

Sharing the urban road space

PIARC – C 4-3 Committee Seminar on „Urban Pavements“
Cracow (Poland) – 21-22 September, 2005

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Sub-Group 1

Sharing the Main Street

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Sharing the Main Street

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Goals

- to give an overview of different guidelines from all over the world for (re)designing a Main Street
- to make a catalogue of best practice examples
- to provide a list for further reading

Definition

- A Main Street is mostly an old street leading to a city centre
- Along such a street many activities take place

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Use of the Main Street

- Through traffic
- People live in these streets
- Or they work there
- Shops and restaurants
- Resting places
- Schools and religious buildings

Problems

- All these functions are often hard to combine in what is generally a narrow space
- Everybody has to share the Main Street
- Road designers, economist and planners struggle with a Main Street

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Definition of an urban main street :

It is a (mostly old) street in an urban area leading to a city centre. Along such a street many activities take place; people live in these streets or they work there. There are shops that need to get goods to sell and consumers to buy things and restaurants and resting places. Sometimes you can find schools or religious buildings along the street. And there is through traffic on their way to the city centre.

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Solutions

- We want to make things a bit easier for them to offer them a range of possible solutions from all over the world;
- both in theory and in practice

Outputs

- Guidelines
- To draw conclusions about designing a Main Street
- Exploring different possible approaches

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Guidelines

- Australia
- Belgium
- Canada
- Denmark
- Finland
- France
- Germany
- Hungary
- Japan
- Netherlands
- Norway
- Scotland
- Slovakia
- South Africa
- Switzerland
- United Kingdom (Scotland)
- USA

Examples

- Hikone, Japan
- Oslo, Norway
- Arnhem, Netherlands
- Utrecht, Netherlands
- Hennef, Germany
- Bern, Switzerland
- Bratislava, Slovakia
- Orleans, France*
- Schwerin, Germany*
- Wuppertal, Germany*
- Okayama, Japan
- Durban, South Africa

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Outline of report

- Aim, definitions etc.
- Results from guidelines
- Examples from all over the world
- Bibliography (and interesting websites)

Analyses

- Comparing guidelines on different design elements
- Comparing examples on effects of (different) measures

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The analyses of the documents were based on three different themes:

1. The type and approach of the documents
2. How the urban main street is dealt with
3. Design philosophy and subjective evaluation

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1. The type and approach of the documents

- Standards
- Guidelines
- Handbooks
- Catalogue of examples

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2. How the urban main street is dealt with

- The definition of an urban main street comprises widely different streets – no precise comparison
- The norm is to divide roads into categories
- Transport function is important for classification
- Focus on the needs of through traffic
- Ways to treat the environmental friendly modes
- No strong policy on the provision for bikes
- Bus stop are often the only PT facility mentioned

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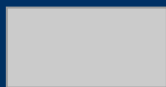
3. Design philosophy and subjective evaluation

- The relation between transport function and urban setting
- Focus on environment-friendly transport nodes
- Comprehensive documents
- Schematic documents

Examples

Space and traffic characteristics of selected examples

Traffic volume → Width ↓	10,000-30,000	30,000-50,000
20 – 30 m	Hennef, Germany	
30 – 40 m	Bratislava, Slovakia	Wuppertal, Germany Durban, South Africa



No example

Examples: Wuppertal / Germany

Deficiencies before conversion

- high traffic volume
- predominance of car-traffic
- unattractive pedestrian tunnels
- insufficient recreation areas for pedestrians
- high velocity
- high exhaust impact
- unused areas because of trolley line ceasing

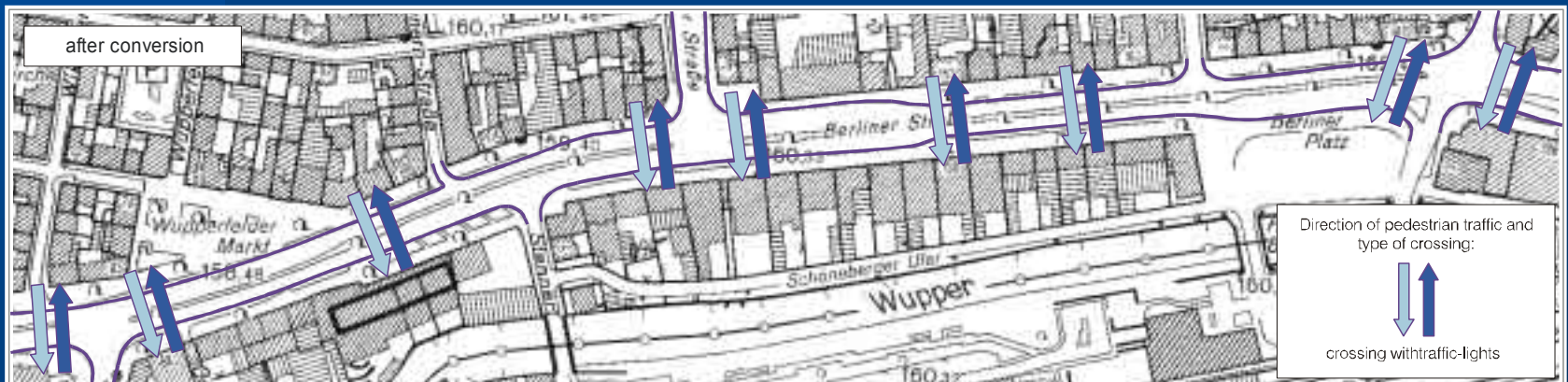
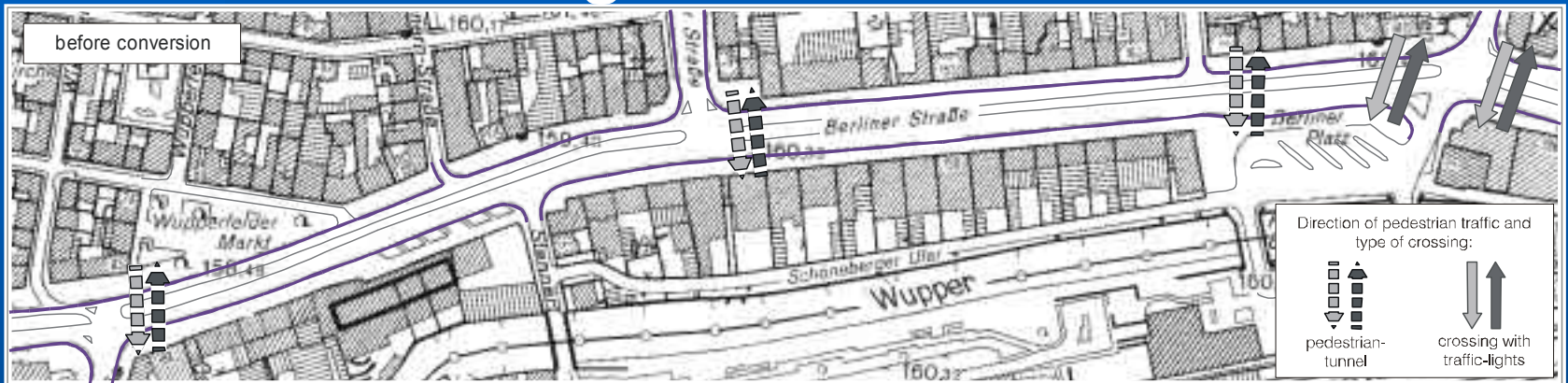
Examples: Wuppertal / Germany

Conversion measures:

- lane width reduction from 3.50m to 3.25m
- building of additional overground pedestrian crossings
- reduction of lane numbers
- setup of bus lanes and busgates
- creating of recreation and rest areas for pedestrians
- building of a planted middle section
- bicycle lanes diverted from pedestrians
- new bus station

Examples: Wuppertal / Germany

Pedestrian Crossings

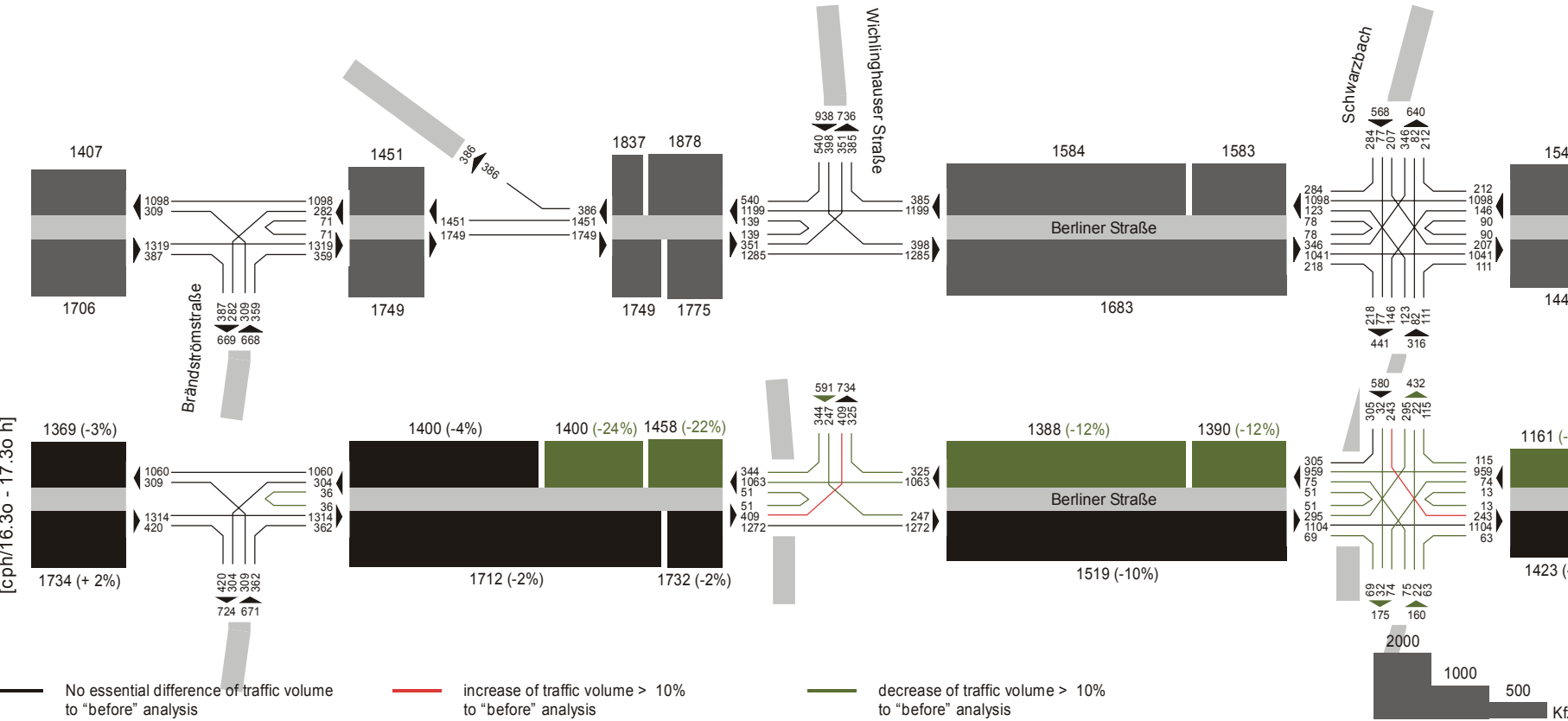


Examples: Wuppertal / Germany

Results of the evaluation

- relative constant loading
- reduction of delays
- reduction of traffic congestions
- homogenisation of traffic flow
- but: interference of emergency vehicles because of the reduced lane width

Examples: Wuppertal / Germany



Examples: Hennef / Germany

Deficiencies before conversion

- historical buildings and ensembles are ignored
- roadway controlled the street space
- heavy traffic during peak hours
- cyclists and pedestrians needs are ignored

Examples: Hennef / Germany

Conversion measures:

- smaller driving lanes
- more space for pedestrians and cyclists
- creating of recreation and rest areas for pedestrians
- building of a paved middle section for easier pedestrian crossing and speed reduction

Examples: Durban / South Africa

Situation before redesign of the Marine Parade:

- major through road
- City is cut off from the beachfront
- conflicts between pedestrian and vehicular traffic

Examples: Durban / South Africa

Situation after redesign of the Marine Parade:

- new crossing facilities with traffic lights and zebra stripes
- People places along the route
- New designed street furniture

Examples: Bratislava /Slovakia

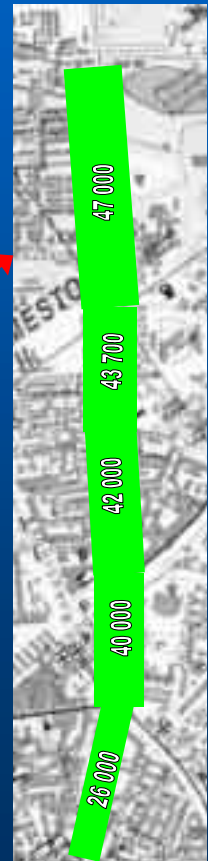
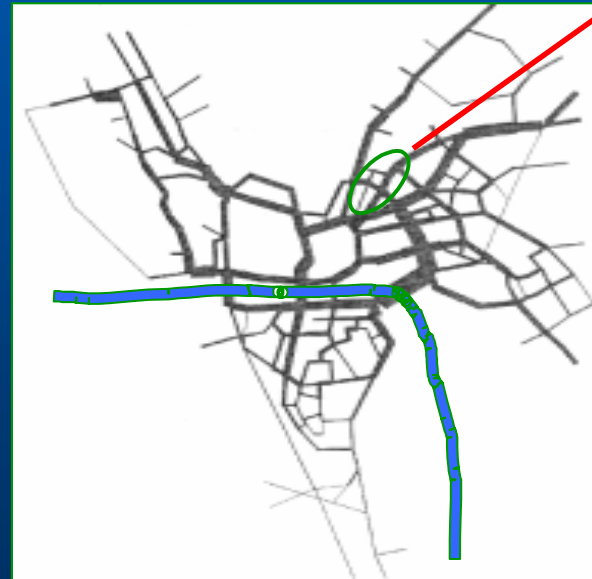
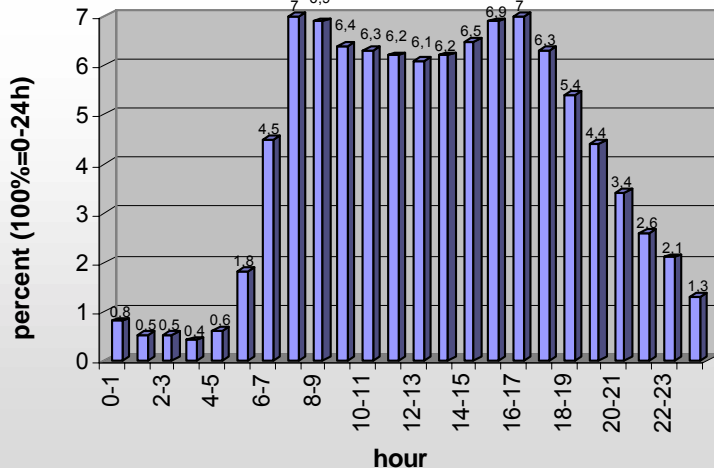
Krizna-Vajnorska Street Historical Radial Road

Krizna - spot measures at Benka square
Vajnorska – line measures of 900 m

Examples: Bratislava /Slovakia

Traffic Load

Daily variations of motor car traffic in Bratislava



Examples: Bratislava / Slovakia

Deficiencies before conversion of Benka square at Krizna street:

- busy road traffic during whole day
- very high speed
- irregular on-street parking
- strong pedestrian transversal and longitudinal traffic
- ignored cyclists and pedestrians needs

Examples: Bratislava /Slovakia



M. Benka square before



Krizna street – cross section



M. Benka square after

Examples: Bratislava /Slovakia

Conversion measures at Krizna –Benka square :

- barrierless pedestrian crossing
- subterranean parking in storeyed garage
- new greenery, fountain and street architecture
- rest places for pedestrians
- new polyfunctional building – housing, shops, restaurants, offices

M. Benka square today - new street architecture



Ideas on Krizna street for future



M. Benka square today - greenery and rest facilities

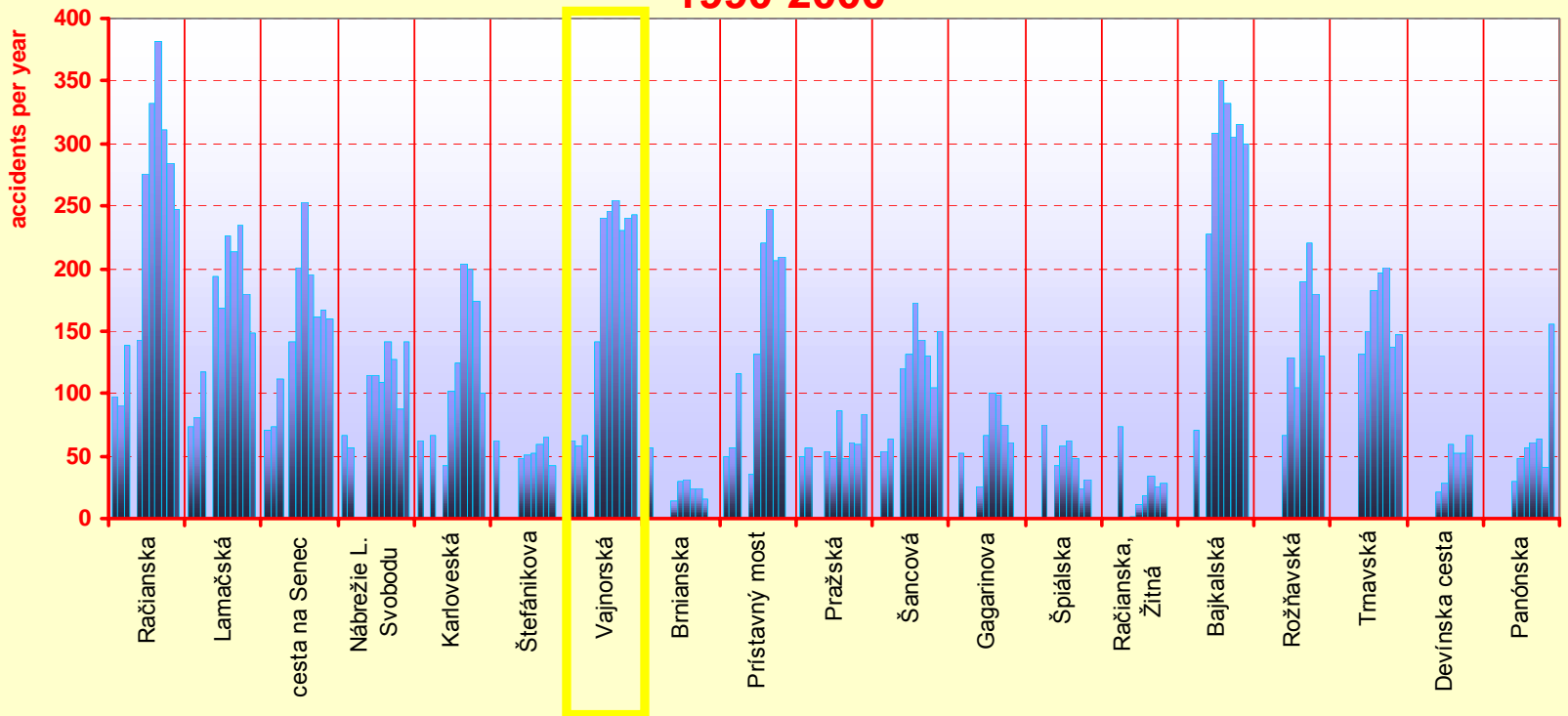
Examples: Bratislava / Slovakia

Deficiencies before conversion of Vajnorska street:

- busy road traffic during whole day
- very high speed
- very high accident rate
- unemployed space of P&R facility
- insufficient location of PT stops
- monofunctional buildings and areas
- ignored cyclists and pedestrians needs
- but many attractive pedestrian and cyclists destination (sports and recreational areas)

Examples: Bratislava /Slovakia

**ACCIDENTS - roads with the highest number of accidents
1990-2000**





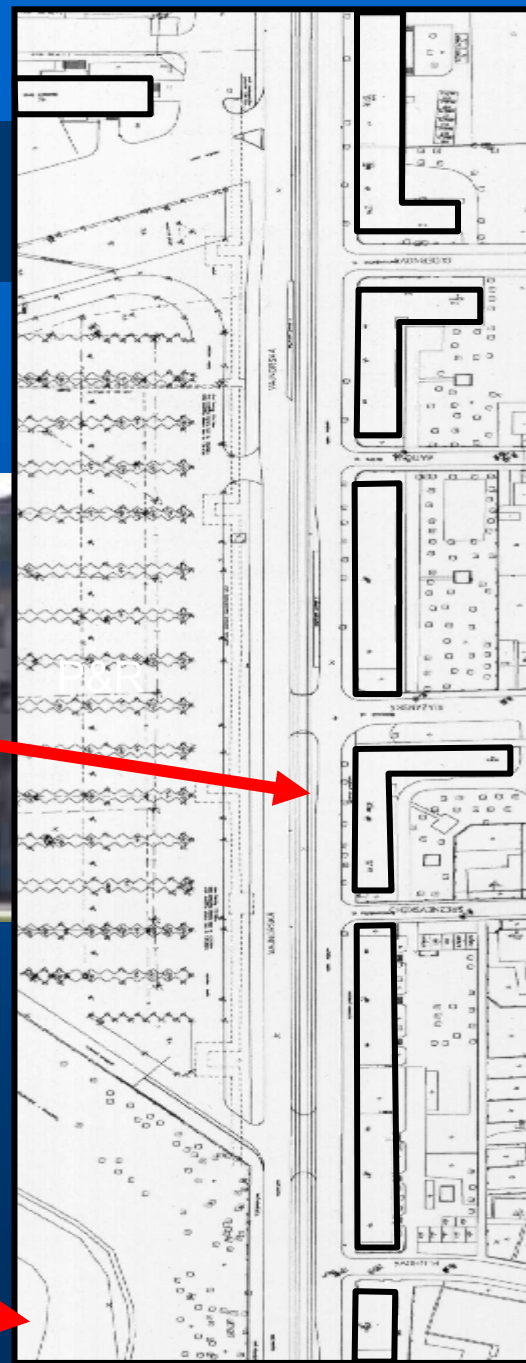
Inter football stadium in the adjoining sport area



Old blocks of houses alongside Vajnorska street



Lake Kuchajda in the adjoining rest complex



Examples: Bratislava / Slovakia

Conversion measures at Vajnorska street:

- reconstruction of tram track in middle section with anti-noise measures
- better location of PT tram and bus stops combined with barrierless pedestrian crossings
- more space for pedestrians and cyclists
- creating of recreation and rest areas for pedestrians with greenery, waterworks and street architecture
- new of polyfunctional building complex and new POLUS city shopping centre

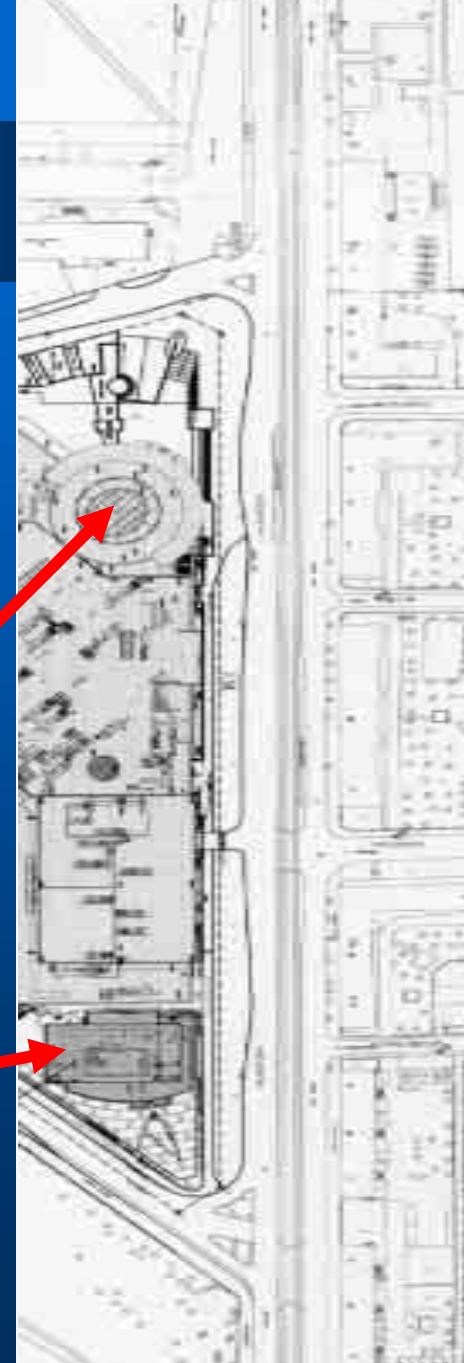


View over Vajnorska radial in the direction to the city centre

Milenium Tower II.



Fountain in front of entrance of the centre



Polyfunctional building and off-street parking



Bus stop in front of the POLUS
shopping centre – Vajnorska street



Busy access traffic
to the shopping centre

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Conclusions:

- Redesign only when problems show necessity
- Combine selected functions carefully
- Avoid boring uniformity
- World wide trend: more space for cyclist and pedestrian and time sharing
- Allow motorized traffic than allow parking
- Public involvement = acceptance

A night photograph of a city skyline with fireworks exploding in the sky over a body of water. The fireworks are bright red and white, creating a large, dense cluster in the upper half of the frame. The city lights are visible in the background, including a prominent white tower with a green roof. The water in the foreground reflects the lights and fireworks.

**Thank you for your
attention!**