CAPITAL INVESTMENTS PLAN FOR 288 STREETS FROM CLUJ-NAPOCA

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This study critically analyzes how the theoretical concept of Capital Investments Plan (CIP) can be employed in order to better understand the financing decisions regarding various investment project undertaken by the Cluj-Napoca City Hall. Different financing scenarios are then analyzed.

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The theoretical framework regarding the concept of "Capital Investments Plan" has already been addressed in depth in the literature[1]. Therefore, this analysis

[1] Adrian Mihai Inceu, Dan Tudor Lazăr, „*Managementul financiar al comunităţilor locale*", ISBN 973-99690-3-8, Ed. Gewalt, Cluj-Napoca, 2000; Ed. Marineasa, Timişoara, 2003, http://www.civitas.ro/docs/management_financiar.doc; Dan Tudor Lazăr, Adrian Mihai Inceu, "*Metodele bugetelor pe programe şi performanţă*", Revista Transilvană de Ştiinţe Administrative (ISSN 1454-1378), nr. 3(12) 2004, pp. 99-105; Adrian Mihai Inceu, Dan Tudor Lazăr, „*Programul de investiţii de capital*", Revista Transilvană de Ştiinţe Administrative (ISSN 1454-1378), nr.2(5) / 2000, pp. 190-199; Dan Tudor Lazăr, Adrian Mihai Inceu, Paul Zai, „*Elemente de fundamentare a cheltuielilor municipiului Baia Mare folosind metode moderne de elaborare a bugetului*", în vol. "Lumea financiară – Prezent şi perspective", Ed. Casa Cărţii de Ştiinţă, Cluj-Napoca, 2004 (ISBN 973-686-660-2), pp. 317-324;

focuses on a case study that illustrates how this concept could be employed in practice in order to analyze the financial decisions of local municipalities.

In order to better understand the method of Planning, Programming and Budgeting Systems (PPBS), the concept of capital investment program (CIP) was employed for a public works project involving 288 streets in Cluj-Napoca Romania. In the case study the street rehabilitation program in Cluj-Napoca is briefly described and critically assessed in light of the aforementioned methods. The streets that are part of this program are located in the city's most important neighborhoods: Andrei Mureşanu, Aurel Vlaicu, Bulgaria, Central-Horea, Dâmbu Rotund, Georgheni, Grigorescu, Gruia, Iris-Oaşului, Manaştur, Mărăşti, Plopilor, Someşeni, Zorilor, N. Titulescu, and Cordoş. The analyzed program aims to rehabilitate the most important streets from each of these neighborhoods. The table below shows the number of streets in each neighborhood that are going to be rehabilitated in the near future.

Table 1

Neighborhood Name	Number of Streets
Andrei Mureşanu	30
Aurel Vlaicu	8
Bulgaria	14
Central-Horea	14
Cordoş	12
Dâmbul Rotund	46
Gheorgheni	7
Grigorescu	15
Gruia	26
Iris-Oaşului	21
Mănăştur	6
Mărăşti	12
Plopilor	7
Someşeni	45
Titulescu	8
Zorilor	17

The indicators used in this analysis for each street are: the surface of the street, the length of the street, number of persons who reside on a certain street, tax value, and estimated value in Euro and ROL for the rehabilitation of the street.

Paul Zai, Adrian Mihai Inceu, Dan Tudor Lazăr, „*Elaborarea Programului de Investiţii de Capital la nivelul bugetului judeţului Bistriţa – Năsăud*", în vol. "Lumea financiară – Prezent şi perspective", Ed. Casa Cărţii de Ştiinţă, Cluj-Napoca, 2004 (ISBN 973-686-660-2), pp. 409-418.

Table 2

No. crt.	Street Name	Street Surface	Length	No Persons/st.	Tax value	Estimated value Euro	Estimated Value Thousands ROL
1	Lunetei	1710	297	37	83.899.835	97.165	3514652,38
2	Malinului (partialy)	3580	510	103	194.748.665	203.421	7358144,412
3	Alexandru D. Xenopol	2400	240	29	517.834.335	136.372	4932847,984
4	Ioan Pop Reteganu	1860	310	86	188.840.167	105.688	3822946,336
5	Matei Basarab	1336	100	39	29.424.417	75.913	2745925,036
6	Victor Hugo	1734	80	28	45.486.666	98.528	3563954,816
7	Zaharia Barsan	1948	204	41	38.690.333	110.688	4003806,336
8	Silviu Dragomir	2660	380	11	11.439.000	151.155	5467578,66
9	Jozsef Attila	3150	350	94	97.207.749	178.988	6474353,936
.....							
101	Viorelelor	2300	258	11	9.453.000	181.668	6571294,896
102	Timisului	4500	650	73	270.927.917	355.437	12856867,16
103	Bobalna II	5965	600	75	156.853.498	471.151	17042473,97
104	Alesd	1440	150	51	50.841.333	413.740	14965803,28
.....							
283	Morarilor	1750	250	23	26.330.667	149.454	5406050,088
284	Orzului	1348	170	80	36.106.834	115.122	4164192,984
285	Scolii	2170	310	119	96.992.999	185.323	6703503,556
286	Oradiei	2164	340	6	2.116.000	184.810	6684947,32
287	Triajului	2880	320	19	6.717.666	235.959	8535108,948
288	Tribunu Andreica	2700	300	114	94.919.417	230.586	8340756,792

The rehabilitation cost (in Euro) was estimated taking into consideration the surface of the street, the length of the street, and the condition of the street. Our costs are estimated in Euro because the bonds were issued in Euro with a value of 15.000.000. For financial calculation purposes the exchange rate of Euro into ROL is 35.705 ROL/Euro. This value will be used for different calculations in the scenarios presented in the last section of the paper.

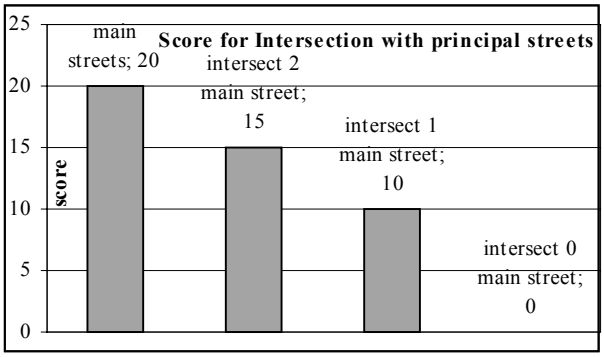
For simplicity, for each street was given a number starting from 101 to 388. The main reason for assigning these numbers was to avoid a possible confusion with the numbers assigned for the evaluation criteria.

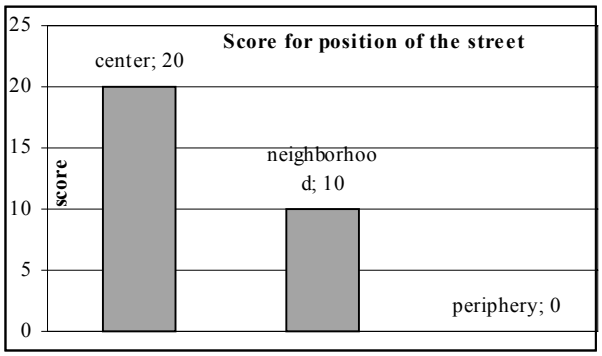
The following step in the proposed analysis was to establish a score based on 8 criteria. The criteria are:

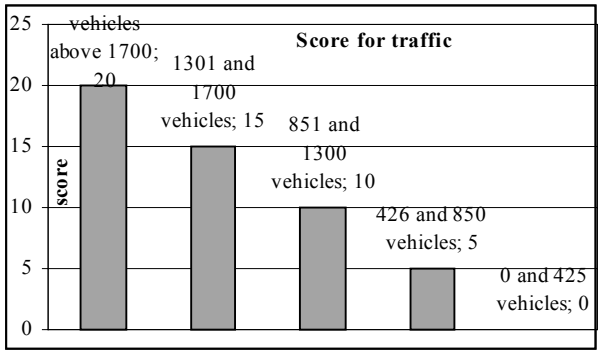
- intersection with the main streets,
- the location of the street,
- the volume of traffic on the street,
- the number of persons who live on that street,
- the amount of taxes collected paid on that street by the persons who live there,
- the number of lanes on each street,
- access to residence areas,
- how many public transportation vehicles operate on a given road.

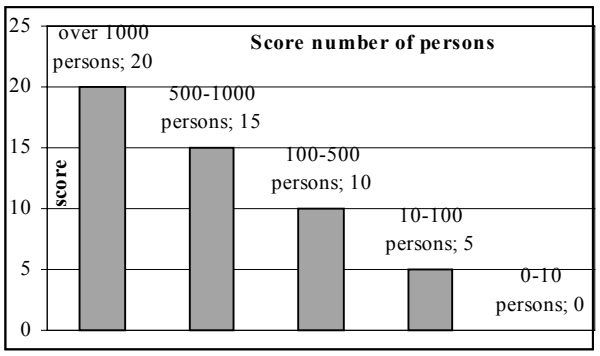
In the following paragraphs an explanation of how scores for each criterion were assigned is provided. If the street is in fact a main street 20 points were assigned, 15 points if the street intersects with 2 or more main streets10, if it intersects with 1 main street 5, and 0 if it doesn't intersect with any main street.

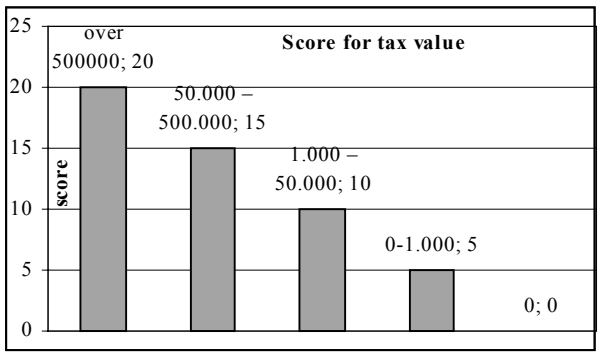
	Intersection with principal streets
B	Position of the street
C	Traffic on the street
D	Number of persons
E	Tax
F	Lines
G	Street with access at populated zone
H	Passed by RATUC vehicles Note: all scores assigned were given by the technical departments, taking into consideration the specific features of Cluj-Napoca





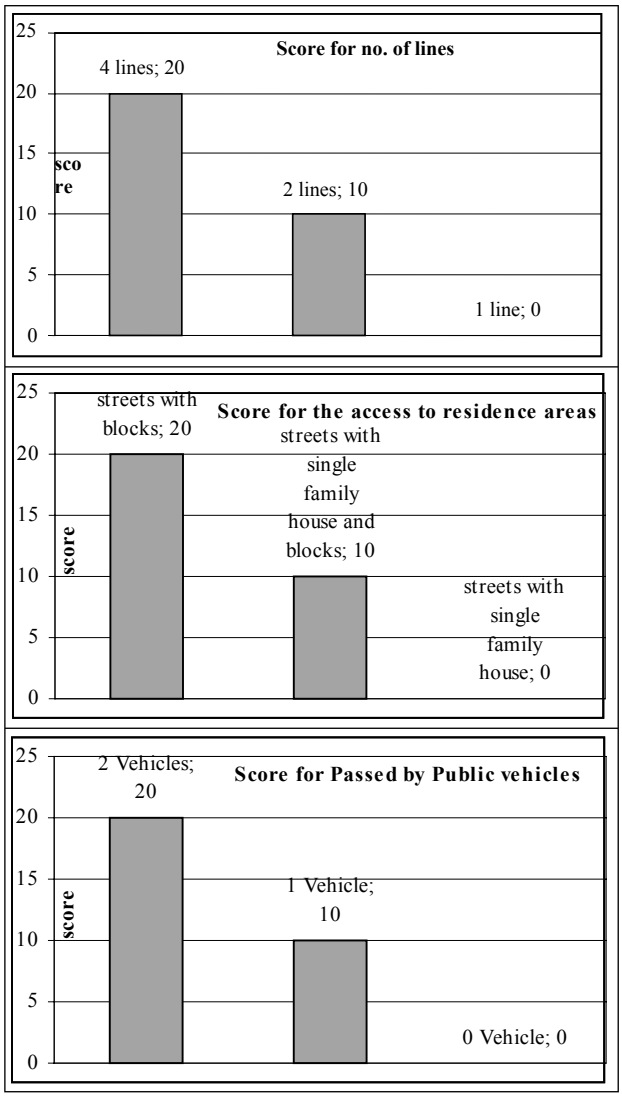






The scores for the second criterion (the position of the street) were assigned as follows: 20 points if it is situated in the center of the town, 10 if it is situated in the center of one neighborhood, and 0 if it is located at the periphery.

With regard to the traffic criterion the scores were assigned as follows: 0 points if the average number of vehicles on that street at peak hours is between 0 and 425 vehicles, 5 points if the average number of vehicles on that street at peak hours is between 426 and 850 vehicles, 10 points if the average number of vehicles on that street at peak hours is between 851 and 1300, 15 points if the average number of vehicles on that street at peak hours is between 1301 and 1700 vehicles on congestion hour, and 20 if the average number of vehicles on that street at peak hours is above 1700 vehicles.



At the following criteria, number of persons, we used the following score: 20 for over 1000, 15 for 500-1000, 10 for 100-500, 5 for and 0 for 0-10. In regard to the tax value we gave 20 points for taxes over 500.000 thousands ROL, 15 between 50.000 – 500.000 thousands ROL, 10 between 1.000 – 50.000 thousands ROL, 5 between 0-1.000 thousands ROL and 0 for 0 ROL. For the sixth criteria we gave the following points: 20 for 4 lanes in one direction, 10 for 2 lanes in one direction and 0 for one lane.

Regarding the following criterion (the access to residence areas) the following scores were assigned: 20 points for streets with blocks, 10 for streets with single family houses and blocks and 0 for streets with only single family houses. For the last criterion we gave 20 points for over 2 Public Transportation Vehicles, 10 points for 1 and 0 for none.

Table 3

PROJECT	Objectives	Score Criteria							
		..A..	..B..	..C..	..D..	..E..	..F..	..G..	..H..
101	Lunetei	0	0	5	10	10	0	20	0
102	Malinului (partially)	0	0	10	15	10	0	20	0
103	Alexandru D. Xenopol	0	0	5	20	10	0	20	0
104	Ioan Pop Reteganu	0	0	5	15	10	0	20	0
105	Matei Basarab	0	0	5	10	10	0	20	0
106	Victor Hugo	0	0	5	10	10	0	20	0
107	Zaharia Barsan	10	0	5	10	10	0	20	0
108	Silviu Dragomir	10	0	5	10	10	0	10	0
109	Jozsef Attila	10	0	5	10	10	0	20	0
.....									
144	Viorelelor	10	0	5	5	10	0	20	0
145	Timisului	10	10	5	15	10	10	20	0
146	Bobalna tronson II	10	0	5	15	10	0	20	0
147	Alesd	0	0	5	10	10	0	20	0
.....									
383	Morarilor	0	0	5	10	10	0	20	0
384	Orzului	0	0	5	10	10	0	20	0

385	Scolii	10	0	10	10	10	0	20	0
386	Oradiei	0	0	0	1	10	0	0	0
387	Triajului	10	0	5	5	10	0	20	0
388	Tribunu Andreica	0	0	10	10	10	10	20	0

Although we wanted to have as criteria the parking spaces on the street we thought that this is not an appropriate criteria because in Cluj-Napoca the parking lanes are insufficient and so people are choosing to park even if they broke the law. After this step we have to calculate the total score of all 8 criterions. The maximum score that can be obtained is 8 criterions multiply with maximum score 20 equal 160 points.

Table 4

PROJECT	Estimated Value Euro	Total Score	COST/ IMPACT
101	97.165	45	2159,4
102	203.421	55	3698,56
103	136.372	55	2479,49
104	105.688	50	2113,76
105	75.913	45	1686,96
106	98.528	45	2189,51
107	110.688	55	2012,51
108	151.155	45	3359,00
109	178.988	55	3254,33
.....			
144	181.668	50	3633,36
145	355.437	80	4442,96
146	471.151	60	7852,52
147	413.740	45	9194,4
.....			
383	149.454	45	3321,20
384	115.122	45	2558,27
385	185.323	60	3088,72
386	184.810	11	16800,91
387	235.959	50	4719,18
388	230.586	60	3843,10

From all 288 streets we have the biggest scores for the following streets: 160 for 21 Decembrie Street, 140 for Campina and Unirii Streets, 135 for Eroilor and Alexandru Vaida Voivod Streets, 130 for Republicii Street. The lowest scores received are the following: Scărilor Alley (10 points), Alexandru Davila Street, Căruţaşilor Street, and Măgura Steet (20 points), Tufei Street, Pârâului Street, and Aramei Street (30 points), Sputnic Street and Barc III Street.

Using the cost-impact matrix a cost-impact indicator was calculated for all 288 streets. Based on the data collected from The City Hall a ranking of all projects was created by arranging in an ascending order the cost-impact column. Based on this ranking the top priorities were selected.

After we have made a top we will create different scenarios. From this top we can see that the most important street is General Gheorghe Pomut, and the following ones are Matei Milo, Tufei, Ion Andreescu, Ion Neculce, Rarău, Virgil Oniţiu and the less important are Nod IRA, Trifoiului, Oradiei, 21 Decembrie Boulevard, Frunzişului, Oaşului and Nod N Streets.

Table 5 PROJECT	Objectiv	Estimated value Euro	Total Score	COST/ IMPACT	TOP
224	General Gheoghe Pomut	4.587	45	101,93	1
231	Matei Milo	6.452	55	117,31	2
225	Tufei	3.652	31	117,81	3
227	Ion Andreescu	6.574	50	131,48	4
228	Ion Neculce	7.992	45	177,60	5
220	Rarau	10.524	50	210,48	6
226	Virgil Onitiu II	9.861	45	219,13	7
233	Alexandru Donici	6.848	30	228,27	8
230	Macului	14.158	55	257,42	9
.....					
344	Paraşutiştilor	117.786	55	2141,56	144
101	Lunetei	97.165	45	2159,4	145
.....					
137	Nod IRA	827.743	61	13569,56	282
123	Trifoiului	636.460	45	14143,56	283

386	Oradiei	184.810	11	16800,91	284
160	B-dul 21 Decembrie	3.397.017	160	21231,36	285
286	Frunzisului	1.574.157	60	26235,95	286
281	Oasului (II)	1.321.014	50	26420,28	287
287	Nod N	1.872.572	60	31209,53	288

Financing scenario no. 1.Under this scenario, the financing of street rehabilitation projects comes from the local budget. In 2005, 640,705,000 ROL were appropriated to finance such projects. By adding together the costs of individual street rehabilitation projects, will be obvious that the appropriated money is enough for financing just a limited number of projects. Based on the 2005 budget appropriation, the municipality can finance during the first year the rehabilitation of 201 streets, the first being the General Gheorghe Pomut Street and the last being the Tractoristilor Street. After the Tractoristilor Street is fully financed, the remaining available money from the 2005 budget appropriation is 1.333.937 thousands ROL. In 2006, the municipality will be able to finance a part of the remaining streets in need for rehabilitation. We can finance the following 66 streets starting with the Silviu Dragomir Street and ending with the Pastorului Street. After the Păstorului Street is completely funded, enough money will be left over in order to finance also the rehabilitation of the Câmpina Street. In 2007, an additional 20 streets (from Câmpina Street to Oaşului Street) will be financed by the municipality. After the Oasului Street is fully financed, the municipality will still have available 60.191.287 thousands ROL. From the available sum of 60.191.287 thousands ROL the municipality could partially finance the street Nod N in 2008. The sum available in 2008 is 7,543,388 thousands ROL. By applying a simple calculation formula (dividing 1,929,658,388 thousand ROL to 640.705.000 thousand ROL) it can be easily noted that the entire number of rehabilitation street projects (288) can be financed in 3,01 years.

Table 6 PROJECT	OBJECTIV	TOP	Total score	Estimated Value thousands ROL	CUMULATED	FINANCING	AVAILABLE
224	General Gheoghe Pomut	1	45	165,921	165,921		
231	Matei Milo	2	55	233,382	399,303		
225	Tufei	3	31	132,100	531,403		
227	Ion Andreescu	4	50	237,795	769,198		
228	Ion Neculce	5	45	289,087	1,058,284		
220	Rarau	6	50	380,674	1,438,958		
133	Magura	199	21	2,523,757	625,438,043		
178	Graurilor	200	55	6,646,750	632,084,793		
323	Tractoristilor	201	60	7,286,271	639,371,063	640,705,000	1,333,937
108	Silviu Dragomir	202	45	5,467,579	4,133,642		
113	Dimitrie Bolintineanu	203	65	7,995,314	12,128,956		
342	Prieteniei	265	35	7,995,748	607,828,587		
210	Vrancea	266	85	19,514,251	627,342,838		
362	Păstorului	267	45	10,398,220	637,741,059	640,705,000	2,963,941
152	Campina	268	140	32,913,554	29,949,613		
219	Madach Imre	269	55	13,019,533	42,969,145		
286	Frunzisului	286	60	56,940,407	532,729,995		
281	Oasului	287	50	47,783,718	580,513,713	640,705,000	60,191,287
287	Nod N	288	60	67,734,674	7,543,388		
				1,929,658,388			
					3.01		

Financing scenario no. 2 Under this scenario, the financing of street rehabilitation projects comes from both the local budget and a loan. The community can obtain a loan no higher than 20% of its general revenues. By employing a simple calculation formula (20% multiplied by 2.677.900.667 thousand ROL), the maximum amount of a loan the municipality can get is 535.580.133 thousands ROL. Even tough the borrowing limit of the municipality was determined to be at 535.580.133 thousand ROL, under this scenario it was decided to make merely a 300.000.000 thousands ROL loan for the financing of street rehabilitation projects. The rationale for not using the entire borrowing capacity of the municipality towards the financing of street rehabilitation projects is simple: there may be other needs a city has despite roads and that need to be financed through municipal loans. We have cumulated the sums from different projects and when the sum was close to 940.705.000 thousands ROL we financed the project in 2005. This sum of 940.705.000 thousands ROL was obtained adding 640.705.000 thousands ROL to 300.000.000 thousands ROL. In this scenario the situation is different from the one in scenario no 1. In 2005 we can finance 237 projects from General Gheorghe Pomut Street to Predeal Street.

By making a comparison between scenario no 1 and scenario no 2 we can observe that if in the scenario no 1 all the projects can be financed in 3,01 years in scenario no 2 all the projects can be financed in 2,31 years.

Table 7					FIN WITH LOAN		
PROJECT	OBJECTIVE	TOP	Total score	Estimated Value thousands ROL	CUMULATED	FINANCING	AVAILABLE
224	Gen. Gh. Pomut	1	45	165,921	165,921		
231	Matei Milo	2	55	233,382	399,303		
225	Tufei	3	31	132,100	531,403		
227	Ion Andreescu	4	50	237,795	769,198		
228	Ion Neculce	5	45	289,087	1,058,284		
220	Rarau	6	50	380,674	1,438,958		
292	Oituz	236	45	7,091,340	914,544,272		
189	Busuiocului	237	65	10,275,163	924,819,435		
125	Predeal	238	65	10,280,878	935,100,313	940,705,000	5,604,687
143	Garoafelor	239	45	7,142,704	1,538,017		
145	Timisului	240	80	12,856,867	14,394,884		
386	Oradiei	284	11	6,684,947	693,617,689		
160	B-dul 21 Decembrie	285	160	122,876,899	816,494,588		
286	Frunzisului (varianta)	286	60	56,940,407	873,434,995		
281	Oasului (II)	287	50	47,783,718	921,218,713	940,705,000	19,486,287
287	Nod N	288	60	67,734,674	48,248,388		
				1,929,658,388			
	Y				2.05		

Financing scenario no 3.

Under this scenario the situation is significantly different from the one portrayed under scenario number 2. In 2005 214 projects will be financed starting with General Gheorghe Pomut Street and ending with Grivitei Street. The available sum that will remain from 2005 is 6.147.711 thousands ROL. From this sum we can partially finance Malinului project. The situation is different in 2006, when the projects starting with Grivitei Street and ending with 21 Decembrie Street will be fully financed. The remaining amount of money is 40.571.412 thousand ROL. So in 2006 the municipality will be able to finance 71 streets. In 2007, 3 projects will remain to be financed.

Table 8	Expenditures Thousands ROL	Increase Rate	Recalculation after ROL dollar Exchange rate			Recalculation after inflation		
Years			ROL/ dollar	Expend. dollar	Increase Rate	Inflation	Expend. price 2004	Increase Rate
2004	521248	1.963	32800	15,891,707	1.955	116	521248	1.693
2003	265492	1.349	32655	8,130,210	1.381	122.5	307,971	1.101
2002	196848	1.500	33440	5,886,603	1.417	117.8	279,721	1.273
2001	131248	1.266	31597	4,153,812	1.039	130.4	219,701	0.971
2000	103670		25926	3,998,689		140.7	226,292	
Average		1.519	1.447934319			1.25939462		
General Average		1.408932857						

Table 9		
ESTIMATED EXPENDITURES		
	Expenditures Thousands ROL	Expenditures CUMULATED Thousands ROL
2004	521248	521,248
2005	734,403	1,255,651
2006	1,063,368	2,319,019
2007	1,539,687	3,858,706
2008	2,229,366	6,088,072
2009	3,227,975	9,316,047
2010	4,673,896	13,989,942
2011	6,767,494	20,757,436

The third scenario was created by using a well-known method namely the increase and decrease method. Using data from the Cluj-Napoca budget, it is easy to notice that the 2000 budget was 103.607.581 thousands ROL, in 2001, 131.247.500 thousands ROL, in 2002, 196.847.954 thousands ROL, in 2003, 265.491.536 thousands ROL, and in 2004, 521.248.000 thousands ROL. According to the budget department from Cluj-Napoca city hall the street expenditures will be 640.705.000 thousands ROL in 2005 and 630.000.000 thousands ROL in 2006. According to our method of estimation the values are different: 734.403.000 thousands ROL in 2005 and 1.063.368.000 thousands ROL in 2006.

In the following paragraphs we will explain how we applied the method. First as we said we took the expenditures from 2000 to 2004. Then we will calculate the increase rate taking into account the expenditures by dividing the expenditures in the current year to the next year; an average of the increase rate will be calculated by dividing the sum of the increase rate from all the years taken into consideration to the next years. To obtain a precise increase rate we take into consideration the ROL – dollar exchange rates, and the inflation rate. So in order to calculate the increase rate we divided the expenditures from 2004 (521.248.000 thousands ROL) at the expenditures from 2003 (265.492.000 thousands ROL). We will continue this process by dividing the expenditure from 2003 (265.492.000 thousands ROL) to the expenditures from 2002 (196.848.000 thousands ROL), then we divide the expenditure from 2002 to the expenditures from 2001 (131.248.000 thousands ROL) and then we will divide the expenditures from 2001 to the expenditure from 2000 (103.670.000 thousands ROL). So we will obtain the followings rates of increase 1,266 in 2001, 1,500 in 2002, 1349 in 2003 and 1,963 in 2004. In order to make the re-calculation after the ROL/dollar exchange rate we will use of course the expenditures from each year and the exchange rate from each year. If we multiply the expenditure of each year with the exchange rate from each year we will obtain the expenditures in dollars. The calculating method for increase and decrease rate is applied in the same way as it was at the first rate of increase. So if we divide the expenditures in dollars from 2004 at the expenditures from 2003 (8.130.210 dollars). After the calculations we will obtain a rate of increase in 2004 of 1,955, in 2003 1,381, in 2002 1,417 and in 2001 1,039.

As well as we applied the increase rate at the ROL/dollar exchange rate we will apply at the inflation and we obtained the following increase rates: in 2004 1,693, in 2003 1,101, in 2002 1,273 and in 2001 0,971. After this we will calculate an average for each increase rate so we will obtain three rhythms of increase: 1,519 for the increase rate regarding the expenditures, 1,447 for the increase rate regarding the ROL/dollar exchange rate and 1,259 regarding the inflation. By making an average from all this three rates of increase we will obtain an increase rate of 1,408. The estimation of the expenditures from 2005 will be obtained by multiplying the expenditures from 2004 with the increase rate. So if we multiply the expenditure from 2004 (521.248.000 thousands ROL) with the increase rate we will obtain an estimated expenditure in 2005 of 734.403.000 thousands ROL. All the other expenditures will be calculated the same way.

Table 10					FORCASTED INCREASE RATE		
PROJECT	OBJECTIVE	TOP	Total score	Estimated Value thousands ROL	CUMULATED	FINANCING	AVAILABLE
224	General Gheoghe Pomut	1	45	165,921	165,921		
231	Matei Milo	2	55	233,382	399,303		
225	Tufei	3	31	132,100	531,403		
227	Ion Andreescu	4	50	237,795	769,198		
228	Ion Neculce	5	45	289,087	1,058,284		
220	Rarau	6	50	380,674	1,438,958		
132	Carutasilor	211	21	2,753,196	701,275,137		
144	Viorelelor	212	50	6,571,295	707,846,432		
161	Clinicilor	213	110	14,477,554	722,323,985		
148	Grivitei	214	45	5,931,304	728,255,289	734,403,000	6,147,711
102	Malinului	215	55	7,358,144	1,210,433		
265	Alexandru Sahia	216	45	6,091,980	7,302,413		
137	Nod IRA	282	61	29,941,120	870,212,711		
123	Trifoiului	283	45	23,022,031	893,234,742		
386	Oradiei	284	11	6,684,947	899,919,689		
160	B-dul 21 Decembrie	285	160	122,876,899	1,022,796,588	1,063,368,000	40,571,412
286	Frunzisului	286	60	56,940,407	16,368,995		
281	Oasului (II)	287	50	47,783,718	64,152,713		
287	Nod N	288	60	67,734,674	131,887,388		
				1,929,658,388			
					2.12		

It is very important to be decided that the politics of the CIP process are well integrated in others politics and financial processes, like the current process of budgeting and politics of duty. These politics must to make the distinction between the types of activities or projects that should be included in PIC and the types that should be included in the current budget.

The period of time intended for the planning of the capital investments refers to the number of years that will be included in CIP-on what further period CIP will be unrolled. On a period of time longer than one or two years, it becomes more and more difficult to estimate the costs and the sources of financing. But we include in CIP only the projects that will begin over one or two years, this would affect the analyzing of certain projects on long term that could be phased on a period of time longer than two years. The projects on long term engaged all those who are involved in the

process to concentrate on the further needs, instead of concentrating only on the current issues. In exchange, this contributes to creation of a concord regarding the priorities and the needs of capital. In their turn, the lenders wish a focusing on the projects on long term. In the majority of the CIP process a period of three to five years represents a proper temporal environment.

In the financing of the programs the following aspects should be taken into consideration:

- the current expenditure and the expenditure of capital from the closed budgets;
- forecast of the expenditure from 2004 to 2013;
- grants: PHARE, ISPA, SAPARD, World Bank, BERD;
- private contributions like public private partnership, concessions, donations, sponsors;
- contracting loans.

We choose the Method of Increasing or of Decreasing because the Automatic Method doesn't allow to consider specific factors such as:

- It is not known precisely which the evolution of the economy, especially the level of collected revenues will be;
- The level of inflation until 2011 is hard to be accurately forecaste;
- The method doesn't allow for the completion of certain projects, this means that there aren't necessary anymore founds for this kind of projects.

However, this method has certain advantages:

- It clearly shows whether the revenues are increasing;
- It allows for a simpler approach with regard to the importance of the time factor and it also implies a relatively simple calculation.

It would have been possible to make an econometrical forecasts; however this method would have implied a more complex and complicated approach. It demands more time, effort, and above all empirical data that are not available to researchers at this point in time (socio-demographic and economic indicators)

Of course, the finances of the future will be realized allowing for the modifications of the legislation and to the inflation rate in that period. Although, every one of us is aware of the fact that there is a long time to wait until we dispose of the necessary resources for financing. The local authorities shouldn't try to solve the issues by the identification of the capital investments. They should study and to check if there are more efficient ways to achieve the wanted results, that doesn't require capital investments. Even if the authorities reach the conclusion that an investment is necessary, they should analyze the alternatively solutions for the respective investment.