contributing students could be attached. Writing the final report has started because of gathering all the important information.

### **14.06.10**

Finishing the final report concerning whole work done for the project.

### **17.06.10.**

Final evaluation with presentation of the whole work on the project.

## **CASE STUDIES**

### **Glasgow**

In the 1970's Glasgow was going through a period of decline. The population had decreased by roughly 20% and its main sources of industry were closing. These industries, specifically the production of steel and shipbuilding, led to a closure of docks along its main river, the river Clyde. This led to unemployment, crime and higher rates of alcoholism. The world wide perception of Glasgow was that it had obtained an image and idea of it being a dangerous city. This was because of its affiliation through its two main football teams to hooliganism as well as it's mainly working class population. Glasgow City Council decided that Glasgow was to be "re-branded" and it was going to aim for the European City of Culture award.

### **Time Line**

To change the image of the city it planned to use cultural redevelopment as a starter for urban redevelopment. Its main targets were to allow a greater public access to leisure facilities in the Glasgow area. The local council also changed the licensing laws for alcohol consumption to make it more relaxed. This allowed for a more enjoyable drinking experience rather than being forced to drink alcohol in a restricted environment. The re-discovery of the famous architect Rene Mackintosh also helped with the re-development of the old red sandstone buildings that had been built in the Victorian ages. The key events that led to Glasgow achieving the award through the 1980's are as follows:

- 1980 – Opening of Burrell Collection
  - The Burrell Collection was a collection of art that was gifted to the city. Pollock House was chosen to host the exhibition of art as it was thought, that as a green area, it would give the best vantage point of the work. Architecture mixture of 16<sup>th</sup> century gateway into a Victorian style house. It was given second place in Scotland's greatest post-war building in a poll of architects.
- 1985 – Building and Opening of the Scottish Exhibition and Conference Centre (SECC)
  - Building started on the centre in 1983 on the closed down Queens Dock that had been abandoned in the late 60's. To fill in the land from the dock old rubble from a train station was used. Scotland's largest exhibition centre and was the key in the 1990 year of culture as it hosted many events, such as a concert by Pavarotti. It still earns business to this day, with a hotel and another auditorium having been added to the site.
- 1988 – Glasgow Garden Festival
  - This was seen as a prelude to the City of Culture year to show that Glasgow had the ability to host a large festival. This also made use of the closure of dockland by revitalizing it and the soil dredged from the Clyde to give a fertile green area on which to host the event. The event was managed by a subsidiary of the Scottish Enterprise group called Glasgow Garden Festival 1988 Ltd. The festival showed Glasgow was ready for change and it got an £100 million boost into

the economy. This was due to the influx of 4.3 million visitors over half a year and also due to the jobs created in tourism and other fields surrounding the festival. This site has now been further redeveloped to hold the Glasgow Science Centre, IMAX and the Pacific Quay (site for national media centers).

- 1990 – Winning of the European City of Culture Award
  - Year long diverse events held to promote Glasgow’s cultural history.

### **Business**

The main business plan was a relatively simple one. It was hoped that through cultural redevelopment this would in turn lead to urban redevelopment and a better outlook on the stagnating housing market. The festival would also bring a great number of tourism to the city and so it was forecasted that this level would be maintained in the years following the award. It also hoped to attract new business and industry, whether it was foreign or international. However to do this it needed an excellent P.R campaign to promote the event.

The campaign that was launched was named “Glasgow Miles Better”. It started off in 1983 and was an incredibly successful promotion. The campaign won numerous awards and started off with a low budget. Its idea was to educate the world that Glasgow no longer had its stereotypical view of a “mean city”. To counter these claims the suitable areas and facts were chosen to best promote the city. These included its suitability to enterprise, its mild climate and the fact that it had more parkland per head of population than anywhere in Europe. The campaign featured the Mr. Men’s Mr. Happy as its logo and its vague catch phrase went some way to achieving the success that it did. It advertised this through television, newspaper articles and billboards on famous Glasgow landmarks, as well as in international airports. The view of Glasgow from a wider perspective was changed as that campaign ran its course. It also used various political figures and famous people to promote the cause, the most famous example being a picture of the Queen underneath a “Miles Better” umbrella.

After the award was won the main aims of the original business plan were made. 200 000 jobs in tourism were created over the next decade, cutting down on unemployment. In the year of cultural events (1990) the number of tourists that arrived gave a £170 million boost to the economy, while in the decade that followed the number of tourists that visited Glasgow increased by 88%. This money came from the fact that Glasgow hosted a year long group of events that had never been done before. The number of conference sales went up by 200% and Glasgow had succeeded in re-branding its image. It was now thought of as one of the elite cultural cities to visit in the U.K.

### **Architecture and Infrastructure**

The success of the award led to other key buildings being done up. This included social buildings such as the Arches, that’s main use, is as a nightclub and for concerts. It also included historical buildings such as the Kelvingrove Museum that’s main use is for tourism and culture.

In terms of high-rised buildings a number of tower block flats that had previously been built were starting to be knocked down. This was due to many factors. Although the buildings were cheap and easy to build they caused many social problems within the city. As the buildings deteriorated in terms of quality, this saw a high rise in crime rates and drug use.

Quickly the image of these places had connotations of being “slums in the sky” than buildings of the future.

Glasgow is not known for having many tall buildings the biggest being the Glasgow viewing tower at the Glasgow Science Centre. However in recent years plans have been put in place to build such sky scrapers that have similarities to the proposed sky scrapers in Lodz. However the project was discontinued after initial planning and groundwork was put in place. This was down to lack of money due to the economic environment in 2008. There was also protests made by certain Historic and environmental groups that were concerned that the sky scraper would detract from the natural beauty of the local area, as well as causing noise pollution. It was seen as an eye sore as it would ruin views from certain areas of the city. A new sky scraper is being planned for 2014 in the east of the city. This building will contain a hotel and also be used for residential use. This sky scraper is being built to drag the local area into the 21<sup>st</sup> century, however as work has not started on it yet this still remains to be seen if it can be done.

### **Transport**

Glasgow has a local airport near by, two central main train stations, a bus station, several motorway networks linking the city to other cities and an underground subway system. Having a good transport system is vital for enticing businesses and industry as they look to have good transport links for supply and export. Outside the main train stations the road can only be used for taxis and buses. The buses provide links to local airports and towns and have their own lanes, along with taxis, on the road to provide a quicker route from the outskirts of the city to the centre. A new motorway is being built that will act as a ring road around the whole city. It also has transport links for pedestrians and cyclists. Several streets in the city centre have been pedestrianised for ease of access and some cycle lanes have been introduced. There are also various bridges and underpass viaducts across busy roads to achieve a safer crossing area for pedestrians.

### **Urban Redevelopment**

Glasgow is going under constant urban redevelopment. New houses are being built in commuter towns around a twenty minute drive from the city centre. The biggest of the urban development projects though is the Clyde Waterfront Regeneration program. This is the largest regeneration program in Britain’s history and the project is expected to last 20-25 years. It has over 200 projects on the river running from the east of the city to the very west. It has thought to have created an estimated 50 00 jobs for the community. Most of the project involves residential, retail and industry. One of the main areas redeveloped was the International Financial Services District, that has created 15 000 jobs in the financial sector for the city. Most of the jobs created in this project tend to be in the tertiary sector of industry. In the residential area over £1.2 million pounds was invested in housing that has almost sold out. A huge retail outlet called Braehead also opened that attracted more jobs to the city. Recently this has been extended to include a recreational facility that includes indoor ski-ing and a cinema. To entice industry in the project offered bonuses such as relocation support and inward investment. As mentioned previously the main media facility is also located on this project.



Figure 01. Area of Clyde Waterfront Regeneration

Table 02. Table of data from 2003-2008

<b><i>Clyde Waterfront Regeneration</i></b>	<b><i>Estimated</i></b>	<b><i>By 2008</i></b>	<b><i>Comments</i></b>
<b><i>Area</i></b>	<i>20 km</i>	<i>20 km</i>	<i>Along the River Clyde</i>
<b><i>Projects</i></b>	<i>200+</i>	<i>65% completed</i>	<i>The rest of the projects are said to be completed by 2028.</i>
<b><i>Jobs Creation</i></b>	<i>50 000</i>	<i>17 000 direct + 7000 indirect</i>	
<b><i>Business and Commercial Space</i></b>	<i>900 000 m<sup>2</sup></i>	<i>260 000 m<sup>2</sup></i>	
<b><i>Environment (Nature Reserve)</i></b>	<i>332 000 m<sup>2</sup></i>	<i>332 000 m<sup>2</sup></i>	<i>Environment is an important aspect when designing a project.</i>
<b><i>Housing</i></b>	<i>23 000 units</i>	<i>6000 units</i>	
<b><i>Funding</i></b>	<i>£5-6 Billion</i>	<i>£2 Billion</i>	<i>If this continues on its current trend it will be under-budgeted by £2-4 Billion.</i>

The table above shows the 5 year out look of the Clyde Waterfront Regeneration program. As it can be seen most of the project has been over-estimated so far but from some data from 2010 it is possible that by the projected targeted year of 2023 it could meet these estimations.

### Environment and Green Areas

As previously mentioned Glasgow has the most parkland per head of population as anywhere else in Europe. Two of the main parks are Kelvingrove and Glasgow Green. These are older parks that have continuous work done to them to maintain their upkeep. These host many events as well as having culturally significant buildings situated within them.

In terms of the environment Glasgow's council main aim is to create a safer cleaner city, whilst also enabling a sustainable environment. One of the most important things to do with the environment is to raise awareness and educate the public. This was done through various advertising campaigns and by introducing lessons to younger children in schools about the importance of recycling and protecting the environment. The local council has also introduced initiatives to reduce the city's carbon footprint due to the dangers of global warming. Examples of this include making sure new residential buildings have sufficient energy efficiency built into them, recycling bins are now being given to every home in greater Glasgow to promote recycling and the council also agreed to reduce its energy consumption and actively support re-newable energy sources.

### Liverpool

Liverpool as a city had similar problems to Glasgow in terms of its image and closing down of key dock areas. It was viewed as a working class area with high levels of alcohol and drug abuse. Whilst having to compete with London for tourism it planned to combat this by aiming for the European City of Culture Award in the year 2008. To do this it planned to re-



develop a large part of the city centre in time for 2008 as shown in the diagram.

Figure 02. Liverpool project scale.

### Timeline

The main project connected with the re-development of Liverpool was called the Paradise Project. It was a retail led project that was hoped was give Liverpool town centre a more cultural feel to it. It was re-designing main streets but the main aim of the project was to provide a key link to already existing business sector in Liverpool.

- 2001
  - Planning application submitted and then re-submitted after consultations with the public
- 2004 – main work of Paradise Project starts

- Paradise Project was a retail led project that was the biggest of its kind in post-war Liverpool. The area chosen to be redeveloped was 42.5 acres in size. 154 000 m<sup>2</sup> of area with designated as retail and 21 000 m<sup>2</sup> was designated as a leisure/recreation area.
  
- 2007 – planting of landscaped area (Green Area)
  
- 2007/2008 – work completed on Paradise Project
  - Hanover Street
    - Re-design of buildings to more modern looking buildings with large glass fronted exterior.
  - Paradise Street
    - This street was pedestrianised, and was given a make over to give it a more European look, with outdoor cafes, shops, cinemas and trams.
  - Peter’s Lane
    - This was the designated fashion district, with well known names and famous designers.
  - South John Street
    - Two large Department stores were built on this street.
  
- 2008 – European City of Culture Year of Events

### **Business**

The business plan was again very simple and similar to Glasgow. The reason for it being similar to Glasgow was that they had seen how successful this campaign was. It was forecasted that the creation of the new city centre would in turn create an estimated 8000 jobs. 75% of these jobs would be in the retail or tourism sector, with the remaining quarter being in construction. It was assumed that winning the award would boost the economy and increase the number of tourist visits to the city. This is why it was so key to the city that they won the award. Also by winning the award Liverpool would have a better world-wide cultural image and would finally be able to be released of its previous unwanted image. Through a P.R campaign they would try to achieve global awareness and this in turn would attract more business and industry.

The P.R campaign that ran was successful and by the end of 2008 had won an award. The slogan was again a simple one, “The World in One City”. It aimed to broadcast the fact that there were so many different aspects to the culture and Liverpool and everyone world-wide would have a brilliant time there. It again made use of famous people from Liverpool, such as the well known Paul McCartney. The main point of success for this campaign was its media exposure, it had over 12 000 articles in the U.K media, around 900 articles in national print media, and over 20 hours of primetime television advertising. This results in a 95% positive feedback from the campaign.

After the year of cultural events it was found that the economy had received a welcome £800 million boost. This was due to the year long cultural events that had taken place, some of the better known examples being a concert by Paul McCartney and the tall ship races. It was found that Liverpool had attracted 3.5 million first time visitors to the city and there were 9.7 million visitors in total. This increased the number of tourists that visited Liverpool in the next year by 34%

### **Architecture and Infrastructure**

One key point of architecture that was built was on the King's Docks. It was called the Echo Arena. It was designed to host a whole range of events from conferences to sports events and music concerts. It was given a unique design making it the only kind in Europe and has an 11 000 capacity. It created jobs in the tertiary sector and also has hotels based near it for visitors.

Liverpool does not have any sky scrapers. Although there are plans being put in place to possibly build some in the future. However this would cost a significant amount of money, even with private investors and some members of the public are sure to complain about the juxtaposition of having older historic building mixed with modern tall powerful buildings as has been the case before.

### **Transport**

Liverpool has a wide variety of good links to other cities through its transport system. It has an airport, main railway station Lime Street, bus stations, underground, tram systems and a ferry port. During the project the major development was the Point of Arrival that was a new futuristic bus station that was developed as well as 3000 spaces for cars to park. The bus station was designed to take 10 million people a year and was designed as a public transport interchange. It also has many motorway links to key cities such as London and Manchester.

### **Urban Redevelopment**

<b><i>Paradise Project</i></b>	<b><i>Estimated</i></b>
<b><i>Area</i></b>	<i>18 ha</i>
<b><i>Total Development</i></b>	<i>234 000 m<sup>2</sup></i>
<b><i>Jobs Creation</i></b>	<i>6000 direct + 2000 indirect</i>
<b><i>Retail and Leisure</i></b>	<i>175 500 m<sup>2</sup></i>
<b><i>Environment (Open Space and Green Areas)</i></b>	<i>2.2 ha</i>
<b><i>Housing</i></b>	<i>23 000</i>
<b><i>Funding</i></b>	<i>£5-6 Billion</i>

Table 03. Urban redevelopment of Liverpool

Liverpool is mainly involved like most British cities in the tertiary sector of industry, such as education, banking, finance and insurance. It still has routes however in the docks with the headquarters for global shipping lines, including Japanese and Danish.

Liverpool Vision is the latest of the urban renewal plans. It is aiming at improving urban housing whilst also upgrading the dock and existing areas.

### **Environment and Green Areas**

The main change to the green area of Liverpool was the alteration of Chavasse Park in the city centre. This park has comparisons to the proposed design of the one in Lodz as a car park was built underneath it with terraces that connected to pavilions. So far the park has been a huge success with many members of the public calling it “brilliant”.

In terms of the environment Liverpool has also introduced a recycling program, with education being the key point of attack. It also introduced by laws into activities at the park, this was to in sure that everyone can enjoy the park without deteriorating it. Liverpool has also installed 25 wind turbines as it tries to combat its Carbon footprint. Some new buildings such as the previously mentioned Echo Arena have used different techniques to benefit the environment. These include controls to the amount of light, electricity and temperature being used in certain parts that may be empty for the day. It also harvested rainwater to use for the flushing mechanisms of the toilets and put some turbines on the river to generate its own power supply.

## **Poblenou (Barcelona)**

### ***22@BARCELONA PROJECT***

Barcelona is the capital and the most populous city of the Autonomous Community of Catalonia and the second largest city in Spain, with a population of 1,621,537 in 2009.

About 5 million people live in the Barcelona metropolitan area. The main part of a union of adjacent cities and municipalities named Àrea Metropolitana Barcelona (*AMB*) with a population of 3,186,461 in an area of 636 km<sup>2</sup> (density 5.010 hab/km<sup>2</sup>).

Poblenou, is an extensive neighborhood of Barcelona (Sant Martí district) that borders the Mediterranean sea to the south, Sant Adrià del Besòs to the east, Parc de la Ciutadella in Ciutat Vella to the west, and Horta-Guinardó and Sant Andreu to the north.



Figure 03. Location of Barcelona.



Figure 04. Aerial view of Barcelona with the Pobrenou district radial.

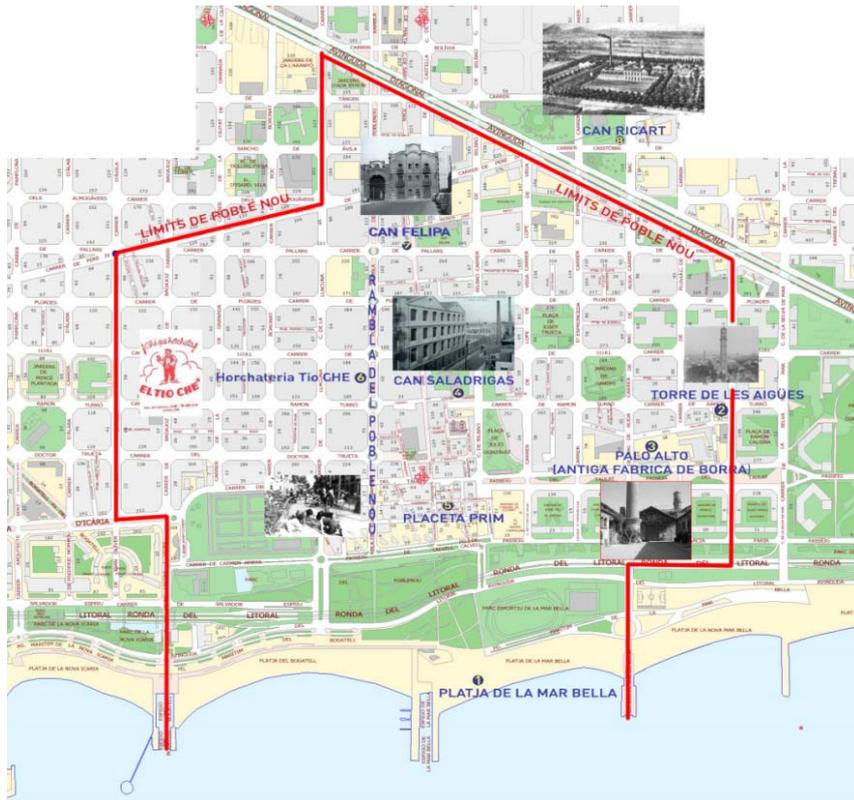


Figure 05. Pobrenou district

### Timeline.

#### 1860 to 1960

The passing of the first Spanish railway through San Martín, from 1848, was one of the main causes for the industrial increase of the area.

Between 1855 and 1888, the register of factories recorded an increase from 57 to 243.

On the borderline between the 19th and 20th Century, San Martín is nicknamed the "Catalan Manchester" due to its important industrialization and politically active mentality of its population.

#### 1960 to 1986

The central years of the 1960's can be considered as the beginning of the de-industrialization of Poblenou.

The emergence of the Zona Franca as a new centre of industrial activity, with a new location of the industrial activity in Barcelona, involved a significant blow to Poblenou.

It is important to mention that, between 1963 and 1990, Poblenou lost more than 1.300 factories.

While the industries started to leave the San Martín district, its neighborhoods began to neglect.

1986 to 1999

The recovery of Poblenou started off with the interventions carried out around the Olympic Games.

The ring roads of Barcelona were built, providing Poblenou with an excellent link to the metropolitan area; the port and airport.

the beaches were turned into urban ground

2000

22@Barcelona Project reinterprets the function of the old industrial fabric of Poblenou and creates a new model of urban space that substitutes the old 22a urban classification.

The new 22@ allows the coexistence of all non-disturbing or non-polluting productive activities and normalizes the presence of the social housing affected since 1953, facilitating its restoration.

**Objectives:**

- 22@Barcelona project transforms the old industrial areas of Poblenou in a high-quality environment for working, living and learning.
- As a project of urban refurbishment, it responds to the necessity of recovering the social and economic dynamism of Poblenou.
- As a project of economic refurbishment, it constitutes a unique opportunity to turn Poblenou into an important scientific, technologic and cultural platform transforming Barcelona into one of the most dynamic and innovative cities throughout the world.
- As a project of social refurbishment, it facilitates the interrelation among different professionals who work in the area and the participation of the district's neighbors in the opportunities information technologies offer.

Scale of the Project

	<i><b>Projected</b></i>	<i><b>Reality (2008)</b></i>
<i><b>New gross floor space</b></i>	<i>4.000.000 m<sup>2</sup></i>	<i>67%</i>
<i><b>Housing</b></i>	<i>4.000 flats</i>	<i>-</i>
<i><b>Increased green spaces</b></i>	<i>114.000 m<sup>2</sup> land</i>	<i>-</i>
<i><b>Increase in facilities</b></i>	<i>145.000 m<sup>2</sup> land</i>	<i>-</i>
<i><b>New Jobs generated</b></i>	<i>130.000</i>	<i>42.000</i>
<i><b>Business</b></i>	<i>3.200.000</i>	<i>-</i>
<i><b>Investment in Infrastructure Plan</b></i>	<i>180 million Euros</i>	<i>-</i>

Table 04. @22Barcelona Project expansion.

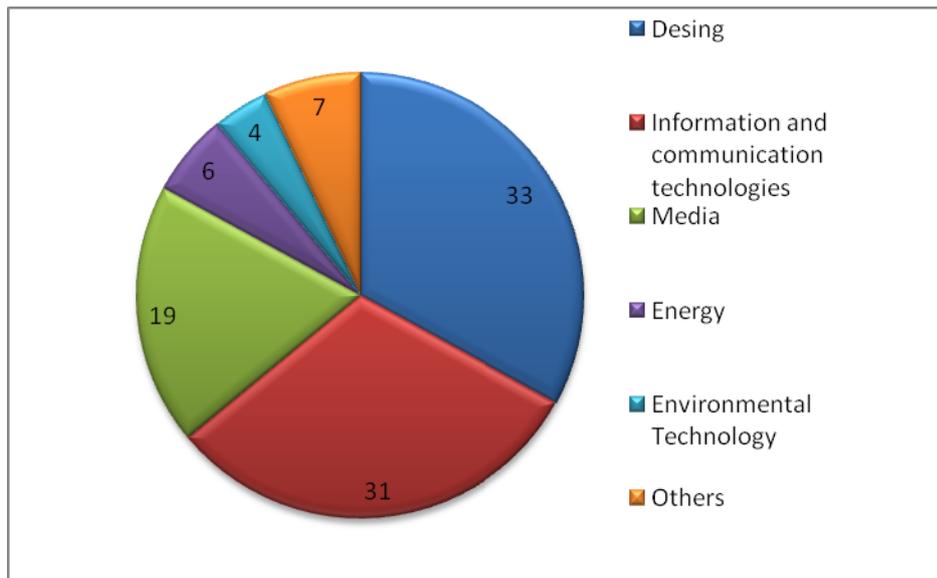


Figure 06. Employees of companies established by sector

### Current state

- Since the beginning of the project the refurbishment of 67% of over ground has been started, under 110 plans for urban amelioration.
- The real estate sector has decisively supported the Project
- Planning permission has been granted to build 582,880 m2 of over ground for production activities.
- The 22@Barcelona project has likewise been warmly received by the business community: 1,441 firms have already established in the 22@Barcelona district or are in the process of building their corporate HQs there.
- As a result, the number of people working in Poblenou has risen significantly. There are currently more than 42,000 new workers, and that number is predicted to reach 150,000.

## Bilbao

Bilbao is the largest city in the Basque Country and the capital of the province of Biscay, Spain. The city has 353,168 habitants and is the most financially and industrially active part of Greater Bilbao, the zone in which almost half of the Basque Country's population lives.



Figure 07. Location of Bilbao.

Problems:

- The impact of the industrial crisis of the '70s, generated in Bilbao – negative effects on the economy, society, infrastructure and landscape of Bilbao.
- Unemployment, migration and depopulation of Bilbao
- Environmental problems
- Economic problems and social marginalization
- Environmental problems

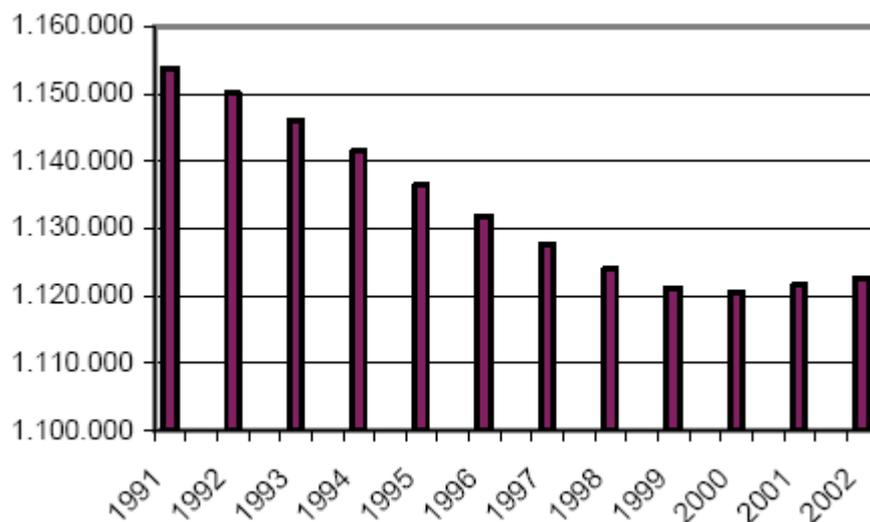


Figure 08. Bilbao Population

**Opportunities for change:**

- Large number of areas and infrastructure available due to industrial abandonment in crisis
- Creation of two associations that drive urban and economic regeneration of Bilbao.

BILBAO RIA 2000

BILBAO METROPOLI 30



- Propose a policy that promotes the quality of air, water and garbage.
- Urban regeneration of degraded areas that enable infrastructure equipment of housing, cultural, leisure and public facilities
- Promote the metropolis to the outside, through the creation of museums, theaters and libraries network.

**Cultural Analysis of Guggenheim Museum:**

- Bilbao ICON. The most emblematic change is the Guggenheim Museum.
- Promotion of cultural creativity and inclusiveness, national and international level
- The Guggenheim is itself a machine to generate business, given that at present nine out of ten visitors from outside the Basque Country.
- The high number of foreign visitors has led to the development of a tourism sector that until the inauguration of the Guggenheim had very limited visibility.

Table 05. Data of Guggenheim Museum

<b><i>Cost</i></b>	<i>126.5 million € + 32.3 million for permanent collection</i>
<b><i>Pending</i></b>	<i>In 2008 there were 40 million to recover</i>
<b><i>Wealth Generated</i></b>	<i>Gross domestic product (GDP) of 1750 million €</i>
<b><i>Income Tax</i></b>	<i>The council has raids 280 million €</i>
<b><i>New Jobs generated</i></b>	<i>Year 2009: 3.536 (indirect) 926 (direct)</i>

**Promoting the city**

- Bilbao Convention Bureau

Entity responsible for promoting the holding of conferences in Bilbao, attended 418 meetings and a total of 89,198 delegates. He presented 77 candidates for the city for conventions, conferences and conventions.

- Bilbao Tourism

Developed in 2008 an intense uptake of tourists and was present in 30 fairs and 14 days of promotion, in which 1129 contacts were established professionals.

Visits by travel agents and Spanish and foreign journalists, all are invited by Bilbao Tourism

## Essen and Ruhr area.

The city of such a long history as Essen is a great example of redevelopment of industrial market. Since the first world war it has become the main center of the weapons industry. Gunsmith's production made high profits due to mass-production of over 14,000 rifles and pistols. Even after second world war Essen became increasingly important strategically because of its industry. Since 20<sup>th</sup> century it became the center of coking-plants and coal-mines. That fact enabled development of Ruhr area and made Essen one of its richest parts of Germany. However, in the 21<sup>th</sup> century the German government insisted on changing the city function what resulted in closing plenty of mines what led to unemployment and emigration. Nowadays Essen is considered as example of successful redevelopment not only of its infrastructure but also of city functions. Because of that, Essen was nominated as a pretender to become the European City of Culture and it won the award in 2010 year.

<b>Area</b>	210.31 km <sup>2</sup>
<b>Population</b>	577.290
<b>Landscape</b>	43%
<b>Population density</b>	2.744 residents/km <sup>2</sup>
<b>Manufacturing industry</b>	20%
<b>Services</b>	80%
<b>Employees</b>	213.335
<b>Disposable income</b>	18.597 EURO

Table 06. Table of data from 2006-2009

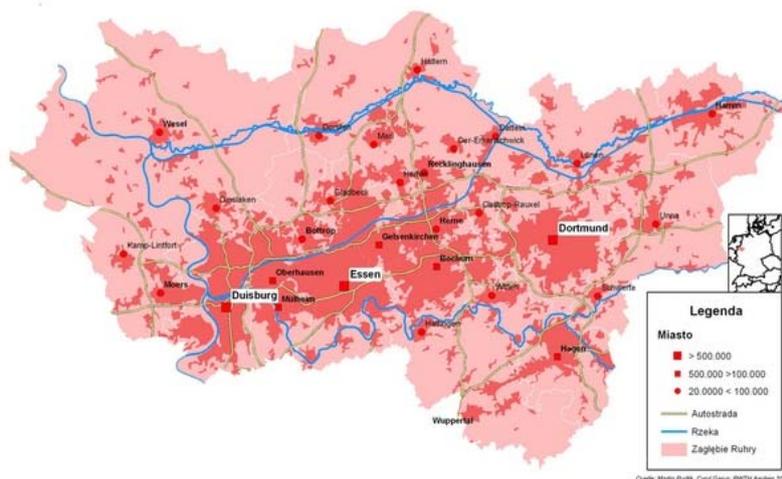


Figure 09. Ruhr Area.

### Timeline

The Ruhr area was considered as the place of degraded environment and much polluted atmosphere. To change that opinion Germany started to think of the way of developing this area. First thought was that environment redevelopment will give a possibility for the culture redevelopment as well as the cultural one. Since 80's the new way of thinking helped the implementation of new tendencies and ideas. That made a rise of IBA project (International Bauaustellung – Emscher Park) which alternated the industrial infrastructure into cultural region of knowledge, tourism and services.

- 1970 - Upgrading the motorway system it helped the connection between southern-northern and eastern-western Germany. Essen became the central motorways crossing
- 1986/87 – Zollverein, the biggest coal mine in Essen with 12 tones output of coal each day was closed. Closure of it led to several economical and social problems. Neglected city and unemployment caused the dweller's emigration - they were seeking for jobs in other places.
- 1993 – largest coking - plant was closed
- 2001 – Zollverein was registered on the UNESCO list of heritage.
- 2010 – Essen becomes the European City of Culture

### Business and Urban Development

<b>Area:</b>	4435 km <sup>2</sup>
<b>Population:</b>	5 317 565
<b>Green areas:</b>	800 km <sup>2</sup>
<b>Unemployment:</b>	10.3%
<b>Investment expenditure:</b>	0.5 mld Euro

Table 07. IBA Project characteristics 2004-2008

IBA (Internationale Bauaustellung) is the project which main target was to present new architectural design and modern urban areas. Project deals with area of 800km<sup>2</sup> divided into 17 cities and their communes of over 2mln of inhabitants. Project was assigned with the name Emscher because of name of the river that passes through the area of interest.

Formation of IBA arised because of necessity of changes in the industry and structure of the economy. Projects were based on the renovation of old industrial buildings, revitalization of environment and preparation of economy development of the region. Main philosophy of IBA is that vital are those enterprises that are responsible for the environment. It was always remembered that there is an important connection between ecological quality of region and the development perspectives. Improvement of the ecological aspects was the basis for the social and cultural changes.

***Tasks of the IBE were mainly as follows:***

- rebuilding of the environment: formation of Emscher Park which became the landscape park
- improvement of ecological system of river Ems
- creation of recreational area along the Rhein-Herne canal. Main goal was to create a tourist attraction of length of over 46km
- creation of new living areas in old workers district
- workplaces in parks – new economical and industrial branches
- redevelopment of historical buildings to serve as a center of culture
- new proposition of social, cultural and sport facilities

However, IBA project does not have any strategy. All smaller projects undergo changes and development process independently on each other. Solutions that are taken into consideration are not the special ones but those which are commonly useful and which have plenty of different functions. IBA success is based on projects which are not proposed by firms but from normal people. Projects are not planned and are rather than investments which are later presented to the community. All presentations were carried very carefully and in a very plastic way so that not only experts would understand them. IBA projects have been carried for 10 years but they successfully ended in 1999 with the half-year presentation. The overall cost of all projects and exhibitions was evaluated for 5 million of DM (2.5 million Euros).

***Environment and Green Areas***

IBA projects enabled the formation of four different tourist tracks: architectural, art, cultural and nature & industrial. The last one presents the industrial region which is revitalized and changed for the nature and environmental friendly. Lot of green areas are built on mine waste dumps while the holes from the open-cast mines are filled with water so that they form artificial lakes. Nowadays due to clean condition of waters and region infrastructure it became popular to swim in river and drains. Moreover, the net of rivers in Ruhr area is about 200km long. IBA proved to be a success. It completely changed the polluted and unattractive region into well planned landscape with parks, rivers and lakes. It also showed how one may combine environment with the cultural aspects of life because of plenty of museums, galleries, theatres and historical monuments. The success of the IBA project can be seen in the number of tourists who comes to Ruhr area. In the last year it was visited by 3mln of people.

***Transport***

Three different motorways pass through Essen territory. The road network of Essen consists of over 3,200 streets, which in total have a length of roughly 1,600 km. That keeps the connection between other cities of Ruhr in every direction. Southern part of the city is directly connected with Düsseldorf while the northern part with Oberhausen and Gelsenkirchen. Connection with Dortmund, which is one of the arterial roads of the Ruhr area (> 140,000 vehicles/day), had always suffered from heavy congestion during rush hours, so in 1970 the new tunnel was built in case to upgrade the motorways standards. The tunnel not only keeps motorways aside from the public view but also connects it with the main

railway station. However the city centre still lacks of the direct connection between motorways. Despite the fact that several projects are proposed, still there is no plan realization – mostly because of high costs that affects citizen's migration and streets renovation. In 2010, as Essen became the European Capital of Culture, the main station was renovated because it was classified as the station of highest importance. The renovation cost was estimated for 57mln Euro; however some costs were founded by the EU. City doesn't lack of other types of transport like trams, Stadtbahn's and trains. On the south of the city there is also an airport and the nearby rivers enables to ship passages.

## **LILLE**

Lille is a city in northern France it is the principal city of the Lille Metropolis the fourth-largest metropolitan area in the country behind those of Paris, Lyon and Marseille. Lille is situated on the Duele River, near French border with Belgium. It is the capital of the Nord-Pas de Calais region and the prefecture of the north department, The city of Lille which annexed on 27 February 2000, had a population of 226,014 at the 2006 census .Meanwhile the Lille Metropolis which also includes Roubaix Tourcoing and numerous suburban communities had a population of 1,091,438. The eurodistrict of Lille-Kortrijk which also includes the areas of the Belgian cities of Kortrijk ,Tournai ,Mouscron and Ypres had 1,905,000 residents.

Lille situated at the heart of a veritable cross-border conurbation of 1,6million inhabitants ,is the capital of the Nord-Pas Calais region 4million inhabitants. The city has an advantageous geographic position close to the major decision-making centres of northern Europe Paris London Brussels Amsterdam and Luxemburg .

Lille's economic mutation has been built upon these new transport infrastructures (Eurostar, Thalys) placing the city just one hour by high-speed TGV train from Paris 35min from Brussels 55min from Charles de Gaulle airport and 1h20min from London

The attraction of the Lille area in terms of economic inward investment is favoured by the availability of prime real estate potential in the form of dedicated business parks, specialised according to different economic sectors, while Eurasanti is dedicated to the healthacare sector and finally Eurotechnologies is a new pole of excellence in the domain of the latest technologies.

The industrial crisis which emerged in the 70s hit the city head-on in the 80s. All sectors are affected, beginning with textiles. The unemployment rate rose from 3% in 1975 to 13% in 1990. Lille then began a period of conversion based on the development of the tertiary sector. The city of factories and workshops gave way to a city office and services, and found his calling in some sort of medieval merchant city. The TGV Lille-Paris in 1993, creating the new district Euralille and the arrival of Eurostar in 1994 are all qualities which have enabled the City of confidence going into the third millennium Fourth French capital, a crossroads International, an economic dynamic, Lille is also listed as a "resort" and "City of Art and History", designated European Capital of Culture in 2004. The city is now a major tourist destination, known for its living host, preserved its heritage and its vibrant cultural life.

## **Time Line**

- **1983**

Two lines of VAL, is the first system in the world and the second longest (45Km in 60 stations. Two matches between the lines) serve the main cities to the Belgian border

- **1989**

The birth of Euralille, as Rem Koolhaas was named winner of the consultation. He conceived the whole project is designated as urban "architect and urban planner. Since the beginning, he worked closely with the neighbourhoods of the city of Lille. It participates actively in the development of urban space as a realization of housing Euralille-Metropolis. It was then one of the first urban development projects carried out by Rem Koolhaas. A year after taking office, he created the planning area of International Business Centre.

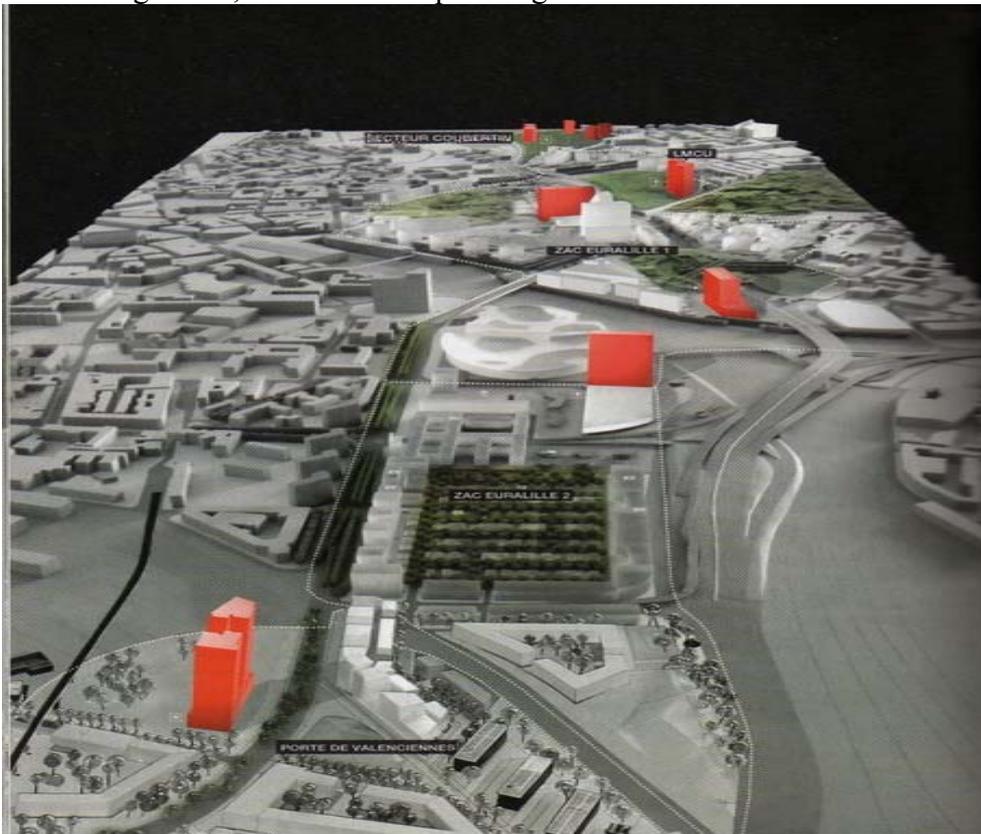


Figure 10. View on the Euralille project area.

- **1993**

TGV Lille Paris, Lille is 1 hour from Paris. Enjoying a privileged location in the centre of the triangle Paris-London-Brussels, Lille Metropolis has successfully converted post-industrial. This movement continues today through the implementation of new strategic projects for the development of the metropolis. Designated European Capital of Culture for 2004, Lille today meets the expectations of economic and attracts many tourists.

- **The 6 of May 1994**

Inauguration of the Channel Tunnel, The construction of the Channel Tunnel, the high speed train (TGV) and Euralille have driven the transformation of this town genuinely cross 1.6 million

• 1994

Opening of the Northern European TGV Lille London and Brussels inauguration Euralille



Figure 11. Communication arrangement in Lille.

But the city of Lille financially bled dry at this time is unable to meet the costs of such an urban project. Jean Peyrelevade and Patrick Marnot suggest a montage of selling building rights to developers of large-backed banks. In 1988 a small cell under the authority of Jean-Paul Baïetto determines the pattern of triangular piece of future city development. In 1990, the company mixed enterprise Euralille, responsible for planning and development of the new district is created. The initial investment goes through the sale of fifty acres of old barracks, fortifications and vacant land owned by the City of Lille has become obsolete.

Draft Urban: Euralille centre

Fifteen years after its launch, Euralille fulfilling its original goal: to provide the city of Lille a business centre across the major European cities.

71% of building rights are marketed today Euralille Euralille 1 to 2, and plan public spaces initiated since 2000 has allowed to improve accessibility at stations,

To strengthen links between different sectors of the operation, while emphasizing the role accorded to green spaces.

Euralille now hosts nearly 7,000 jobs, which are mainly concentrated in the banking, insurance, telecommunications, and consulting and information technology. At the end of operation, 2010, Euralille should accommodate 15 to 20,000 jobs.

Since 2000, 138,350 m<sup>2</sup> gross floor area of offices that have been marketed throughout Euralille 1 and 2. Today the business centre of Euralille includes a pair consisting of nearly 110,000 m<sup>2</sup>. Three major programs will soon break ground, totalling them only about 70 000 m<sup>2</sup> and bringing the business centre at 180 000 m<sup>2</sup> of offices.

<b><i>Planning Area</i></b>	<i>120 Ha</i>
<b><i>Housing</i></b>	<i>123 374 housing in 2006</i>
<b><i>Offices</i></b>	<i>369586 m<sup>2</sup></i>
<b><i>Hotels</i></b>	<i>24971 m<sup>2</sup></i>
<b><i>New Jobs generated</i></b>	<i>15 to 20.000jobs in 2010</i>
<b><i>Investment in Infrastructure Plan</i></b>	<i>335 million Euros</i>

Table 08. Euralille center assumptions.

### Composition of Euralille

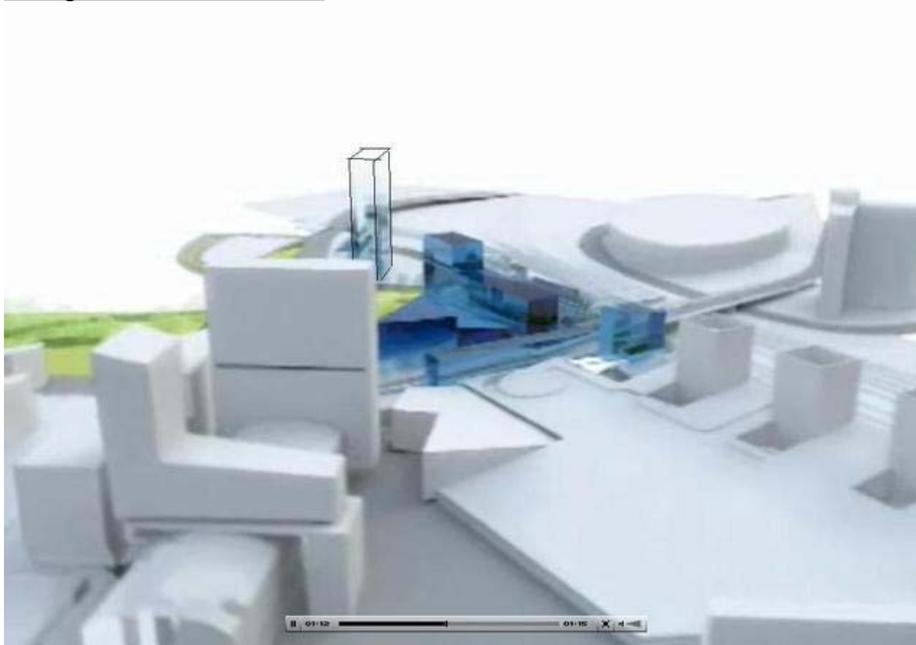


Figure 12. Composition of Euralille

- The Lille-Flanders and Lille-Europe concentrate the bulk of international flows, national and regional.
- The mall Euralille (architect Jean Novel) includes a Carrefour hypermarket of 12,000 m<sup>2</sup> and a shopping mall of 120 shops, totalling 66,000 square meters of retail space.
- The tower of Lille (formerly Crédit Lyonnais tower - architect Christian de Portzamparc) Lilleurope tower (architect Claude Vasconi), the Atrium, the

city of Business, Axis Europe / Suite Hotel and Towers offers a total Eurocity more than 81,000 m<sup>2</sup> of office space in the heart of business;

- La Maison architecture built under the viaduct Corbusier;
- Lille Grand Palais, originally named "Congrexpo, gathers under its roof elliptical Zenith Arena (concert hall of 7,000 seats), three lecture halls and exhibition area. It is the only site in France to meet these three facilities under one roof.
- INPI (National Institute of Industrial Property) has decentralized its local Euralille.
- An urban park of 7 hectares, the park designed by Henri Matisse Gilles Clément
- International Business Centre including Tower CL (designed by the architect Dominique Perrault: This business centre has recently been strengthened with the creation of the "City Business" including an international space business, under the auspices of the Chamber of Commerce and Industry.
- Mall Euralille: there are Lille (Grand Palais) brings together a large exhibition space, convention facilities
- City Park
- Lille-Flandres and Lille-Europe

<b><i>PROJECT</i></b>	<b><i>Area</i></b>	<b><i>Architect</i></b>
<b><i>The mall Euralille</i></b>	<i>Carrefour hypermarket of 12,000 m<sup>2</sup>, 120 shops totalling 66,000 square meters of retail space</i>	<i>Jean Nouvel</i>
<b><i>The tower of Lille</i></b>	<i>(formerly Crédit Lyonnais tower) (Lilleurope tower) more than 81,000 m<sup>2</sup> of office space in the heart of business</i>	<i>Christian de Portzamparc Claude Vasconi</i>
<b><i>Lille Grand Palais originally named Congrexpo</i></b>	<i>concert hall of 7,000 seats</i>	-
<b><i>Urban park</i></b>	<i>7 hectares</i>	<i>Henri Matisse Gilles Clément</i>
<b><i>International Business Centre City Business</i></b>	-	<i>Dominique Perrault</i>
<b><i>INPI(National institute of Industrial Property)</i></b>	-	-
<b><i>Mall Euralille</i></b>	-	-

Table 09. Characterisation of projects concerning Lille.

### The centre

- The centre of Euralille is the junction of Old Lille and suburbs. It includes:
- The main elements of international business centre:
- The Lille-Flandres and Lille-Europe concentrate the bulk of international flows, national and regional;
- The mall includes a hypermarket Euralille 10,000 m<sup>2</sup>. and a shopping mall 120 shops, totalling 66,000 square meters of retail space;
- The towers CL, Lille-Europe, the Atrium, City Affairs and Eurocity offer a total 81,000 m<sup>2</sup> of office space in the heart of business centre
- INPI (National Institute of Industrial Property) has decentralized its local Euralille.
- An urban park of 7 hectares, the park Henri Matisse.

### GPU (Grand Urban Project) in figures:

- 482millioneuro budget
- 2 main sites and 14 sites linked across all city of Lille
- A length of 6 years for a construction site which, normally, would have required 10 - 15 working years
- 3400 new accommodation among which 1100 social rental accommodation (for 750 demolished accommodation); 900 free rental accommodation; 560 accommodation in home-buying
- a comfort ameliorated for about 4500 accommodation

400 produced new accommodation and 900 accommodation renovated in the private park



Figure 13. Scale of the Grand Urban Project.

**Lille Metropolis in the hearth or Northern Europe**

*Economic problems of Lille*

In 1973, INSEE divided Nord Pas-de-calais into 15 A zones each subdivided into B zones. The arrondissement de Lille consists of two A zones: Lille, and Roubaix Tourcoing. Roubaix Tourcoing contains the two northern B zones of the arrondissement, Lille the other six B zones. These zones are also called employment zones or travel-to work areas.

<i><b>Year</b></i>	<i><b>1962</b></i>	<i><b>1977</b></i>	<i><b>1994</b></i>
<i><b>Manufacturing</b></i>	<i>77.000</i>	<i>68.900</i>	<i>26.600</i>
<i><b>Construction</b></i>	<i>7.700</i>	<i>10.900</i>	<i>5.200</i>
<i><b>Trade</b></i>	<i>2.900</i>	<i>10.500</i>	<i>10.700</i>
<i><b>Services</b></i>	<i>10.200</i>	<i>25.100</i>	<i>37.200</i>
<i><b>Total</b></i>	<i>97.800</i>	<i>115.400</i>	<i>79.600</i>

Table 10. Economy of Lille.

## **Conclusions with Regards to Łódź.**

The first question that must be answered in this conclusion was whether these examples were successful? The answer would be each case had successes and failures but overall it can be said that it achieved their main accomplishments. The table below summarises the main features of the projects and case studies.

<i>City</i>	<i>Culture</i>	<i>Business</i>	<i>Environment</i>	<i>Urban Redevelopment</i>	<i>Retail</i>	<i>Tourism</i>
<i>Barcelona (Poblenou)</i>		*	*	*		
<i>Bilbao</i>	*	*		*	*	*
<i>Essen</i>		*	*	*		
<i>Glasgow</i>	*	*		*		*
<i>Lille</i>		*	*	*		
<i>Liverpool</i>	*	*	*		*	*

Table 11. Characterization of elements regarding to Łódź.

### **Culture**

The table shows the areas that each city was successful in. The main failures of the cases in Britain were failing to plan after winning the culture award. As for example in Glasgow, cultural events fell from a few years after the award before picking back up again in the mid 90's. In Liverpool the main problem with the Paradise Project was that it drew customers away from the existing retail centre, however plans are in place to change this as the Paradise Project plans to expand into that area to create a "bridge-way" of retail. In Bilbao, the economic engine is the Museum Guggenheim. It would be good idea to have something similar in Łódź. It is not possible to have the same museum with similar characteristics; however there are other options such as art galleries, theatres and museums that would allow Łódź to be enriched through culture. Barcelona is also well known for its cultural influences that draw tourists in, so it is important that Łódź successfully develops its culture to increase the number of tourists.

## **Business**

In the Spanish examples too much space was devoted to business, as for example in Barcelona only 42000 of the jobs out of the 130 000 estimated have been filled. This is also true for the Glasgow example as less than a third of the space dedicated to business on the Clyde Waterfront Regeneration program have been filled.

The common factors between all projects are that they both promoted their existing culture, as well as creating new cultural buildings to further emphasize it. It was also vitally important that each city promoted their campaign through marketing techniques. This can be seen most clearly in the cases of Bilbao and Glasgow. In Bilbao two separate associations were created specifically to promote cultural events and for bringing attention to the heart of Bilbao. In Glasgow the promotional campaign successfully re-branded its city image, while also attracting many new tourist visitors to the city. It seems obvious then that Łódź would need a similar campaign if it was trying to achieve the same results.

For redevelopment of the business centers like this, in these cases the most jobs that were attracted were in the tertiary sector. This can be seen clearly in Essen where jobs have shifted from the manufacturing industry to 80% in the services. As there is a University located near the area that is being re-developed in Łódź there should be in theory a qualified work force that could take these jobs in the services area. These tertiary services have included Financial, Tourism and Retail.

From each case studied we have calculated the average of surface for new services and business. These estimates are based on calculations of averages and scales from the case studies. For each case study the sections that were designated to specific areas such as business, were scaled down to the size of the area being redeveloped in Łódź. Then the average was taken from each case study. Finally the area of the zone that was completed was taken into account. After these calculations were completed it was estimated that for this area in Łódź, there should be an estimated of 30-40% of the dedicated to new businesses and services. It is also estimated that 6000 houses should be introduced or re-developed.

## **Environment**

Green areas and environment also played important parts, as Glasgow was keen to emphasize the amount of parkland it had, while Liverpool re-developed Chavasse Park. In Essen the project was mostly devoted to the development of the green areas and also showed careful consideration to the environment. This shows that the green area outside Fabryczna Station will be vital to this project and it is important it is developed fully to enhance the image of the station. Now in the 21<sup>st</sup> century, with the effects of global warming and a rapidly declining fuel sources it is more important than ever to have a “green” city. Therefore it is important with in the area of redevelopment to have environmental proposals to do with waste and energy consumption. For example, the generation of electric energy for the new zone could be provided with some type of renewable energy. Like the installation of photovoltaic panels for lighting, solar thermal energy use for heating water or wind turbines as seen in other areas of Łódź already.

### **Architecture and Infrastructure**

We would also suggest against the sky scrapers because while there are examples of tall buildings in Liverpool and Glasgow they are rarely used for residential purposes. When they are used for residential purposes, from research it suggests that it badly affects social conditions, living conditions and the environment. From theory it also shows that this is a poor idea as “they take hold of wind, direct it down and intensify making draughts while dense and low buildings are passed by wind. In addition, at psychological aspect, human mind is created to get to know the world and events in horizontal surface not vertical.”

Also from the case studies it should be noted that new buildings, while designed to be modern also take into account the historical aspect of the architecture and this was also incorporated into the design. Therefore this should be investigated as a possibility when designing new buildings.

### **Transports**

It is also important that the area developed does not have an effect on other surrounding areas, such as Manufaktura and Piotrowska Street. We would suggest having transport services to these areas from the new centre or some other form of link as it is vital that the project doesn't detract from the surrounding areas. Ways to do this would be to increase the quality of service of trams and buses from the new area developed to these important existing areas.

For the new railway station it is important that it is efficient and is able to deal with large amounts of commuters. Also the train station should provide services and should be easy to reach in terms of both buses and trams. Furthermore, to raise the profile of Lodz in Poland, not only should there be a high-speed railway line to Warsaw but also to other Polish cities such as Krakow. As for international connections with the current situation is impossible today to travel to European cities such as Berlin directly. To attract visitors and make the city more attractive it should be considered that there should be a direct connection.

### SUMMARY OF PROJECTS OF CASE STUDIES

<i>City</i>	<i>Barcelona</i>	<i>Bilbao</i>	<i>Essen</i>	<i>Glasgow</i>	<i>Lille</i>	<i>Liverpool</i>
<i>Project</i>	<i>Poblenou</i>	<i>Guggenheim</i>	<i>IBA</i>	<i>Clyde Waterfront Regeneration</i>	<i>EuraLille</i>	<i>Paradise Project</i>
<i>Area</i>	<i>4 km<sup>2</sup></i>	<i>-</i>	<i>4435 km<sup>2</sup></i>	<i>20 km<sup>2</sup></i>	<i>1.2 km<sup>2</sup></i>	<i>0.234 k m<sup>2</sup></i>
<i>Funding</i>	<i>180 million Euros</i>	<i>€126.5 million</i>	<i>0.5 mld Euro</i>	<i>£2 billion</i>	<i>335 mln Euros</i>	<i>£5-6 Billion</i>
<i>Jobs Created Directly</i>	<i>42 000</i>	<i>926</i>	<i>-</i>	<i>17 000</i>	<i>7000</i>	<i>6000</i>
<i>Jobs Created Indirectly</i>	<i>42 000</i>	<i>3536</i>	<i>-</i>	<i>7000</i>	<i>20000</i>	<i>2000</i>
<i>Area of Business Estimated</i>	<i>3 200 000 m<sup>2</sup></i>	<i>-</i>	<i>-</i>	<i>900 000 m<sup>2</sup></i>	<i>369586 m<sup>2</sup></i>	<i>175 500 m<sup>2</sup></i>
<i>Area for Business in Reality</i>	<i>3 200 000 m<sup>2</sup></i>	<i>-</i>	<i>-</i>	<i>260 000 m<sup>2</sup></i>	<i>-</i>	<i>175 500 m<sup>2</sup></i>
<i>Number of Housing Estimated</i>	<i>4000 flats</i>	<i>-</i>	<i>-</i>	<i>23 000</i>	<i>123 374</i>	<i>23 000</i>
<i>Number of Housing in Reality</i>	<i>4000 flats</i>	<i>-</i>	<i>-</i>	<i>6000</i>	<i>-</i>	<i>23000</i>
<i>Green Area</i>	<i>0.114 km<sup>2</sup></i>	<i>-</i>	<i>800 km<sup>2</sup></i>	<i>0.332 km<sup>2</sup></i>	<i>0.07 km<sup>2</sup></i>	<i>0.022 k m<sup>2</sup></i>

Table 12. Case studies summary.

### **Economic Potential**

<b>City:</b>	<b>Year</b>	<b>Population</b>	<b>Percentage of Unemployment</b>	<b>Foreign Investment</b>	<b>GDP (€ per capital)</b>
<b>Lodz</b>	2010	753 192	16.7%	980	7 092
<b>Liverpool</b>	2004	441 900	11.1%	-	16 466
<b>Glasgow</b>	1980	783 000	38.3%	-	7 137
<b>Poblenou (Barcelona)</b>	2000	51 000	14.8%	-	13 729
<b>Bilbao</b>	2001	349 000	11.2%	-	19 693
<b>Essen</b>	2010	577290	13.2%	-	29 760
<b>Lille</b>	2000	226014	14%	-	20 191

Table 13. Economical potential comparison of chosen cities from case studies.

As you can see from the above table Łódź is more than capable of achieving success in terms of achieving the European Capital City of Culture award. It is very similar in terms of population and Gross Domestic Product (GDP) in euros per capita than Glasgow was when it started its campaign in 1980. I would say that it has a greater form of economic potential than Glasgow, as it has a lower percentage of unemployment. When compared to Liverpool it can be seen that the GDP is much lower which shows that it cannot spend as much capital on the campaign as Liverpool did. The same can be said of Essen and Lille. However it has a greater potential to economically achieve as it has a higher number of population and foreign investors will continually be attracted due to its cheaper land and workforce.

## ***ANALYSIS OF EXISTING STATE.***

### **CULTURAL AND HISTORICAL VALUES OF DEVELOPING DISTRICT.**

#### **1. Aim of the analysis.**

Aim of the analysis is to indicate the historical and cultural conditioning of the area of NCL project, evaluation of its valorization as well as estimation of its influence on the area mentioned above. Aim will be achieved after defining the main valorization factors of separated values. Conclusions from this analysis that are preceded by project assumptions aims at indication of possible solutions not only from the spatial point of view but also from functional points that are found in valorization.

#### **2. Essential elements included in the analysis.**

Factors included in the analysis which are considered of the high importance are as follows:

- Historical and development conditioning, main communication connections, public spaces
- Kind of buildings on the chosen area
- Functional tradition of the area

#### **3. Factors influencing the values of valorization**

- Financial analysis
- Necessity of revitalization of the area
- Neighboring areas that influence the area of interest
- Current needs and targets which are supposed to reach in terms of NCL project
- Conception of Łodz development – ‘Feasibility Study’
- Functionality of the area, services

## DESCRIPTION OF THE EXISTING STATE.

### 1. Location of the area and historical view.

Area of NCL project is situated in the Nowa Dzielnica which was planned on 1840 year. It was a response to the dynamic development of spatial arrangement of the city buildings. The area was then surrounded by forest in the east, the communication node in the west (Kilinskiego Street), in the north by gardens and in the south by factories.

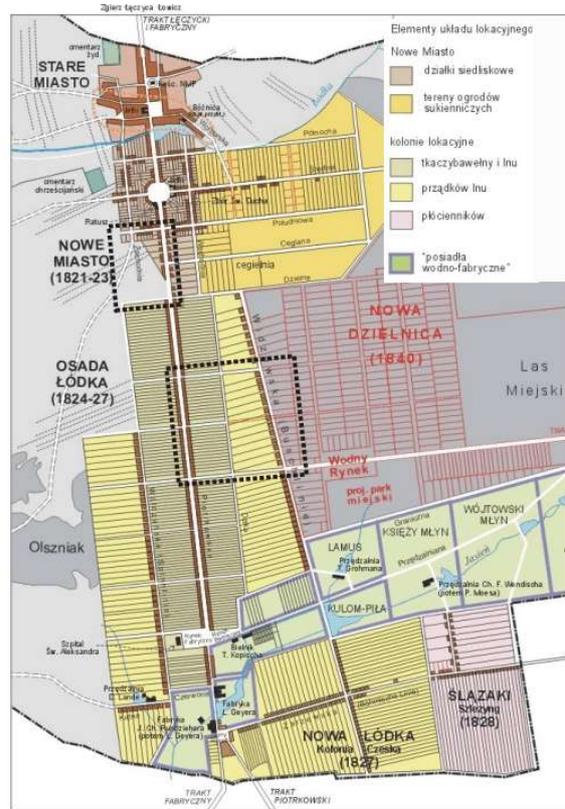


Figure 14. Historical content of the Nowa Dzielnica.

### 2. Most important conditioning factors – tendencies and barriers.

Development of the area was strictly connected with the railway development and its availability. Increasing economical potential of the city resulted in limitation of development of areas of Nowa Dzielnica what lead to formation of another barrier. This resulted in differences in the city management in the southern area of Tuwima Street and northern area of Narutowicza. Nearby district was dominated by industrial plants which were built without any organized plan what led the city to deformation of its architectural structure and random localization of not only factories but also municipal objects.

### **3. Spatial structure:**

- Elements of spatial structure

Analysis is based on Kevin Lynch work „The image of the city” from year 1962 which divide the composition into following elements: path, edge, district, nodes and landmarks. Lynch creates so called “mental mapping” what is the set of ideas about chosen place that includes information about spatial organization of phenomena. Analysis of urban structure aims at distinction of main composition elements that form chosen area and which support its identification.

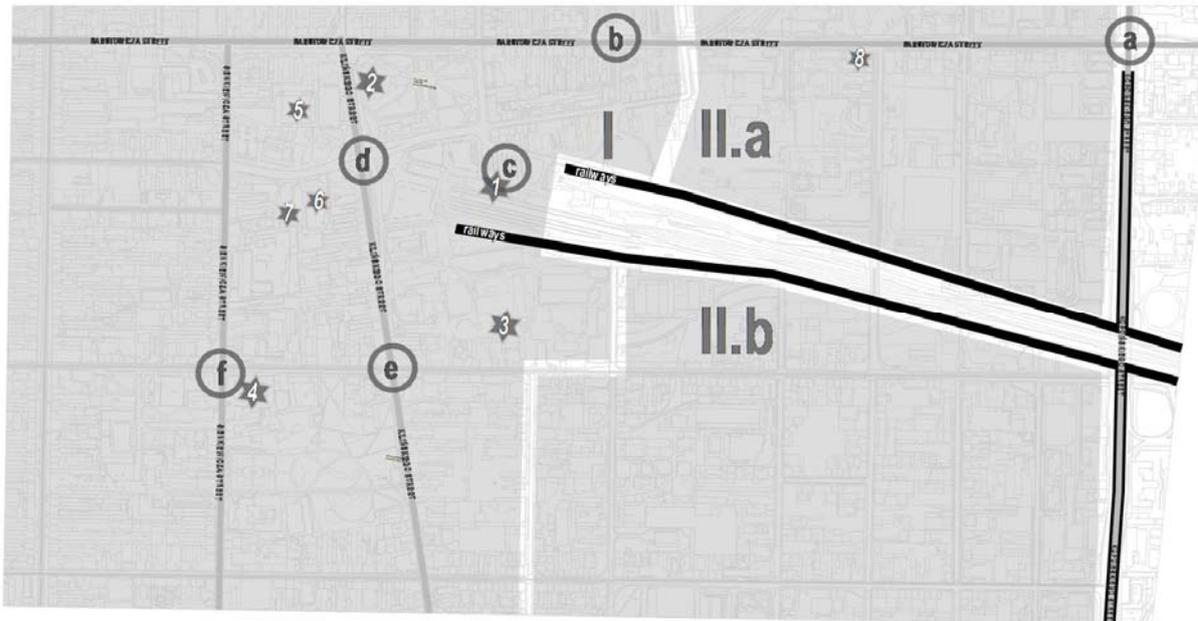
“Paths” are all spatial elements among which the pedestrian and wheel communication occurs (for example roads, railway tracks). In the New Center of Łódź district main communication paths are four main streets: Kopcińskiego Narutowicza, Kilińskiego and Sienkiewicza. Importance of these communication paths is defined by the existence of communication barrier which is the railway tracks in east – west direction. That means the formation of main”paths” in the south – north direction. The existence of Narutowicza Street as the horizontal “path” is the sole exception.

“Edges” are the linear elements that form barrier or discontinuation in the spatial view axis. In the case of project such “edges” are Kopcińskiego Street and railway tracks.

“District” is defined as those areas that have their internal consistency and which are seen by the observer as the whole elements of the construction. The area of interest may be divided into two different parts that deal with “districts”. First one is the historical downtown with high investment scale while the second one is historical downtown with low investment scale which simultaneously contains communication barrier which is the railway tracks.

“Nodes” are strategic points and places with huge level of activity in which different spatial areas intersect. These are the main crossroads: Kopcińskiego and Narutowicza streets, Kilińskiego and Traugutta streets, Kilińskiego and Tuwima streets, Tuwima and Sienkiewicza streets, as well as the Dąbrowskiego square with Railway station.

“Landmarks” can be defined as reference point by which location of other places is defined. Area of the project has plenty of such points. Few of them are current railway station building, the Ortodox Alexander Nevsky Cathedral, church on Sienkiewicza street, EC1 and some buildings which we can find as a high dominants: TV building, Miastoprojekt building and Office of Measurements.



THE ELEMENTS OF CITY IMAGE

- PATH  
 NARUTOWICZA STREET  
 KOPCINSKIEGO STREET  
 KILINSKIEGO STREET  
 SIENKIEWICZA STREET
- EDGE  
 RAILWAYS  
 KOPCINSKIEGO STREET
- DISTRICT  
 I. HISTORICAL DOWNTOWN WITH  
 HIGH INVESTMENT  
 II.a LOW-BUILDDED DOWNTOWN A  
 II.b LOW-BUILDDED DOWNTOWN B

- NODE  
 a) JUNCTION KOPCINSKIEGO STREET AND NARUTOWICZA STREET  
 b) DABROWSKIEGO SQUARE  
 c) BUS STATION  
 d) JUNCTION KILINSKIEGO STREET AND TRAUUGUTTA STREET  
 e) JUNCTION KILINSKIEGO STREET AND TUVIMA STREET  
 f) JUNCTION SIENKIEWICZA STREET AND TUVIMA STREET
- ★ LANDMARK  
 1. BUILDING OF FABRYCZNA STATION  
 2. THE ORTHODOX CATHEDRAL  
 3. EC1  
 4. CHURCH
- ★ HIGH DOMINANT  
 5. TV BUILDING  
 6. AND 7. MIASTOPROJEKT BUILDING  
 8. OFFICE OF MEASURES

Figure 15. Elements of the city image.

- Main communication paths and public spaces.

Plans of „Nowa Dzielnica” are strictly adapted to rectangular arrangement of New Center. New streets are projected parallel to the Piotrkowska Street while the perpendicular streets are supposed to elongate the existing streets. All that results in integration of two cores of industrial Łódź with the streets net of “Nowa Dzielnica”. Main artery of Nowa Dzielnica was the Główna Street (Piłsudskiego Street) on which axis a huge central market was built (Wodny Rynek). Among southern arteries the main role was displayed by Targowa Street which was connecting Wodny Rynek with Rynek Cegielniany (Dąbrowskiego square) in the linear way.

- Shape and size of the quarters and plots.



Figure 16. Characterization of quarters and plots.

Size of the quarters in the oldest part of area that means the Piotrkowska Street is about 200x300 m in size. Areas of such a large dimension are typical for Łódź mainly due to their previous function as the agricultural areas. Shape of the plots and their elongation in the east-west direction is mainly the result of location of Piotrkowska Street. Incorporation of Kilińskiego to the city's changed this layout and forced the perpendicular localization of the plots.

In year 1840 the east-west direction of the plots was dominating. The area of one district included even 22 plots however incorporation of the railway line had changed their arrangement and buildings.

- Width and shape of the streets.

Regular net of quarters was disrupted by formation in 1865 of railway switchboard to Kuluszki but which had a blind end on Sienkiewicza Street. Creation of the rail bank resulted in blocking the main southern arteries of Nowa Dzielnica and resulted in division of district into two parts. For a long time the only connection between those districts was Kilińskiego Street above which was the viaduct. Connection between south and north parts was available by formation of Tramwajowa Street below the viaduct.



Figure 17. Streets net in the timeline.

Density of streets net between Narutowicza Street and Fabryczna Station suggests valorization of this area. It is easy to find such elements which show the changing communication structure such as tram lines with a long history of its existence. Currently low intensity of buildings and its diversity resulted in lack of exactly defined street spaces. On quite a small areas like Lindleya street very specific frontages were formed which follows the rule in all center of Łódź. Such a combination is favorable for the width of the streets and perception of the city center.

#### 4. Elements worth developing or at least respecting

Łódź was known previously as the town of factories and chimneys, building the outline of the city. Nowadays industry in Łódź is collapsing what causes the loss of primeval town character and the task for contemporary human is to prolong its industrial nature above all in aspect of buildings. Apart from the factory nature of the town in Łódź there are many types of streets which contribute to its attractiveness. Numerous spaces dominate appearing in a neighborhood of roads, which attract the sight of observers, while different kinds of roads reduce monotony. There are some sorts of streets characteristic for Łódź:

##### 1) *Built streets:*

Narrow streets with height of frontage bigger than the width of the road, creating unique atmosphere and known as human- friendly.

Wide streets, with the width of the road bigger than the height of frontage necessary in the city because of great traffic capacity.

Streets with one or double-sided green areas improving the climate of city.

**2) Non-built streets:**

Streets with “walls of greenery” adding variety to urban space.

Streets with double-sided areas of low greenery imparting the character of space

Usually frontages are built by plots of equal width but various types of architecture and details which make streets more attractive. It is worth stressing that the ground floor is usually exhibited in facade. Balconies or loggias vary the space here.

Building city space is also important, specific courtyards generally consist of three annexes, with horizontal divisions by cornices. As a rule, window and door frames are wood. Sometimes a central share of building is marked. Typical number of stories is four. Often annexes have also a functional garret.

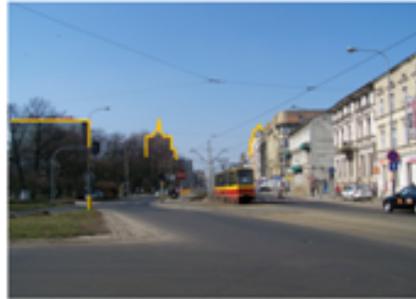
Additionally it's needed to be mentioned that despite Łódź being an industrial city, there are many beautiful natural monuments supplementing town scenery.

NORTH FRONTAGE OF NARUTOWICZA STREET



- variety of architecture and details
- equal width of plots
- ground floor always exhibited in facade
- balconies
- marked windows

SOUTH FRONTAGE OF NARUTOWICZA STREET



- viewable dominants of height which attract the sight of observers

NARUTOWICZA STREET TOWARDS THE EAST



- good proportions between heights of the buildings and the width of the road

VIEW FROM NARUTOWICZA STREET TOWARDS THE SOUTH



- typical courtyard of Łódź with three annexes
- horizontal divisions made by windows and cornices

LINDLEY STREET TOWARDS THE SOUTH



- narrow built street with unique character
- variety of heights of the buildings
- equal number of storeys
- good proportions between heights of the buildings and the width of the road

TRAMWAJOWA STREET TOWARDS THE NORTH



- wall of the greenery- Staszic Park as the spatial dominant closed the street

WIERZBOWA STREET TOWARDS THE SOUTH



- good proportions between heights of the buildings and the width of the road
- street with double- sided strip of greenery

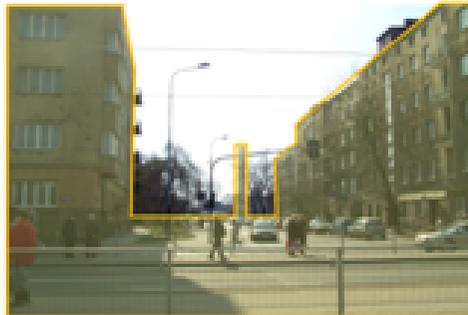
UNIERSYTECKA STREET TOWARDS THE NORTH



- wall of greenery which adds variety to the street

Figure 18. Existing streets in Łódź nearby area of ‘New Center of Łódź’.

KNYCHALSKI STREET TOWARDS THE SOUTH



distinct spatial dominants connected with industrial character of city

WEST FRONTAGE OF KNYCHALSKI STREET



- annexe with marked central share
- proportions of windows- 2:3 or 1:1
- wood window frames with multiple internal divisions
- number of storeys:4 and functional garret

KNYCHALSKI STREET TOWARDS THE NORTH



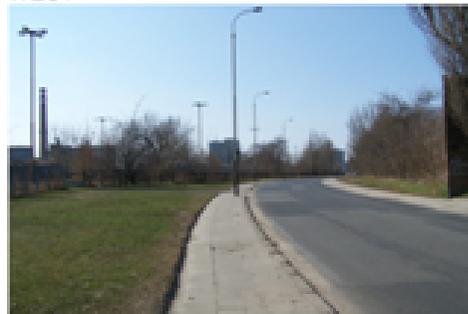
- Grand Theatre as the spatial dominant
- the Dąbrowski Square as the theatre stage
- the beautiful willow as the theatrical curtain

SKŁADOWA STREET TOWARDS THE EAST



- narrow built street with unique character
- good proportions between heights of the buildings and the width of the road

WĘGLOWA STREET TOWARDS THE WEST



different character of street: double-sided green surfaces and lack of buildings

Figure 19. Existing streets in Łódź nearby area of ‘New Center of Łódź’.



ŁÓDŹ FABRYCZNA STATION



- characteristic building of Łódź Fabryczna Station
- viewable dominants of height which attract the sight of observers- from the left side: City Project, TV office, Centrum Hotel

MONIUSZKI PARK TOWARDS THE WEST



Orthodox church as the spatial dominant

KILIŃSKIEGO STREET TOWARDS THE NORTH



- viewable dominants of height which attract the sight of observers

WEST FRONTAGE OF KILIŃSKIEGO STREET



group of high dominants adding variety to the street

VIEW FROM ZWIĄZEK STRZELECKI SQUARE



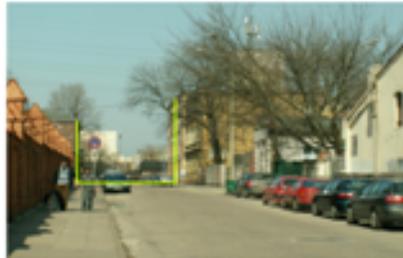
viewable dominants of height which attract the sight of observers

VIEW FROM SIENKIEWICZA STREET TOWARDS NORTH- WEST



- dense frontages of road which build the space of the street
- square which adds variety to the street

TARGOWA STREET TOWARDS THE NORTH



- narrow built street with unique character
- good proportions between heights of the buildings and the width of the road

Figure 20. Existing streets in Łódź nearby area of ‘New Center of Łódź’.



KOPCINSKIEGO STREET TOWARDS THE NORTH



- church dedicated to Santa Teresa and Saint Jan Bosko as the high dominant closed the composition axis- street
- dense frontages of road which build the space of the street

VIEW FROM TUWIMA STREET TOWARDS THE SOUTH



- variety of topography creates untypical places

TUWIMA STREET TOWARDS THE WEST



- wall of the greenery adds variety to the road

TUWIMA STREET TOWARDS THE WEST



- good proportions between heights of the buildings and the width of the road

PANORAMA OF DĄBROWSKI SQUARE



- dense frontages of the square which build the space in front of the Grand Theatre
- similar height of buildings, only east side of the place need to exchange little public services for higher buildings

Figure 21. Existing streets in Łódź nearby area of ‘New Center of Łódź’.

## **5. Axes in Łódź.**

Characteristic thing for each city is axes both composition and of views creating by traffic routes and finished by space dominants for example: high buildings or greenery. Axes are very important for making urban space attractive. In Łódź especially in area of New Centre of Łódź there are many axes, additionally composition ones are known as streets and pedestrian paths. It is worth noticing that despite existing composition of axes there are many possibilities to create new ones adding variety to the town scenery.

### ***Existed composition axes:***

- Moniuszki street as an interesting axis ended by beautiful tenement house with various cornices and rustications in Piotrkowska street and by tenement house to modify because of bad technical state and lack of the architectural details in Sienkiewicza street,
- Sienkiewicza street closed in north by tenement house to modify because of bad technical state and lack of the architectural details,
- Tramwajowa street with green closure by Staszic Park,
- internal road in officers' housing finished in west by modernist tenement house to renovate,
- Nawrot street ended in east by urban and architectural complex of industrial plant " Monopol Wódczany"

### ***Possibilities to create new composition axes:***

- Dowborczyków street finished by modified EC1,
- Targowa street ended by New Centre of Łódź,
- Składowa street with hypothetical closure as a high space accent
- internal road in officers' housing finished in west by hypothetical space dominant for example high building or greenery
- Tuwima street finished by more than nowadays dense high greenery to hide blocks of flats in east

In addition in Łódź there are numerous axes with views for well- known and famous city places and buildings. Below there are some existing axes with views:

- with a view for Centrum Hotel
- with a view for Cultural House of Łódź
- with a view for "City Project" buildings
- with a view for Grand Theatre
- with a view for church dedicated to Santa Teresa and Saint Jan Bosko
- with a view for officers' housing

It's needed to mention that axes complement each other and add variety to the urban space.

**Recommendations concerning the axes**

The general guideline is to keep streets as composition axes and renovate or modify their existed closures (tenement houses, greenery etc.) which are in bad technical state. If there are not any of space dominants finishing traffic routes, there is need to create them with the aim of attracting the sights of observers. Both all of existed composition axes and propositions of creating other ones are to adapt in project of New Centre of Łódź.

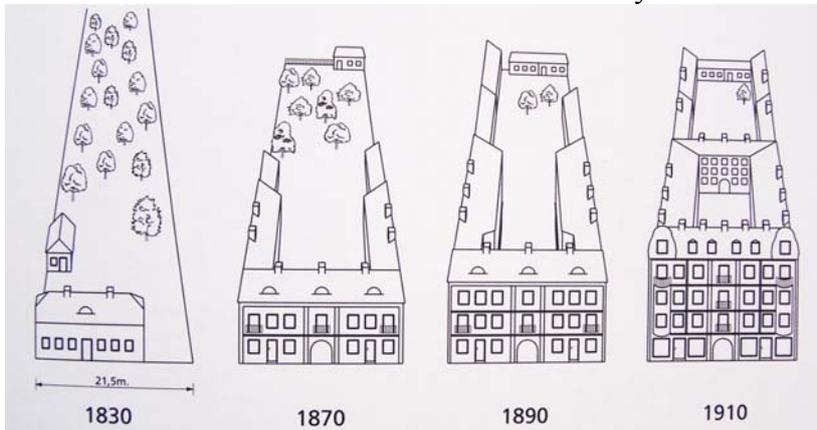
Additionally there is also possibility to use existed axes with a views. It is worth noticing that the space will be clearer if there are more axes directing at Piotrkowska Street.



Figure 22. Representation of the view axes in the area of existing state.

**6. Buildings structure existing on the area.**

- Tenement house from XIX century



- Tenement house from XX century – modern architecture



- Factories, industrial plants

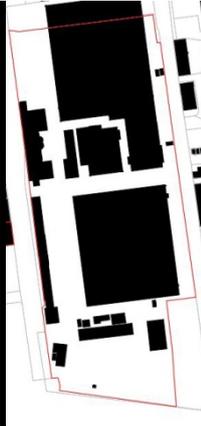


- Public usage buildings



1) Dawna Szkoła Zgromadzenia Kupców, ul  
Narutowicza 68

- Buildings connected with communication (railway, trams)



2) Tramwajowa 6 street

- Palaces, villas



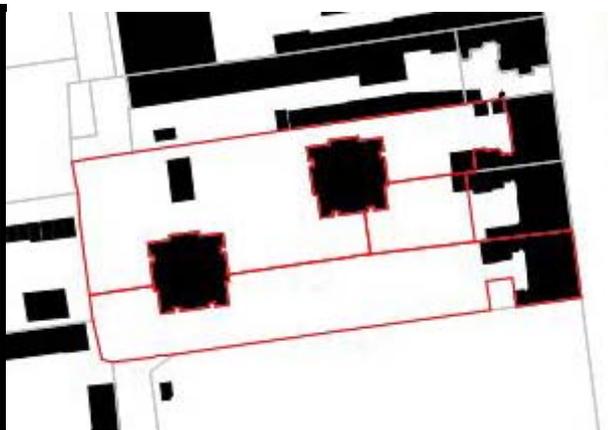
3) Maria Lange's Villa, Narutowicza 59 street

- Housing blocks



4) Składowa 16/18 street

- Sky scrapers



5) ul Tramwajowa 19, 21 street

## **ANALYSIS OF THE QUALITY OF BUILDINGS**

Analysis of the quality of buildings consists of two studies: the valorization and the condition analysis. The aim is to gain the necessary information about the area, stocks, values, characteristics, consistency in the quality and state of buildings. Summary of two pieces of information - two studies together shows the detailed information about buildings.

Analysis of the technical condition

It was carried out a technical assessment of the buildings based on the elevation and woodwork condition, the type of structure, the nearest environment of the object. The possibility of assessing individual buildings, conditioned by its availability, is focusing on objects close to the public. Each tested building was assigned one of 4 categories:

- 1) Building in good condition - not requiring repair
- 2) The building requires renovation, renewal; supplement the part of elevation, carpentry or joinery exchange or other improving the condition
- 3) Stores, kiosks, buildings, garages
- 4) Need to be demolished

The aim of creation of this criteria, and linking them with the function object (category 3) is to direct indication of the possibility of demolition.

The largest group among respondents are buildings needed to be renovated - 41.7%. Almost 10.1% of buildings need to be demolished. In total, categories 2 and 3 are 51.8%, more than half of the examined objects. This proves a big construction negligence in the study area. The group of stores, newsagents, garages and farm buildings accounts for 39% of the surveyed buildings. A significant number of these objects is due to their small size, simple construction, which was one of the determinants of separation of the group, and ease of implementation, and thus - ease of dismantling. Usually located at the rear of the plots, however, often occupy the whole plot area. The least group are the buildings in good condition - 9.2%. Concentration of this buildings are the University premises.

The area of density of buildings in poor condition are Składowa Street and the point- Tuwima Street. Feeling of neglect of these streets is reinforced by the lack of building front, possibility of looking at the interior courtyards, 'blind walls' and many outbuildings. Other areas are characterized by a great diversity of technical condition and the character of architecture, which also strengthen the sense of disorder.

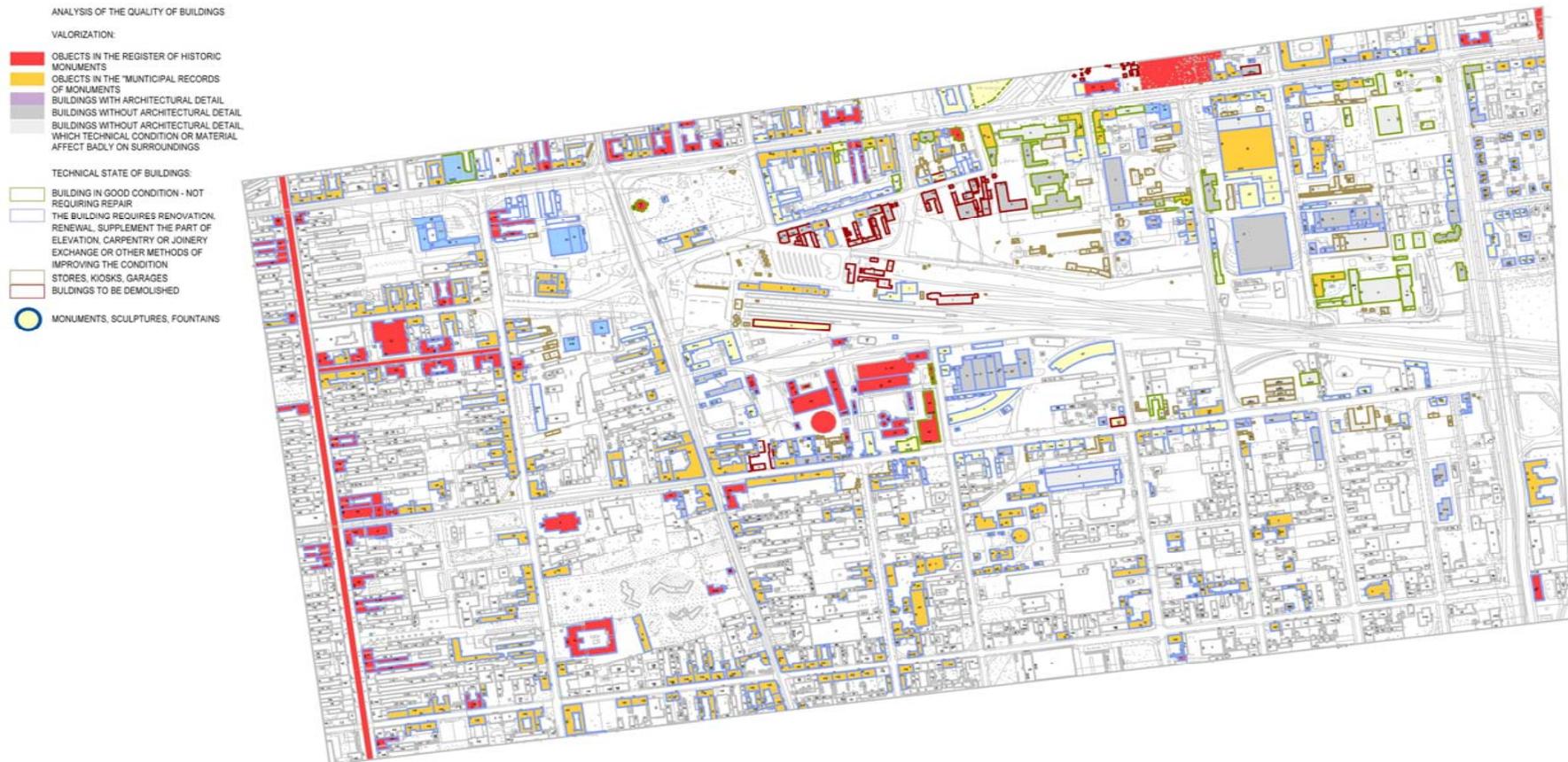


Figure 23. Quality and function of buildings in existing state.

## **VALORIZATION**

In the second part of analysis, called "valorization" elements were as follows:

- Objects in the Register of Historic Monuments
- Objects in the “municipal records of monuments”
- Buildings with architectural detail,
- Buildings with no architectural detail,
- Buildings with no architectural detail, which technical condition or material affect badly on surroundings

Objects under legal protection, which are in the register or records of monuments, are located close to major roads. The number of these increases as we approach the Piotrkowska Street. Objects with architectural detail, which are part of the historic downtown, are mostly located near Narutowicza Street, Kilińskiego Street, Tuwima Street and Składowa Street. At each intersection there is a building with architectural detail or registered or record monuments. Also, at each of the streets there is an object that represents the identity of the historic area. Streets which do not end with buildings with architectural detail is: Wierzbowa Street on the south, Składowa Street on the east, Tramwajowa Street and Wysoka Street on the north. Common for this area is existence of clusters of buildings with architectural detail, for example: Narutowicza Street, POW Street, the ec1 area, Narutowicza and Kilińskiego crossing, Narutowicza and Lindley’a crossing, Wierzbowa and Węglowa crossing, Tramwajowa Street close to depot, Kopcińskiego Street on the north of viaduct. The rest of area is chaotic and has a large inconsistency in the housing. Plot close to the railways has low density of buildings and low number of valuable buildings. Creation of areas with unstable objects, stores, warehouses, manufacturing buildings gives the area ‘un-urban’ character. Buildings having no detail exists in both the traditional systems - tenement house and in the “modern trends of architecture” - blocks, commercial buildings of various shapes and heights.

Synthesis of information resulting from the two analysis helps to identify the main problems such as:

- Very bad technical condition of buildings and a small number of buildings not need to be repair evidence of low status area in the downtown area
- Failure to order, for both buildings with architectural detail, as well as legally protected objects
- A small number of buildings with architectural detail
- Large dispersion and diversity of development and its technical condition causes a sense of disorder
- Large technical state of neglect of objects on the Składowa street present a negative image of the city from the perspective of users of railway

## 1. Valorization of the historical elements.

- Building structure

The tenement houses structure from XIX and XX centuries have several characteristic elements which are presented and compared in the table shown below:

<i>Advantages</i>	<i>Disadvantages</i>
+ considers historical structure	- small backyards decreases comfort of inhabitants
+ perception of the municipal area is commonly known and friendly for people	- limited access of light deteriorates interpersonal relationship and social and environmental conditions
+ long and narrow plots are the possibility for diverse frontages	- aeration of annexes is not possible
+ possibility of attractive performance of the services	- too high floors deteriorate economical heating of flats
+ low number of floors enables easy communication among people	- not enough paring space, environmental degradation of backyards
+ frontages are cohesive	- additional light facilities only in the frontal flats
	- old technology are poor economically (ventilation, acoustics, heating)

Table 14. Comparison of advantages and disadvantages of tenement houses.

Factories, industrial plants and buildings concerning the communication function (railway, trams) also performs several characteristics. These are:

- large diversity and dimensions of the buildings applicable for their functions
- unique spatial solutions
- creation of individual and unique character of the streets

The same study we can provide for the public usage buildings, palaces and villas. Buildings that are considered to fulfill housing function are the sky scrapers and blocks. Thing that are the most characteristic for such solutions are:

- high intensity of buildings and economical usage of existing plots and districts
- districts with such buildings remain the historical patterns of plots

However it must be remembered that quite a wide distance between such buildings must be maintained.

- Spatial structure.

On the basis of mental mapping it is easy to observe legible arrangement of elements of spatial structure. Landmarks and nodes are clearly situated on the west side of the are. It is caused by the localization of „the edge” which is the railway. Moreover ‘edges’ prevented rapid development of eastern part of the area but they underlined importance of the western part which is in closer neighborhood of Piotrkowska Street. Currently existing structure does not apply for spatial development. Presence of communication barriers and lack of ‘paths’ are disadvantageous for existing state as well as lack of nodes and landmarks make this area anonymous and isolated.

## 2. Conclusions from valorization.

	<i>Revalorization</i>	<i>Current functions</i>	<i>Adaptation and new functions</i>	<i>Other</i>
<i>Tenement houses structure</i>	<i>necessary</i>	<i>Municipal and housing state</i>	<i>Housing state and services on ground floor</i>	<i>Parking places not longer possible in the backyards</i>
<i>Factories, industrial plants</i>	<i>necessary</i>	<i>Industry</i>	<i>To a new service function</i>	<i>Spatial exposition of area</i>
<i>Public usage buildings</i>	<i>necessary</i>			<i>Spatial exposition of area</i>
<i>Blocks, sky scrapers</i>	<i>necessary</i>	<i>Housing function</i>		<i>'hiding' of current state</i>
<i>Spatial structure</i>	<i>necessary</i>		<i>Communication renovation; connection between east and west areas</i>	<i>Maintaining difference between west and east areas; more landmarks on east; elimination of railways as an 'edge';</i>

Table 15. Conclusions from valorization for different kinds of buildings.

## 3. Project assumptions

The main aim is to make the area of New Center of Łódź attractive and friendly part of city not only for citizens, but also for workers, travelers, tourists and investors. The goal can be gained by the revitalization.

Revitalization is mostly obtained by combining aspects including economy, social life and culture. *'General aim of the revitalization is to ensure harmonic and multilateral development of town what may be obtained due to adaptation of old resources for a new functions and needs. That will provide better living conditions, protection and maintaining of those needs, integration between historical and modern forms as well as equalization of new standards and old resources'*\* (T. Sumień, J. Furman-Michałowska, K. Ufnalewska, W. Waś, *Odnowa miast europejskich*, Instytut Gospodarki Przestrzennej i Komunalnej, Warszawa 1989)

*"It is assumed that the spatial heritage is not only the element of the identity but also urban material that provides strict rules of non-comparable strength of influence to the current structures mostly due to exploitation of structural composition that uniquely combines monumentality and clarity with amazement."*\*\* (Prorevita)

New Center of Łódź will exist on the area with very crucial historical values that are necessary for the formation of identity of this place. At the end of XIX century 'Nowa Dzielnica' was formed in order to enlarge the city. It's worth to see that these two names 'Nowa Dzielnica' and 'New Center' are contradictory.

One must have an awareness of advantages and disadvantages of traditional buildings and also try to connect objects that will combine several functions and services that are followed

by structural order and arrangement. However such a process must be flexible and must make an opportunity to environment redevelopment combined with the economical processes.

Every design decision must be human friendly. The scale of architecture, detail, materials, character, function, availability, green areas, space, squares, streets shouldn't be considered as business or car communication but from human point of view.

Combination of functional difference of the area, introducing the green areas, favourisation of pedestrian communication and isolation from wheel communication with simultaneous availability of public transport aims for enlargement of area of current city center and for incorporation area of New Center of Łódź into this net. That will enable combination of urban trends from XIX century with modern development needs.

Important element of making genius loci is keeping „old” buildings. They are valuable not only for being „the witness of history” and the element that builds identity, but also from the economical point of view.

Old buildings are a good place for location of new non-commercial and low-founding services. Differentiation of services and elements is necessary in creation of vivacious city life. Such examples were well-described in details by Jane Jacobs in her book ‘Death & Life of Great American Cities’. However it must be remembered that choosing the largest possible quantity of elements for revitalization will characterize the buildings on the area and they possible adaptation. Such an analysis also aims at protection of urban-architecture character of district. What is worth to mention about the traditional buildings in the ‘New Center’ district is the centralization of plenty of functions which is supported by the spatial structure. The uniform surrounding will result in architecture cohesion with the rest of the city and simultaneously will underline the importance of new designed cultural elements.

#### **4. Functional analysis of existing state**

The New Centre of Łódź district consists of various- characterized areas. Generally there are marked different zones of: housing, industrial, services, surfaces of greenery and necessary traffic routes bonding together all of them. There are not defined areas of single character of services which is positive effect because it prevents the monotony.

Going into details the majority of housing estates is constituted by tenement houses with their annexes, creating typical courtyards of Łódź. It is occurred occasionally some blocks of flats but honestly there are aliens for traditional town. Continuing the aspect of buildings as in each city, unfortunately also in Łódź there are some empty houses, outbuildings or some little public buildings for example as kiosks which do not improve the image of the town. It is very important to give those kinds of buildings new better and higher- quality form.

In aspect of industry it is appeared production which first of all decreases the unemployment and prolongs historical character of Łódź, famous for its industrial nature.

Talking about services there is rich offer beginning from cultural through public or health and finishing by educational ones. Wide fan of propositions contributes to attractiveness increase of the city.

Additionally the supplements of those functions are areas of greenery. Despite the fact that Łódź is famous for factory chimneys, it consists of various surfaces of vegetations. There are two main types of greenery: low such as lawns, areas of bushes and high such as parks. It is worth noticing that green spaces change the climate of the city and make it more human-friendly.

In conclusion, it is necessary to mention that those functions do not exist without communication system. Traffic routes for example numerous types of streets: built, non- built, with double- sided areas of greenery or pedestrian paths connect whole the district and give the possibility of good city development. Surely the states of traffic routes are not ideal and moreover there is not enough number of bicycle lanes making the society healthier.



Figure 24. Functional analysis of existing state.

## **ANALYSIS OF SYSTRA PROJECT**

### ***1. General information about the project.***

SYSTRA Project considers renovation of the area of Łódź Fabryczna station and the district surrounded by four streets: Tuwima Street on the south, Narutowicz Street on the north, Sienkiewicza Street on the west and Kopcińskiego Street on the east.

The most important issues that the project deals with are as follows:

- building of multimodal communication node for regional trams and buses from local and long-distance transport
- formation of underground parking space and services
- renovation of technical infrastructure
- building of special culture zone (SSK), special art zone (SSS), Festival Congress Hall and Kopro Market

Moreover it also assumes the formation of new communication paths and roads in order to provide several new tram and bus stops that will improve the communication in the city center. Project also considers formation of new pedestrian paths and bike roads.

### ***2. Project localization.***

Project concerns the area of eastern part of the city nearby current city center which zone needs revitalization.

New Center of Łódź is supposed to connect three chosen zones that will form the unit complex area. Earlier mentioned districts are as follows: EC-1 West, EC-1 East and EC-1 east - south and their future function will be only the culture and services. The other parts of the area of interest will remain its current function. For the objects and buildings of PGE - Łódzki Zakład Energetyczny, their function is defined and it will serve as the services, administration and education zone and also the energy offices.

The main streets will strictly define the range of those functions so that among Tuwima Street and southern part of Kilińskiego Street housing area will remain while the New Center of Łódź will develop rather in eastern direction. Another examples are Targowa and Kopcińskiego Streets which destiny is because of the business zone, hotels, flats and services.

### ***3. General aims of the project and assumptions.***

The main goal is to maintain the economical income of Łódź as well as improving communication among other cities and in town itself. Additional aim considers city development and its promotion.

All goals should be achieved after several points like changing the city's infrastructure, public transport and the formation of multimodal communication node Łódź Fabryczna Station what is assumed to result in creation of safe and convenient local and regional transport with high quality of services and which obeys the EU norms. Furthermore, these factors will be adapted

to the community needs and requirements. More integrated city center will help the cooperation with the local transport and will have a positive effect on city unity.

Main results and benefits from the project are:

- Improvement of availability of communication transport inside the city
- Shorter time of travel
- Decrease of the level of noise and emission of pollution that comes from several kinds of transport
- Increase of the centers attractiveness
- Increase of the public transport in local communication
- Proper adaptation of infrastructure

#### ***4. Analysis of surrounding and the spatial function.***

The New Center of Łódź district made by Systra is more organized than existing state. There are also stressed zones of: culture, services, residential, areas of greenery and communication system. The bottom of the matter is creation of multimodal underground railway station connecting Łódź with Warsaw and many foreign cities which can give numerous opportunities for town development. There are also many propositions to change and renovate communication system to facilitate moving among city space. It is important to mark that the station will be rebuilt and changed.

Moreover traffic routes are supplied by cultural area making the city more attractive and lively. This zone consists of EC1 West and EC1 East complex and also there will be some new buildings such as: huge horizontal tube - Art Zone or festival and congress center with its commercial part. Apart from buildings there are proposed streets of fourth cultures: Polish, Russian, German and Jewish. Additionally buildings of the cultural zone are supplied by services for instance cultural and commercial zone. It is needed to say that some of buildings have not had the precise function yet.

Moreover public spaces such as squares for example: Związek Strzelecki Square, Dąbrowski Square, Strzebiński Square or Kobro Market give the possibility to improve interpersonal contacts.

In aspect of resident area there is designed sky scrapers zone, locating between Narutowicza Street in North, Kopcińskiego Street in East, new- designed park in South and Nowotargowa Street in West. This complex is created as high dominant in Łódź.

Similarly as in existing state the areas of greenery play very valid role. In addition, the project uses contemporary surfaces of vegetations and adds more green areas such as enormous park between sky scrapers zone in North and Tuwima Street in South. It is worth noticing that there are some propositions to make new quality of pedestrian paths, plenty of greenery.

Another meaningful things are axes, compositions ones built by streets and some axes with views of: Grand Theatre, Community Center of Łódź or EC1 complex. Only the one of them is not justified because it is disrupted by building.

In summary it is good observation that in neighborhood of New Center of Łódź district there are many significant and well- known buildings such as theatres, cinemas, concert hall, hotels or the main post office which can give the possibility to join new designed district in historical city tissue.

The area was divided into several smaller sections which function and area are presented in the diagram shown below (Fig.25). Every area are shortly discussed in the further part of the report.

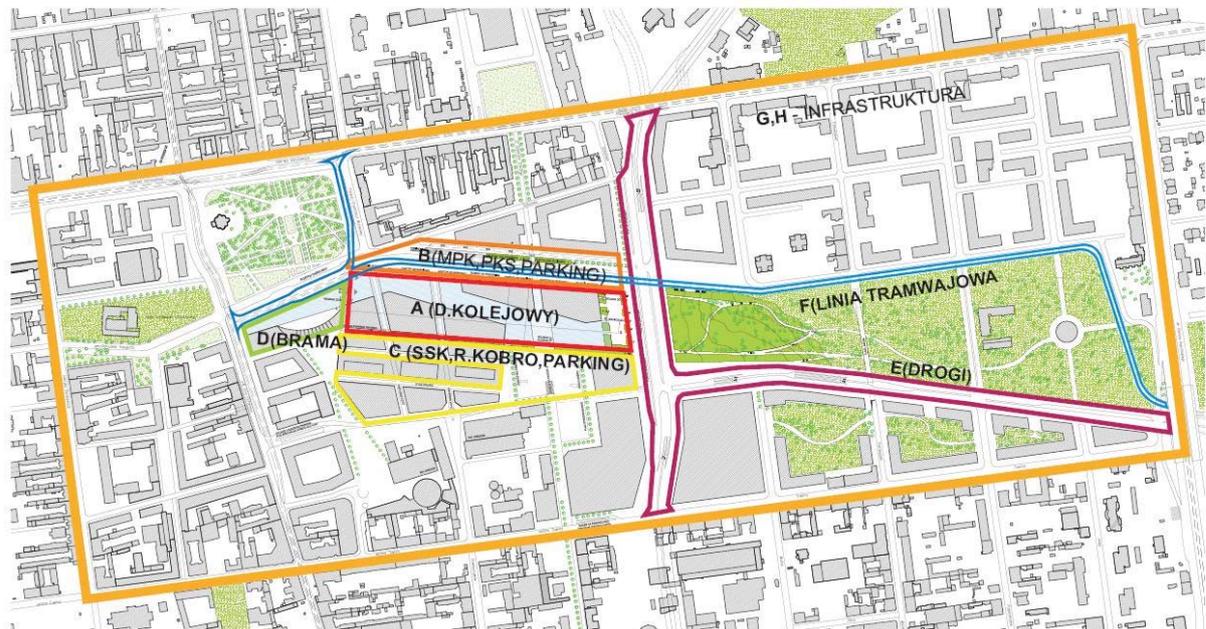


Figure 25. Investment of sections A, B, C, D, E, F, H.

### Section A – Railway Station

This part considers formation of the new, multilevel station. The mail building has localization on level  $-16.5\text{m}$  while levels  $-8\text{m}$  and  $0\text{m}$  will combine the commercial and tourism services.

### Section B – Bus communication.

This section is divided into two parts. First one considers the formation of an underground bus stops for regional and long-distance transports. The second part deals with bus communication on the ground level. Section B also includes:

- level  $0\text{m}$  – local communication: bus stops, tram stops, and availability of connection with lower levels
- level  $-8\text{m}$  – regional and long-distance communication, connection with Węglowa and Nowowęglowa streets
- levels  $-11\text{m}$ ,  $-14\text{m}$   $-17\text{m}$  – parking space, connection with Nowowęglowa, Nowotargowa and Węglowa streets.

Accessibility to the section B is enabled by three streets: POW, Składowa, Węglowa. Moreover along this section the new tram line is projected.

### **Section C – Cultural and art zones.**

Creation of the Special Art Zone (SSS) and Special Cultural Zone (SSK) is proposed. This sector considers different function for each level so that we obtain:

- level 0m – SSK, Kopro Market, commercial services and communication paths with new formed streets: Ruska, Żydowska, Niemiecka and Polska.
- level –8m – services and communication paths
- level –11m, -14m, -17m parking space

### **Section D – Gates to the city.**

Contains services in the western part as well as commercial transport PKP in the eastern part.

**Section E** – Formation of new Targowa street in the eastern part of railway station along the north-south axis and Nowowęglowa street. Additional thing is the connection with the underground parking and taxi spaces as well as the access to the regional and long-distance transport.

**Section F** - renovation of the existing tram line on Kilińskiego street, formation of the new tram line from Kilińskiego/Traugutta crossroad along the north part of green area then along the Kopcińskiego street.

### **Section G/H – Infrastructure and investment zone**

**Section I** – renovation of several streets necessary in the area of interest. This includes:

- Kilińskiego street starting from Tuwima to Narutowicza street
- POW street starting from Narutowicza to Węglowa street
- Węglowa street starting from Kilińskiego to new designed Targowa street
- Przędzalniana street starting from Węglowa to Tuwima street
- Knychalskiego from Narutowicza to Węglowa street

The project will see a segregation of functions, which is the foundation of giving rise to the impression of a spatial order. It should however be borne in mind that too much insulation of buildings of various functions will result in loss of movement at different times of day and night. The town center is the conical mixing a variety of facilities services and housing to ensure a continuous flow of consumers that first, but at the same time that this move was not too burdensome for residents. Creation of large blocks of commercial buildings (office) will make the area after hours will be abandoned by users and most of the day will be unfulfilled. Designing the layout of functional areas of central cities must ensure the rotation of the users that these sites were in constant usage.



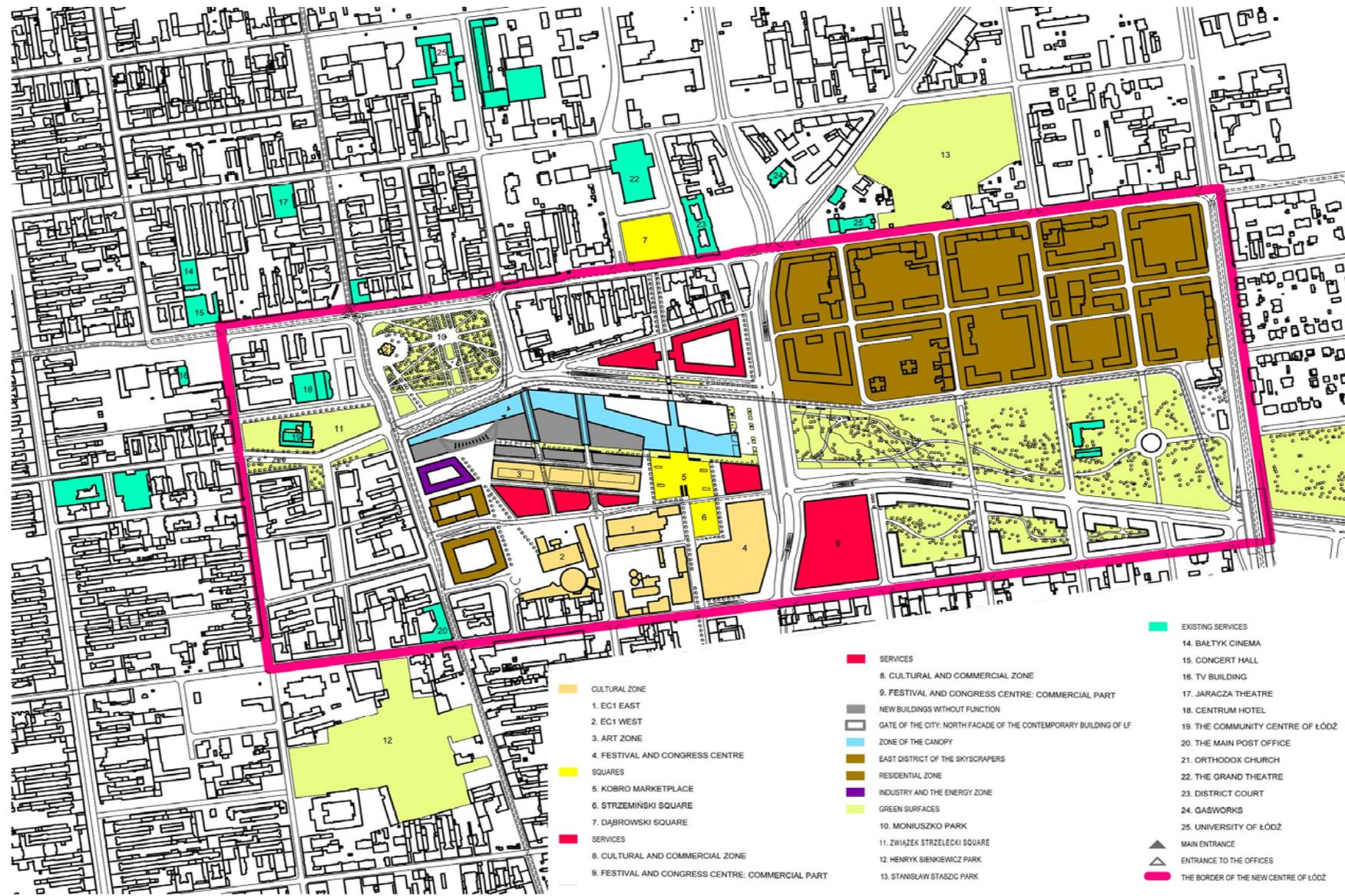


Figure 26. Functional analysis of SYSTRA Project.

### 5. SYSTRA solution for the spatial arrangement.

The multimodal connection node and its surrounding creates several serious problems that SYSTRA project tried to overcome. Main of them involves the spatial structure of the area of interest and the function for the new designed buildings.

It was observed that combining various functions should give the most positive results for the whole project. That means satisfying the customers needs in terms of the culture, services, communication, entertainment and also promotion of the city itself combined with its future prospective and its development.

SYSTRA Project had developed the functions of the new area as it is shown in the table below:

<i>Space</i>	<i>All</i>	<i>Housing</i>	<i>Industry</i>	<i>Services</i>
<i>Total (m<sup>2</sup>)</i>	1 271 333,00	572 424,95	69 992,15	628 915,918
<i>Percentage</i>	100	45.03	5.50	49.47

Table 16. Spatial proposition of areas from SYSTRA analysis.

These values are supposed to be the best solution for the new created area not only from the economical point of view but also from the point of citizens and investors.

#### *Existing state.*

Area of interest is localized in the eastern part of the city center and its size is considered to be 30 ha. It deals with the formation of New Center of Łódź in the nearby neighborhood of EC1 complex including the PGE energy station.

The most important points are the functional aspects of the buildings in the western part of the area. There two different spheres may be found, one that is localizes between Sienkiewicz and Kilińskiego streets. That part is very essential in the historical aspect of the city, it combines the architecture from XIX century and the modern one from XX century and its main function are the housing state, services and administration.

Second part is mainly the communication paths and connections with all parts of the city and it also provides services.

In the near distance several important buildings exist which presence must be strictly take into considerations. This includes buildings of town council, University of Łódź, EC1, cinemas, theatres, philharmonic and others. In the future this area will be covered with the Special Art and Cultural Zones, Festival Congress Hall and Kobro Market what will establish different functions for the future city center.

***Public-private status of the existing state.***

On the whole analyzed area can be seen very chaotic and unplanned deployment of public spaces. Squares are not used because of poor location or improper arrangement. Often a car, which contradicts the definition of the square as a public space. Often completely closed courtyard buildings creates an aura of chaos in the spaces of the streets. Green frequently, as wild and unarranged, which means that it is not well received by people. Kilinskiego Street does not have consistent and uniform frontage, which it has no character of a downtown street. In addition, at the height of the extension of its railway Fabryczna causes the breakdown and separation of this part of downtown to Piotrowska Street. Wide, dual carriageway street is a very large obstacle to foot traffic, bicycle. This problem can not solve unfriendly to users and neglected underpasses.

Narutowicza Street, one of the main routes of communication in Łódź, also does not have a single character. This is due to frequent changes of width of road and associated with this process demolition. Deprivation yards, adjacent to the thoroughfare, the front rise buildings numerous "pocket" the impression of public spaces, but not used in any way. Only the section between the streets and Kopcińskiego Kilińskiego it retains the form of a downtown street, however, the inlet of the University Street area disturbs this system. Kopcińskiego Street, as the dual carriageway for its entire length of the ring serves as the center of Lodz. In connection with increased traffic along this thoroughfare cannot have limited access and should be guaranteed to support communication with other parties. This street also must meet certain representative functions, and through thoughtful insights into the system for the city to encourage members to join the center. Unfortunately, broken corner at the intersection of the street Narutowicza and uninteresting view of the Viaduct over the railway line will have the opposite effect.

Street Tuwima to the greatest extent retained their original character. Nearby streets have ordered Kilińskiego though neglected frontage. Unfortunately, closer to the street Kopcińskiego on the north side of the street located various industrial plants. This resulted in the loss of a single coherent development and the nature of the street as a public space of the relevant parameters.

Equally bad is happening to the streets inside the analyzed area. Many demolition of old buildings and filling gaps in these areas resulting in loss of new buildings by their very nature these streets, these areas no longer function as the streets in the sense of public space and only as passageways.

In the vicinity of the train, where public spaces are most needed, both to discharge traffic caused by an object as well as for reasons of lack of representation of squares. The entire space, which could meet this role has been replaced by parking lots and deprived the right framework in the form of buildings frontages.

Equally wrong is true of the urban green areas. Moniuszko Park located at the corner of Narutowicza and Kilińskiego long lost character of the city park because of neglect and bad arrangement. Currently, he is a sequence of communication between the train and Fabryczna Narutowicza Street, which leads the movement toward Piotrowska Street. Greenery near the streets is in very poor condition and aesthetic values than the claims of public spaces, such as streets and fingers, but actually it decreases, resulting in loss of public functions in this region.



**PUBLIC SPACE:**

-  ROAD AND PEDESTRIAN TRAFFIC OR THE REST OF INTERNAL QUARTERLY SPACES
-  MAIN NATURAL SURFACES (GREENERY, DIRT ROADS, ETC)
-  TREES

**PRIVATE SPACE:**

-  BUILDINGS

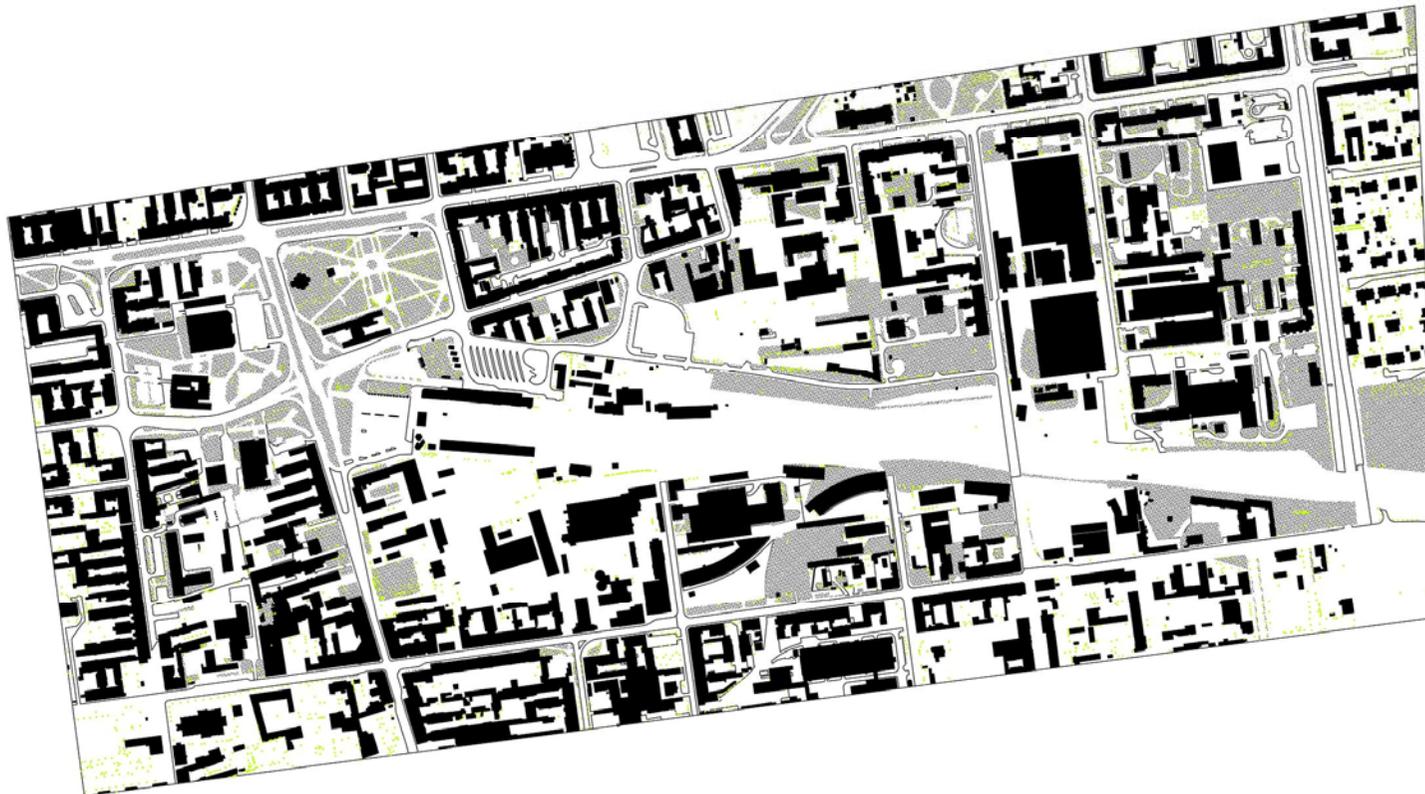


Figure 27. Public and private space analysis of existing state by Nolli.



PUBLIC SPACE:

-  ROAD TRAFFIC
-  PEDESTRIAN AND ROAD TRAFFIC
-  PEDESTRIAN PATHS
-  MAIN NATURAL SURFACES (GREENERY, DIRT ROADS, ETC)
-  TREES

PRIVATE SPACE:

-  BUILDINGS
-  THE REST OF INTERNAL QUARTERLY SPACES

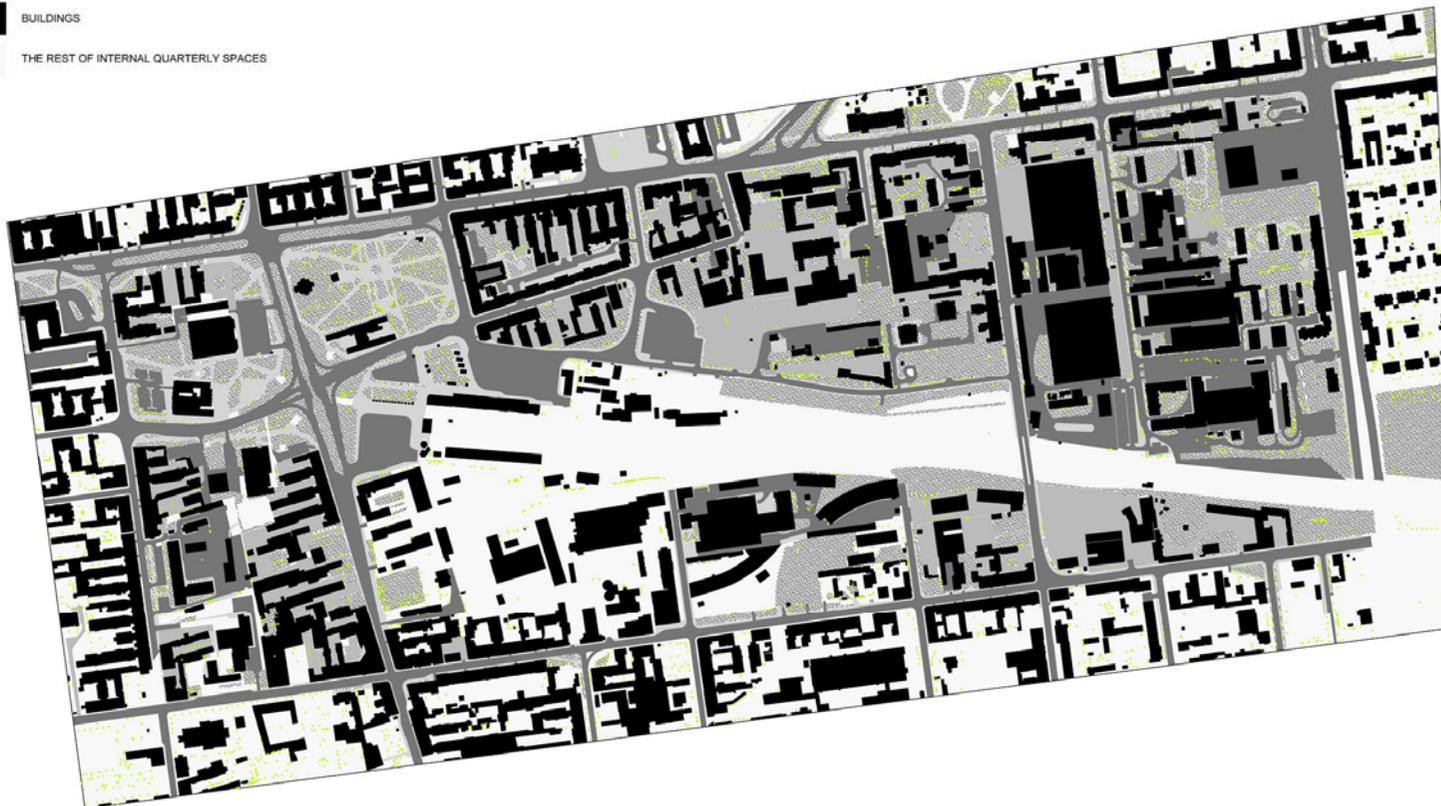


Figure 28. Functional analysis of current buildings and services on the existing state.

### ***Spatial solution.***

Solution for the railway station considers formation of several different levels which were described above in each section of the project.

Other thing worth to mention is the pedestrian path which is proposed to start on the Kopcińskiego street and which will enable the pedestrians to get to the railway station through the green area. Pedestrian path is projected in such a way that it will connect the green area with the level –8m of the railway station and above which will be the Nowotargowa street. Moreover the access to the Moniuszki park which is in front of the Łódź Fabryczna will be possible due to formation of so called ‘green path’ and further it will connect with more streets until it reaches Piotrkowska street. Width of the pedestrian path counts for 15m and it prognoses planting of trees what will result in creation of human-friendly environmental.

In the northern part of the pedestrian path the access to Kobro Market will be available as well as the cultural and art zone access.

### ***Communication solution.***

Because of formation of multimodal communication node SYSTRA suggests that the access to the station should include all kinds of possible transport and communication. That means:

- Pedestrians
- Vehicles of local transport (buses, trams, taxi)
- Vehicles of customers (cars, bikes)
- Trains

Pedestrian path was shortly described in previous paragraph, however it may not be completed because the problem of the ‘green path’ may arisen weather it will be ever green. The other thing is the space that the passenger has while entering the station from the green area.

For local and customers transport project shows several solutions. First one is access from the north part of the city. That includes formation of Nowotargowa street which will connect the north part of the city with multimodal node and also will enable vehicles to leave the station from levels of –8m and –17m. Other facility that should improve the internal communication in the city is formation of three ring-roads in the city center. Also adaptation of streets in terms of the traffic intensity was not neglected so that SYSTRA suggest that the most convenient communication ways should connect the directions north- south, and east-west.

The traffic intensity indicates the function of each street which could be show on the below picture (Fig. 29).



Figure 29. Function of main communication paths dependent on traffic intensity.

Exit from the Fabryczna Station is possible into two directions, to the southern part of the city or to the eastern part. The southern communication is possible because of the Nowotargowa street while connection with Kopcińskiego street and with east is possible due to new designed Nowowęglowa street.

For the majority of the analyzed sites are generating traffic on the west side of the Kilińskiego Street only railway and bus stations located on the east side of the street. In the depths of the area, which is in the future become the center of the city, or district with the highest traffic volume is only a tram depot and buildings, gas and municipal waterworks. These plants should be located outside the city center. The best-organized street in this area is Narutowicza Street, both sides built up with a compact construction, which falls on the ground floors and service apartments on higher floors. At the same time the communication was located and a lot of utilities, such as the Grand Theatre, District Court, an office building gas Łódź. This arrangement makes this street can work virtually around the clock.



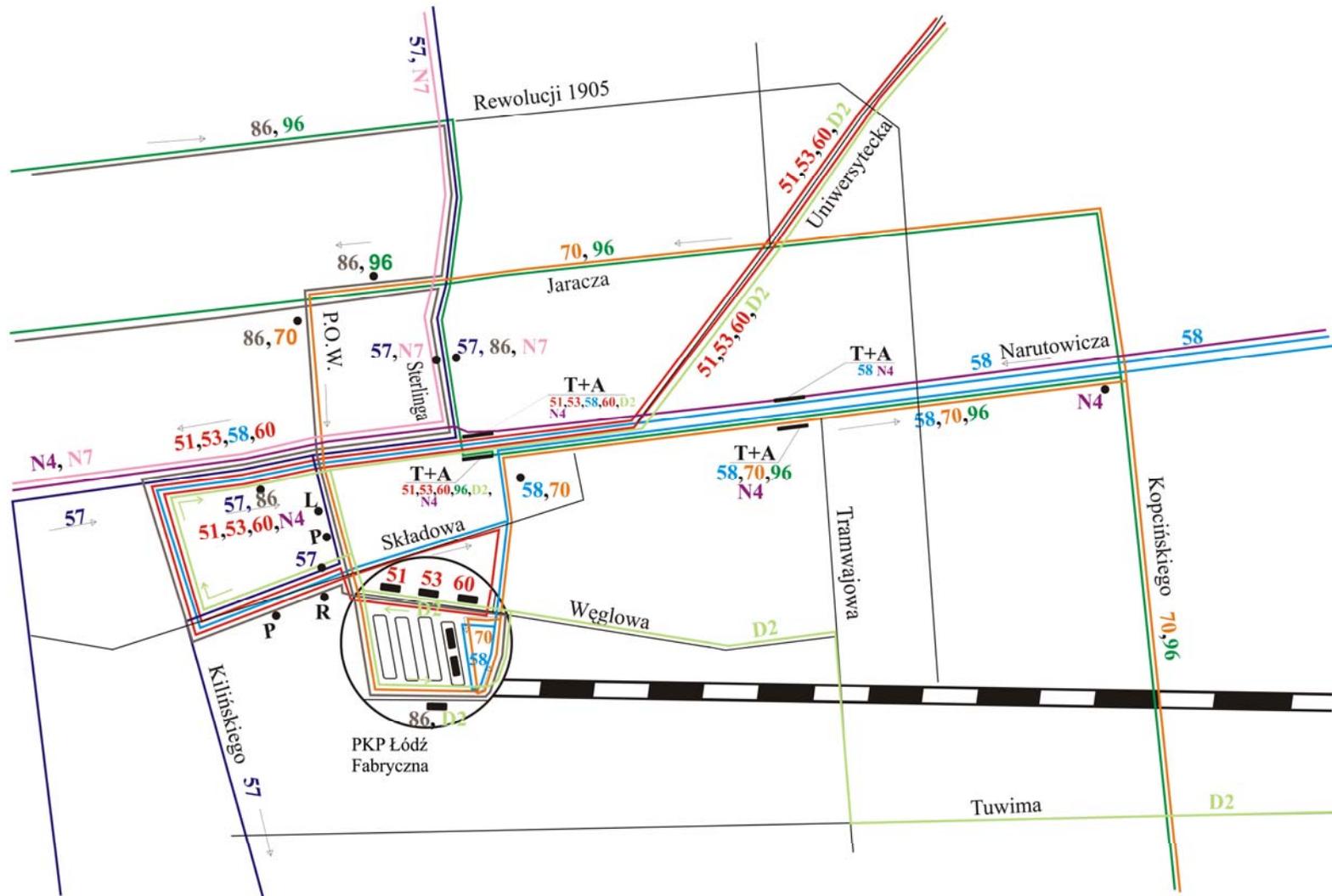


Figure 30. Existing public and local communication in the Fabryczna Station neighborhood.

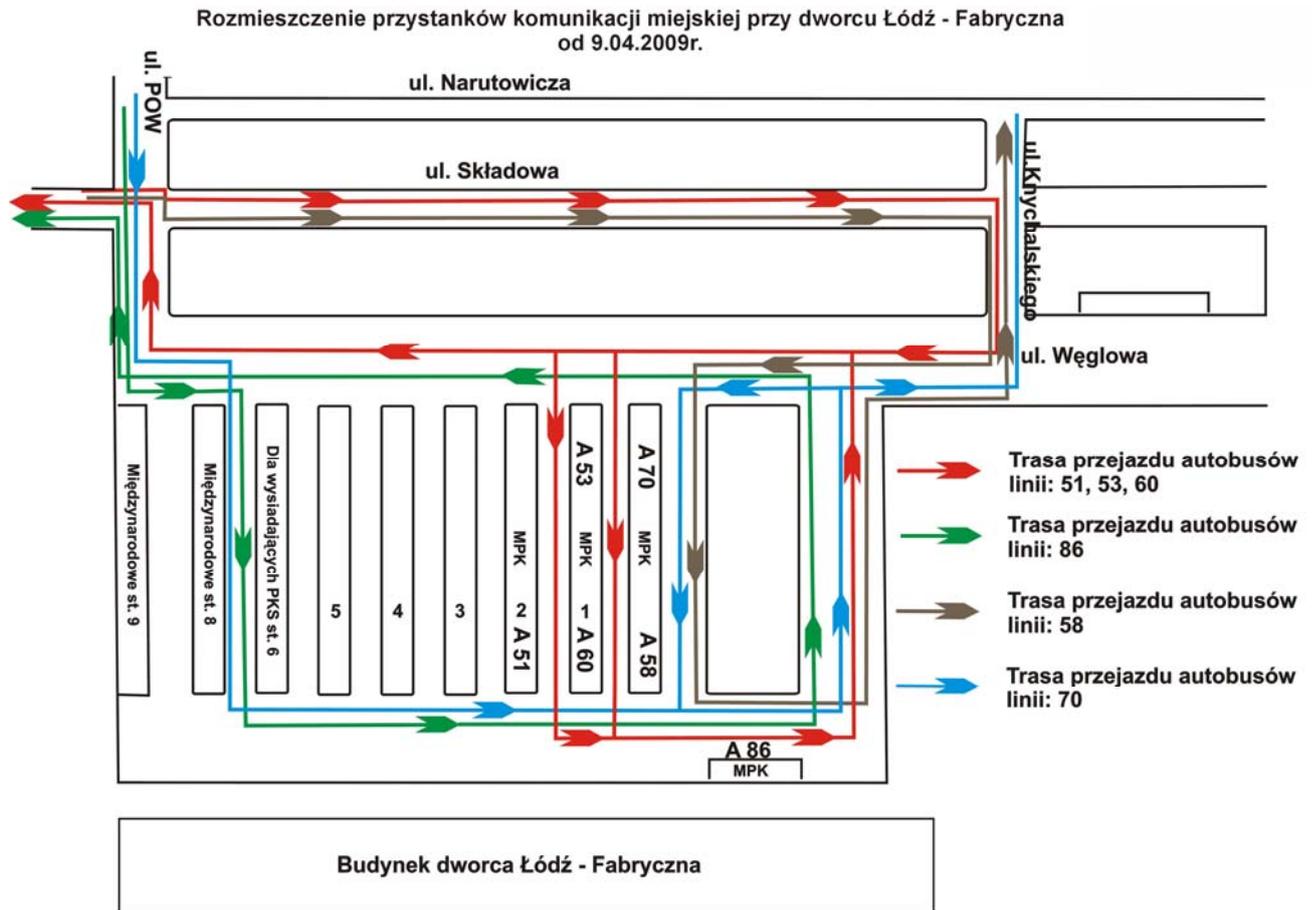


Figure 31. Local transport stops in neighborhood of Fabryczna Station.

### Public-private partnerships, SYSTRA concept.

The land use proposals for the New Centre of Łódź clear distinction between public and private spaces. There is no mixing and interpenetration of space and place are logically interconnected streets and passageways of the nature of the streets. The most important feature in this project remain very public squares, which are aggregated traffic. The central point of the whole project is supposed to be a market Kopro, in the vicinity, which are all important for the city buildings. However, the street running along the northern wall of the square is 8 meters below the surface, which constitutes a barrier to communication and makes the frontage is not used from the market.

The same applies to the new park area running from east to west and which is the entrance to the new train Fabryczna. Because of its progressive delve below the surface of the surrounding park area is isolated from neighboring buildings. This may result in missing a large and well-invested in the city center area.

We should also consider whether the spaces between the buildings in the area of streets and Kopcińskiego Narutowicza are not too large and so hostile to man. Despite the introduction of green areas where they can take on a space unused which can not be frequented by residents.

PUBLIC SPACE:

-  ROAD AND PEDESTRIAN TRAFFIC OR THE REST OF INTERNAL QUARTERLY SPACES
-  MAIN NATURAL SURFACES (GREENERY, DIRT ROADS, ETC)
-  TREES

PRIVATE SPACE:

-  BUILDINGS
-  CANOPY

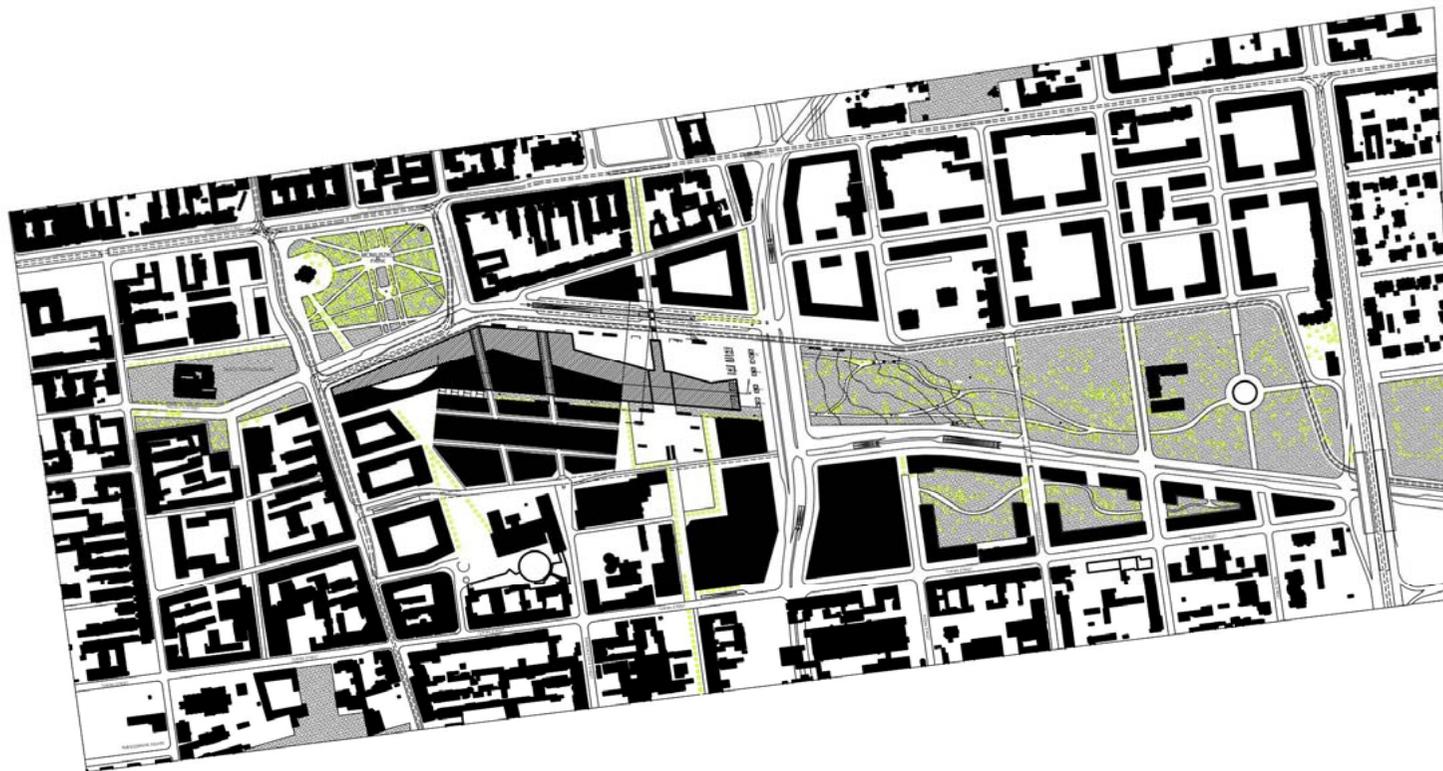


Figure 32. Functional analysis of buildings by Nalli.



PUBLIC SPACE:

-  ROAD TRAFFIC AND TRAMS
-  PEDESTRIAN PATHS
-  MAIN NATURAL SURFACES (GREENERY, DIRT ROADS, ETC)
-  TREES

PRIVATE SPACE:

-  BUILDINGS
-  CANOPY
-  THE REST OF INTERNAL QUARTERLY SPACES

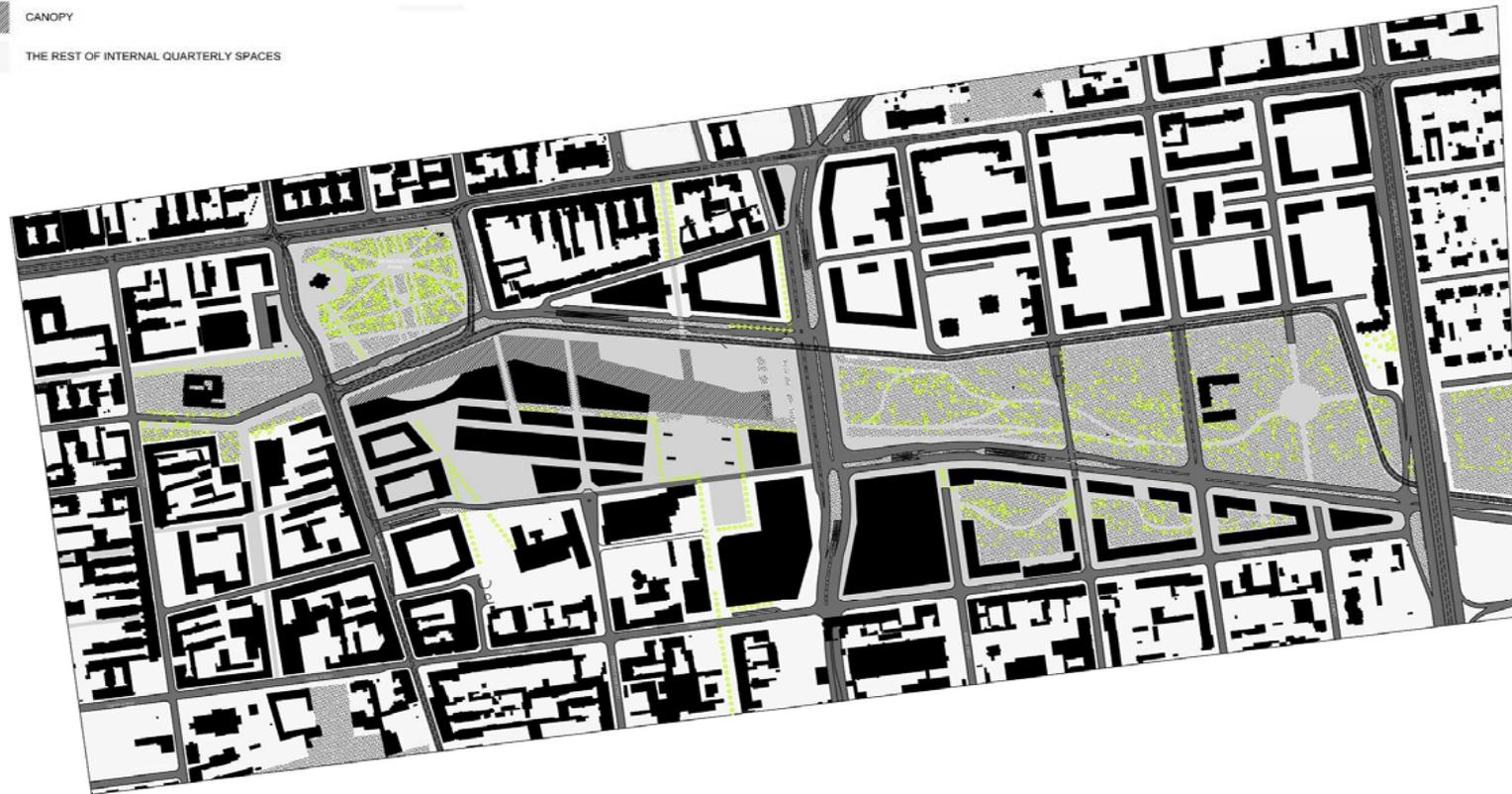


Figure 33. Analysis by SYSTRA Project.

## **SUMMARY OF SYSTRA CONCEPTS.**

As far as Project New Center of Łódź is quite a big venture, it must be considered in several different ways. First of all what we discussed is the theoretical background of the project. Despite several very important issues were noticed, our project will consider only few of them. However these cannot be neglected.

Several advantages and disadvantages of this project can be seen so that the project may be divided into different sections.

Firstly it considers the communication and connection with other cities. Communication node in the Fabryczna Station will form the possibility for Lodz to become the communication node for Poland and for Europe. That will lead to better integration with our country and EU. It is estimated that until years 2020 and 2040 transport and communication will differ from the current one. Several plans, surveys and researches were done and on the basis of them it is observed that contribution of individual transport will still be the leading one. Until year 2020 number of travelers will increase twice whereas until year 2040 it will increase three times. Communication will be divided into three main kinds: railway, individual and bus. Contribution of the rail transport will increase after building the new railway station will result in amount approximately 0.5 mln people per day.

Other thing concerning communication is the connection with Warszawa which should enable traveling between cities in time less than 1 hour. It will be also advantageous for people using airports because Łódź does not have such as big airport as Warszawa as well as the connections with the same cities.

Moreover the system of underground railway station is the possibility for the future plans for the underground connection between two railway stations in Łódź – Łódź Kaliska and Łódź Fabryczna. That would not only help the town with its local railway network and easy communication with the rest of the town but also enables becoming the communication node of Europe.

However the communication is still affected by several inconvenient factors. The main one is the condition of the local transport facilities. Renovation of the station will not help the bad condition of the trains and buses until they also are renewed. This state mainly affects the trams system of Łódź which are in very bad condition so that they now cannot form the connection between two different railways until the underground one is built. Moreover the condition of tram and bus stop is strongly repelling as well as the pedestrian system for crossing roads.

SYSTRA Project deals with all above factors and tries to improve the city communication however its solution are not always the best ones. First of all the project insist on forming more streets with biggest traffic capacity what should result in smaller traffics in rush hours. Secondly traffics and availability of the railway station should be easier after formation of so called ring roads inside the city. That may be not a reasonable solution especially for the Nowotargowa Street which will form the bridge over the green area which connects eastern part of the city with the railway station. Such a streets should be more human friendly that means more ecological one and with not such intensity of noise. Moreover the bridge will demolish the view of entrance to the station and may result in poor condition of the planned green area (may become untidy dark place).

Second thing about the NCL project is such that it deals with the area inside the city center. That leads to adaptation of the city to different functions – dealing with the promotion of the city and its functional aspects. Renovation of the area in short distance to the Łódź

Fabryczna allows the formation of a new district that may serve as the place for the services, living area and a business center. Location near to the station and Piotrkowska street enables building the shop center which will be visited by a lot of people not only from Łódź but also the travelers from other cities.

Apart from the historical point of view, Łódź is also the city with long cultural origin. It combines the architectural buildings from times of Scheibler and Herbst with the modern art. Majority of city buildings are considered to have important architectural details so that old buildings should remain and not be completely descended by a modern ones. Typical example of combination of historical view with the functional application of Manufaktura in which one can find lot of attractions like museums, shops, entertainment and refreshments.

In addition lot of important events take place in Łódź such as Festival of Four Cultures. Promotion of such events may help to develop the infrastructure of the city as well as its policy. Improving the cultural aspects of Łódź may contribute to success in becoming the European City of Culture which is a very prestigious award.

The future plans for that nowadays are rather not possible because of not many interesting events for people and political conflicts what results in deterioration of the city condition. Currently Łódź is supposed as a gray not- interesting city with bad technical condition of not only buildings but also the roads. Moreover the eastern part of the city center consists of lot of low buildings that should be renovated not demolished. SYSTRA project propose formation of sky scrapers instead of low building what results in more space for living area or business center. That may also be a risky idea. This project affects not only the architectural composition but also the negligence for the historical monuments. The composition of buildings in Łódź consists of low buildings so that sky scrapers may spoil the view and also may form the conflict between modern and historical architecture.

Other aspects of the project consider formation of the green area nearby the railway station which also may become some kind of leisure and city promotion. The composition of the park and the streets will form the view axis and form so called 'city gates'. That will underline all composition access in Łódź. Another problem is the formation of the vertical walls in the green area. They disable the pedestrians from passage in northern-southern direction of the city. Furthermore they may strengthen the level of noise formed by the cars passing through Nowotargowa street.

## ***PROJECT – students solution.***

SYSTRA Project tries to overcome several problems concerning the newly formed area of “New Center of Łódź” and despite the prospective solutions for every aspect and problems that might be observed, we noticed that project could be more detailed.

Firstly we would like to consider the communication planning over the new designed streets and the multi-modal communication node. SYSTRA proposes the connection between the northern and southern parts of the city by the creation of Nowotargowa Street that will be the bridge connection over the proposed green area and entrance to the station, as well as the crossroads with new designed Nowowęglowa Street. This crossroad would be the most usable, not only from the Fabryczna Station point of view but also from passengers that will travel from the north of Łódź to the south. However our proposition is to shift these two streets by 12m in the southern direction what would have a beneficial effect on the decrease of traffic that would be created by vehicles coming out from underground parking places (buses, cars, taxi). Another beneficial factor would be exerted on the entrance to the station itself. It would increase the area of the station frontage as well as the accessibility to the Special Culture Zone. Moreover the enlargement of this area will result in the image of wider green area which creates the environmental friendly and more humanized atmosphere for pedestrians and also easier access to the station.

The Nowotargowa Street is considered to be a bridge over the green area. That is a very favourable solution however if we deal with the pedestrians that approach the entrance to the station we might have a feeling of unease which is the result of perspective view over the traffic and traveling vehicles. An avoidance of this might be the pedestrian truss along the Nowotargowa Street on the level of  $-8\text{m}$  and  $-4\text{m}$ . That will not only hide the communication and transport in some extent, but also will enable the passage of pedestrians in the north-south direction what was impossible as the SYSTRA Project proposed formation of the high walls at each edge of green area. Moreover it would have a beneficial effect on the noise level as the covering the street with truss should decrease the level of noise which would spread in the green area and would be highlighted by existing walls.

Nevertheless the existence of the wall is inevitable because they establish the stability of Nowowęglowa Street and the northern part of green area. Our solution for this is the creation of different services in those walls. That would result in exploitation of the free area for the small businesses and will encourage people coming from station to recreate in the park.

Secondly, covering the traffic and communication problems may be resolved by creation of new buildings, not necessarily sky scrapers. Such buildings are proposed in two different places. The first one is at the corner of Nowowęglowa and Nowotargowa Streets. It would not only hide the traffic but also become the area for business. Moreover, we propose the formation of second building opposite to this one, and formation of another pedestrian truss what would enable people to pass over the Nowotargowa Street on level of  $+8\text{m}$  and have an access to elevators directly onto the level of Fabryczna Station. Second high building is proposed over the northern services.

Third factor that was considered is the existence of the roof over underground parking place. It was supposed to enable pedestrians on level of  $0\text{m}$  to have a view on the Nowotargowa Street and green areas however its existence had and negative effect on the underground parking places. That is because on limitation of the sunlight accordingly to formation of wholes in the roof. Riddance of this would cause the more bright parking area.

SYSTRA proposes that the different functions of area of “New Center of Łódź” should be strictly defined and not combined. However there a strong disagreement arises. Creation of only chosen functions may result in none social life in some hours, especially in the evening hours. To avoid this we suggest the combination of different functions what is shown in the Fig. 34. Moreover, as in the ‘*Analysis of SYSTRA Project*’ section the areas of chosen functions were previously mentioned, in our project there also exist some propositions which are presented in Table 17. and also intensity of buildings shown in the Table 18. Proportions that are presented in the table were determined by analysis of proportions of services and housing area from the case studies analysis. Moreover the combination of functions will help the better social relations and conditions.

<b>FUNCTION</b>	<b>USABLE [m<sup>2</sup>]</b>	<b>PERCENTAGE</b>
<b>SERVICES</b>	83623	10,4%
<b>EDUCATION</b>	18703	2,3%
<b>OFFICES WITH SERVICES</b>	113384	14%
<b>OFFICES</b>	308598	38,3%
<b>CLUTURE, MUSEUM, GALLERY</b>	6416	0,9%
<b>HOTEL</b>	12264	1,5%
<b>PUBLIC GREENRY</b>	77835	9,6%
<b>HOUSING</b>	185595	23%
<b>ALL</b>	806418	100%

Table 17. Proposition of functions for New Center of Łódź.

<b>Area</b>		<b>Main function</b>	<b>Intensity</b>
<b>Nr</b>	<b>Name</b>		
1	Nowotargowa- Narutowicza- Lindleya- Street 1	Services	3
2	Lindleya- Narutowicza- Tramwajowa- Street 1	Housing	3,2
3	Tramwajowa- Narutowicza- Wierzbowa- Street 1	Services	3,2
4	Wierzbowa- Narutowicza- Street 2- Street 3	Housing	1,8
5	Wierzbowa- Street 3- Street 2- Street 4	Services	3,8
6	Street 2- Narutowicza- Pedestrian path	Services	4
7	Street 2- Pedestrian path - Kopcińskiego- Street 4	Housing	3

Table 18. Intensity of buildings in the projected area.



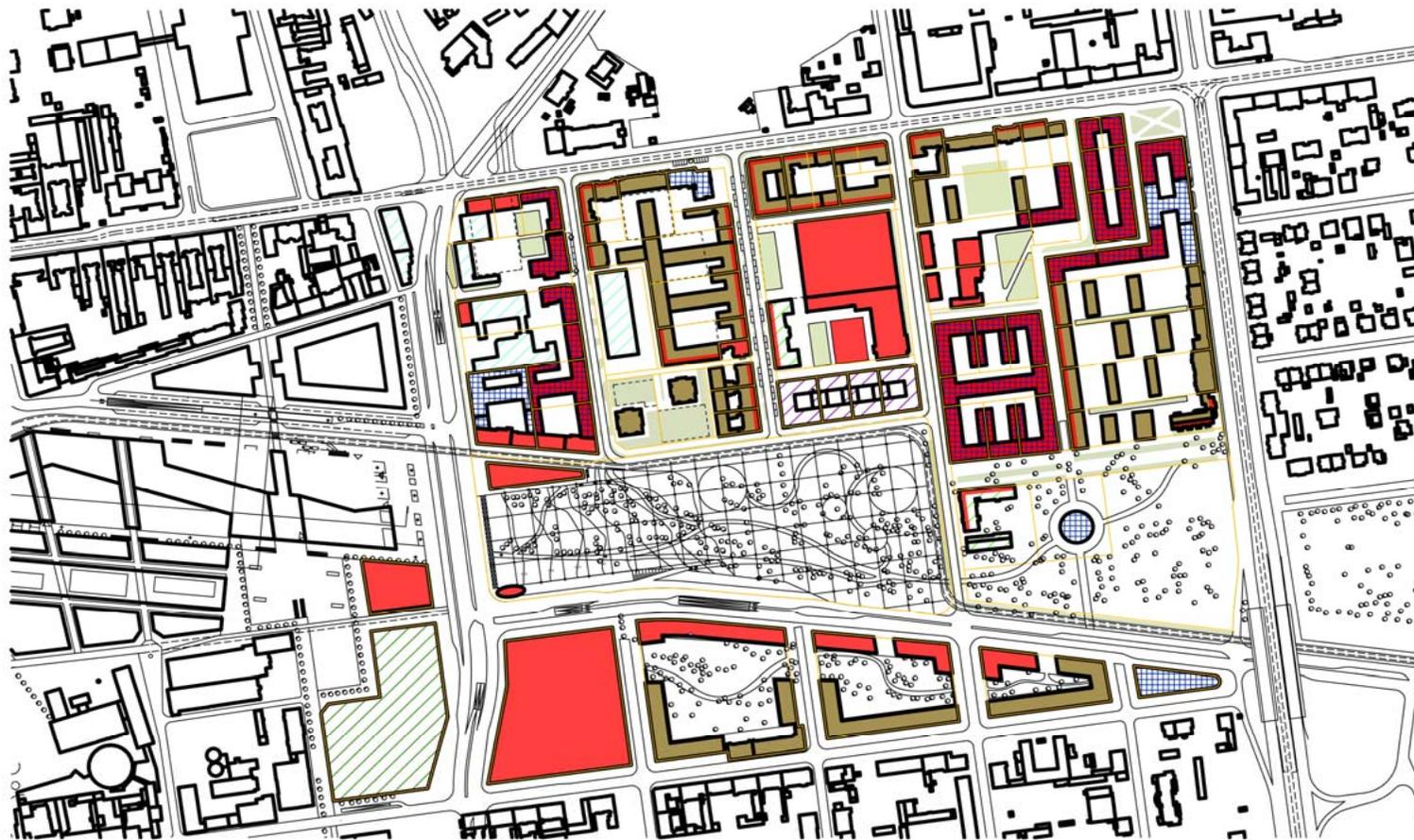


Figure 34. Proposition of localization of different functions.

Additional thing from our project is historical value of the architecture of Łódź. As the existence of tenement houses and marvelous frontages is very typical for our city we want to underline their values by creating the modern architecture only there where it is necessary but the rest of buildings should maintain their historical character. Considering this factors we obtain the completely new spatial structure of buildings. Our project considers not only the existing ones but also those that should be designed in strictly defined areas. Proposition of this solution is shown in the Figure 35.

Moreover, each of the new designed building is supposed to be facilitated with the underground parking space. It is also remembered that if there isn't enough space, the 7 additional underground parking areas are designed. Additionally for the existing buildings the parking places are proposed to appear on the streets not only perpendicularly to the streets but also parallel to each other.

In the eastern part of the area of interest we propose several solutions that are quite similar to those from feasibility study of SYSTRA. As one may observe the shapes of the plots and quarters are a bit different and larger than those proposed by SYSTRA, however creating knowingly such areas would enable formation of pedestrian paths. Such a proposition may seem to be a risky venture because of unusable areas however large districts may be divided by the pedestrian paths what would make the more social friendly atmosphere.

Firstly the housing, services and public areas were considered. As it is shown in the Figures 36. and Figure 37. we propose the combination of these functions not only in the existing buildings but also in the newly projected ones. As it is easily observed the most important point is the existence of so called shed hall. It is a very characteristic element of the Łódź architecture and especially this one that still exist on the area of "New Center of Łódź" should remain. It is the one of the last still existing such buildings so its existence is strongly recommended because it refers to the industrial history of our city. Moreover the existence of nearby factory would be simultaneously highlighted.

Another thing that we considered was the division of green area by SYSTRA into three different parts. First part which would become the attractive entrance to the station still remains while for other parts we found a slightly better solution. It was proposed to divide the park by the Tramwajowa and Wierzbowa Streets and to form the new tram line along the northern part of green area which further turns and goes along the Kopcińskiego Street and then goes in the eastern part of the city. As it is shown in the Figure 38. the green area consists of two main parts. First is the entrance to the station similar to this presented by SYSTRA as well as the entertainment and recreation zone while the second part is much smaller and becomes the park zone for the projected sky scraper.

We suggest that Tramwajowa Street should not cross the green area because it will result in unfriendly atmosphere, formation of small quarters and lack of sense of safety. To avoid that we increased the length of Wierzbowa Street and also we shift the tram line. As one may observe shifting the tram line will result in the easier access to the new projected sky scraper as well as the north and south part of the city center. Moreover such a venture will enable gaining an area of park near the Kopcińskiego Street which in the SYSTRA Project was cut. Additional thing is that we want to introduce the existence of a small green area at the corner of Narutowicza and Kopcińskiego streets. This will also enable the incorporation of a local street that will become the connection between Narutowicza Street and the new projected sky scraper. Moreover as it is shown in the Figure 34. that the street will not only be the access road to this building with a blind end but the access to existing buildings and Wierzbowa Street will be possible.

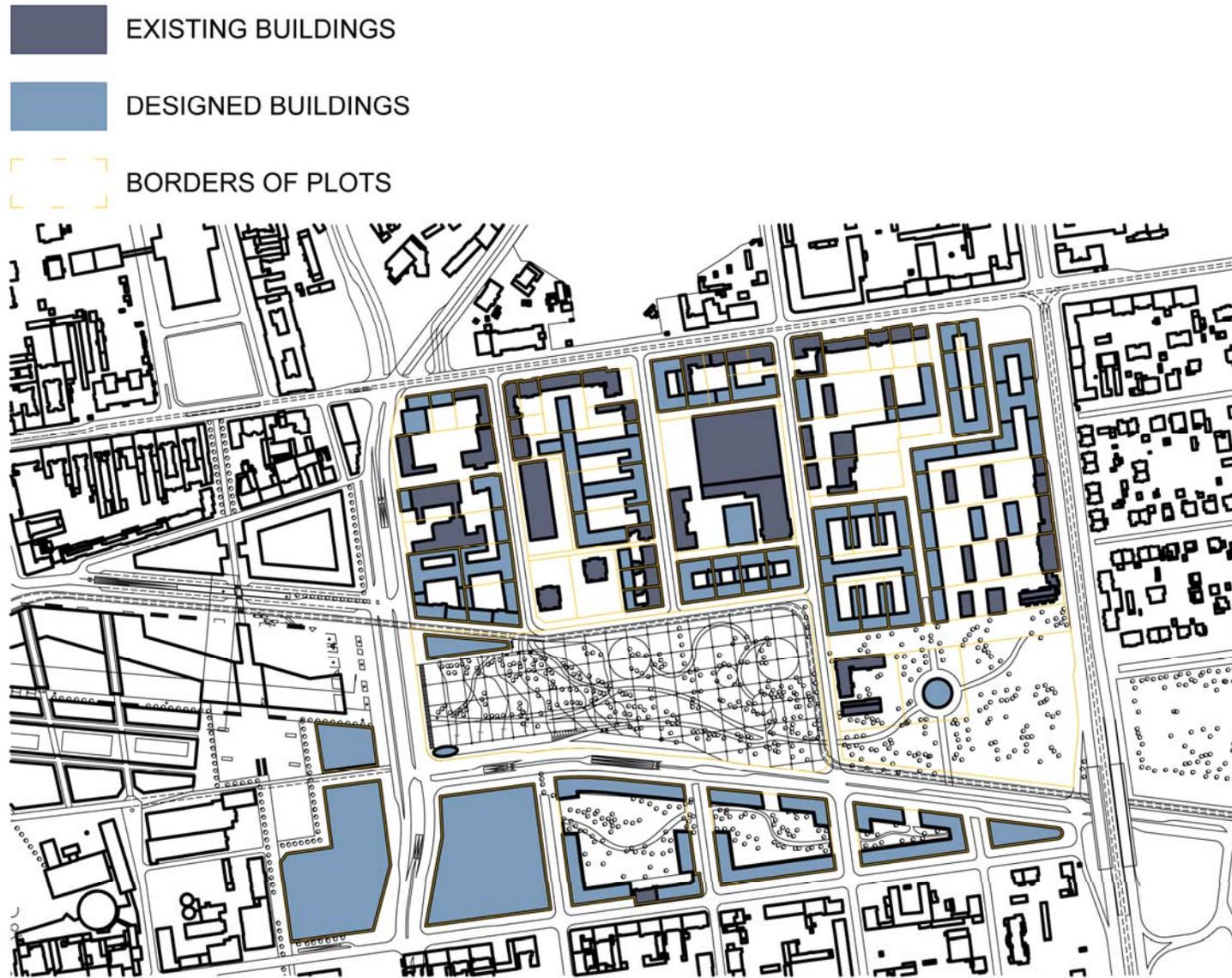


Figure 35. Localization of existing buildings and new designed buildings.



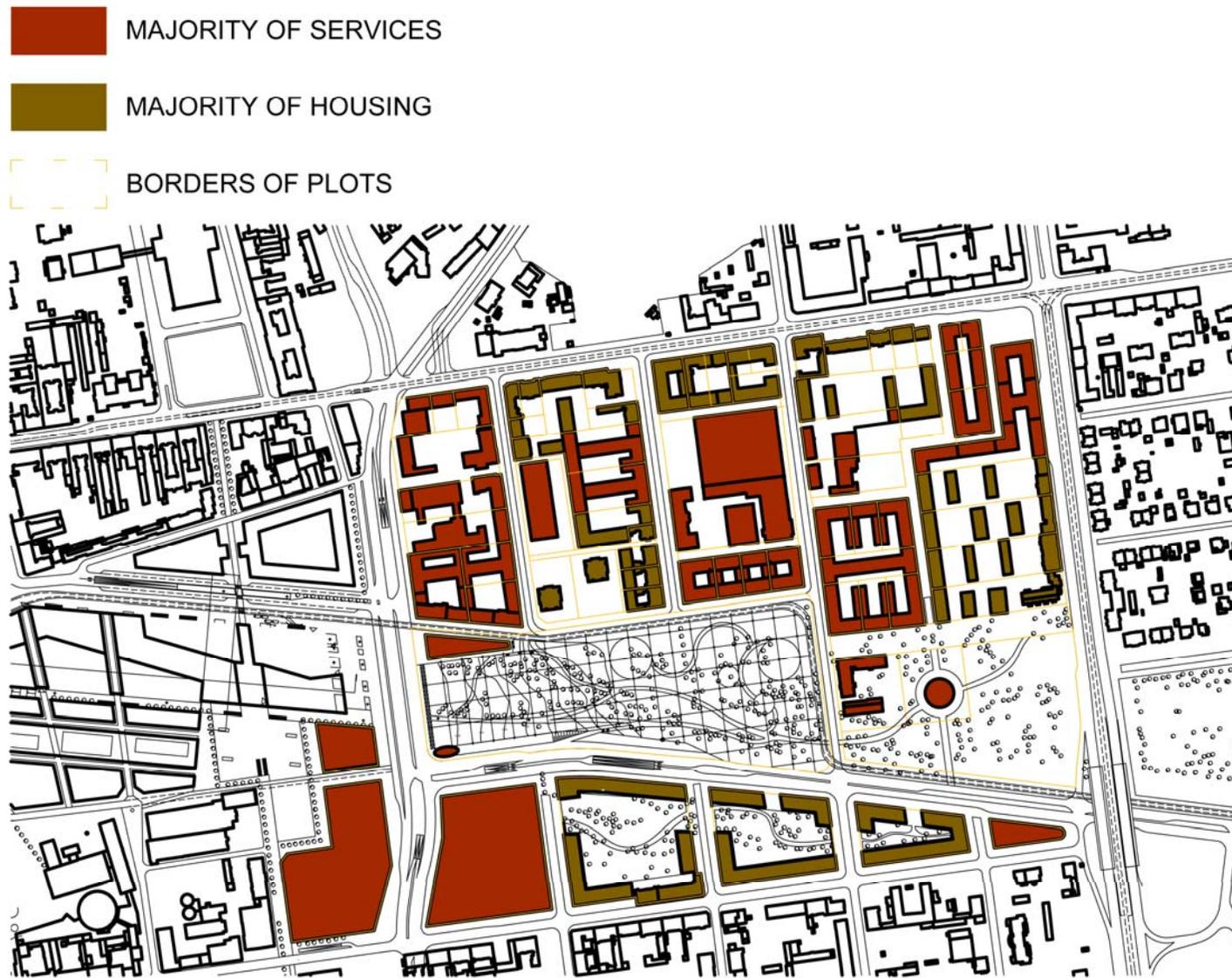


Figure 36. Functional analysis of housing and services.



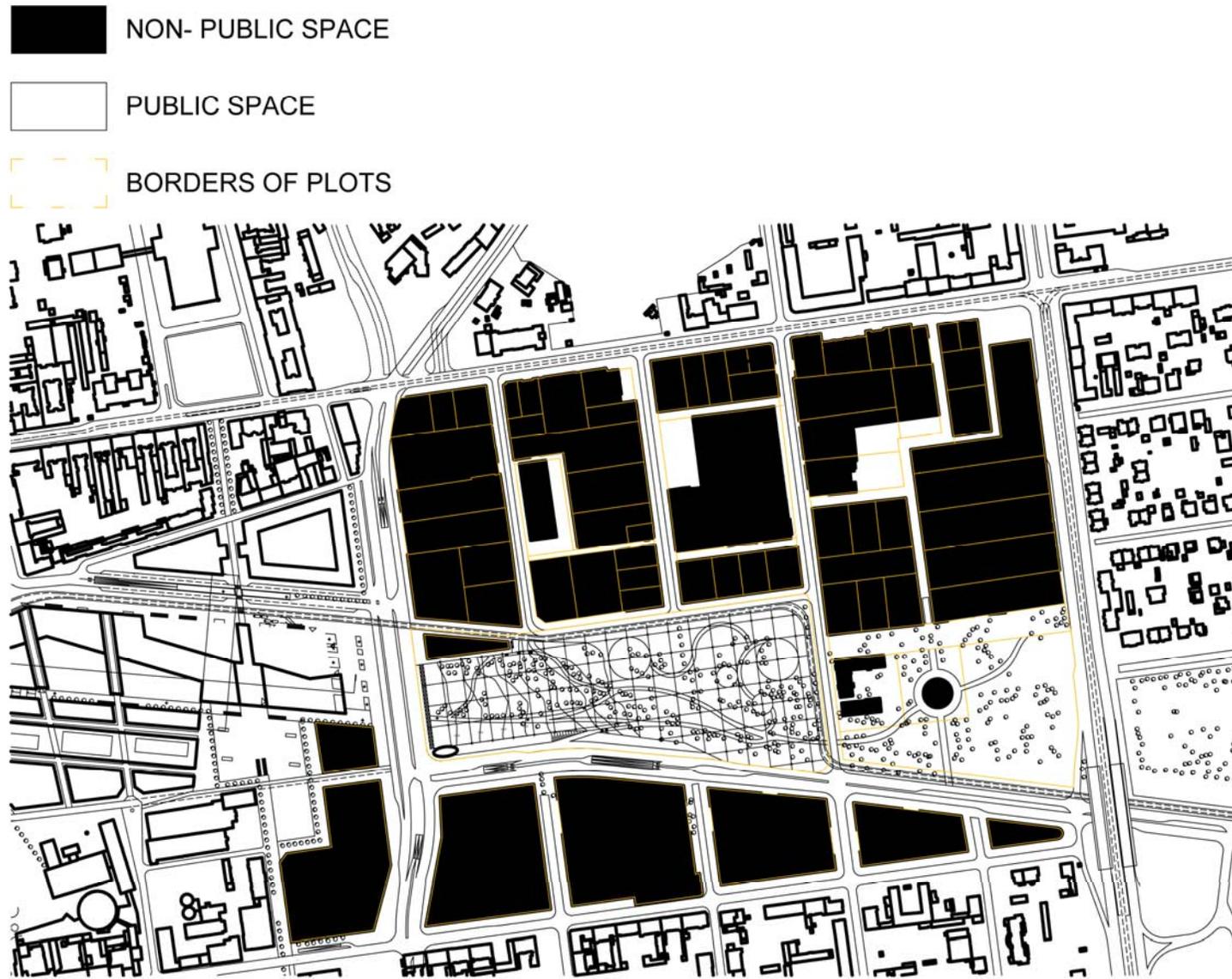


Figure 37. Comparison of public and non-public areas.



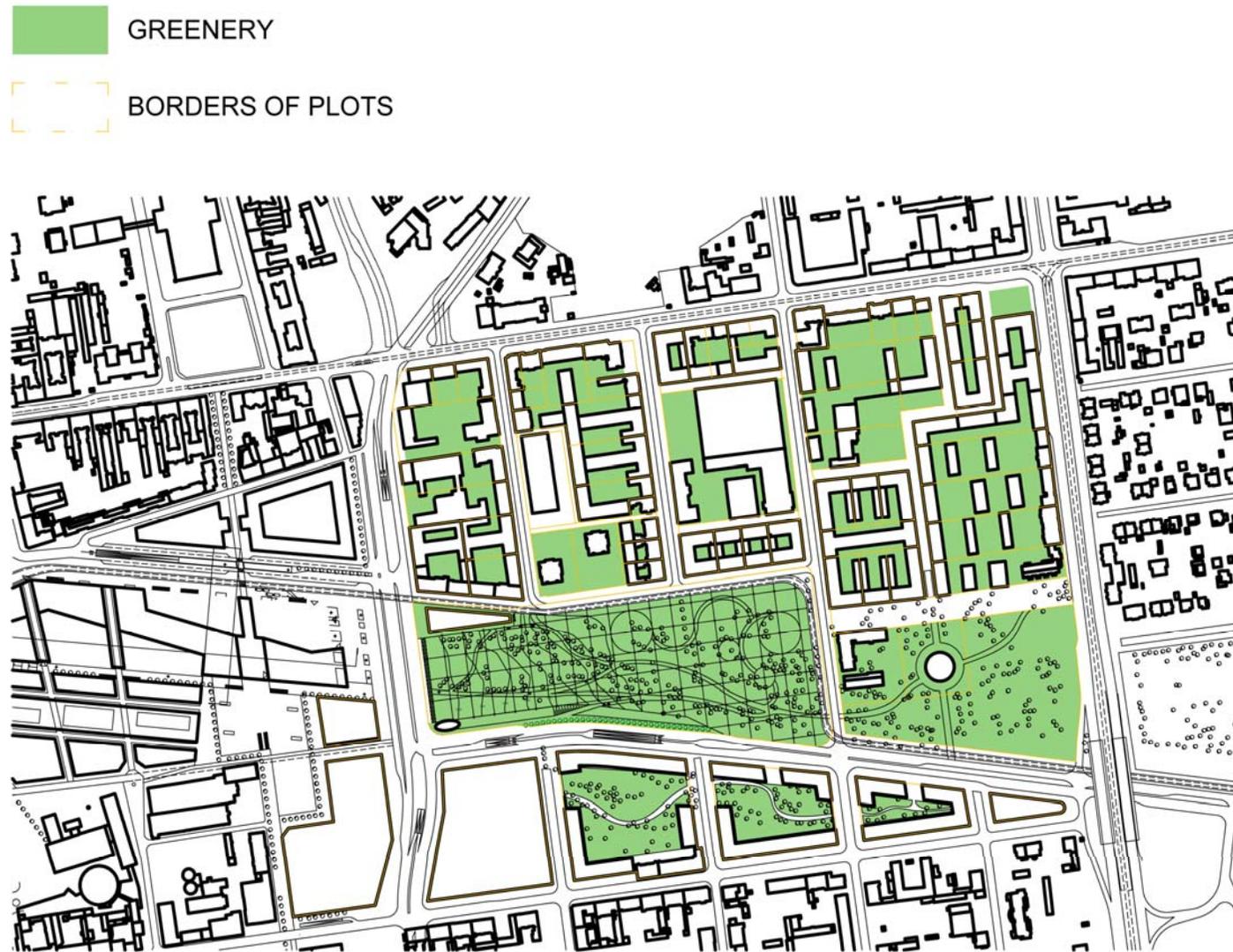


Figure 38. Designed green areas.

Another thing concerning the tram line movement is avoidance of formation of two parallel trams lines (on Kopcińskiego Street there exists a tram line so the formation of the second line is a nonsense project) and we enable the pedestrians from central area of the park to have easy and quick access to the local communication. The distribution of local communication concerning not only the buses, pedestrians, traffic routes but also the new projected tram line as well as localization of its tram stops are presented in the Figure 39.

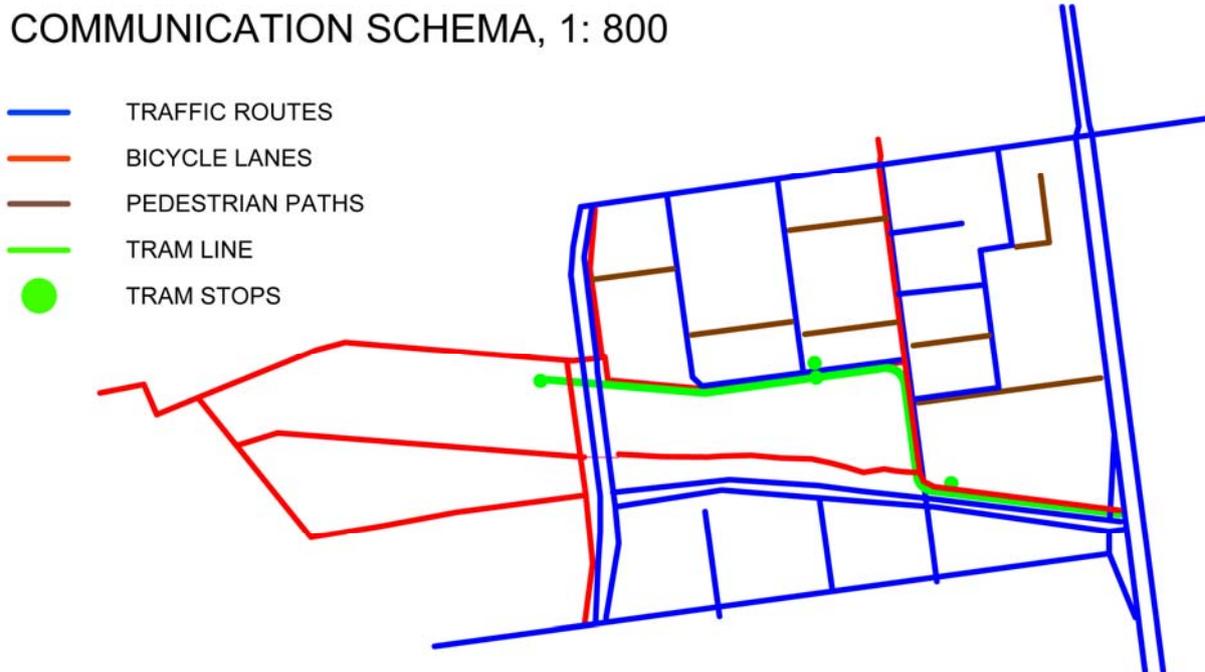


Figure 39. Projected communication roads and tram stops on the new tram line.

As it may be observed there were also projected the bicycle lanes in the park and in the new designed streets. Such a connection would have its node in the neighborhood of the Fabryczna Station and will directly provide the access to the current city center.

### **DETAILS OF THE PROJECT.**

Taking all above points and conclusions into consideration the comparison between our project and the SYSTRA project was done. All the necessary information as well as the schemes concerning preliminary assumptions are presented in the Fig 40.

To facilitate our propositions of the project we also provide the several details which helps the better visualization of our solutions. Firstly we provide the details of cross-sections of chosen fragments of our project. Those sections concern the view on the projected buildings and new designed streets as well as the solution for the local communication and pedestrians. Parking places are also included there where their presence is obligatory. All those factors are shown in the Fig 40. respectively.



Figure 40. Elaboration of the SYSTRA project combined with students project.

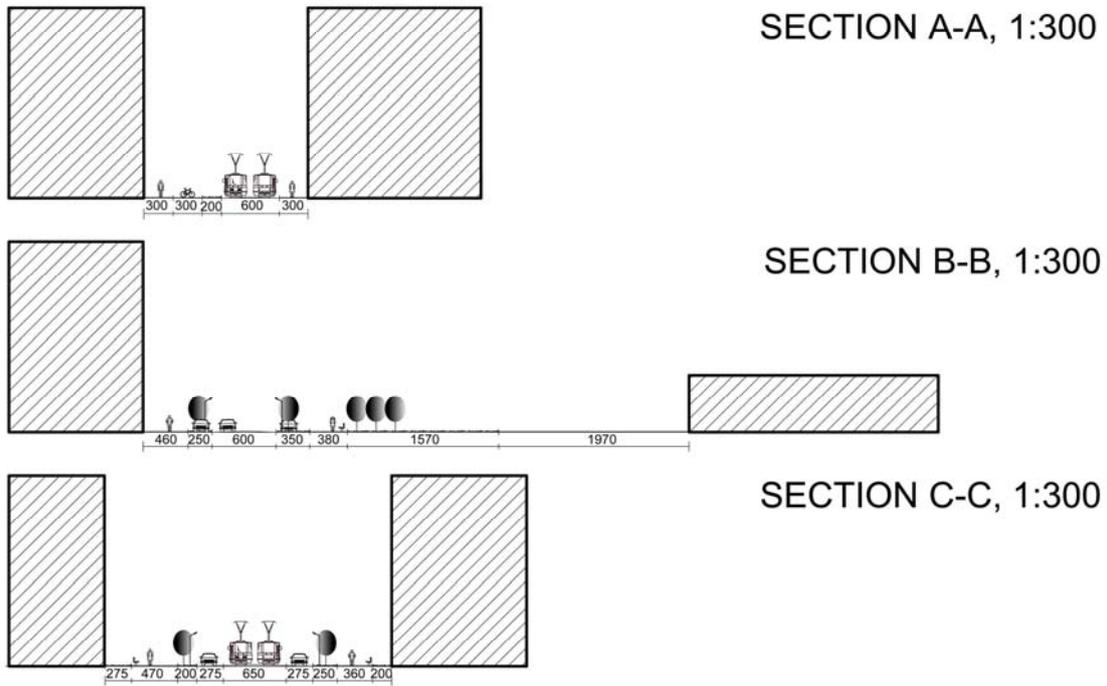


Figure 41. Sections A-A, B-B, C-C respectively.

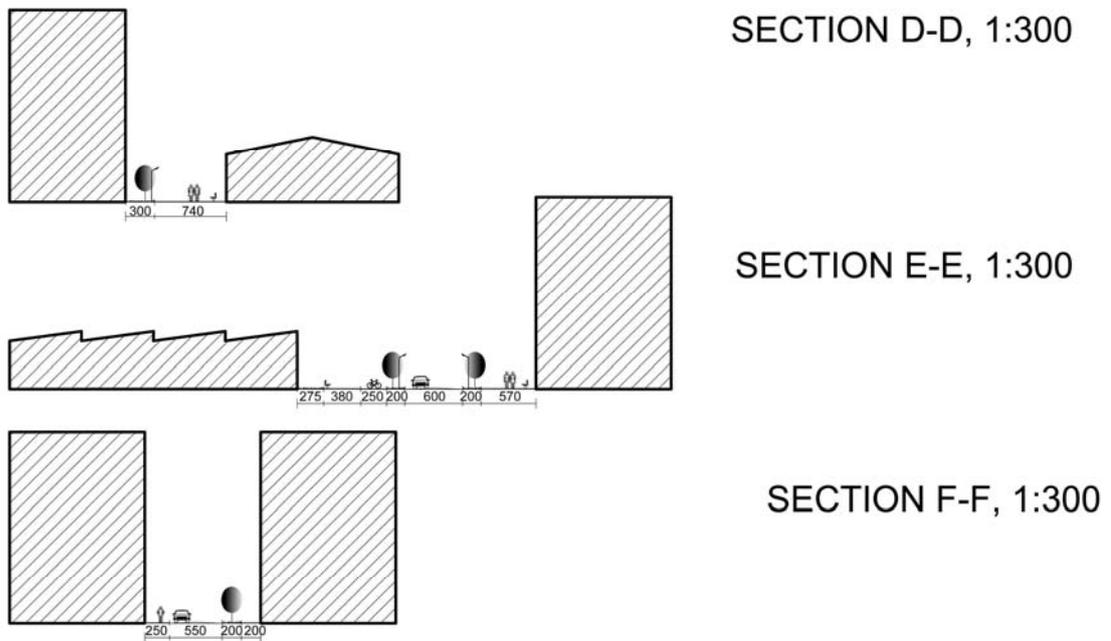


Figure 42. Sections D-D, E-E, F-F respectively.

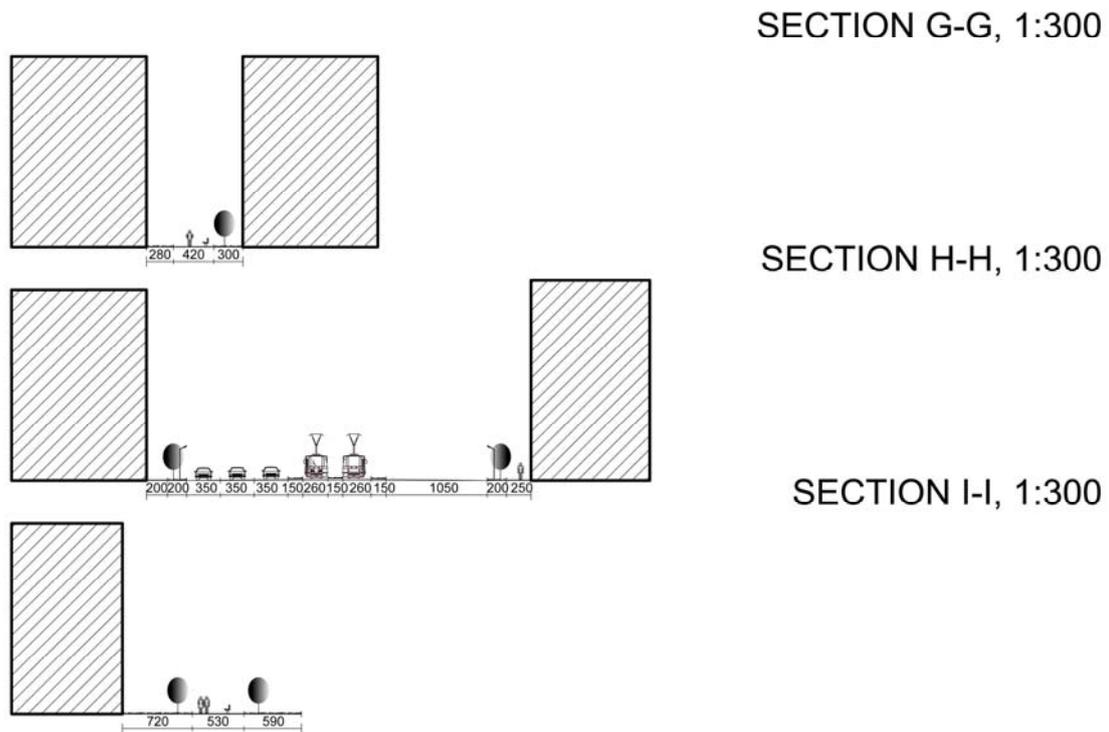
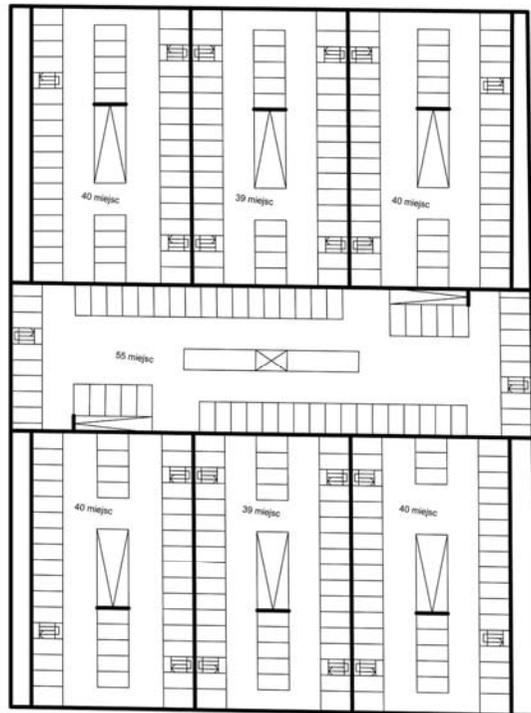


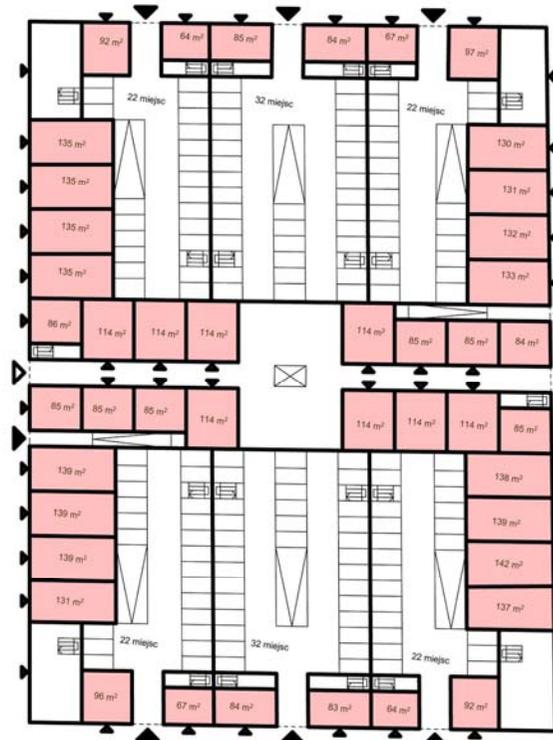
Figure 43. Sections G-G, H-H, I-I respectively.

An example of similar analysis was carried out for chosen business buildings. The cross-section of this building as well as the functional areas are calculated and shown in the Fig. 44.





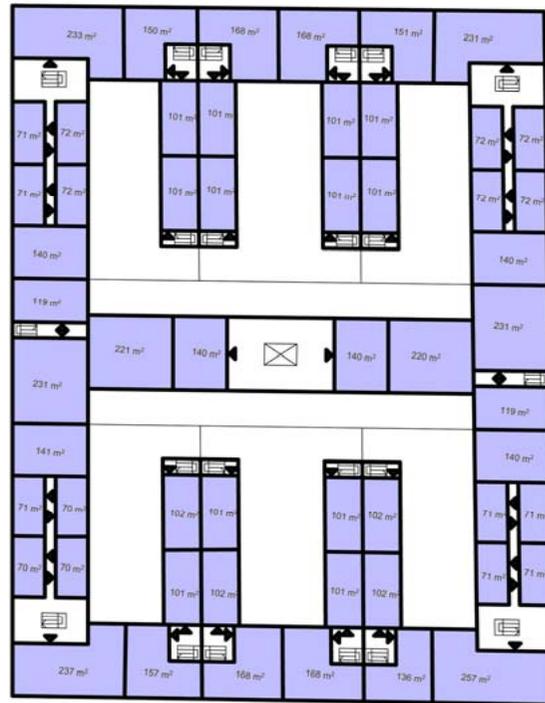
LEVEL -1



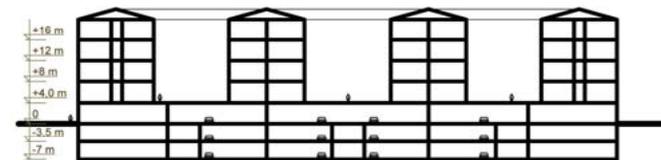
LEVEL 0

Figure 44. Cross-section of projected business building facilitated with parking spaces.





LEVEL +1



CROSS- SECTION

Figure 45. Cross-section of proposed buildings facilitated with underground parking space.

Another thing that was previously described was the entrance to the station and formation of services area in the high walls at the edges of the green area. Moreover the construction of pedestrian trusses was mentioned. We propose formation of three different trusses. First of them enables pedestrian to cross over the Nowotargowa Street and simultaneously connects two new designed buildings. The second truss is more expanded as it consists of two levels (- 8m and - 4m). Exact localization of each truss and the cross-sections of the green area and services in the walls are presented in the Fig 46.

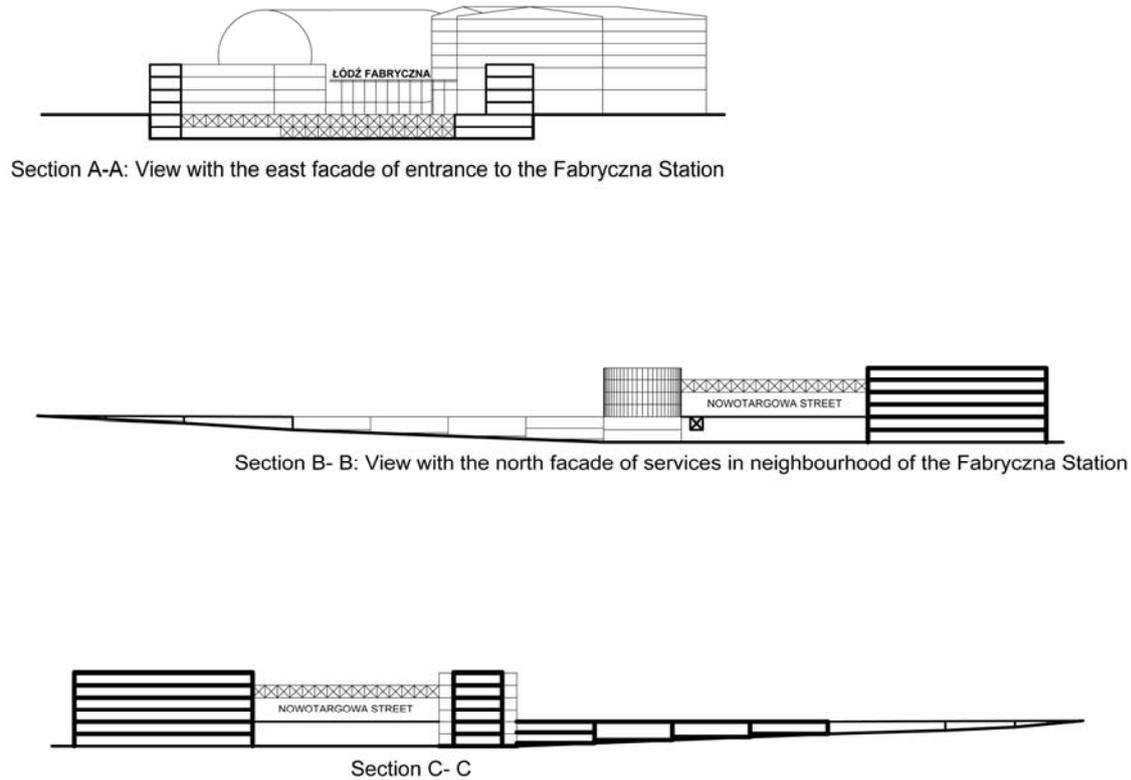


Figure 46. Cross-section of green area and the entrance details concerning formation of pedestrian trusses.

Finally, to have a better look at our project we also provide the colorful visualizations of the entrance to the Fabryczyna Station. The images are considered from different perspectives what is show in the Fig 47.

The final design of our project was compared with the original design and the current state so that the general view of the area and possible designs could be obtained. The final elaboration of the SYSTRA project and our own work is represented in the last image Fig 48. Hopefully our project concerns every aspect from the previous design however it introduce several beneficial factors and provides more detailed elaboration of the feasibility study.

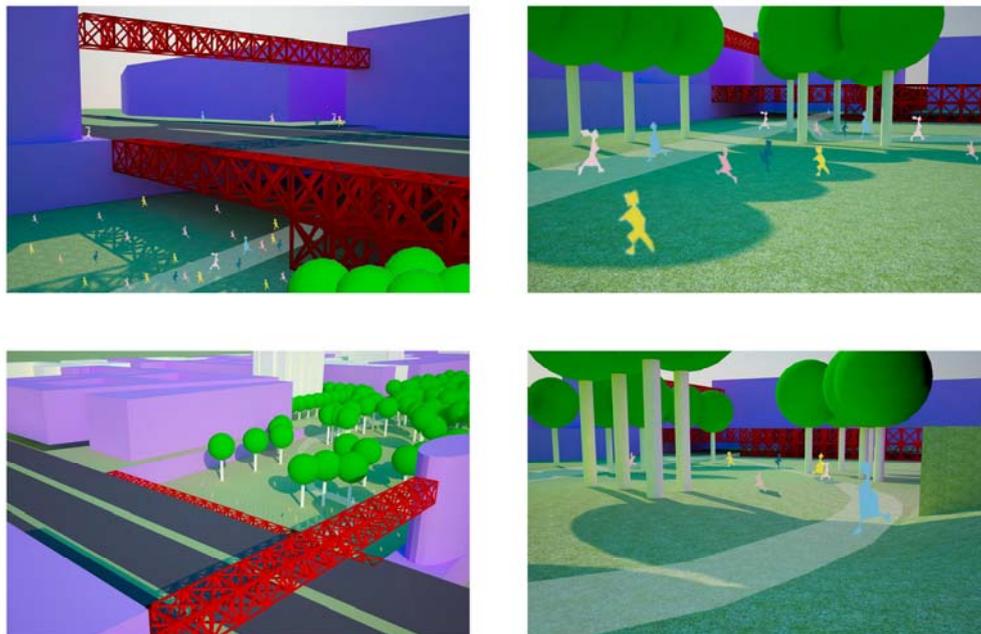


Figure 47. Different view perspectives onto the entrance to the station as well as proposed pedestrian trusses.



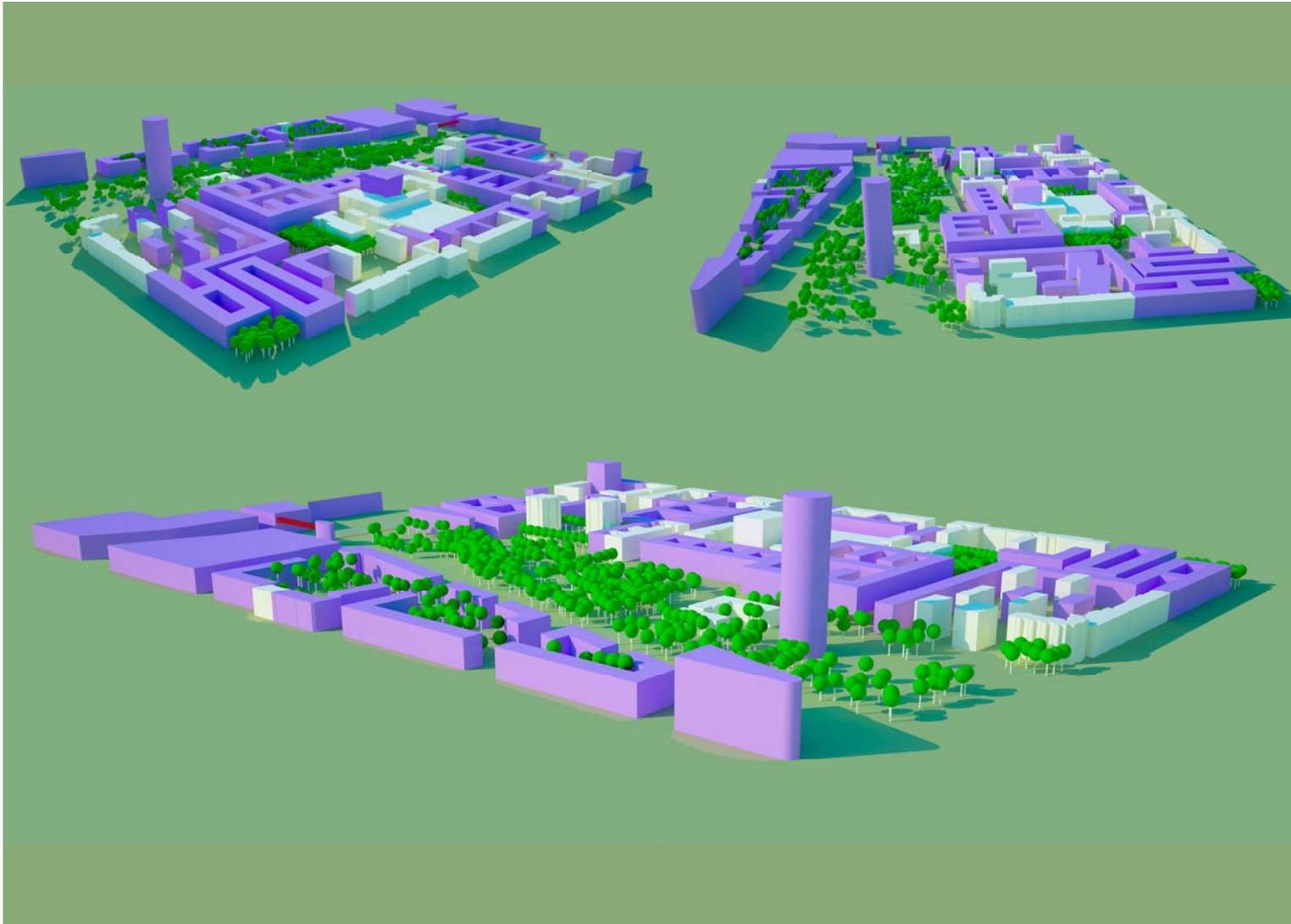


Figure 48. Elaboration of previous design and students final project.

## **FINAL CONCLUSIONS.**

The aim of this project was to re-develop the centre of Łódź. There were many problems and assumptions associated with this project, with some of the assumptions difficult to complete. It was assumed that a whole new city would be built, however it wasn't taken into account that it was in an under-developed area.

For the development of a new city it is important that the environment, both natural and artificial, is friendly and attractive. For this project the new environment should foster and nurture culture.

### **Natural Environment**

For the natural environment (green areas) it is important that these areas are as attractive as possible as they are known to be a draw to the area for visitors. As well as parks containing the obvious greenery, which is usual for such environments, it is important that they have more unusual attractions and features to enhance the environment, for example ; water (such as fountains, ponds etc), trees/plant life, flower gardens, labyrinths/attractions and well lit safe paths.

These natural environments foster culture through environmental vitality and how accessible it is. "The environmental dimension accessibility means encouraging participation, because facilities can be easily reached on foot or by public transport. Environmental competitiveness is measured by a city's attractiveness and uniqueness, as well as its location."\*\*\* (*The Creative City, Charles Landry, page 245*)

### **Artificial Environment**

In terms of the artificial environment, a built up urban area in this case, it can be concluded that it should have services that are unique within Poland and perhaps Europe, services that are attractive to both investors and tourists but also maintaining the original historical aspect of the city.

### **Safety**

The environment should also have a high level of safety as well. It is important for humans to feel safe in their surrounding environment and if the new centre has safety incorporated into it, it will achieve this. Basic levels of safety should include:

- A peaceful and safe surroundings
- Well lit areas
- Try to avoid tight areas that could lead to it being over-crowded
- Police and Security Patrols
- The ability to detect "threats" that otherwise could be hidden
- Activities for youth and enterprise schemes
  - Activities for youth give them an opportunity to do something different and enjoyable, whilst also keeping them out of trouble. Enterprise Schemes could involve giving the homeless a place to stay or giving them jobs that would be of a benefit to them.

### **Environmental Issues**

With every new development of a city it is now more important than ever to include positive environmental steps to make the city a “green city”. With the rising carbon footprints of cities it is looked on as a positive step if a city can combat this. There are many ways in which this can be done; from simple methods such as education at a young age to more complicated forms of renewable clean energy such as solar power. This is also gives the city a good image and can be looked upon as a way of developing Łódź for the future.

### **Calculations**

<i>Numbers</i>	<i>Space</i>	<i>All</i>	<i>Housing</i>	<i>Other</i>	<i>Business and Services</i>
<b>SYSTRA</b>	<b>Total</b>	1 271 333 m <sup>2</sup>	572 425 m <sup>2</sup>	69 992 m <sup>2</sup>	628 916 m <sup>2</sup>
	<b>Percentage</b>	100	45.03	5.50	49.47
<b>Case Studies</b>	<b>Total</b>	1 271 333 m <sup>2</sup>	381 400 m <sup>2</sup>	381 400 m <sup>2</sup>	508 533 m <sup>2</sup>
	<b>Percentage</b>	100	30	30	40
<b>Project</b>	<b>Total</b>	806 418 m <sup>2</sup>	185 595 m <sup>2</sup>	115 317	505 625 m <sup>2</sup>
	<b>Percentage</b>	100	23	14.3	62.7

Table 19. Comparison between SYSTRA, case studies and project functions intensities.

The projects overall area was chosen as to have less density than the originally designed project by SYSTRA. This was to create a more human friendly atmosphere within the new developed area. The other part of the table includes the following; cultural buildings, education, industry and green areas etc. It was deemed housing was of less importance than creating new office spaces and services in the new centre.

Elsewhere more housing were introduced then it is assumed in Łódź, as presence of housing provides safety, because of the constant use of the space, lack of the effect of emptiness at night and during weekends.

The project checked the capacities of the area when preserving some of existing constructions. The percentage values may also be altered as some of office buildings may be easily converted into housing.

## **SYSTRA**

The SYSTRA project focused on; the building of a multimodal communication node for local and long distance transport, the formation of underground parking spaces and services, renovation of technical infrastructure and the building of special cultural zones.

From the calculations in the Table 19, shown above it can be concluded that:

- Too many office spaces designated to the area

The area that was given had to high intensity than was necessary. This in turn would lead to a feeling of an enclosed space, whilst in reality we would prefer a more open space.

- Too many services that the area can contain

SYSTRA calculated this from knowledge of the amount of people that will be traveling through the new Fabryczna station. It didn't take into account that most of these people will remain underground.

The SYSTRA project as outlined in its aims was to make Łódź an important communication node in Poland. This is why the underground high speed railway station is so important in this project. It was proposed to have many traffic connections around this station. We feel that it is important to make Łódź a communication node.

It also stresses the importance of the many different cultures that are in Łódź today. This is a good idea as it unites the city with a new centre that includes everyone's culture; however it focuses on separating the culture into specific zones rather than having a zone that tries to incorporate all cultures into one area.

We also appreciated the idea of creating public squares, as this gives people a good chance to interact in a friendly, safe environment. It also gives the opportunity to create business as services can be placed around these squares.

In summary it is good observation that in neighborhood of New Center of Łódź district there are many significant and well-known buildings such as theatres, cinemas, concert hall, hotels or the main post office which can give the possibility to join new designed district in historical city tissue.

## **Project**

The original design of the project could be improved upon, we felt as a group. The main problems we noticed concerned the high blind walls on the north and south of the park. We also had some problems with the layout of some roads and access to the station, as we perceived these as dangerous. The project was designed to have a business centre to the east of the new underground station that was to be put underground as a transport node for the city. Also in this area will be residential zones, along with services. The new zone for culture

will be located in direct proximity to the station. To change the problems were to change the high walls to glass walls that would give the illusion of space, while also allowing the opportunity to increase business with the inclusion of services. Some tram lines and roads have also been changed around the station. A walk way was included over the entrance to the station as this allowed a better ease of access to the station. New buildings were made as well, one acting as a lift and access building for pedestrians to the station. It will also have services in the building. The proposition of this new entrance to the railway station should eliminate any possible safety concerns we had. The new building will contain services with the higher edifice in the form of an oval, which will also serve as a landmark and thus showing the entrance location. The project will also incorporate historical aspects of Łódź.

<i>Function</i>	<i>Usable [m<sup>2</sup>]</i>	<i>Percentage</i>
<i>Services</i>	83623	10,4%
<i>Education</i>	18703	2,3%
<i>Offices with Services</i>	113384	14%
<i>Offices</i>	308598	38,3%
<i>Culture, Museum and Gallery</i>	6416	0,9%
<i>Hotel</i>	12264	1,5%
<i>Public Greenery</i>	77835	9,6%
<i>Housing</i>	185595	23%
<i>Total</i>	806418	100%

Table 20. Solution of functions proportions of the students project.

The assumptions of the project were to make interesting spaces that are human friendly. They also included the mixture of different uses: housing, services, offices. The assumptions of our project also included the concept of ground scrapers. The rationale behind this was that “Taking each in turn, commercial office groundscrapers are a rational response by the market to providing space for the increasing number of ‘blue-chip’ multi-national occupiers seeking to bring their disparate workforces together on fewer sites. For the public sector on the other hand, groundscrapers are also seen as a means to avoid building high, although in their case this needs to be seen in the context of the conservation requirements of historic city centres such as London, and also the potential of such developments to provide distinct public benefits at no cost to the public purse through the incorporation of new ‘public’ urban spaces into the mix.” \*\*\*\* (The Groundscraper: Exploring the Contemporary Reinterpretation, Carmona and Freeman)

So why is our new project better than the previous proposal? It has designs of nice streets. The project is safe and that at no point threatening any element of the city or society. Is only thinking about the future and improving the city. It encourages people to enter the new centre of Łódź and should encourage more people that are currently moving away from Łódź to stay here. It was also important to have many green areas.

We have had in mind from the beginning of the importance of green areas. In the new area, there will be a large park in the center of the new district. Will be provided with paths, trees, benches and everything needed to provide the harmony of peace and tranquility to visitors. As it was decided that the green area was to be of importance to our project some research was done into successful parks. This green area has taken ideas from the Parc de la Villette in Paris. It will feature colourful sculpture pieces throughout the park, as well as summer pavilions that will feature the 4 different cultures through them. Ideas for services and attractions have also been included to make our park an attractive area.

The second issue that was incorporated into our project was the elaboration of the design of the business centre located in the north-west part of the site. This location was chosen given its proximity to the park, as this will act as an incentive to attract business. It was also designed to have a feeling of space as well as a high density of services.

The designs of new streets have also been made to be nice and safe. Services have also been included as these will attract people as well as boosting the money. It will also be denser, with a lot more people employed. The buildings have been designed to be 5 stories high as this will allow sun into all the buildings which is attractive. The project has also inscribed the current situation of the site. There are some constructions that we found to be of value and so will continue to there. Alternitivaley they may be adopted in th first stage of the project realisation and after replaced with time. This final point is important as projects such as these take time to be realised and therefore can have a long period of time for completion.

### **Quality of Architecture**

The new buildings have to be designed as to be of high quality as this will attract investors to the city. It should have uniqueness from other towns but also maintain the same character of Łódź. Tourists are drawn to places that have this unique character, so it is important to remember this when designing the architecture. It should also incorporate itself into the rest of the city. Some buildings in this area will remain. These include industrial buildings such as the factories. Some buildings shall also be re-used for different functions, as these buildings are perceived as being of value. One of the most important examples of this is the old power station, EC1, being redeveloped.

**How NCL may help with getting the European Capital City of Culture Award**

The NCL will help the city to the Capital City of Culture Award, as described below.

- Promote artistic events, which are associated with cultural actors in other cities of the Member States of the Union, to facilitate the establishment of lasting cultural cooperation and foster their movement within the European Union.
- To ensure the mobilization and participation in the project of large segments of the population.
- Charge of receiving citizens of the Union and encourage the resonance of events planned through the various media, with a multilingual approach.
- Promoting dialogue between cultures in Europe and other world cultures.
- Assess the historic heritage, urban architecture and quality of life in the city.
- New institutes of culture

- New Museum

The new museum will be a breakthrough for the city's culture. Łódź will be possible to accommodate in important exhibitions nationally and internationally. Cultural development will be enriched in large amount.

- EC1

The EC1 is the link between PKP, officials and NCL. Thanks to EC1 is able to develop the project and should strengthen the rule of Łódź as an important cultural center of the supra-regional importance and create conditions for the development of artistic creativity, cultural and film.

- David Lynch Film Studios

- Modern Art activity

There will be an institution to work in the promotion and preservation of contemporary art from the perspective of Łódź that art should be affordable for everyone. In the museum are generated spaces for children, youth, adults and groups.

- Provide space where activities may happen

The new center will hold several areas in which to hold events. It be possible, the installation of scenarios or tents, for the realization of certain cultural events.

- Events of culture (glass tube)

In the central area is a large glass building in a tube. It will have several rooms and auditorium to be employed by the city. Continuously cultural exhibitions will be

possible to locate within the building. On the other hand will be available to all the cultural associations of the city, if be necessary.

- Different festivals, street art festivals

For the NCL this more alive, it will be possible to hold festivals, art festivals in the streets. They should be encouraged to establish partnerships annual festivals or summer always thinking about the future of the city.

### **Concluding Remarks**

Overall we feel our project if inscribed correctly into the city will be successful given the time period for completion. Our project also has a scope for change if some aspects are found to be unsatisfactory. However the project should provide a bright, safe and attractive new centre of Łódź.

## **Promotion of Łódź**

The city of Łódź is commonly known as the cradle of culture. It successfully combined the existence of various cultures and because of that nowadays it is generally known for giving the real creative life with a lot of fresh and new ideas not only for its citizens but also for people who visit Łódź. The view of combination of cultures is mainly represented by the annual Festival of Four Cultures. This festival makes an excellent opportunity to underline the historical content of the city as well as the importance of culture's influence on the city's architecture and social life. This event shows how the city was affected by 4 cultures: Jewish, German, Russian and Polish.

Another thing that may advertise the city is the EC1 activity. A special project was designed, however, what was so special about it?... Well, the creativeness of this project is mostly defined by the content of Łódź industrial history. The project introduces the production of EC1 jeans that refers to the textile and chemicals which were the major products of Łódź industry in XIX and XX centuries. Such a venture is supposed to draw people's attention to the popular industry in the times of II World War and moreover it suggests that Łódź still wants to continue the tradition of textile industry. However, the city wants to be known from also other aspects. What's more, it simultaneously tries to convince people to give new ideas for city promotion by the simple example of designing the new look of jeans.

Secondly, a promotion factor is the presence of the Film School in Łódź which is one of the most famous schools in the world and which has educated a lot of famous actors and stage-managers. Due to the presence of this school as well as the Łódź Art Center the city has a chance to organize the Fotofestival which is the international meeting for artists to show products of their artistic work and the Camerimage Festival as well. All such ventures are the possibility of summing up the prestige of Łódź and attracting people and potential investors as well.

Thirdly, because of the historical content of Łódź, especially in terms of times before II World War, our city is an important paragraph of the global and national history. This must be always remembered so that it is necessary to support the cultural exhibitions and creation of museums that are the most crucial and most valuable sources of history.

Moreover, the traditional architecture shouldn't be underestimated, however, we must keep up with the passage of time so that the new designs are really appreciable. An example of this may be the new glass tube museum that is supposed to be built near the Fabryczna Station. It perfectly shows that the modern architecture may become the part of traditional town composition and also has a beneficial effect on the outside visitors.

## APPENDIX

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