

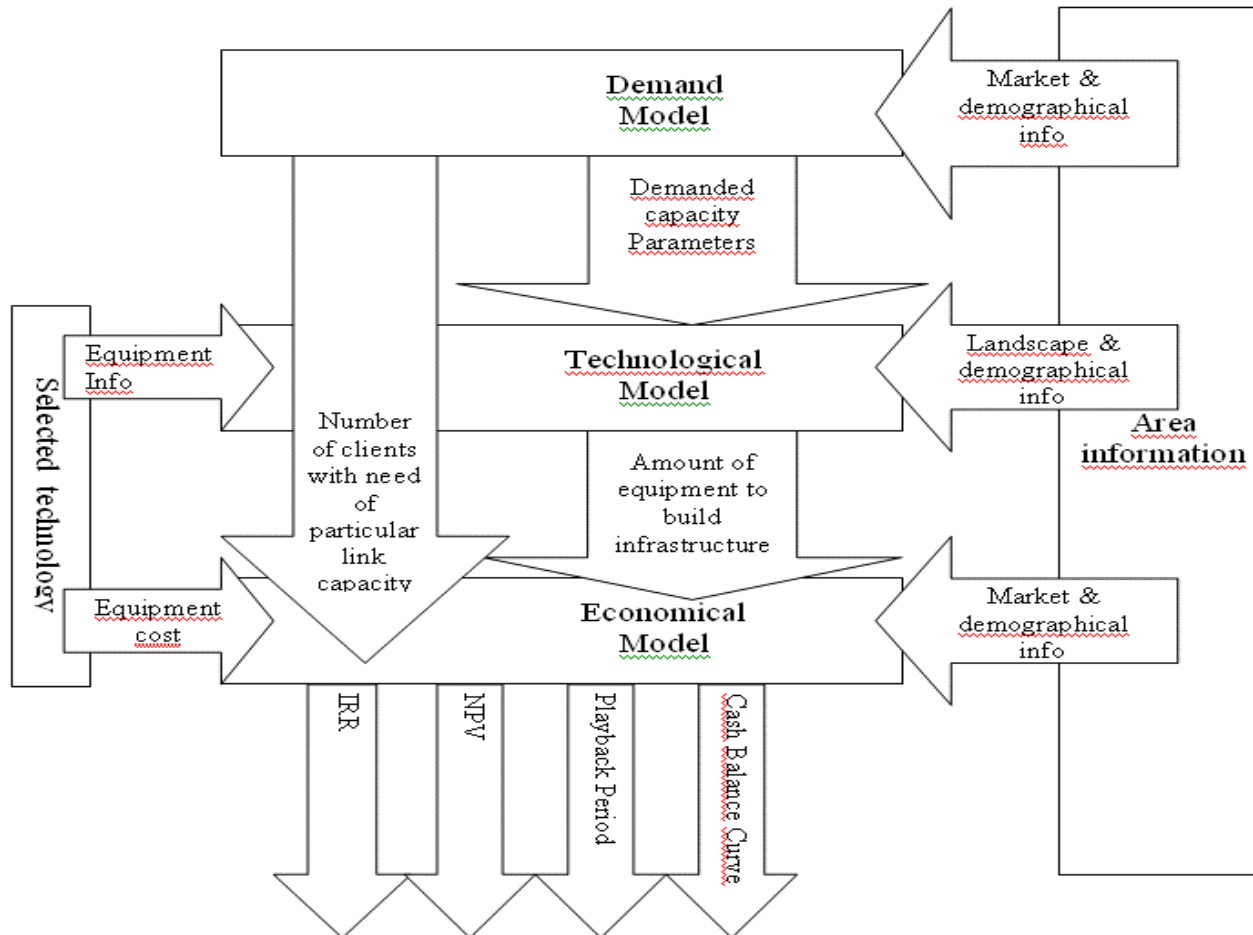
Techno-economical analysis of broadband development for city of Łódź



*National Institute of Telecommunications
Warsaw, Poland*



Techno-economical model



Available data about environment

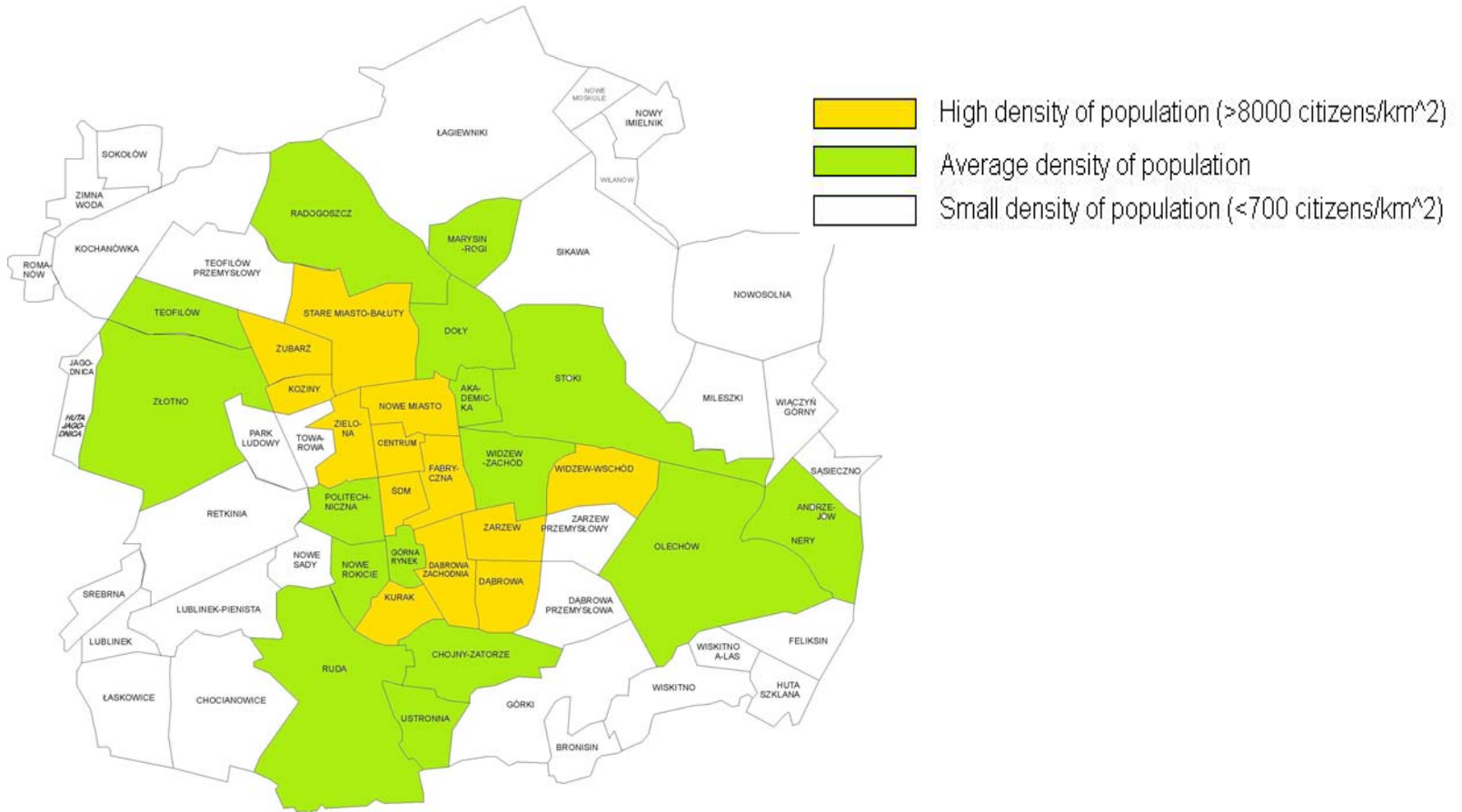


- Łódź area divided to housing estates zones
- Number of households
- Number of big, average and small companies
- Density of population
- Number of public offices
- Area size



City of Łódź

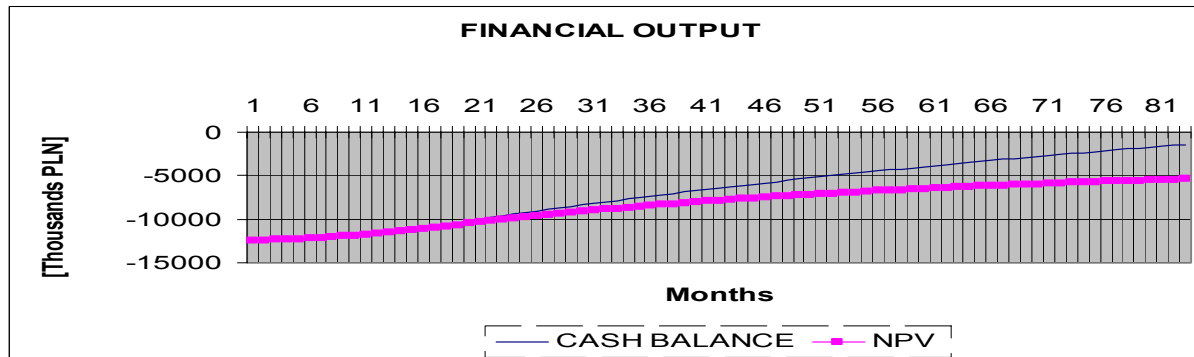
ŁÓDŹ DIVIDED TO HOUSING ESTATES AREAS



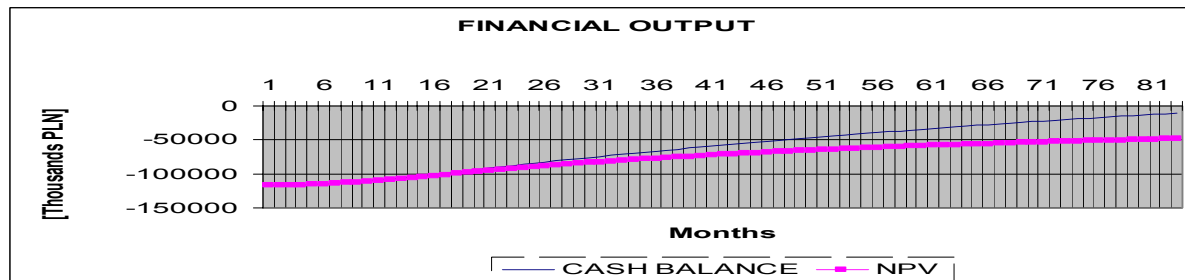
Example of analysis, based on WiMAX technology



- Market share (10% assumed)



Financial output when we carry out test for terrain c (low population area).



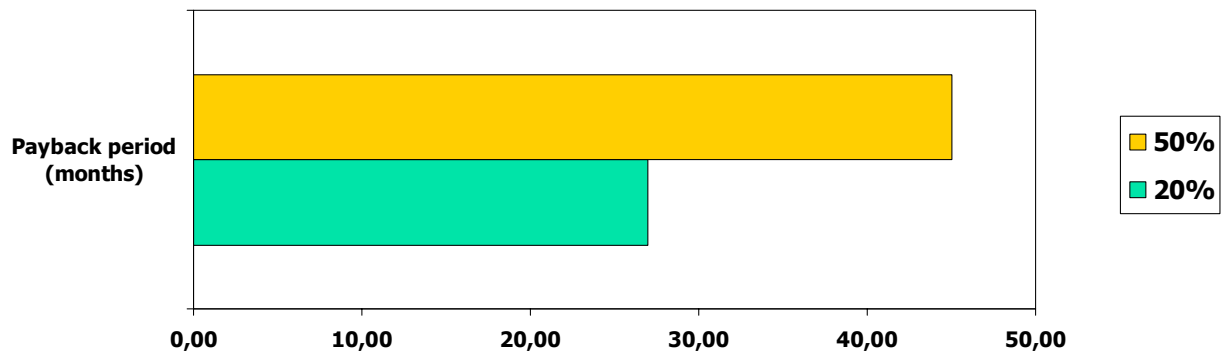
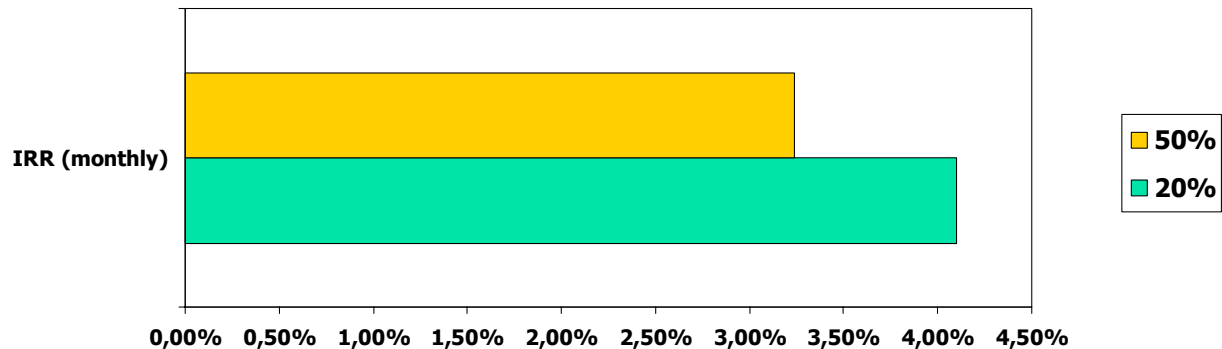
Financial output when we carry out test for terrain a (high population area).



Example of analysis, based on WiMAX technology



- Service operators' profit margin

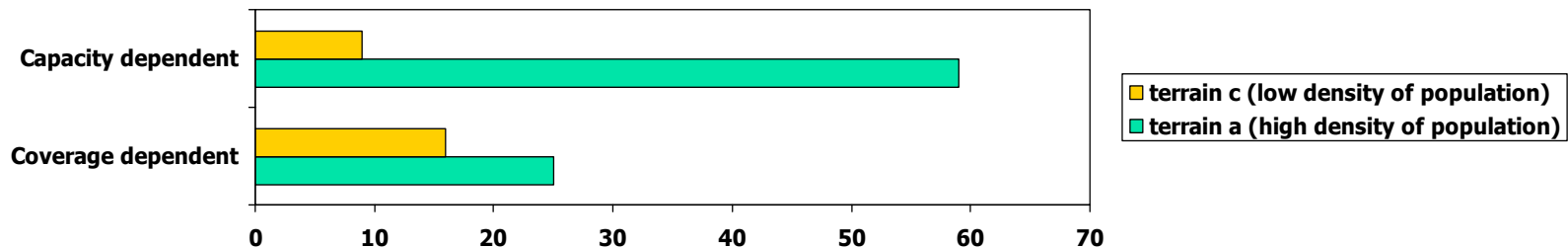


Example of analysis, based on WiMAX technology



- Village areas –the worst deal?

Number of base stations (WiMAX technology) depending on the coverage and demanded capacity in selected area



Example of analysis, based on WiMAX technology



- Village areas –the worst deal?

Not always.

	village	Suburban area	Urban area
big enterprises	0,8	1,7	6
average enterprises	3	12	43
small enterprises	28	275	1306
schools	6,5	5,7	16,5
households	66	936	5515
households to enterprises ratio	1,723238	3,179348	4,021145

Number of subscribers per square km in particular areas

