FORMAT
Forecast and Roadmapping for Manufacturing Technologies

Post-industrial future of Konin city region

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urban workshop

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Outline

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1. Introduction about Konin city and county
2. Stage FOR
3. Stage M
4. Stage A
5. Experience collected

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Konin
Berlin
Warsaw
Wrocław
Prague
Kaunas
Kaliningrad
Vilniu
Gdynia
Gdansk
Hrodna
Szczecin
Bydgoszcz
Berlin
Poznan
Warsaw
POLAND
Lodz
Leipzig
Lublin
Wroclaw
Dresden
Katowice
Krakow
Ostrava
Lviv
CZECH
REPUBLIC
Brno
Nationalpark
Bayerischer Wald

17km

5km

Data

- population Konin city 77k (Varese 80k),
  - Konin region 205k
- jobless 4,7k
  - Konin region 12k
- Planned changes in industry:
  - 1 power station scheduled to close in 2017,
  - mine scheduled to close gradually by 2030
- Power stations:
  - Konin 193 MW*, Pątnów II 474 MW*, Pątnów I 1,2 GW*, Adamów 600 MW*;
  - tot. 2.5GW* 8,5% of national power

* MW of electric power

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FOR: Main question

How will a quality of life change in Konin until 2050?

Consider:

1. economy (industry, companies, entrepreneurs)
2. job posts creation
3. education system
4. demographic structure
5. natural environment quality

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M_1: Dealing with system's size

How will a quality of life change in Konin until 2050?

Quality of life has been defined as being created by five features:

- Business activity and job market
- Leisure activities
- Natural environment
- Transport / infrastructure
- Education

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M_1: Example of initial system description

Business activity and job market

		Actors		
	Functions & elements of a system	Council	NGO	Private business
Groups of functions & elements	Job access	Labor office, Job creation	Job creation, Job Activation Unit, Intermediate party	Job creation, Employment Agency
	Economic structure in the region	Spatial planning, Fiscal programs, Concessions, Bureaucratisation		
	Access to goods and services	Rent collection, Hospitals, clinics	Research, prevention	private clinics, commerce

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M_2: Alternative solutions in 5 parallel tracks

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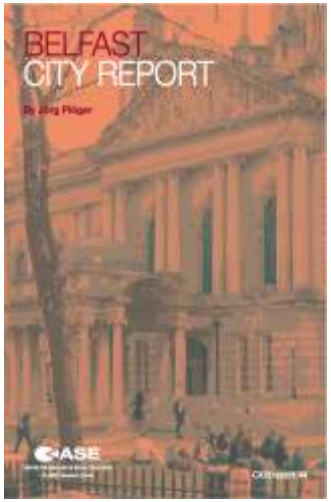

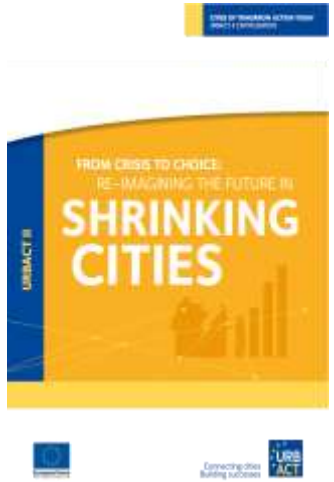

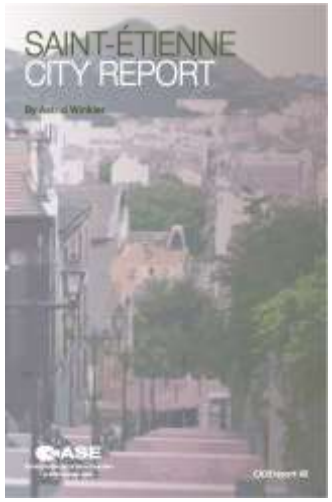

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M_2: Alternative solutions

1	Education programs answering to job market demand
2	Entrepreneurship incubator
3	City-bike system
4	City-bike promotion program
5	Integrated cooperation between council, business and NGO (Increased role of business council)
6	Municipal beach
7	Private and public zero-energy buildings
8	Turning a city towards a river

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M_3: Measures

	#1	#2	#3	#4
	Performance			
Job market/Business	jobless [people]	new business [per capita]	employed [people]	employed in mining and energy sector
	Expenses			
	investments support from the council [PLN]*			

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M_3: Measures

	#1	#2	#3	#4
	Performance			
Education	Ratio of education expenses and GDP	People employed after training by job office	People active in voluntary activities	Number of pupils/students using job training
	Expenses			
	Jobless aged 18-25	Six components of city's education budget		

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M_3: Measures
Data Accessibility

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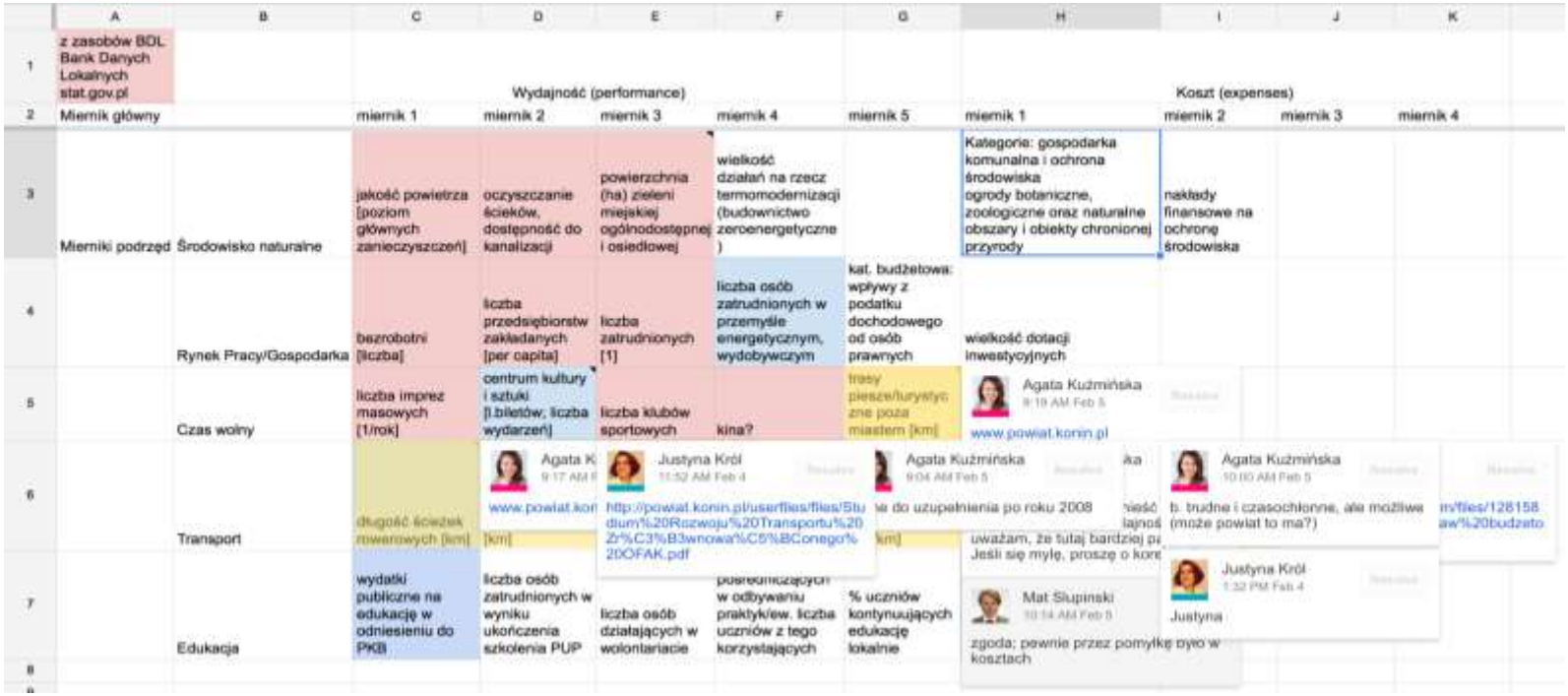
Cells in red - accessible through regional statistical service
Blue - evaluated as key measures
Comments - collected indications where to access data



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M_4: Alternatives Selection

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	Alternative solution	Measures associated	Domains related
1	Education programs answering to job market demand	7	2
2	Entrepreneurship incubator	5	2
3	City-bike system	5	3
4	City-bike promotion program	3	3
5	Integrated cooperation between council, business and NGO (Increased role of business council)	7	2
6	Municipal beach	5	3
7	Private and public zero-energy buildings	1	1
8	Turning a city towards a river	5	2

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M_4: Alternatives Selected

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1. Investment in “returning city to river” - creation of leisure infrastructure
2. City-bike infrastructure and supporting program
3. Inter-sectoral policy for education and entrepreneurship through tight cooperation Business+Council+NGO

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M_5: Returning city to river

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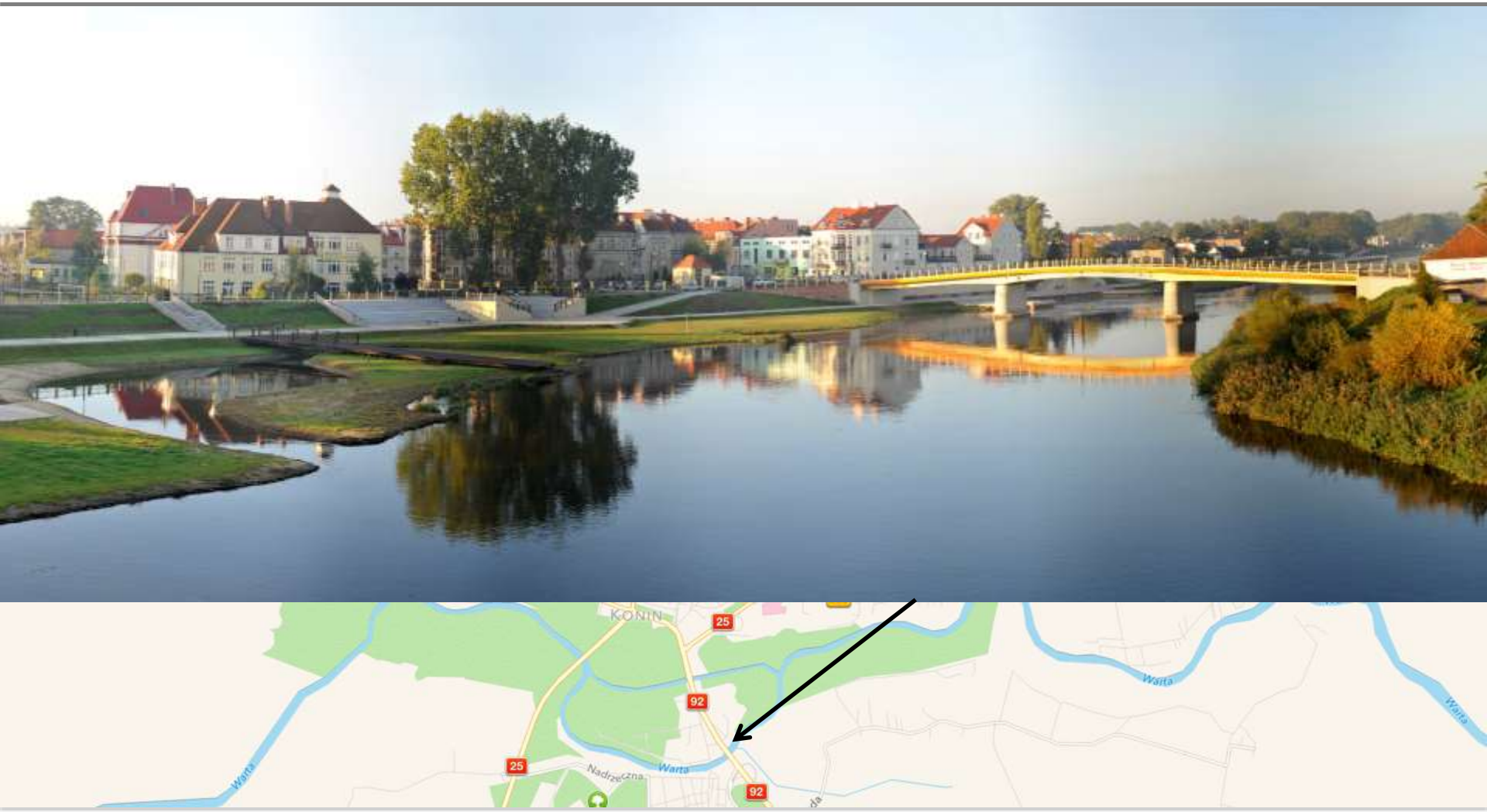

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M_5: Returning city to river

Pro	Con
Inland waterways exploitation - commercial, leisure (support in H2020)	Risk of low interest of population
Growth of leisure space	Risk of river and banks pollution
River banks development	Need for maintenance i.e. infrastructure and people assuring security (fences, life guard)
Exploitation of nature-created area	Noise and people movement during late hours
Development of space for leisure activities and small cultural events	More objects to be endangered by floods
River incorporation into city life	

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1980

- konserwacyjne

- handlowa (?)

- pow. ter. rekr. wzdł. rzeki 10%
2. niezagospodar.
3.

1. ?

2015

① Przywrócenie m. rzeki

1. m. Konin - inwestycje [PLN, szt.] - konserwatyjne
2. Zag. gospod. środ. nat. [km²]
3. Sieć żegl. śródląd.

<zagospodarowanie terenów wzdł. cieków wodnych>

1. pow. ter. rekr. wzdł. rzeki [km²]
2. pow. zieł
3. liczba podmiotów gosp.

niewielki wzrost 15%

1. żegluga
2. ścieżki rowerowe
3. infrastruktura
   + przestrzenna i techn.

STYCZEŃ LUTY M

2050

+

1. inwest. strategiczne zrealizowane
2. wzrost
3. podwyższenie jakości

1. wzrost, 60%
2. ukształtowana
3. wzrost

1.

Step M_5

	1980	2015	2050
super-system		1. City's council activity 2. Environment development 3. Waterways	
system		<Development> of <river* banks> 1. Leisure area along river 2. Maintained green area 3. Business initiatives	
sub-system		1. Navigation activity 2. Bike tracks 3. Infrastructure 4. Service	

* river - includes river and channels, both qualified and not qualified for commercial navigation

A_1 Problems & limited resources

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	#1	#2	#3	#4
	Problems			
Job market/Business	Decreasing job places corresponding to competences of workforce	Adaptation of trade to needs of business	Radical decrease of jobs in industry	Low number of small and micro entreprises
	Limited resources			
	Braun coal deposits designated for exploitation	Job posts in heavy industry	Entrepreneurs hip tradition	Size of B2B space around large companies

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A_1 Problems & limited resources

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	#1	#2	#3	#4	#5
	Problems				
Education	Adaptation to needs of job market	No accountability for no response to job market	Low quality of education	Need for development of entrepreneurial competences	Complexity of education programs construction
	Limited resources				
	Competences of management staff				

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A_1 Support from Scenario workshop

Draft report from scenario workshop was used to extract:

11 problems e.g.:

- topographic divisions,
- artificial society tights,
- lack of local identity

16 resources e.g.:

- lakes,
- multi-cultural background,
- sailors,
- number of craftsmen (low)

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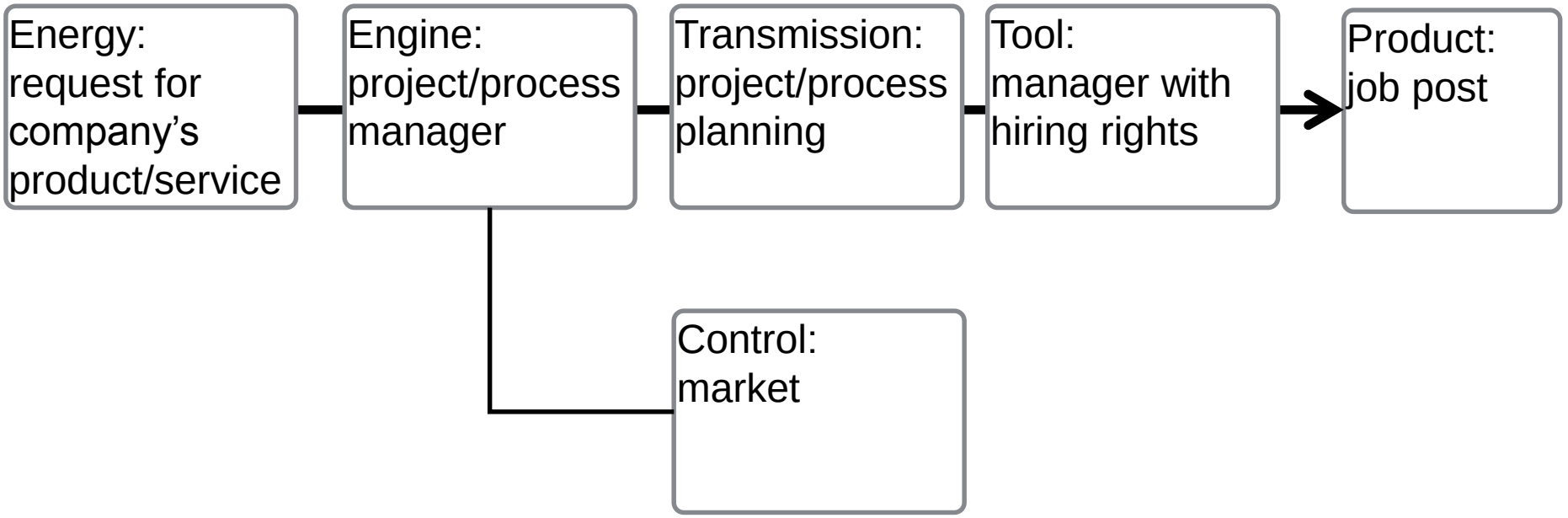
A_2 Minimal Technical System

Job market/Business



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A_2 Minimal Technical System

Laws of Technical Systems Evolution:

- Dynamization: projects oriented structures in companies,
- Transition to super-system: extension of operation area e.g. nation-wide, international
- Transition from macro to micro level: self-employment
- Increasing S-field involvement: coordinated self-employment

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A_2 Minimal Technical System

Observations have been done for all levels in System Operator. Conclusions from A_1 and A_2 have been written in a form of short glimpses for each of alternative solutions.

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A_2 Returning city to river

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Glimpse

Thanks to creation of a minimal and efficient infrastructure utilization of river banks surroundings will be increased.

“minimal” - investments will be limited due to the lack of demographic stability what involves a number of potential users

“efficient” - limited resources will be spent on infrastructure facilitating self-organization of leisure activities by population

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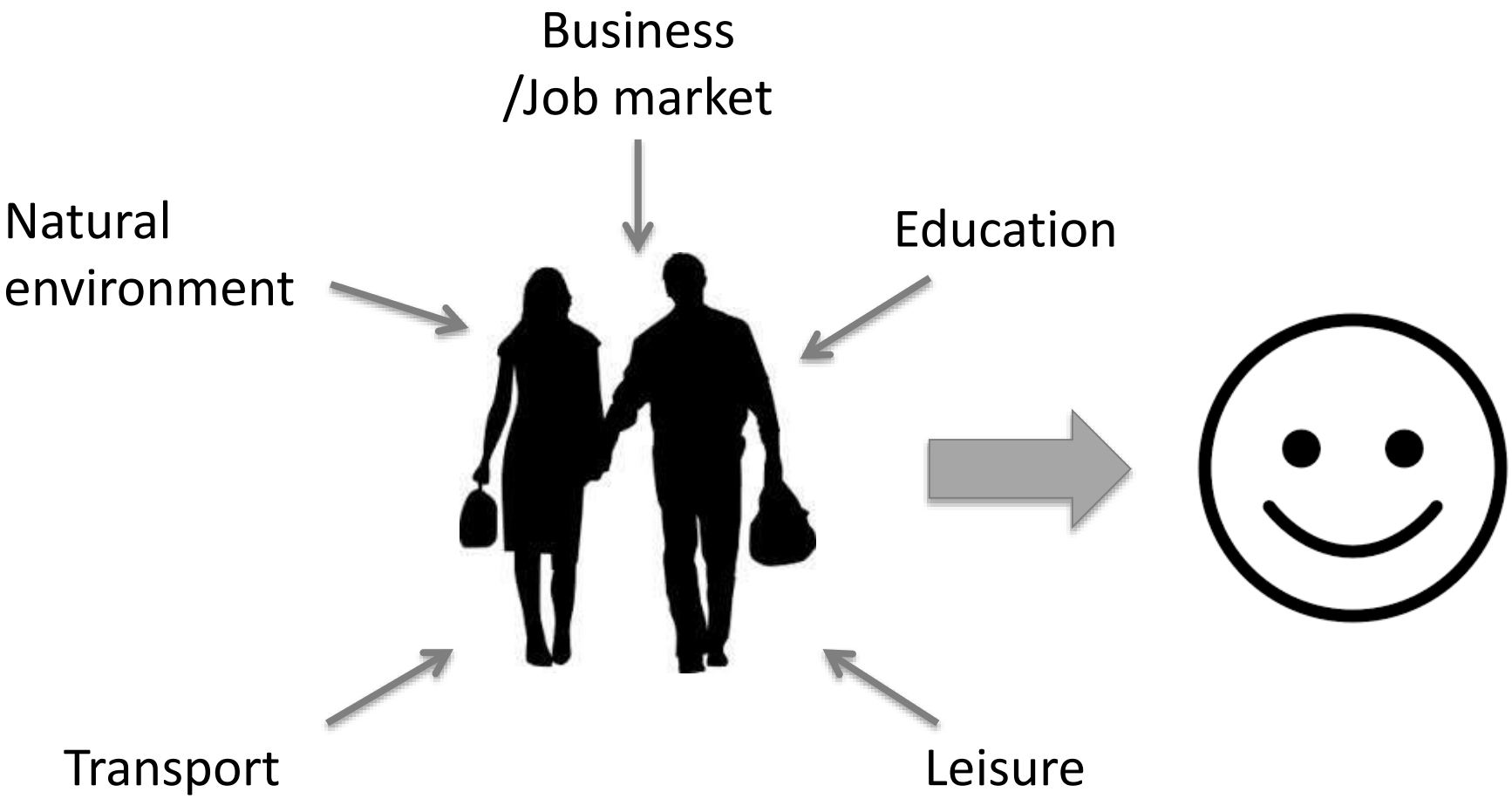
A_3 Quantitative forecasting



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A_3 Quantitative forecasting Data sets

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#	Logistic	Ideality
1	Population	Population / total budget expenses
2	Employed	Employed / new business registration
3	Number of people training in sport clubs	Number of people training in sport clubs / budget expenses for sport
4	Number of students continuing education (option)	
5	Number of public transport tickets sold (option)	Number of city transport tickets sold (option) / budget expenses for public transport
6	Green area administrated by city	Green area administrated by city / budget expenses for maintenance

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A_3 Quantitative forecasting Population

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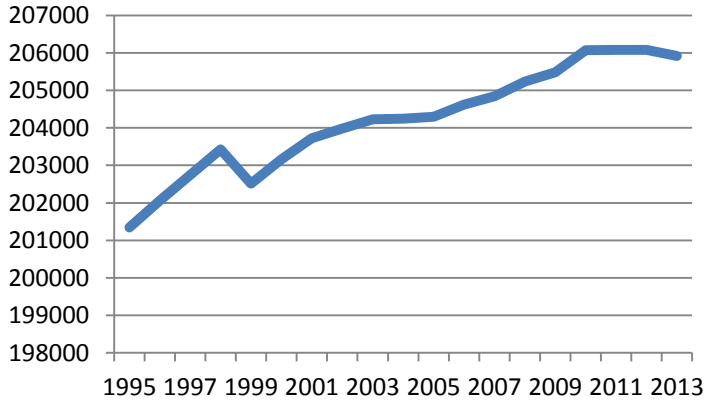
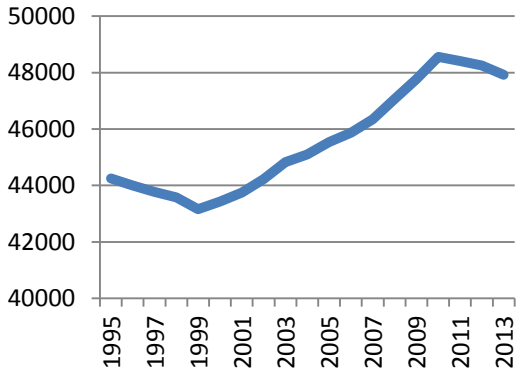
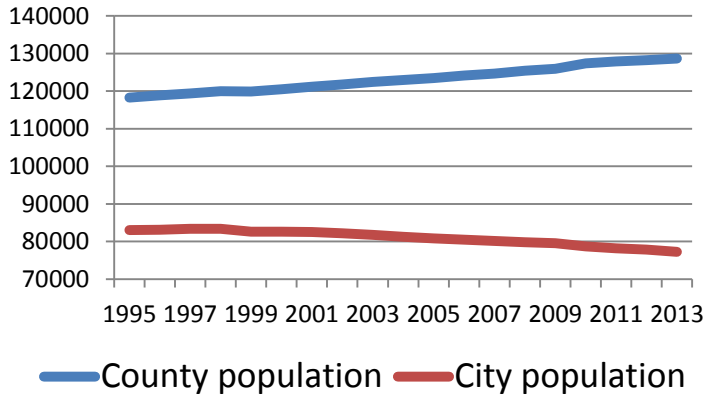
Population in study area



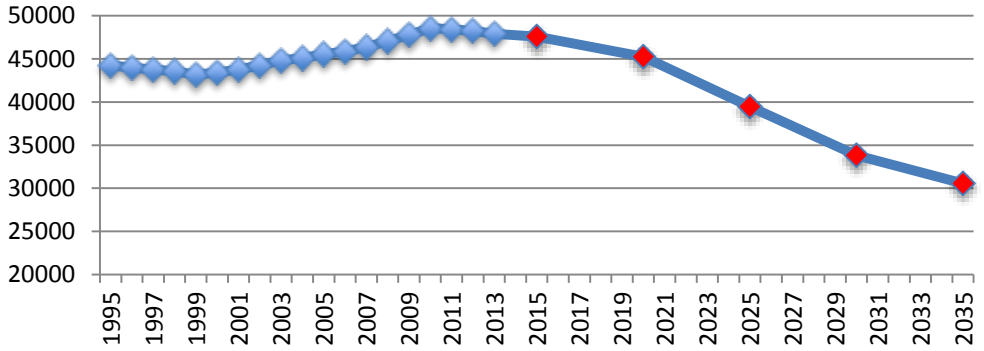
Population 24-39 (county+city)



Population in study area



Statistical Office forecast of 2012 for population of age 24-39 (county+city)



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A_3 Quantitative forecasting Transport

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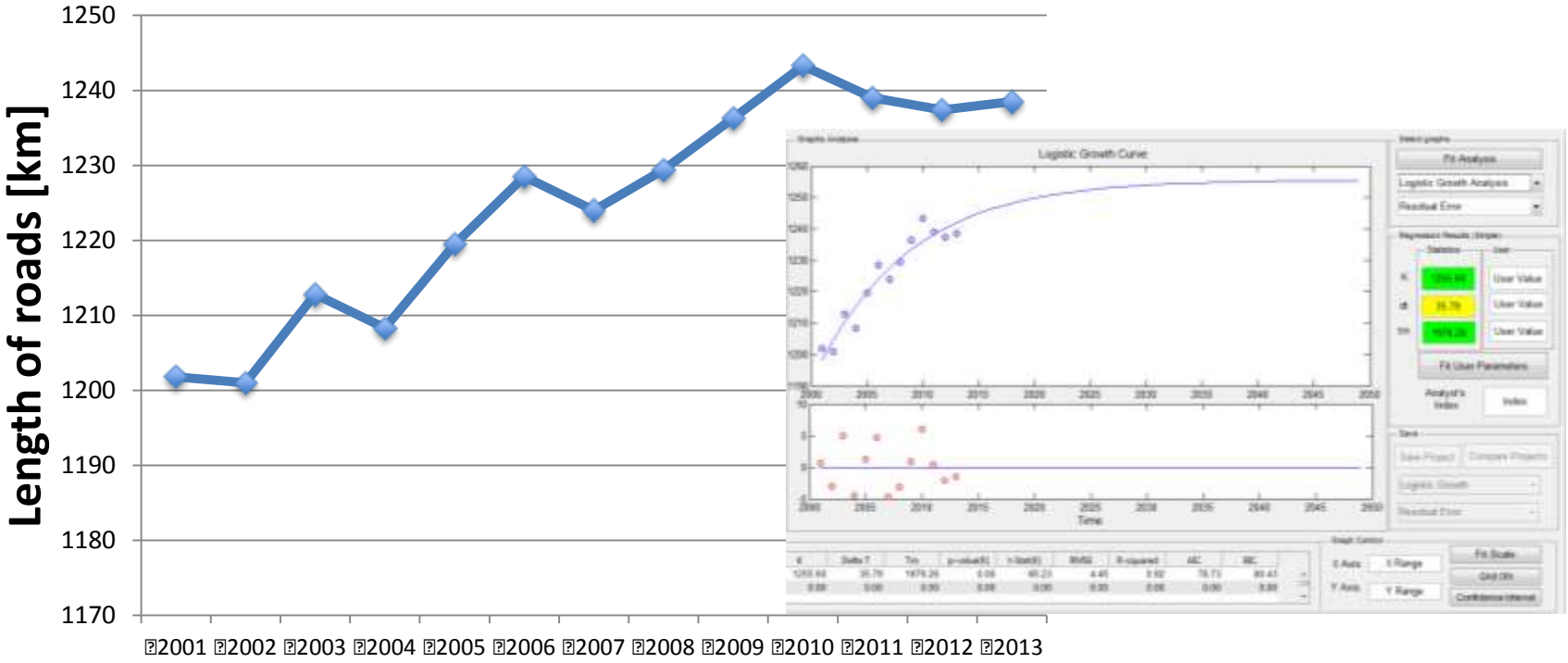
County roads with hard and improved surface (county + city of Konin)



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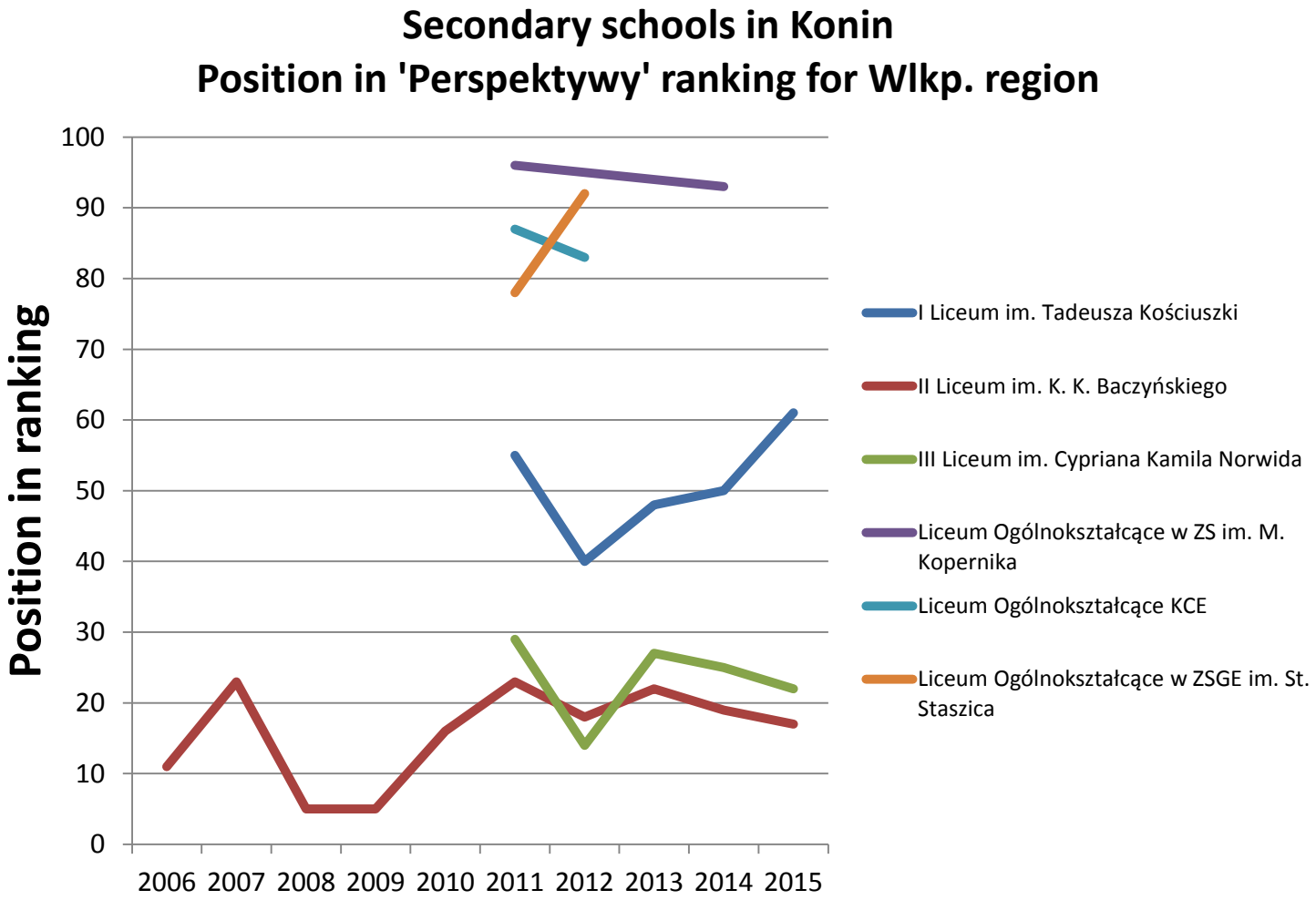
A_3 Quantitative forecasting Education



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A_4 Summary

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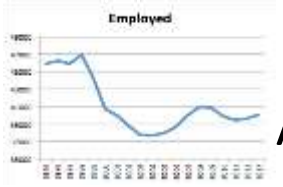
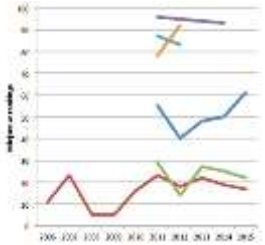
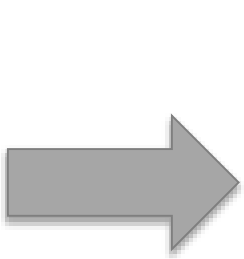


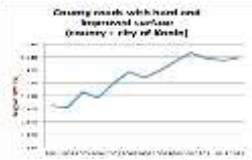
Business /Job market



Education

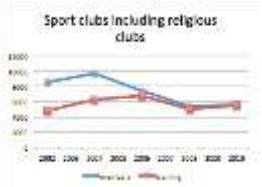
Natural environment





Transport

Leisure



Experience

- Data accessibility and use
- Opinions of users
- Difficulty in interpretation of technical oriented tools for non-technical systems

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