GOALS FOR THE DESIGN DEVELOPMENT:

1. Higher density;
2. More mixed environment;
3. Better connection with the surroundings;
4. Better connection between the living area and the lake;
5. Enclosed courtyards;
6. Open space – for everybody's needs;

EXPECTED RESULT:

Mixed neighbourhood with functions spread withing a walking distance. The renovation proposal for the area should fix such problems like oversized and empty public spaces, dull and monotonous architecture, outdated equipment, lack of public services and facilities and the lack of outdoor activities.
Strategy Nr. 1: Good connection with the city center:

IDEA: To improve bicycle links from the city centre to Mežciems

Firstly in order to improve the connection between the neighbourhood Mežciems and city center, new bicycle tracks should be provided. The new connection links provides two starting points in the neighbourhood. Bicycle tracks connects with the track planned by municipality. The distance of new tracks might not look much shorter at a first glance but it provides more starting points and higher flexibility.

The bicycle tracks should be strictly divided from car roads, in order to provide high security for cyclists of all ages. This can be done with building green edges (trees, bushes) between them. The landscape around cycling tracks should be pleasant in order to increase the cycling. The high distance, planted with greenery, between cars and bicycle tracks can highly improve the quality of bicycle tracks.

Cycling and pedestrian tracks should be divided from car roads.

New cycling paths improves the connection to the city center.
Currently the road is a problem in the area because it disconnects the lake from the living area, in consequence the lake is not in use by its inhabitants. Another fact is that the traffic on the road is not intensive but the width of the road is very high. The complete removement of the road was chosen because the neighbourhood has high speed roads on both sides already. The purpose of Gailezera street is to connect these two high speed roads, however the road is just promoting a car use, while the design proposal suggest to promote pedestrian use of the area. The removal of the street can bring new features, connecting the neighbourhood and the lake, to the area and improve the safety of pedestrians.

Another solution to improve pedestrian and cyclists use of the area is to integrate Traffic calming strategy in the area by:

a) building new bariers on the streets to force the speed reducement of cars;

b) build more traffic lights in the area;

c) reduce the width of the street;

d) to create more room for pedestrians and cyclists;

e) to build and plant the area near the street in order to provide interesting scenery.
For the upgrade of blocks of flats, renovation of facades would not be genuine. The upgrade of houses with the extension of their area is even smarter. This type of renovation is already in practice and there are real examples of it (ps. 54). It gives more opportunities in creating new facades and changes the character of the building. The renovation proposal also suggests to fill the gaps between buildings but leaving first floor for pedestrian passway. The design of facades is suggested to be diverse in order to get rid of monothonic character of buildings and visually reduce great size of buildings.
References of housing renovation

1. Renovation of 709 housing units in Genicart district, Larmont, France. Housing units are transformed by adding extra space to the facades. This way the flats gain extra space and facade gets completely different look. Year of renovation: 2009. Office: LAN http://www.lan-paris.com

2. Transformation of the housing block No.17, Paris. Self supporting structures were added to the edges of the existing building, this way the size of a block was extended by 3560 sq.m. Year of renovation: 2011 Office: Lacaton & Vasaal http://www.lacatonvassal.com

IDEA: Designing new buildings in the area:

New buildings in the study area are proposed using the mixed-use infill strategy. The delimitation of infill strategy is that existing blocks of flats are quite high, consisting from 9 and 16 floors. Because of this factor not many buildings can be built, otherwise the new buildings will reduce the amount of sunlight the existing buildings get.

The goal is to design various buildings in the area, so that the area would escape the mono character of residential district.

The infill consists from 4 types of buildings:

1. 5-6 storey residential houses for new inhabitants - the house is divided with flats;
2. 3 storay duplexes - flats are planned for families. Each family has a flat planned within three floors with the private garden;
3. 5 storey mixed use buildings with commercial spaces on the first floor, offices on the 2nd and residential use on the rest floors.

Different functions

Changing facades every 10 - 15m
Strategy Nr. 3: To create new and encourage existing forms of entrepreneurship

IDEA: More entrepreneurial activities in the area

Since the area already has two buildings of a public use, it is suggested to redesign them into more attractive commercial buildings. The existing building in the north could serve as a good space for market, where individuals can sell domestic goods, such as vegetables, meet, fruits and other foods. The public building in the north is suggested to be a community center, where locals could organise meetings. Swimming pool for inhabitants could also be located in that buildings.

It is strongly proposed to open shops and other commercial spaces on a groundfloor of housing blocks, which are located along the walking alley.

New buildings should have a variety of functions, in order to avoid empty or alien spaces during certain time of the day/night. New buildings are designed to provide office spaces for rents on the 2nd floor and commercial spaces on the groundfloor.
In order to create calm atmosphere in the courtyards, the parking lots are moved outside them and the space for courtyards is particularly designed for outdoor activities. Spaces in courtyards are divided into small pockets of spaces of 10m - 25m width. Each pocket has a different function. Functions provided in courtyards are:

1. Children playground;
2. Inline laundry drying;
3. Urban gardening;
4. Games area for adults and elderly;
5. Basketball field in bigger courtyards;

All pockets of spaces are located in a landscape planted with trees, where the seating places are provided.
IDEA: Open public space with the variety of functions:

The idea is to create an open public space where people of all ages could find interesting activities. The purpose of the public space is not to create a sophisticated or expensive design but to use the potentials of existing space, which can be used for purposeful free time.

Since the lake is one of the greatest potentials in the area, the design proposes to revive the lake area by implementing water activities there.

Also the establishment of winter activities, such as sliding from the hill, are proposed.

An importance for public areas for elderly is also given, who very often lack outdoor activities in public spaces and yet too often forgotten.

Stadium already exists in the area, so the design proposal suggests to renovate it and implement more activities for active people around it.

All in all, the purpose of the space to create a diverse and interesting environment for the inhabitants of microrayon. It is designed respecting the primary layout, created by architects almost 40 years ago, but it integrates more functions in the area.
Strategy Nr. 5: The mix of functions within a walking distance

IDEA: Bus stops are located in that way so it would take 3 minutes to reach the destination.

A shape of a neighbourhood is dictated by the certain character of an oblong space, because of that there is a difficulty to create a 3 min. neighbourhood as a whole. However, the public space is designed in a way so that a changing and interesting scenery along the way would visually reduce the distance, in case the destination requires to cross the neighbourhood from South to North.

From East to West is easy to create a 200 meters network, which means that most of the objects and functions can be reached in three minutes.

New density of buses is proposed, which creates a good walking distance in the neighbourhood and all facilities could be reached within a 3 min. from a bus stop.
EVALUATION OF THE DESIGN PROPOSAL
Revitalization project promises a more organized master plan layout. The existing vast land in the South which occupies even 7.5 hectares is eliminated by creating a mixed living pattern. The area is filled with single family homes, which occupies 1.4 hectares; extended housing facilities, entrepreneurship section and recreational area. Parking lots now occupy less space than before but have a well-organized pattern, where more cars can be parked. Parking area is designed on the edges of the neighborhood, in order to generate enclosed courtyards just for the inhabitants. This type of area organization gives more space to inhabitants by 0.5 hectare. The area in the middle is designed to be a recreation space for inhabitants and its visitors, which is divided into smaller sections, in order to suit everybody’s needs. The total size of the park is 12.3 hectares. Fenced areas of schools and kindergartens, located in the eastern part of the area are transformed into public zones. The safety from the street still stays high, because of the mixed-use buildings designed along the street.

The above analysis which is deduced from the design shows that the local problems of Mežciems, such as unorganised parking spaces, unused areas etc. (mentioned in p.61 - 65) are solved.
The proposed revitalization project would create even 960 new living spaces, 9 of them are private single family houses and 5 terraced houses consisting of 25 flats. New flats can be used for various purposes – for rents, as affordable accommodation for students, accommodation for young families and etc. The implementation of new housing in the area also reduces urban sprawl and increases the density in the area, which creates a cozy atmosphere.

As mentioned above in design proposal, the introduction of new flats attracts new inhabitants, businesses and creates a diverse living environment.
3. Wider possibilities for Entrepreneurship

The proposed design project concentrates on mixed use revitalization plan. According to that plan there should be 225 commercial plots in total, which create approximately 520 work places (calculated according to the formula: 1 commercial plot * 2 workers + 50 places in local veg. market + 20 places in community center). It means that unemployed inhabitants have possibilities to create working space for themselves. In order to make these areas affordable for this specific class of people - special subsidies and discounts should be implemented. In case the demand is smaller than supply, there is a possibility to convert those spaces into living areas or to use them for community purposes. Not only does the introduction of new businesses sustain the present inhabitants but also for future inhabitants due to long term investments, an important principle in sustainable development.
CONCLUSIONS:

Though Riga is rich with Art Noveaux architecture (included in the UNESCO world heritage list), the above project has shown that the city is mostly covered with mass housing estates. These estates portray monotonic and dull architecture, over scaled public spaces etc. as discovered during the analysis (Microrayons in the city’s context), which is far from an attractive and comfortable environment.

Riga has also got many potentials some of which are mentioned in this project but the problems which come with mass housing, overshadow them. These problems are peculiar in Riga’s microrayons. Thus the focus of this project has been to revitalize these potentials by proposing some strategies to solve these problems (Urban Renovation Strategies for Riga’s Microrayons).

The main focus has been to use the most economic and efficient way to give Riga the face it deserves. The aim of the strategies mentioned above was to preserve the buildings, while at the same time uplifting the potentials of microrayons. For this many strategies were used, some of which were to increase the sociability level in public spaces, to upgrade the current appearance of mass housing estates, to encourage entrepreneurship, to create better connections to the city center and within microrayons.

Some of the problems solved by these strategies include monotonic architecture, over scaled public spaces, unorganized parking etc.

Using the strategies mentioned above Mežciems is used in this project as a case study to demonstrate a possible transformation of mass housing estates in Riga.

The proposed design for the transformation of Mežciems solves most of these problems, with main focus on the economic aspects. This included introduction of new buildings, creation of new bicycle tracks, implementation of traffic calming system in high speed roads, reorganization of public spaces etc.

A further recommendation would be to implement these strategies on other microrayons of Riga in order to give a complete face transformation.
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Kino un Architekūra, 6 lekcija, VARA UND PILSĒTA: Pēckara Rīga kinohronikās, Latvia (unknown year).
APPENDIX 2: PICTURES

COVER PICTURE: made by Manten Devriendt;

COVER PAGE 7: Author: Jomante Valiulyte;

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Figure 1: Author: Jomante Valiulyte;

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3. www.urbancentre.net;

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2. Author: Jomante Valiulyte;
3. Author: Jomante Valiulyte;
4. Author: Jomante Valiulyte;
5. Author: Jomante Valiulyte;

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Figure 2.www.apkaimes.lv;
Figure 3. http://www.rpad.lv/apkaimes/.

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Figure 4. Author: Jomante Valiulyte;
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Figure 6. Author: Jomante Valiulyte;
Figure 7. http://www.primavera.bpg.lv/

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Figure 8. Magazine Latvijas Architectura, vol. 93, 2011, article by Janis Lejnieks „Pieriga 20. un 21.gs.”

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All photos made by Jomante Valiulyte.

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Figure 11: illustration SVESMI in magazine VOLUME 21

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Figure.12: www.failedarchitecture.com. Images by Archined, 1999.

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Figure 13: www.failedarchitecture.com Images by Projectbureau Vernieuwing Bijlmermeer, 2008

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Figure.14: http://www.arch-i-lab.polimi.it/SocialHousing/ Germany_1%20-%20Flecken.pdf

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Figure 12: Author: Jomante Valiulyte;
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URBAN TRANSFORMATION OF RIGA’S MICRORAYONS: FROM A SUSTAINABLE URBAN DESIGN PERSPECTIVE:
CASE STUDY: MEŽCIEMS

Master Thesis, 30ects, Spring Semester 2013

Spatial Planning with an emphasis on Urban Design in China and Europe
Blekinge Institute of Technology (BTH)
Karlskrona, Sweden

Institute for Sustainable Urbanism (ISU), TU Braunschweig,
Braunschweig, Germany

Tutors:
Prof. Jana Revedin (BTH);
Prof. Dr. Vanessa Miriam Carlow (ISU).

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