„Sleeping“ suburbs of Bratislava

How to support mixed use development in suburban residential areas

- **Mass housing estates**
  Case study of Bratislava - Dúbravka

- **Suburban residential areas**
  Case study of Bratislava – Záhorská Bystrica

- **Valid planning system in Slovakia**
  Current issues

Ing.arch. Oľga Melcerová, PhD.  Faculty of Architecture STU Bratislava
**Location**

**Slovakia:**
- area 49,035 km²
- 5.40 mil. inhabitants (30.6.2012)

**Bratislava:**
- capital of Slovakia since 1993
- area 367 km²
- 465,327 inhabitants (1.6.2012)
### Prefabricated housing estates

**Mass housing estates:** functionally and territorially autonomous residential areas of at least 300 flats

**Statistics:**
- Construction in 50s-90s: 1960 – 22,696 flats
- Large estates built in a short time: 1970 – 30,690 flats (91% in prefabs)
- 1.2 mil. flats in prefabs = 1/3 of all flats: 1980 – 8,215 flats
- 2 mil. inhabitants in prefabs: 1995 – 6,209 flats

**Prefabricated construction:**
- + fast and rather cheap
- - „crane urbanism“
  - monotony, uniformity, bad orientation
  - low technical quality

**Technical – economic directions:**
- + flats of good hygienic parameters
- - „rabbit hutchesa"
  - small rooms, missing pantry or storage

**Complete housing construction:**
- + planned public and sport facilities
- - late and reduced facilities construction
- + lost of recreational greenery
- - missing work opportunities
- + good public transport connection
- - lack of parking places
Prefabricated housing estates

Bratislava

- 21 prefab estates built in 1955-95
  - 1956: 1st mass housing estate
  - 1955-60: smaller estates (300-3000 flats)
  - 1961-75: 1st large estate (5000-15000 flats)
  - 1976-81: largest estates (up to 50 000 flats)
  - 1982-95: estates in difficult construction sites

Population living in prefabs:
- 1970s - 50%
- 1980s - 90%
- now - 70%
6.5 km from the city centre
Prefabricated housing estates

Bratislava - Dúbravka

Former village
1,500 inhabitants

Housing estate
40,000 inhabitants
Prefabricated housing estates

Bratislava – Dúbravka plan

Facts:
- Total area: 179.31 ha
- Built area: 29.93 ha
- Number of flats: 12,000 flats
- Housing density: 67 dwellings/ha
- Population density: 223 inhabitants/ha

Planning and projects:
- 1965: city development plan of Dúbravka – Lamac
- 1966: masterplan of housing estate (Koncek, Skocek, Titl)
- 1969-72: project of Záluhy I. (Koncek, Skocek, Titl)
- 1969-72: projects of Záluhy II. and Podvornice I.-IV. (Ehrenberger)

Construction:
- 1965-85: housing estate
- 1986: „House of culture“ as only building of planned center
Prefabricated housing estates
past

Bratislava – Dúbravka
present

- retail, services – daily use
- retail, services – other
- schools / preschools

- culture
- administration / offices
- health / social care
- sport
Prefabricated housing estates

Number of facilities:

- retail, services – daily use: 25 / 5
- retail, services – other: - / 18
- schools: 9 / 9
- preschools: 31 / 25
- culture: 1 / 6
- administration and offices: 9 / 12
- health and social care: 5 / 8
- sport: 2 / 4

Center – past / center – present

Bratislava – Dúbravka
## Migration since 1991

<table>
<thead>
<tr>
<th>District no</th>
<th>Borough</th>
<th>Population</th>
<th>Growth / decline since 1991</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Staré mesto</td>
<td>49 018</td>
<td>-16.7%</td>
</tr>
<tr>
<td></td>
<td>Ružinov</td>
<td>73 131</td>
<td>-1.8%</td>
</tr>
<tr>
<td></td>
<td>Vrakuňa</td>
<td>18 201</td>
<td>+9.1%</td>
</tr>
<tr>
<td></td>
<td>Podunajské Biskupice</td>
<td>21 087</td>
<td>+0.6%</td>
</tr>
<tr>
<td>II</td>
<td>Nové Mesto</td>
<td>40 317</td>
<td>-6.3%</td>
</tr>
<tr>
<td></td>
<td>Rača</td>
<td>20 784</td>
<td>-1.1%</td>
</tr>
<tr>
<td></td>
<td>Vajnory</td>
<td>3 384</td>
<td>+49.4%</td>
</tr>
<tr>
<td>III</td>
<td>Karlova Ves</td>
<td>22 154</td>
<td>+55.8%</td>
</tr>
<tr>
<td></td>
<td>Dúbravka</td>
<td>37 442</td>
<td>-7.3%</td>
</tr>
<tr>
<td></td>
<td>Lamač</td>
<td>7 004</td>
<td>-4.0%</td>
</tr>
<tr>
<td></td>
<td>Devín</td>
<td>771</td>
<td>+42.5%</td>
</tr>
<tr>
<td></td>
<td>Devínska Nová Ves</td>
<td>15 233</td>
<td>+6.0%</td>
</tr>
<tr>
<td></td>
<td>Záhorská Bystrica</td>
<td>1 731</td>
<td>+84.5%</td>
</tr>
<tr>
<td>IV</td>
<td>Petržalka</td>
<td>128 251</td>
<td>-12.2%</td>
</tr>
<tr>
<td></td>
<td>Jarovce</td>
<td>1 124</td>
<td>+23.5%</td>
</tr>
<tr>
<td></td>
<td>Rusovce</td>
<td>1 759</td>
<td>+51.7%</td>
</tr>
<tr>
<td></td>
<td>Čunovo</td>
<td>816</td>
<td>+18.9%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>442 197</td>
<td>-2.5%</td>
</tr>
</tbody>
</table>
Suburban residential zones

Location:
• 15 km from city center

History:
• agricultural village founded in the 13th century
• part of Bratislava since 1972

Population:
1991: 1731 inhabitants
2001: 2086 inhabitants / +21%
2011: 4034 inhabitants / +93%

Finished projects: Strmé vršky
• Rezidencia Záhorská

Planned projects: Pod vrškami
• Záhorské sady
• Átriá Vlkovka
• Pod cintorínom
Suburban residential zones

Bratislava – Záhorská Bystrica

Former village
1,700 inhabitants

New residential areas
1,500+4,000 inhabitants
Suburban residential zones

- large number of new inhabitants
- underestimated public and sport facilities
- no sufficient public transport connection
- execution of planned facilities postponed to later project stages or not done at all
- quality and capacities of existing facilities insufficient considering increased number of inhabitants

<table>
<thead>
<tr>
<th>Development project</th>
<th>Number of housing units</th>
<th>Population growth</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>In family houses</td>
<td>In apartment blocks</td>
</tr>
<tr>
<td>Pod vřškami</td>
<td>110</td>
<td>1 000</td>
</tr>
<tr>
<td>Záhorské sady</td>
<td>106</td>
<td>-</td>
</tr>
<tr>
<td>Átriá Vikovka</td>
<td>42</td>
<td>-</td>
</tr>
<tr>
<td>Pod cintorinom</td>
<td>99</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>357</td>
<td>1 000</td>
</tr>
</tbody>
</table>

* - calculated 3 inhabitants per housing unit

Bratislava – Záhorská Bystrica
## Suburban residential zones

### Bratislava – Záhorská Bystrica

<table>
<thead>
<tr>
<th>Project</th>
<th>Realization</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Type of facilities</td>
</tr>
<tr>
<td><strong>Commercial segment</strong></td>
<td></td>
</tr>
<tr>
<td>Pod Vŕškami</td>
<td>RETAIL: shopping center</td>
</tr>
<tr>
<td>Záhorské sady</td>
<td>OFFICES: 200 m² RETAIL: 800 m² SERVICES: - services - 1000 m² - hobby center - 1000 m² - gardencraft - 800 m² - veterinary - 200 m²</td>
</tr>
<tr>
<td>Átriá Vlkovka</td>
<td>OFFICES + RETAIL + SERVICES</td>
</tr>
<tr>
<td>Pod cintorínom</td>
<td>RETAIL + SERVICES</td>
</tr>
<tr>
<td><strong>Non-commercial segment</strong></td>
<td></td>
</tr>
<tr>
<td>Pod Vŕškami</td>
<td>EDUCATION: kindergarten and primary school</td>
</tr>
<tr>
<td>Záhorské sady</td>
<td>HEALTH CARE: dentist - 100 m² SOCIAL CARE: - club - 500 m²</td>
</tr>
<tr>
<td>Átriá Vlkovka</td>
<td>HEALTH CARE</td>
</tr>
<tr>
<td>Pod cintorínom</td>
<td>-</td>
</tr>
<tr>
<td><strong>Leisure segment</strong></td>
<td></td>
</tr>
<tr>
<td>Pod Vŕškami</td>
<td>- sport hall - playgrounds - relax center</td>
</tr>
<tr>
<td>Záhorské sady</td>
<td>- fitnes - 300 m² - wellness - 300 m² - Indoor tenis courts - 300 m²</td>
</tr>
<tr>
<td>Átriá Vlkovka</td>
<td>- playgrounds</td>
</tr>
<tr>
<td>Pod cintorínom</td>
<td>-</td>
</tr>
</tbody>
</table>
Prefab housing estate  Suburban residential zones

Monofunctionality
- housing + basic facilities
- only housing

Physical structure - centrality
- hierarchy, unfinished centers
- homogeneity, no centers

Transport
- public transport
- car transport
Valid planning system

Law on spatial planning and building regulation (building act) no. 50/1976


Current issues:

- long terms preparation (Bratislava: 1993-2007)
- obstacles with changes (appr. 2 years)
- inappropriate scale for development and regulation plan
- absence of detailed development plans
- ownership of land not taken into account
- limited public participation (official board / public hearing)
- no discussion between city, developer and local community
- no flexibility – no space for negotiation
- ambiguous definition of parameters
- difficult professional language – obscure for ordinary people
- worked out by individual planners not planning authority
Current planning system
- complicated
- obligatory
- approved in advance
- detailed in city scale

New planning system
- simple
- flexible
- approved for planned development
- detailed in building scale
„Sleeping“ suburbs of Bratislava

How to support mixed use development in suburban residential areas

Thank you for your attention

Ing.arch. Oľga Melcerová, PhD. Faculty of Architecture STU Bratislava